



# Behavioral Tech

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## DBT Treatment Research

JUNE 16 – OCTOBER 19, 2017

1. **Title:** [Randomized Clinical Trial of Dialectical Behavior Therapy for Pre-Adolescent Children With Disruptive Mood Dysregulation Disorder: Feasibility and Outcomes](#)

**Authors:** F Perepletchikova, D Nathanson, S Axelrod, C Merrill...

**Journal & Date:** Journal of the American Academy of Child & Adolescent Psychiatry (2017)

**Objective:** Persistent irritability and behavior outbursts in [disruptive mood dysregulation disorder](#) (DMDD) are associated with severe impairment in childhood and with negative adolescent and adult outcomes. There are no empirically established treatments for DMDD. This study examined the feasibility and preliminary efficacy of [dialectical behavior therapy](#) adapted for [preadolescent](#) children (DBT-C) with DMDD.

**Method:** Children 7 to 12 years old with DMDD (N = 43) were randomly assigned 1:1 to DBT-C or treatment as usual (TAU). The 6 domains of feasibility included recruitment, randomization, retention, attendance, participants' satisfaction, and therapist adherence. Blinded raters assessed participants at baseline, after 8, 16, 24, and 32 weeks, and at 3-month follow-up. The primary efficacy outcome was the positive response rate on the [Clinical Global Impression–Improvement](#) scale. Improvements in behavior outbursts and angry/irritable mood were assessed by the Clinical Global Impression–Severity scale.

**Results:** Mean number of participants randomized per month was  $2.53 \pm 2.72$ . Participants in DBT-C (n = 21) attended 89% of sessions compared with 48.6% in TAU (n = 22). Eight TAU participants (36.4%) dropped out compared with none in DBT-C. Parents and children in DBT-C expressed significantly higher treatment satisfaction than those in TAU. The rate of positive response was 90.4% in DBT-C compared with 45.5% in TAU, despite 3 times as many participants in TAU receiving psychiatric medications. Remission rates were 52.4% for DBT-C and 27.3% for TAU. Improvements were maintained at 3-month follow-up. Therapists showed adherence to DBT-C.

**Conclusion:** DBT-C demonstrated feasibility in all prespecified domains. Outcomes also indicated preliminary efficacy of DBT-C.

2. **Title:** [Comparing Brief Interventions for Suicidal Individuals Not Engaged in Treatment: A Randomized Clinical Trial](#)

**Authors:** EF Ward-Ciesielski, JA Tidik, AJ Edwards, MM Linehan

**Journal & Date:** Journal of Affective Disorders (2017)



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**Background:** Non-treatment-engaged individuals experiencing suicidal thoughts have been largely overlooked in the intervention literature, despite reviews suggesting most individuals who die by suicide were not in treatment immediately prior to their death. Most intervention studies recruit individuals from treatment providers, potentially neglecting those individuals who are not already engaged in services. These individuals clearly represent a group in need of additional empirical attention.

**Methods:** A randomized clinical trial was conducted to compare a single-session dialectical behavior therapy skills-based intervention to a relaxation training control condition. Ninety-three non-treatment-engaged subjects participated in a single in-person assessment, received one of the intervention protocols, and completed follow-up phone interviews for three months including measures of suicidal ideation, emotion dysregulation, and coping skills, as well as other relevant assessments.

**Results:** Both conditions reported significantly reduced levels of suicidal ideation, depression, and anxiety; however, analyses revealed no significant differences between conditions on the main outcome measures of suicidal ideation, emotion dysregulation, skills use, depression, or anxiety.

**Limitations:** The two interventions may have been too similar to permit detection of differential effects with this sample size. Specifically, the control condition may have been too active and there may have been stylistic overlap by providers who delivered both interventions.

**Conclusions:** Encouragingly, half of subjects contacted other mental health services during the follow-up period. Although the two interventions under investigation did not yield differential results, the significant changes in important domains across interventions suggest that brief interventions may hold promise for this difficult-to-reach population.

3. **Title:** [Outcome Trajectories and Prognostic Factors for Suicide and Self-Harm Behaviors in Patients With Borderline Personality Disorder Following One Year of Outpatient Psychotherapy](#)

**Authors:** SF McMain, S Fitzpatrick, T Boritz, R Barnhart, P Links...

**Journal & Date:** Journal of Personality Disorders (2017)

This study examined suicide and self-harm trajectories in 180 individuals with BPD receiving dialectical behavior therapy or general psychiatric management in a randomized controlled trial. Suicide and self-harm behaviors were assessed at baseline, every four months throughout treatment, and every 6 months over 2 years of follow-up. Latent class growth mixture modeling identified suicide and self-harm trajectories. Multinomial logistic regression analyses examined baseline patient characteristics. Three latent subgroups were identified. The largest responded rapidly to treatment and sustained a favorable response post-discharge. The second progressed slowly during treatment but achieved and maintained a favorable response. A third subgroup showed a rapid favorable response during treatment, however symptoms returned to near baseline levels post-discharge. This third subgroup had higher baseline depression, emergency department visits, and unemployment. BPD patients with high baseline health care utilization, depression, and unemployment may benefit from modifications to treatment specifically targeting these issues.



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4. **Title:** [Impact of therapist change after initial contact and traumatic burden on dropout in a naturalistic sample of inpatients with borderline pathology receiving dialectical behavior therapy](#)

**Authors:** C Steuwe, M Berg, M Driessen, T Beblo

**Journal & Date:** Borderline Personality Disorder and Emotion Dysregulation (2017)

**Background:** This study focused on the predictors of therapy dropout in a naturalistic sample of patients with borderline pathology receiving dialectical behavior therapy (DBT) in an inpatient setting. We assumed that the change of the therapist between DBT-briefing and start of DBT-treatment as well as comorbid posttraumatic stress disorder (PTSD) and childhood trauma history were associated with elevated dropout.

**Methods:** Eighty-nine participants with borderline pathology ( $\geq 3$  borderline personality disorder criteria) receiving an inpatient DBT program completed a quality assurance questionnaire set assessing demographic information and pretreatment psychopathology during the days of their inpatient stay. Beyond that, changes of therapists were documented. The predictor analyses were investigated with generalized estimating equations.

**Results:** The dropout rate was 24.7%. A change of therapist between DBT-briefing and treatment as well as high childhood emotional abuse was associated with premature termination of treatment. Higher values of physical neglect during childhood were associated with a protective effect on treatment dropout. Surprisingly, this was also true for comorbid PTSD.

**Conclusions:** This study supports the importance of therapy process variables as predictors of therapy dropout in borderline pathology. A change of therapist between DBT-briefing and treatment was associated with an increased vulnerability for dropping out of treatment and should therefore be avoided if possible. Against our hypotheses, a comorbid PTSD was even protective with regard to DBT dropout. Therefore, this severely suffering patient group should not be rejected from treatment assuming them to be too unstable for psychotherapy. However, results need to be replicated.

5. **Title:** [Effectiveness of a 10-week group program based on Dialectical Behaviour Therapy skills among patients with personality and mood disorders: findings from a pilot study](#)

**Authors:** AM Conrad, A Sankaranarayanan, TJ Lewin, A Dunbar

**Journal & Date:** Australasian Psychiatry (2017)

**Objectives:** Community mental health services are often required to manage people experiencing repeated crises. Personality disorders are not uncommon, accounting for up to one-third of such presentations. These patients are often difficult to treat, leading to a revolving-door phenomenon. This study evaluated the effectiveness of a pilot intervention in reducing psychological symptoms and distress, and examined the impact of the intervention on mental health service utilization.



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**Methods:** A pre- versus post-treatment evaluation was conducted of the effectiveness of a 10-week group psychological intervention based on Dialectical Behaviour Therapy skills, conducted in a regional Australian community mental health service with patients diagnosed with either Cluster B personality disorder or a mood disorder.

**Results:** Of those who completed the program ( $N = 38$  patients), 84% were female, with an average age of 35.13 years. Participants were active clients of the service for an average of 58.3 weeks prior to the program. They demonstrated significant improvements in quality of life and self-control, and a reduction in hopelessness, cognitive instability and dependence on mental health services.

**Conclusions:** Limiting the Dialectical Behaviour Therapy program to a short-term skills-based group component was successful with the targeted patient group; however, more research is required to establish the generalizability of these results.

6. **Title:** [DBT for co-morbid borderline personality disorder and substance use disorder without drug replacement in Egyptian outpatient settings: A non-randomized trial](#)

**Authors:** A Abdelkarim, T Molokhia, A Rady, A Ivanoff

**Journal & Date:** European Psychiatry (2017)

**Background:** [Dialectical behavior therapy](#) has demonstrated effectiveness for patients suffering from co-morbid [borderline personality](#) and [substance use disorder](#). The current study tries to replicate results of previous studies in a mixed gender sample of Egyptian outpatients.

**Aim:** The aim of the current study was to examine the effectiveness of DBT without drug replacement relative to treatment as usual "TAU" in improving behavioral outcomes related to SUD and BPD, and improving emotional regulation.

**Methods:** Forty outpatients with co-morbid BPD and SUD in Alexandria and Cairo were assigned for one year either to comprehensive DBT program (20 patients), or TAU defined as ongoing outpatient psychotherapeutic treatment from referring center (20 patients). Patients were assessed at baseline and follow up assessment at 4, 8, 12 and 16 months was done using Arabic version of Difficulties in Emotion Regulation Scale (DERS), urine multidrug screen and time line follow-back method for assessment of [alcohol and substance use](#) history.

**Results:** Following one year of treatment, DBT group showed significantly lower doses of drugs used, DERS score, rates of hospital admission, ER visits, suicidal attempts and episodes of NSSI. Also, DBT patients showed markedly increased retention in treatment and longer duration of total alcohol abstinence and other drugs of abuse. Positive outcomes were maintained for four months post-treatment.

**Conclusion:** DBT demonstrated superior efficacy in comparison to TAU for treatment of Egyptian patients suffering from co-morbid borderline personality and substance use disorder across behavioral domains of SUD, BPD and reduction hospital admission, emergency room visits and DERS score.



7. **Title:** [Comparison of the Effects of Cognitive Behavioral Therapy and Dialectical Skill Training on Symptoms of Borderline Personality Disorder in Male Patients](#)

**Authors:** M Zarabian, M Salehi, F Gholshani, F Hasani

**Journal & Date:** Avicenna Journal of Neuro Psycho Physiology (2017)

**Introduction:** Borderline personality disorder (BPD) is a common disorder, associated with different biological and psychological parameters. However, further research is required to determine the optimal therapeutic methods and conditions, which can produce better outcomes for BPD patients.

**Objectives:** This research aimed to compare the effects of cognitive behavioral therapy (CBT) and dialectical behavioral therapy (DBT) skill training on the symptoms of male patients with BPD.

**Methods:** This comparative semi-experimental study was performed with a pretest-posttest design on 3 groups (2 experimental and 1 control). The statistical population consisted of all male patients, hospitalized at Farshchian Psychiatric hospital, affiliated to Hamadan University of Medical Sciences from April to October 2016. Availability sampling method was applied to select the subjects, and simple random sampling was used for replacement of subjects. In this study, out of 36 selected patients, 27 were studied. The patients' symptoms were evaluated, using BPD Severity Index (BPDSI). The study was carried out in 3 stages of initial assessment, therapeutic intervention, and follow-up. Drug therapy, along with CBT, was implemented for the experimental group 1, while DBT skill training and drug therapy were applied for the experimental group 2. To analyze the data, repeated measures ANOVA was performed, using SPSS.

**Results:** The findings showed that both CBT and DBT skill training could reduce the symptoms of BPD ( $F[2, 24], 42.276; P < 0.05$ ).

**Conclusions:** With respect to the effect size measurements for CBT ( $\eta^2, 0.67$ ) and DBT skill training ( $\eta^2, 0.85$ ), it can be concluded that the effect size of DBT was greater than CBT in reducing the symptoms of BPD.

8. **Title:** [Effectiveness of Group Dialectical Behavior therapy \(DBT\) in reducing depressive symptoms in women with Multiple Sclerosis in IRAN](#)

**Authors:** S Sepehri, F Zandnia, MM Rad, S Ghahari...

**Journal & Date:** JCBP (2017)

**Subject:** Depression as the most prevalent psychiatric disorder among MS patients, affects their quality and quantity of life negatively. So, treatment of depression for people with MS is very important. Among different treatment approaches in reducing depression among MS patients, dialectical behavioral therapy has not been studied sufficiently.



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**Aim:** The present study evaluated the efficacy of dialectical behavior therapy in reducing depression among women with MS.

**Methods:** This is a semi experimental study by pre-test – post-test with two groups; one case group and one control group. In sampling, 20 women with MS were first voluntarily selected and next randomly replaced to two above mentioned groups. Experimental group received twelve dialectical behavior therapy sessions intervention while control group did not receive any thing. For data collection Beck Depression Inventory was used. Descriptive statistics, covariance and independent t-test were used to analyze the data in SPSS-20.

**Results:** Depression was significantly decreased in case group after the dialectical behavior therapy. Conclusion: Dialectical behavior therapy not only is a non-pharmacological, non-harmful and economical way to improve depression co morbid with MS, but also enhance patients' quality and quantity of life, which is the main target of any treatment policy. So, using DBT in comprehensive treatment of patients with MS is recommended.

## Other Articles Relevant to DBT & BPD

1. **Title:** [Assessment-Driven Case Formulation and Treatment Planning in Dialectical Behavior Therapy: Using Principles to Guide Effective Treatment](#)

**Authors:** SL Rizvi, JHR Sayrs

**Journal & Date:** Cognitive and Behavioral Practice (2017)

Dialectical Behavior Therapy (DBT) is a complex cognitive-behavioral treatment designed for a population with multiple problematic and high-risk behaviors. As with any behavioral treatment, the role of assessment in DBT is critical. Although there is a significant body of research supporting the efficacy of DBT, there is a relative dearth of practical and principle-based information that help therapists formulate cases and treatment from a DBT perspective. In this article, we provide a step-by-step guide for creating an assessment-driven DBT case formulation and treatment plan. We focus on identifying stage of treatment, determining goals, developing the target hierarchy, assessing and treating the primary target behavior, and tracking outcomes. We highlight the few rules that inform DBT assessment and practice, note and correct several common misconceptions, and demonstrate how the use of thorough assessment can result in a more nuanced case formulation and treatment plan.

2. **Title:** [Mechanisms of change in dialectical behaviour therapy and cognitive behavior therapy for borderline personality disorder: A critical review of the literature](#)

**Authors:** S Rudge, JD Feigenbaum, P Fonagy

**Journal & Date:** Journal of Mental Health (2017)

**Background:** Little is known about the "active ingredients" of psychological therapy for Borderline Personality Disorder (BPD) despite a growing evidence base documenting its clinical



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effectiveness. This information can be used by clinicians to inform service planning and care pathways.

**Aims:** The aim of this study was to review published empirical research investigating the potential mechanisms underlying therapeutic change in Dialectical Behaviour Therapy (DBT) and Cognitive Behaviour Therapy (CBT) for BPD.

**Method:** A thorough search of the PsychInfo, CINAHL Plus, PubMed, MEDLINE and EMBASE databases revealed research into potential mechanisms of change.

**Results:** A total of 52 abstracts were reviewed. After a full text screen of the most relevant studies, 14 met inclusion criteria. Twelve examined DBT and two CBT. Mechanisms of change identified broadly fell into three categories: emotion regulation/self-control, skills use and therapeutic alliance/investment in treatment. Outcomes measured included general mental health diagnoses (e.g. anxiety, depression) and BPD-specific symptoms (e.g. self-harm/suicidality, impulsivity, substance misuse, anger).

**Conclusion:** Further empirically robust research is required to test hypotheses about the influence of the proposed mechanisms on therapeutic change in psychological therapies for BPD.

3. **Title:** [Effects of brief mindful breathing and loving-kindness meditation on shame and social problem solving abilities among individuals with high borderline personality traits](#)

**Authors:** SL Keng, JX Tan

**Journal & Date:** Behaviour Research and Therapy (2017)

Borderline personality disorder (BPD) is a severe mental condition characterized by a range of cognitive and behavioral vulnerabilities, including chronic shame and deficits in social problem solving (SPS) abilities. Little research however, has examined strategies that may alleviate shame and SPS deficits among individuals with BPD traits. Using a laboratory experimental approach, the present study compared the effects of a brief mindfulness versus loving-kindness meditation (LKM) induction on shame and SPS abilities in a sample of adults with high BPD traits. Eighty-eight participants underwent a shame induction procedure involving recall of a negative autobiographical memory. They were then randomly assigned to 10 min of mindful breathing or LKM, or a no-instruction condition. Shame and SPS abilities were assessed via visual analogue scales and the Means-Ends Problem Solving task respectively. Results indicated that there were significant decreases in shame from pre-to post-regulation in the mindfulness group versus the LKM and no-instruction groups. Groups did not differ on changes in SPS abilities from pre-to post-regulation. Overall, the findings support the efficacy of mindfulness as a strategy to regulate shame among individuals with BPD traits, and raises questions with regard to the utility of LKM in modulating shame in the context of high emotional arousal.

4. **Title:** [Switching roles: a qualitative study of staff experiences of being dialectical behaviour therapists within the National Health Service in England](#)

**Authors:** R Hutton, S Hodge, M Tighe

**Journal & Date:** British Association for Behavioural and Cognitive Psychotherapies (2017)



Many National Health Service (NHS) Trusts in England have invested in dialectical behavioural therapy (DBT) for mental health service users. The experiences of NHS staff delivering DBT were explored using semi-structured interviews with six dialectical behaviour therapists working in secondary mental health services within the NHS. The aim was to consider the impact on staff of adding the DBT therapist role onto their existing job role. Interview data were analysed using thematic analysis. Six themes were inductively generated from the data: DBT as a useful framework; DBT as the most satisfying part of the job; 'Worzel Gummidge heads' – conflicts in roles; 'DBT buddies' – the importance of informal support; uncertainty about the future; and recursivity – using DBT skills personally. Interactions between themes, implications for the service and future research directions are discussed. Key findings suggest that the addition of the DBT therapist role, as well as the recursive nature of DBT, has a positive impact professionally and personally. However, the service context within which participants were working can lead this additional role to cause increased demands and therefore stress, reducing that positive impact.

5. **Title:** [Family Connections versus optimised treatment-as-usual for family members of individuals with borderline personality disorder: non-randomised controlled study](#)

**Authors:** D Flynn, M Kells, M Joyce, P Corcoran, S Herley...

**Journal & Date:** Borderline Personality Disorder and Emotion Dysregulation (2017)

**Background:** Borderline personality disorder (BPD) is challenging for family members who are often required to fulfil multiple roles such as those of advocate, caregiver, coach and guardian. To date, two uncontrolled studies by the treatment developers suggest that Family Connections (FC) is an effective programme to support, educate and teach skills to family members of individuals with BPD. However, such studies have been limited by lack of comparison to other treatment approaches. This study aimed to compare the effectiveness of FC with an optimised treatment-as-usual (OTAU) programme for family members of individuals with BPD. A secondary aim was to introduce a long term follow-up to investigate if positive gains from the intervention would be maintained following programme completion.

**Methods:** This study was a non-randomised controlled study, with assessment of outcomes at baseline (pre-intervention) and end of programme (post-intervention) for both FC and OTAU groups, and at follow-up (3 months post-intervention; 12 or 19 months post-intervention) for the FC group. Eighty family members participated in the FC ( $n = 51$ ) and the OTAU ( $n = 29$ ) programmes. Outcome measures included burden, grief, depression and mastery. Linear mixed-effects models were used to assess baseline differences in the outcome measures by gender, age group and type of relationship to the individual with BPD. Linear mixed-effects models were also used to estimate the treatment effect (FC versus OTAU) utilising all available data from baseline and end of programme.

**Results:** The FC group showed changes indicating significant improvement with respect to all four outcome measures ( $p < 0.001$ ). The OTAU group showed changes in the same direction as the intervention group but none of the changes were statistically significant. The intervention effect was statistically significant for total burden (including both subscales;  $p = .02$  for



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subjective burden and  $p = .048$  for objective burden) and grief ( $p = 0.013$ ). Improvements were maintained at follow-up for FC participants.

**Conclusions:** The findings of the current study indicate that FC results in statistically significant improvements on key measures while OTAU does not yield comparable changes. Lack of significant change on all measures for OTAU suggests that a three session psycho-education programme is of limited benefit. Further research is warranted on programme components and long-term supports for family members.

6. **Title:** [The use of Virtual Reality facilitates Dialectical Behavior Therapy®“observing sounds and visuals” mindfulness skills training exercises for a Latino patient with severe burns: a case study](#)

**Authors:** J Gomez, HG Hoffman, SL Bistricky, M Gonzalez...

**Journal & Date:** Frontiers in Psychology (2017)

**Background:** Sustaining a burn injury increases an individual's risk of developing psychological problems such as generalized anxiety, negative emotions, depression, acute stress disorder, or post-traumatic stress disorder. Despite the growing use of Dialectical Behavioral Therapy® (DBT®) by clinical psychologists, to date, there are no published studies using standard DBT® or DBT® skills learning for severe burn patients. The current study explored the feasibility and clinical potential of using Immersive Virtual Reality (VR) enhanced DBT® mindfulness skills training to reduce negative emotions and increase positive emotions of a patient with severe burn injuries. The participant was a hospitalized (in house) 21-year-old Spanish speaking Latino male patient being treated for a large (>35% TBSA) severe flame burn injury.

**Methods:** The patient looked into a pair of Oculus Rift DK2 virtual reality goggles to perceive the computer-generated virtual reality illusion of floating down a river, with rocks, boulders, trees, mountains, and clouds, while listening to DBT® mindfulness training audios during 4 VR sessions over a 1 month period. Study measures were administered before and after each VR session.

**Results:** As predicted, the patient reported increased positive emotions and decreased negative emotions. The patient also accepted the VR mindfulness treatment technique. He reported the sessions helped him become more comfortable with his emotions and he wanted to keep using mindfulness after returning home.

**Conclusions:** Dialectical Behavioral Therapy is an empirically validated treatment approach that has proved effective with non-burn patient populations for treating many of the psychological problems experienced by severe burn patients. The current case study explored for the first time, the use of immersive virtual reality enhanced DBT® mindfulness skills training with a burn patient. The patient reported reductions in negative emotions and increases in positive emotions, after VR DBT® mindfulness skills training. Immersive Virtual Reality is becoming widely available to mainstream consumers, and thus has the potential to make this treatment available to a much wider number of patient populations, including severe burn patients. Additional development, and controlled studies are needed.