



Behavioral Tech

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DBT Treatment Research

JULY 1 – JULY 31, 2018

1. **Title: Effectiveness of step-down versus outpatient dialectical behaviour therapy for patients with severe levels of borderline personality disorder: a pragmatic randomized controlled trial**

Authors: R Sinnaeve, LMC van den Bosch, L Hakkaart-van Roijen, & K Vansteelandt

Journal & Date: Borderline Personality Disorder and Emotion Dysregulation 2018

Abstract: Background: Step-down dialectical behaviour therapy (DBT) is a treatment consisting of 3 months of residential DBT plus 6 months of outpatient DBT. The program was specifically developed for people suffering from severe borderline personality disorder (BPD). The present study examines the effectiveness and cost-effectiveness of step-down DBT compared to 12 months of regular, outpatient DBT. Methods: Eighty-four participants reporting high levels of BPD-symptoms (mean age 26 years, 95% female) were randomly assigned to step-down versus standard DBT. Measurements were conducted at baseline and after 3, 6, 9 and 12 months. The Lifetime Parasuicide Count and BPD Severity Index (BPDSI) were used to assess suicidal behaviour, non-suicidal self-injury (NSSI) and borderline severity. Costs per Quality Adjusted Life Year (QALY) were calculated using data from the EQ-5D-3L and the Treatment Inventory Cost in Psychiatric Patients (TIC-P). Results: In step-down DBT, 95% of patients started the program, compared to 45% of patients in outpatient DBT. The probability of suicidal behaviour did not change significantly over 12 months. The probability of NSSI decreased significantly in step-down DBT, but not in outpatient DBT. BPDSI decreased significantly in both groups, with the improvement leveling off at the end of treatment. While step-down DBT was more effective in increasing quality of life, it also cost significantly more. The extra costs per gained QALY exceeded the €80,000 threshold that is considered acceptable for severely ill patients in the Netherlands. Conclusions: A pragmatic randomized controlled trial in the Netherlands showed that 9 months of step-down DBT is an effective treatment for people suffering from severe levels of BPD. However, step-down DBT is not more effective than 12 months of outpatient DBT, nor is it more cost-effective. These findings should be considered tentative because of high noncompliance with the treatment assignment in outpatient DBT. Furthermore, the long-term effectiveness of step-down DBT, and moderators of treatment response, remain to be evaluated.

2. **Title: Differential Change of Borderline Personality Disorder Traits During Dialectical Behavior Therapy for Adolescents**

Authors: A Buerger, G Fischer-Waldschmidt, F Hammerle, K von Auer, P Parzer, & M Kaess

Journal & Date: Journal of Personality Disorder, 2018

Abstract: Despite the expansion of treatment options for adults with borderline personality disorder (BPD), research on treatment options for adolescent BPD is scarce. The aim of this



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study was to investigate the impact of dialectical behavior therapy for adolescents (DBT-A) on the individual trait level as primary outcome; and the frequency of suicide attempts and nonsuicidal self-injury, self-reported BPD core pathology, and general psychopathology as secondary outcomes. Seventy-two adolescents (aged 12.17 years) with full- or subsyndromal BPD were treated with DBT-A (25 single sessions, 20 sessions of skills training), and 13 patients (18.1%) withdrew during treatment. From baseline to post-treatment, the number of BPD traits decreased significantly ($p \leq .001$). All secondary outcomes decreased significantly as well ($p \leq .001$). Results of this uncontrolled study suggest that beside selfharm, DBT-A may also have a beneficial impact on other features of BPD.

Other Articles Relevant to DBT & BPD

1. **Title: A systematic review of negative parenting practices predicting borderline personality disorder: Are we measuring biosocial theory's 'invalidating environment'?**

Authors: N Musser, M Zalewski, S Stepp, & J Lewis

Journal & Date: Clinical Psychology Review, 2018

Abstract: A core tenet of Linehan's biosocial theory (1993) is that borderline personality disorder (BPD) emerges as a result of transactions between emotional vulnerability and an invalidating environment. Invalidation has become a popular term in the literature, but there is a lack of uniformity in its operationalization and measurement, particularly as applied to invalidating parenting practices that are non-abusive. This systematic review of 77 empirical studies examined the measurement and operationalization of parental invalidation in the BPD literature and determined the extent to which measurements used converge with Linehan's original model. This review provides a description of methodological design features of the literature and presents the percent of studies that measured four key components of invalidation— inaccuracy, misattribution, discouragement of negative emotions, and oversimplification of problem solving. Limitations of the literature, including a dearth of studies which include measurements that align with Linehan's model, and recommendations for future research are discussed in an attempt to encourage greater scientific rigor in the measurement of invalidation and elucidate the role of invalidation in the development of BPD.

2. **Title: Borderline personality disorder is equally trait-like and state-like over ten years in adult psychiatric patients.**

Authors: CC Conway, CJ Hopwood, LC Morey, & AE Skodol

Journal & Date: Journal of Abnormal Psychology, 2018

Abstract: Borderline personality disorder (PD) has historically been cast as an unabating condition. Longitudinal data, however, support a more variable time course marked by remission and relapse. In the present study, we tested the possibility that borderline PD has both stable (i.e., consistently present across time and situation, as modern diagnostic systems stipulate) and dynamic (i.e., episodic and situational) elements. Participants were 668 patients from the Collaborative Longitudinal Personality Disorders Study who were administered semistructured diagnostic interviews 5 times over a decade. Trait-state-occasion modeling



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dissected borderline pathology into time-invariant (i.e., trait) and time-varying (i.e., state) components. Contradicting traditional views of PD intransigence, less than half of borderline PD variability (approximately 45%) was time-invariant (i.e., perfectly stable) over the study timeframe. Furthermore, we found that the time-invariant component of borderline pathology, which we termed borderline proneness, was very closely related ($r = .81$) to a previously validated Five Factor Model trait composite of borderline features. Moreover, the trait versus state components showed a clear pattern of discriminant validity in relation to several putative causal agents for borderline PD (i.e., environmental pathogens, temperament dimensions). We conclude that borderline pathology contains a stable core and sizable situational components, and that both elements relate systematically to normative personality dimensions and known risk factors. These findings have key implications for etiological research, prognosis, and treatment for borderline PD.

3. **Title: Sensitization of the Neural Salience Network to Repeated Emotional Stimuli Following Initial Habituation in Patients With Borderline Personality Disorder**

Authors: BT Denny, J Fan, S Fels, H Galitzer, D Schiller, & HW Koenigsberg,

Journal & Date: The American Journal of Psychiatry, 2018

Abstract: Objective: Borderline personality disorder is the prototypical disorder of emotion reactivity and dysregulation, yet there remains limited understanding of its neurocognitive correlates. Two mechanisms that may underlie anomalous reactivity in response to negative stimuli among patients with borderline personality disorder are impairment in habituation and exaggerated sensitization of activity in the neural salience network, including the amygdala, anterior insula, and dorsal anterior cingulate cortex. The authors aimed to reveal the most plausible mechanism by examining the effect of repeated exposure to emotional images both within and across study sessions. Method: A total of 75 participants (patients with borderline personality disorder, $N=26$; patients with avoidant personality disorder included as a psychopathological control group, $N=25$; and healthy control subjects, $N=24$) were included in the study analyses. All participants viewed five presentations of the same set of negative and neutral images at each of two sessions, separated by approximately 3 days, while functional MRI data were acquired. Salience network activity, as measured by blood-oxygen-level–dependent signal in anatomically defined regions of interest across the salience network, was compared across the three groups for each presentation at each of the two study sessions. Self-reported negative affect was measured for each trial. Results: Salience network activity showed a main effect of within-session habituation across all groups and sessions. However, a group-by-session interaction was present, such that only patients with borderline personality disorder showed increased salience network activity in response to the images reencountered at the second session, and this increased salience network sensitization predicted greater sensitization in self-reported negative affect. Conclusions: These results elucidate the neural mechanisms by which patients with borderline personality disorder appraise negative social situations as exaggeratedly salient and suggest potential neurocognitive intervention targets.



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4. **Title: More is not always better: Strategies to regulate negative mood induction in women with borderline personality disorder and depressive and anxiety disorders.**

Authors: AR Daros, GE Williams, S Jung, M Turabi, AA Uliaszek, & AC Ruocco

Journal & Date: Personality Disorders, 2018

Abstract: Individuals with borderline personality disorder (BPD) have difficulties regulating emotions, which may be a consequence of using less effective emotion regulation (ER) strategies to lessen the intensity of their negative emotions. It is not yet known whether people with BPD utilize particular ER strategies to modulate specific mood states and if these strategies are different from those used by individuals with depressive and anxiety disorders. In the present study, 90 participants (30 BPD, 30 anxiety and/or depressive disorders, and 30 healthy controls) underwent a mood induction procedure and specified which ER strategies they used and their perceived difficulty regulating mood following induction. Compared with healthy controls, BPD endorsed higher negative mood prior to, immediately following, and 4 min after neutral and negative mood inductions; more maladaptive ER strategies (e.g., rumination); and more perceived difficulty regulating negative mood. Compared with anxiety and/or depressive disorders, BPD endorsed similar ER strategies and subjective difficulty during mood inductions, endorsed higher negative mood following a neutral video and 1 negative video, and recorded higher RSA reactivity during and following 2 negative videos. Results suggest that individuals with BPD use a higher number of maladaptive ER strategies compared with healthy controls, which may lead to less effective modulation of negative mood and higher reports of difficulty regulating emotions. In addition, physiological measurements indicated that individuals with BPD may have higher RSA reactivity in response to negative mood induction compared with other mental disorders, which may reflect inefficient or disorganized attempts to regulate emotional arousal.

5. **Title: Examining the role of borderline personality traits in the relationship between major depression and nonsuicidal self-injury**

Authors: EM Peters, A John, M Baetz, & L Balbuena

Journal & Date: Comprehensive Psychiatry, 2018

Abstract: Background: Depression and borderline personality disorder (BPD) are highly comorbid conditions that are both associated with nonsuicidal self-injury (NSSI). Aims: The purpose of this study was to determine if depression is associated with NSSI after controlling for BPD traits. A distinction was made between NSSI for emotional regulation and NSSI for interpersonal motives. Method: Logistic regression analyses were conducted on cross-sectional data from a general population sample of 7,370 adults who completed the 2007 Adult Psychiatric Morbidity Survey. Depressive symptoms were assessed with the revised Clinical Interview Schedule. NSSI and motives for NSSI were also assessed during clinical interviews. BPD traits were assessed with the participant-completed Structured Clinical Interview for DSM-IV Axis II Personality Disorders. Results: Participants in a major depressive episode were more likely to have engaged in emotion-regulation NSSI and interpersonal NSSI than participants without depression. After controlling for BPD traits depression remained associated with emotional regulation NSSI, whereas the association with interpersonal NSSI became nonsignificant. There were statistically significant relationships between depression and both types of NSSI occurring



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indirectly through BPD traits. Conclusions: BPD traits account for a significant portion of the cross-sectional relationship between depression and past NSSI that varies in size depending on the motive for NSSI. People with depression are more likely to have engaged in NSSI for emotional regulation even in the absence of prominent BPD traits. In contrast, BPD traits may be more prominent in people with depression who have engaged in interpersonal NSSI.