1. **Title:** Evaluation of a Mindfulness-Based Intervention With and Without Virtual Reality Dialectical Behavior Therapy® Mindfulness Skills Training for the Treatment of Generalized Anxiety Disorder in Primary Care: A Pilot Study  
   **Authors:** MV Navarro-Haro, M Modrego-Alarcón, HG Hoffman, A López-Montoyo, M Navarro-Gil, J Montero-Marin….. & J García-Campayo  
   **Journal & Date:** Frontiers in Psychology, 2019  

   **Abstract:** Generalized Anxiety Disorder (GAD) is a very prevalent disorder in primary care (PC). Most patients with GAD never seek treatment, and those who do seek treatment often drop out before completing treatment. Although it is an understudied treatment, Mindfulness-Based Interventions (MBIs) indicate preliminary efficacy for the treatment of GAD symptoms, but many patients with GAD present other associated symptoms (e.g., attention deficits) that complicate the treatment. Virtual Reality DBT® Mindfulness Skills learning has recently been developed to make learning mindfulness easier for patients with emotion dysregulation who have trouble concentrating. Virtual Reality (VR) might serve as a visual guide for practicing mindfulness as it gives patients the illusion of “being there” in the 3D computer generated world. The main goal of this study was to evaluate the effect of two MBIs (a MBI in a group setting alone and the same MBI plus 10 min VR DBT® Mindfulness skills training) to reduce GAD symptoms. A secondary aim was to explore the effect in depression, emotion regulation, mindfulness, and interoceptive awareness. Other exploratory aims regarding the use of VR DBT® Mindfulness skills were also carried out. The sample was composed of 42 patients (roughly half in each group) with GAD attending PC visits. After treatment, both groups of patients showed significant improvements in General Anxiety Disorder measured by the GAD-7 using mixed regression models [MBI alone (B = -5.70; p < 0.001; d = -1.36), MBI+VR DBT® Mindfulness skills (B = -4.38; p < 0.001; d = -1.33)]. Both groups also showed significant improvements in anxiety, depression, difficulties of emotion regulation and several aspects of mindfulness and interoceptive awareness. Patients in the group that received additional 10 min VR DBT Mindfulness skills training were significantly more adherent to the treatment than those receiving only standard MBI (100% completion rate in MBI + VR vs. 70% completion rate in MBI alone; Fisher = 0.020). Although randomized controlled studies with larger samples are needed, this pilot study shows preliminary effectiveness of MBI to treat GAD, and preliminary evidence that adjunctive VR DBT® Mindfulness Skills may reduce dropouts.

2. **Title:** Feasibility and preliminary efficacy of dialectical behaviour therapy skills groups for Veterans with suicidal ideation: pilot  
   **Authors:** SE Decker, L Adams, LE Watkins, LM Sippel, J Presnall-Shvorin, M Sofuoglu, & S Martino  
   **Journal & Date:** Behavioural and Cognitive Psychotherapy, 2019  

   **Abstract:** Background: Veterans are at high risk for suicide; emotion dysregulation may confer additional risk. Dialectical behaviour therapy (DBT) is a well-supported intervention for suicide attempt reduction in individuals with emotion dysregulation, but is complex and multi-
component. The skills group component of DBT (DBT-SG) has been associated with reduced suicidal ideation and emotion dysregulation. DBT-SG for Veterans at risk for suicide has not been studied. **Aims:** This study sought to evaluate the feasibility and acceptability of DBT-SG in Veterans and to gather preliminary evidence for its efficacy in reducing suicidal ideation and emotion dysregulation and increasing coping skills. **Method:** Veterans with suicidal ideation and emotion dysregulation (N = 17) enrolled in an uncontrolled pilot study of a 26-week DBT-SG as an adjunct to mental health care-as-usual. **Results:** Veterans attended an average 66% of DBT-SG sessions. Both Veterans and their primary mental health providers believed DBT-SG promoted Veterans’ use of coping skills to reduce suicide risk, and they were satisfied with the treatment. Paired sample t-tests comparing baseline scores with later scores indicated suicidal ideation and emotion dysregulation decreased at post-treatment (d = 1.88, 2.75, respectively) and stayed reduced at 3-month follow-up (d = 2.08, 2.59, respectively). Likewise, skillful coping increased at post-treatment (d = 0.85) and was maintained at follow-up (d = 0.91). **Conclusions:** An uncontrolled pilot study indicated DBT-SG was feasible, acceptable, and demonstrated potential efficacy in reducing suicidal ideation and emotion dysregulation among Veterans. A randomized controlled study of DBT-SG with Veterans at risk for suicide is warranted.

3. **Title:** Dialectical behaviour therapy (DBT) for forensic psychiatric patients: An Italian pilot study  
   **Authors:** V Bianchini, V Cofini, M Curto, B Lagrotteria, A Manzi, S Navari... & G Nicolò  
   **Journal & Date:** Criminal Behaviour and Mental Health, 2019

   **Abstract:** **Background.** Several previous randomised controlled trials of dialectical behaviour therapy (DBT) since Linehan’s original have shown that it has an advantage over standard care or other psychological treatments, but focus is usually on suicide-related behaviours, and little is known about its effect with offender-patients. **Aims.** To evaluate DBT with a group of offender-patients in the Italian high intensity therapeutic facilities—the Residenze per l’Esecuzione delle Misure di Sicurezza (REMS), established under the Italian Law 81/2014. **Methods.** Twenty-one male forensic psychiatric in-patients with borderline personality disorder were enrolled and randomly assigned to 12 months of standard DBT together with all the usual REMS treatments (n = 10) or usual REMS treatments alone (n = 11). All participants completed the same pretreatment and posttreatment assessments, including the Barratt Impulsiveness Scale (BIS-11), Difficulties in Emotion Regulation Scale (DERS), and Toronto Alexithymia Scale 20 (TAS-20). **Results.** Men receiving DBT showed a significantly greater reduction in motor impulsiveness, as measured by the BIS-11, and emotional regulation, as reflected by the DERS total score, than the controls. There were no significant differences between groups in alexithymia scores. **Conclusions.** Italy has innovative forensic psychiatric facilities with a new recovery–rehabilitation approach, but the ambitious goals behind these cannot be achieved by pharmacology alone. For the first time in clinical forensic settings in Italy, there has been limited access to DBT. This small pilot study suggests this is likely to help ameliorate traits associated with violent and antisocial behaviours, so a full-scale randomised controlled trial should follow.

**Other Articles Relevant to DBT & BPD**

4. **Title:** The Relationship Among Shame, Nonsuicidal Self-Injury, and Suicidal Behaviors in Borderline Personality Disorder  
   **Authors:** AY Cameron, S Erisman, K Palm Reed
Journal & Date: Psychological Reports, 2019
Abstract: Shame has been individually linked to nonsuicidal self-injury and suicidal ideation and behavior and is highly prevalent in individuals with borderline personality disorder. The current study investigated the relationship between shame, nonsuicidal self-injury, and suicidal ideation in a sample of women with borderline personality disorder. Participants were 40 women recruited from a Women’s Dialectical Behavior Therapy Partial Hospital Program in a psychiatric hospital in New England as part of a larger, six-month treatment development study. Results indicated that shame-proneness predicts nonsuicidal self-injury and suicidal ideation and behavior above and beyond the severity of borderline personality disorder symptoms, suggesting that shame may be an important treatment target for individuals with borderline personality disorder. Clinical implications, limitations, and future directions are discussed.

5. Title: Blinded by our emotions: The impact of borderline personality disorder and affect on emotion recognition sensitivity
Authors: K McMahon, K Kim, CM Fang, AD Neacsiu, & MZ Rosenthal
Journal & Date: Journal of Experimental Psychopathology, 2019
Abstract: Previous studies have demonstrated abnormalities in emotion recognition within individuals diagnosed with borderline personality disorder (BPD). However, it is yet unknown how much these abnormalities can be attributed to emotional states or affect. Therefore, the current study aimed to investigate the independent effects of BPD, positive affect, and negative affect on emotion recognition sensitivity. We recruited a mixed, transdiagnostic community sample of 118 adults diagnosed with either a personality disorder, only an affective disorder, or without psychopathology. Participants completed self-report assessments of positive and negative affect and two behavioral assessments of emotion recognition sensitivity. We found that both positive and negative affect predict lower overall emotion recognition sensitivity in both tasks, beyond the effect of BPD. We did not find a significant, independent effect of the diagnosis of BPD. Additionally, we found that the diagnosis of BPD moderated the relationship between negative affect and emotion recognition sensitivity within one task. Findings from the present study suggest that sensitivity to other people’s emotional expressions may be influenced by affect beyond the effect of the BPD diagnosis. The implications for future research efforts on emotion recognition and BPD are discussed.

6. Title: The role of attachment characteristics in dialectical behavior therapy for patients with borderline personality disorder
Authors: D Bernheim, M Gander, F Keller, A Lischke, R Mentel, HJ Freyberger, & A Buchheim
Journal & Date: Clinical Psychology and Psychotherapy, 2019
Abstract: Attachment characteristics play a key role in understanding borderline-specific problems with respect to childhood maltreatment. The aim of this study was to investigate how attachment representations may influence the trajectory of change in a 1-year outpatient dialectical behavior therapy (DBT) for patients with borderline personality disorder (BPD). Attachment representations were assessed in 26 BPD patients and 26 healthy controls (HC) using the Adult Attachment Projective Picture System (AAP) before treatment. Borderline and global symptom severity and interpersonal problems were examined before, during, and after completing the intervention. Analysis of variance and stepwise hierarchical regression analyses were used to explore the course of symptomatology. As expected, BPD patients displayed a
predominance of unresolved attachment in the AAP compared with HC, by showing a lack of ability to integrate attachment related trauma. Whereas both resolved and unresolved attachment groups revealed significant improvement in symptom severity during treatment, dimensional AAP scores showed differences. Patients with higher scores in “synchrony” demonstrated more indicators of mutual care in their narratives to dyadic pictures and displayed a significantly stronger decrease of interpersonal problems than patients with lower synchrony scores. Assessing attachment representations prior to DBT might provide a helpful insight into individual attachment related resources or lack of these capacities. Responsiveness and synchrony in dyadic interactions with significant others are crucial for healthy interpersonal relations. A stronger therapeutic focus on the patient’s capacity to show synchrony in dyadic attachment situations might improve the patient’s interpersonal problems towards sensitive and mutual interaction.

7. Title: Nonsuicidal Self-Injury and Borderline Personality Features as Risk Factors for Suicidal Ideation Among Male Veterans With Posttraumatic Stress Disorder
   Authors: KC Cunningham, JL Grossman, KB Seay, PA Dennis, CP Clancy, MA Hertzberg...& NA Kimbrel
   Journal & Date: Journal of Traumatic Stress, 2019

   Abstract: U.S. veterans are at increased risk for suicide compared to their civilian counterparts and account for approximately 20% of all deaths by suicide. Posttraumatic stress disorder (PTSD) and borderline personality features (BPF) have each been associated with increased suicide risk. Additionally, emerging research suggests that nonsuicidal self-injury (NSSI) may be a unique risk factor for suicidal behavior. Archival data from 728 male veterans with a PTSD diagnosis who were receiving care through an outpatient Veterans Health Administration (VHA) specialty PTSD clinic were analyzed. Diagnosis of PTSD was based on a structured clinical interview administered by trained clinicians. A subscale of the Personality Assessment Inventory was used to assess BPF, and NSSI and suicidal ideation (SI) were assessed by self-report. Findings revealed that NSSI (58.8%) and BPF (23.5%) were both relatively common in this sample of male veterans with PTSD. As expected, each condition was associated with significantly increased odds of experiencing SI compared to PTSD alone, odds ratios (ORs) = 1.2–2.6. Moreover, co-occurring PTSD, NSSI, and BPF were associated with significantly increased odds of experiencing SI compared with PTSD, OR = 5.68; comorbid PTSD and NSSI, OR = 2.57; and comorbid PTSD and BPF, OR = 2.13. The present findings provide new insight into the rates of NSSI and BPF among male veterans with PTSD and highlight the potential importance of these factors in suicide risk.

8. Title: Early Versus Later Improvements in Dialectical Behavior Therapy Skills Use and Treatment Outcome in Eating Disorders
   Authors: TA Brown, A Cusack, L Anderson, EE Reiley, LA Berner, CE Wierenga....& WH Kaye
   Journal & Date: Cognitive Therapy & Research, 2019

   Abstract: Dialectical behavior therapy (DBT) has demonstrated initial efficacy for the treatment of eating disorders (EDs). However, no study has examined potential processes that may contribute to observed improvements in DBT for EDs. The present study sought to investigate changes in DBT skills use throughout treatment as a predictor of symptom change in a DBT-based partial hospital program (PHP) for adults with EDs. Adults [n = 135; M(SD) age = 25.08 (7.88)] with EDs completed self-report measures at treatment admission, one-month post-
admission, and discharge from PHP. DBT skills use, as measured by the DBT Ways of Coping Checklist, increased by 12.65% from admission to one-month post-admission and increased by 24.10% from admission to discharge. Early (admission to month 1) and later (month 1 to discharge) improvements in DBT skills use predicted greater improvements in ED, depressive, and emotion dysregulation symptoms from treatment admission to discharge. Notably, early versus later change in skills use was a stronger predictor of outcome. Results are consistent with the theoretical model of DBT and add to a growing literature on DBT for Eds.

9. **Title:** Emotion Vulnerability in the Context of Positively Valenced Stimuli: Associations with Borderline Personality Disorder Symptom Severity  
**Authors:** GE Williams & AA Uliaszek  
**Journal & Date:** Journal of Psychopathology & Behavioral Assessment, 2019  

**Abstract:** Theories of borderline personality disorder (BPD) have posited that emotion vulnerability (including greater baseline emotion intensity, greater emotion reactivity to salient stimuli, and slower return to emotional baseline) is a key etiological factor in the development of the disorder. Despite evidence to suggest that baseline negative emotion is greater in individuals with BPD (and perhaps across psychopathology), less is known about potential patterns of positive emotion vulnerability that may be uniquely associated with BPD symptoms. In the current study, 120 undergraduate students enrolled in an introductory psychology course were shown three positively valenced video clips. Self-report and psychophysiological indices of emotion (i.e., respiratory sinus arrhythmia and galvanic skin response) were measured before, during, and after each clip. Analyses examined associations with BPD and depression symptom severity. Some evidence was found for a more attenuated subjective positive emotional response specific to BPD symptom severity, distinct from the effects of depression severity. Other patterns of associations with BPD severity, including greater baseline negative emotion and attenuated parasympathetic activity, were largely accounted for by depression severity. Results also suggested that positive emotion vulnerability in BPD may be somewhat context specific, and certain positively valenced stimuli (e.g., others expressing positive emotion) may contribute more to attenuated positive emotional responses. More broadly, this study highlights the value in examining how psychopathology may impact emotional responses to positive stimuli specifically.

10. **Title:** Risk Factors for Borderline Personality Disorders in Adolescents  
**Authors:** MC Zanarini, CM Temes, LR Magni, BA Aguirre, KE Hein, & M Goodman  
**Journal & Date:** Journal of Personality Disorders, 2019  

**Abstract:** The objective of this study was to assess the association between variables reflecting childhood adversity, protective childhood experiences, and the five-factor model of personality and BPD in adolescents. Two groups of adolescents were studied: 104 met criteria for BPD and 60 were psychiatrically healthy. Adverse and protective childhood experiences were assessed using a semistructured interview. The five-factor model of personality was assessed using the NEO-FFI. Eight of nine variables indicating severity of abuse and neglect, positive childhood relationships, childhood competence, and the personality factors studied were found to be significant bivariate risk factors for adolescent BPD. However, in a multivariate model, severity of neglect, higher levels of neuroticism, and lower levels of childhood competence were found to be the best risk factor model. Taken together, the results of this study suggest that all three
types of risk factors studied are significantly associated with BPD in adolescents.