

DBT Research Takeaways

Articles from QUARTER 4, 2021

Portland DBT Institute Research Team:

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DBT RESEARCH

1

Braden, A., Anderson, L., Redondo, R., Watford, T., Emley, E., & Ferrell, E. (2021). **Emotion regulation mediates relationships between perceived childhood invalidation, emotional reactivity, and emotional eating.** *Journal of Health Psychology, 26*(14), 2937–2949. <https://doi.org/10.1177/1359105320942860>

HOW. 258 adults completed various measures assessing for childhood invalidation, emotional reactivity, emotion regulation, and emotional eating. **WHAT.** Higher reactivity to negative emotions was correlated with greater difficulty in regulating emotions, which was correlated with greater emotional eating. Greater perceived childhood invalidation was also correlated with greater difficulty in regulating one's emotions, which remained correlated with greater emotional eating. Results suggest that emotional regulation difficulties may serve as a mediator between negative emotional reactivity and emotional eating, and between perceived childhood invalidation and emotional eating.

2

Chen, S.-Y., Cheng, Y., Zhao, W.-W., & Zhang, Y.-H. (2021). **Effects of dialectical behaviour therapy on reducing self-harming behaviours and negative emotions in patients with borderline personality disorder: A meta-analysis.** *Journal of Psychiatric and Mental Health Nursing, 28*(6), 1128–1139. <https://doi.org/10.1111/jpm.12797>

HOW. A meta-analysis was conducted on 11 randomized control trials (RCTs), consisting of 849 participants, regarding the use of DBT and DBT skills training (DBT-ST) as treatments for self-harming behaviors and negative emotions in individuals with BPD. **WHAT.** DBT interventions significantly reduced the frequency of self-harming behaviors compared to the control conditions used, which included treatment as usual or other non-DBT interventions. Researchers observed a significant reduction in depressive symptoms for participants in DBT treatment groups compared to control conditions. No significant differences between groups were observed for anger and suicidal ideation. Findings presented suggest that DBT is more effective in reducing self-harm and depressive symptoms in people with BPD than other, non-DBT treatments.

3

Davoudi, M., Allame, Z., Ferooghi, A., & Taheri, A. A. (2021). **A pilot randomized controlled trial of dialectical behavior therapy (DBT) for reducing craving and achieving cessation in patients with marijuana use disorder: feasibility, acceptability, and appropriateness.** *Trends in Psychiatry and Psychotherapy, 43*(4), 302–310. <https://doi.org/10.47626/2237-6089-2020-0123>

HOW. 61 adult males in Iran with Marijuana Use Disorder (MUD) underwent either a DBT for Substance Use Disorder treatment, or a non-DBT treatment implementing psychoeducation and craving management for cannabis use. All participants completed measures assessing cannabis cravings, intervention acceptability and appropriateness, and self-reported their cannabis use for two months after the treatment period. **WHAT.** Participants who received DBT treatment were more likely to remain in treatment and rated their treatment as significantly more appropriate and acceptable than those in the non-DBT condition. Participants who received DBT exhibited a significant reduction in emotional reactivity and cannabis use compared to non-DBT treatment. No significant differences were found between treatment groups in reported cravings for cannabis, compulsivity, expectancy, and purposefulness.

4

Heath, N., Midkiff, M. F., Gerhart, J., & Turow, R. G. (2021). **Group-based DBT skills training modules are linked to independent and additive improvements in emotion regulation in a heterogeneous outpatient sample.** *Psychotherapy Research: Journal of the Society for Psychotherapy Research, 31*(8), 1001–1011. <https://doi.org/10.1080/10503307.2021.1878306>

HOW. 136 adults attended at least one of four different weekly DBT group skills training each of which ran for six to eight weeks. Baseline and post-module emotion regulation skills were assessed using the Difficulties with Emotion Regulation Scale (DERS). **WHAT.** Participants' DERS scores were significantly lower after the completion of a module compared to their baseline scores, regardless of module type. The rate of reduction in DERS scores decreased over the course of treatment, suggesting that after approximately 95 sessions, the effects of DBT skills modules in reducing DERS scores would reach zero. No interactions were observed between treatment outcome and patient age or gender.

5

Iskric, A., & Barkley-Levenson, E. (2021). **Neural Changes in Borderline Personality Disorder After Dialectical Behavior Therapy-A Review.** *Frontiers in Psychiatry, 12*, 772081. <https://doi.org/10.3389/fpsyt.2021.772081>

HOW. Researchers reviewed nine studies using either functional Magnetic Resonance Imaging (fMRI) or functional Near-Infrared Spectroscopy (fNIRS) to assess for neurobiological changes in individuals with BPD after DBT treatment was conducted. **WHAT.** Reductions were observed in amygdala, anterior cingulate cortex (ACC), inferior frontal gyrus (IFG) activation when viewing arousing stimuli. Increases were observed in medial prefrontal cortex (PFC) and right IFG activation in those that did not complete their full DBT treatment. Findings indicate that there are specific neurobiological differences and changes in individuals with BPD who undergo and complete DBT treatment, compared to those that do not complete DBT treatment, those who undergo another treatment, and those without BPD.

6

Keng, S.-L., Mohd Salleh Sahimi, H. B., Chan, L. F., Woon, L., Eu, C. L., Sim, S. H., & Wong, M. K. (2021). **Implementation of brief dialectical behavior therapy skills training among borderline personality disorder patients in Malaysia: feasibility, acceptability, and preliminary outcomes.** *BMC Psychiatry, 21*(1), 486. <https://doi.org/10.1186/s12888-021-03500-y>

HOW. 20 adults with BPD living in Malaysia attended a 14-week outpatient DBT skills group, and BPD symptom severity was assessed during intake and two weeks after treatment. Participants were also able to provide open-ended feedback on their experience in the training group after treatment was completed. **WHAT.** Researchers observed significant decreases in overall BPD symptoms, depressive symptoms, stress, and difficulty with emotion regulation. Significant increases in self-compassion and personal well-being were also observed. Most participants reported that the DBT skills training positively impacted their lives, and many participants reported an increase in confidence in managing daily life challenges and an increased ability to emotionally regulate. The distress tolerance and mindfulness modules were rated to be the most helpful, and many participants reported that they wished the sessions were longer or more frequent.

7

Larsen, S. L., Helweg-Jørgensen, S., Langergaard, A., Søndergaard, J., Sørensen, S. S., Mathiasen, K., Lichtenstein, M. B., & Ehlers, L. H. (2021). **Mobile Diary App Versus Paper-Based Diary Cards for Patients With Borderline Personality Disorder: Economic Evaluation.** *Journal of Medical Internet Research, 23*(11), e28874. <https://doi.org/10.2196/28874>

HOW. 78 adults admitted to Danish psychiatric outpatient programs for BPD underwent standard DBT treatment and were assigned to complete their diary cards using either a mobile diary app or a paper-based diary card. Health-related outcomes in both groups were assessed at baseline and at a 12-month follow-up, and costs of treatment for each diary card method were recorded. **WHAT.** Both conditions exhibited a decrease in severity in borderline symptoms, depressive symptoms, and suicidal behavior at the 12-month follow up, with participants using the mobile diary app exhibiting a smaller decrease in borderline symptoms but a greater decrease in suicidal behavior compared to the paper diary card group. However, there was a high volume of missing values in both baseline and 12-month follow up assessments. Findings indicate that mobile app diary card use is similar in effectiveness to paper diary card use, but can come with higher costs for providers.

DBT Research Takeaways

4th QUARTER, 2021

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Liang, L., Feng, L., Zheng, X., Wu, Y., Zhang, C., & Li, J. (2021). **Effect of dialectical behavior group therapy on the anxiety and depression of medical students under the normalization of epidemic prevention and control for the COVID-19 epidemic: a randomized study.** *Annals of Palliative Medicine*, 10(10), 10591–10599. <https://doi.org/10.21037/apm-21-2466>

HOW. 52 medical students with mild to moderate depressive and anxiety symptoms in Wuhan, China, were randomly assigned either to a remotely-delivered DBT intervention or to virtual psychoeducation on mental health, between June and August of 2020. All participants completed measures assessing for depressive and anxiety symptoms before and after treatment. **WHAT.** Participants in the DBT condition exhibited significantly lower scores in their post-test for depressive symptoms (PHQ-9), anxiety symptoms (GAD-7), and overall somatic symptom severity (SSS) compared to their pre-test scores, whereas those in the control condition did not exhibit a significant reduction between pre- and post-test scores on any scale.

9

Lothes, J. E., McCool, M. W., Mochrie, K. D., Guendner, E., & St John, J. (2021). **Applying adherent DBT Principles to treatment in a partial hospital setting: An analysis over 5-years of outcomes from intake to discharge.** *Journal of Clinical Psychology*, 77(11), 2431–2441. <https://doi.org/10.1002/jclp.23188>

HOW. 460 adults in a Partial Hospital (PH) setting attended an adherent DBT program. Upon intake into and exit from PH, participants completed various measures assessing depression, anxiety, hopelessness, and suffering symptoms. **WHAT.** After the DBT intervention, participants exhibited a significant reduction in depression, anxiety, hopelessness, and suffering symptoms compared to their pre-test scores. Findings add to prior literature indicating that adherent DBT treatment in a PH setting can be beneficial in reducing symptoms of depression and anxiety. Additionally, findings demonstrate the feasibility of the use of adherent DBT treatment in a PH setting as a form of step-down care, or to prevent the need for a higher level of care..

10

Newlands, R. T., & Benuto, L. T. (2021). **Enhancing Mental Health Services for Survivors of Intimate Partner Violence: A Stage One Pilot.** *Community Mental Health Journal*, 57(8), 1588–1594. <https://doi.org/10.1007/s10597-021-00782-0>

HOW. 24 female survivors of Intimate Partner Violence (IPV) were randomly assigned to an intervention or control condition within a 22-day DBT for IPV skills group program. Participants in the intervention group completed a virtual intervention adjunct (VIA) every other day after the skills group, and participants in the control group attended the same skills group without the VIA. All participants were assessed for PTSD symptoms, and mindfulness and emotion regulation skills, before treatment and at a one-month follow up. Participants also completed a follow-up questionnaire asking about skills use, and acceptability of the VIA. **WHAT.** Participants in the VIA condition exhibited a significantly greater improvement in interpersonal sensitivity compared to those in the control condition. No other differences between groups in terms of mental health outcome measures were significant. Participants in the VIA condition reported more skills use compared to the control condition, with a significant increase in mindfulness skills. VIA participants also reported enjoying the VIA, and that the VIA increased their understanding of DBT skills. Findings demonstrate the feasibility, acceptability, and efficacy of VIAs in DBT skills groups for survivors of IPV.

11

Rameckers, S. A., Verhoef, R. E. J., Grasman, R. P. P., Cox, W. R., van Emmerik, A. A. P., Engelmoer, I. M., & Arntz, A. (2021). **Effectiveness of Psychological Treatments for Borderline Personality Disorder and Predictors of Treatment Outcomes: A Multivariate Multilevel Meta-Analysis of Data from All Design Types.** *Journal of Clinical Medicine*, 10(23), 5622. <https://doi.org/10.3390/jcm10235622>

HOW. A meta-analysis investigating various psychological treatments for BPD was conducted, using 87 studies and 5881 total adult participants. Treatments included adherent DBT, nonadherent/reduced DBT (DBTmin), Schema Therapy (ST), Mentalization-Based Treatment (MBT), Psychodynamic Treatment (PDT), Cognitive Behavior Therapy (CBT), Transference-Focused Psychotherapy (TFP), Community Treatment by Experts (CTBE), Treatment as Usual (TAU), and mixed therapies. **WHAT.** DBTmin, ST, and TAU treatments exhibited a significant reduction in overall BPD symptomology. Across all treatments, symptoms of general severity and affective instability were shown to significantly improve the most out of all BPD symptoms. Dissociation, impulsivity, anger, and suicidality exhibited the least significant improvement out of all BPD symptoms. DBTmin improved anger and affective instability the most out of all other treatments. Researchers also observed that as age increased, treatment effectiveness decreased.

12

Ramsey, W. A., Berlin, K. S., Del Conte, G., Lightsey, O. R., Schimmel-Bristow, A., Marks, L. R., & Strohmer, D. C. (2021). **Targeting self-criticism in the treatment of nonsuicidal self-injury in dialectical behavior therapy for adolescents: a randomized clinical trial.** *Child and Adolescent Mental Health*, 26(4), 320–330. <https://doi.org/10.1111/camh.12452>

HOW. 37 participants between the ages of 10 and 18 in a Partial Hospital Program (PHP) completed measures to assess for Nonsuicidal Self Injury (NSSI) and self-criticism, before and after treatment. Participants were randomly assigned to either a 7-week adherent DBT treatment adapted for adolescents (DBT-A), or to the same treatment with additional weekly 10-15 minute cognitive intervention sessions (DBT-A Plus). **WHAT.** Participants in the DBT-A Plus treatment group demonstrated a non-significant decrease in NSSI. Higher post-treatment levels of self-criticism were significantly associated with a higher frequency of NSSI behaviors post-treatment. No other significant results were observed. Findings indicate the need for further research in this area.

13

Rogg, M., Braakmann, D., Schaich, A., Ambrosch, J., Meine, C., Assmann, N., Schweiger, U., & Fassbinder, E. (2021). **How patients with borderline personality disorder experience the skill opposite action in the context of dialectical behavior therapy-A qualitative study.** *Psychotherapy (Chicago, Ill.)*, 58(4), 544–556. <https://doi.org/10.1037/psr0000392>

HOW. 23 adults with BPD undergoing DBT treatment were interviewed about their experiences with the Opposite Action (OA) DBT skill. **WHAT.** Nearly half of participants reported that OA requires motivation or initiative, and one third of participants reported that OA requires discipline and consistency. Nearly half of participants reported that OA is difficult to engage in, and more than half of participants reported that OA is exhausting, and that it can have adverse effects on their lives, such as in interpersonal conflict or intensified emotions. Many participants reported that OA is helpful in providing an increase in freedom and new experiences in their daily lives. Nearly half of participants reported that OA helps them to move things forward in their life, and more than half of participants reported that OA helps them to prevent problem behavior and to change their emotional experiences in a positive direction.

14

Sobanski, T., Josfeld, S., Peikert, G., & Wagner, G. (2021). **Psychotherapeutic interventions for the prevention of suicide re-attempts: a systematic review.** *Psychological Medicine*, 51(15), 2525–2540. <https://doi.org/10.1017/S0033291721003081>

HOW. Researchers conducted a systematic review of 18 randomized controlled trials regarding various psychotherapeutic treatments for suicidality, totaling 1990 participants. **WHAT.** Participants who underwent Cognitive Behavior Therapy (CBT), Mentalization-Based Treatment, or brief psychodynamic interpersonal therapy, exhibited significantly less suicide re-attempts compared to those who engaged in Treatment as Usual (TAU) or those in a control condition. Participants who underwent DBT or Problem-Solving Therapy (PST) did not exhibit a significant difference in suicide re-attempts compared to their control conditions.

DBT Research Takeaways

4th QUARTER, 2021



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Steil, R., Schneider, A., & Schwartzkopff, L. (2022). **How to Treat Childhood Sexual Abuse Related PTSD Accompanied by Risky Sexual Behavior: A Case Study on the Use of Dialectical Behavior Therapy for Posttraumatic Stress Disorder (DBT-PTSD)**. *Journal of Child & Adolescent Trauma*, 15(2), 471–478. <https://doi.org/10.1007/s40653-021-00421-6>

HOW. Researchers conducted a case study, investigating treatment outcomes for a woman who survived childhood sexual abuse, and developed PTSD with risky sexual behavior as a result. This individual underwent DBT treatment for her PTSD, over the course of 18 months, with weekly 50-minute sessions and a four-week phase of exposure sessions up to 200 minutes each. **WHAT.** After treatment, the individual was able to set healthy sexual boundaries with her partner and exhibited a significant reduction in PTSD symptoms. Preliminary feasibility for DBT-PTSD in treating PTSD with risky sexual behavior in women survivors of childhood sexual assault is discussed.

16

Steuwe, C., Berg, M., Beblo, T., & Driessen, M. (2021). **Narrative Exposure Therapy in Patients With Posttraumatic Stress Disorder and Borderline Personality Disorder in a Naturalistic Residential Setting: A Randomized Controlled Trial**. *Frontiers in Psychiatry*, 12, 765348. <https://doi.org/10.3389/fpsy.2021.765348>

HOW. 58 adult female participants with PTSD and BPD in a residential setting were randomly assigned either to a DBT based treatment (DBT-bt) or to Narrative Exposure Therapy (NET). Participants completed measures to assess PTSD, BPD, and depressive symptoms, as well as a measure to assess quality of life. Measures were completed before, directly after, and 12 months after treatment. **WHAT.** PTSD remission rates at the 12-month follow-up were significantly higher in participants who underwent NET compared to participants who underwent DBT-bt. All participants who went into remission for PTSD also went into remission for BPD, and nearly half of all participants who went into remission for BPD went into remission for PTSD. Both treatments were found to be effective at reducing symptom severity of PTSD and BPD.

17

van Leeuwen, H., Sinnaeve, R., Witteveen, U., Van Daele, T., Ossewaarde, L., Egger, J. I. M., & van den Bosch, L. M. C. (2021). **Reviewing the availability, efficacy and clinical utility of Telepsychology in dialectical behavior therapy (Tele-DBT)**. *Borderline Personality Disorder and Emotion Dysregulation*, 8(1), 26. <https://doi.org/10.1186/s40479-021-00165-7>

HOW. Researchers conducted a review of 41 studies regarding the efficacy of DBT telehealth services. **WHAT.** Telecommunications, such as phone consultations and phone coaching, increased client and therapist satisfaction and treatment retention in some cases, but also raised barriers and concerns, such as therapist unwillingness. Virtual, asynchronous DBT skills training programs (iDBT) were less feasible than traditional DBT skills training programs but were more feasible than no treatment. In terms of synchronous videoconferencing DBT skills training programs, participants were generally able to learn and connect with the group leader as successfully as in in-person DBT groups, but participants did report an increased difficulty in connecting with the other group members in a virtual setting.

18

Vogel, E. N., Singh, S., & Accurso, E. C. (2021). **A systematic review of cognitive behavior therapy and dialectical behavior therapy for adolescent eating disorders**. *Journal of Eating Disorders*, 9(1), 131. <https://doi.org/10.1186/s40337-021-00461-1>

HOW. A systematic review of 50 studies was conducted regarding the use of CBT or DBT in the treatment of eating disorders in adolescents. **WHAT.** No significant difference in parent satisfaction was found between outpatient CBT and DBT programs for adolescents with Anorexia Nervosa (AN). DBT-enhanced Family-Based Treatment (FBT) exhibited acceptability from parents and patients with AN, Bulimia Nervosa (BN), Binge Eating Disorder (BED) and Eating Disorder Not Otherwise Specified (EDNOS), and exhibited an overall improvement in weight and eating disorder psychopathology and behavior.

19

Wilks, C. R., Gurtovenko, K., Rebmann, K., Williamson, J., Lovell, J., & Wasil, A. R. (2021). **A systematic review of dialectical behavior therapy mobile apps for content and usability**. *Borderline Personality Disorder and Emotion Dysregulation*, 8(1), 29. <https://doi.org/10.1186/s40479-021-00167-5>

HOW. A systematic review of 21 DBT-related mobile apps was conducted. Apps were categorized in six ways: DBT-only versus DBT-mixed, standalone versus non-standalone, and completely free versus upgradeable apps. **WHAT.** While DBT-only apps had more features, they were rated slightly lower on the Mobile App Rating Scale (MARS; an assessment measuring the quality of mobile apps) compared to DBT-mixed apps. Standalone apps were also rated lower on the MARS and had less app features than non-standalone apps. Completely free apps also had less features and were rated lower on the MARS compared to Upgradeable apps. DBT-only and completely free apps exhibited the least amount of engagement from their users.

20

Zalewski, M., Walton, C. J., Rizvi, S. L., White, A. W., Gamache Martin, C., O'Brien, J. R., & Dimeff, L. (2021). **Lessons Learned Conducting Dialectical Behavior Therapy via Telehealth in the Age of COVID-19**. *Cognitive and Behavioral Practice*, 28(4), 573–587. <https://doi.org/10.1016/j.cbpra.2021.02.005>

HOW. 221 DBT providers from around the world filled out a mixed questionnaire. The survey included questions regarding providers' practices, modes of DBT offered, number of telehealth sessions, as well as open ended questions asking providers to report their experiences with telehealth. **WHAT.** Some providers reported that building relationships with clients and gaining commitment for services during the pretreatment phase was more difficult with telehealth. During treatment, some providers reported that it was more difficult to assess for and intervene in life-threatening behaviors through telehealth. Many providers reported an introduction of new therapy-interfering behaviors DBT treatment, such as turning off one's camera, logging off early, falling asleep, etc. Some providers reported that engagement for children and adolescents had particularly decreased with telehealth compared to in-person services. In individual therapy, some providers highlighted challenges in assessing and responding effectively to the emotions of their clients. In consultation teams, some providers reported that themselves or other providers were more distractible in a telehealth setting. Many providers reported experiencing burnout due to the nature of telehealth.

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Borderline Personality Disorder

See previous research takeaways on our website:
<https://www.pdbti.org/take-10/>

BPD RESEARCH TAKEAWAYS

Portland DBT Institute Research Team:

Articles from QUARTER 4, 2021

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BORDERLINE PERSONALITY DISORDER

1

Akça, Ö. F., Wall, K., & Sharp, C. (2021). **Divergent mentalization types in adolescent borderline personality disorder and attention deficit/hyperactivity disorder.** *Nordic Journal of Psychiatry*, 75(7), 479–486. <https://doi.org/10.1080/08039488.2021.1887349>.

HOW. Adolescents (n = 550) with ADHD and/or BPD in an inpatient setting completed measures assessing explicit mentalization (accurate understanding of others' thoughts, feelings, and intentions), BPD features, and psychiatric symptomatology and problem behaviors. **WHAT.** Hypermentalization was associated with BPD symptom severity in girls, but not ADHD symptom severity. In boys, mentalization was negatively correlated with BPD. There was an overall pattern of BPD associated with hypermentalization, and ADHD with hypomentalization.

2

Bora, E. (2021). **A meta-analysis of theory of mind and "mentalization" in borderline personality disorder: A true neuro-social-cognitive or meta-social-cognitive impairment?** *Psychological Medicine*, 51(15), 2541–2551. <https://doi.org/10.1017/S0033291721003718>.

HOW. A meta-analysis was conducted on key terms such as "theory of mind", "social cognition", "mentalization", and "borderline personality disorder", analyzing 34 articles involving 1448 individuals with BPD and 2006 healthy controls. **WHAT.** Theory of mind was significantly impaired in BPD compared to healthy controls, and reflective functioning/mentalization scores were largely and significantly abnormal for those with BPD. Implications of meta-social and neuro-social cognitive deficits and processes are discussed further.

3

Bourvis, N., Aouidad, A., Spodenkiewicz, M., Palestra, G., Aigrain, J., Baptista, A., Benoliel, J.-J., Chetouani, M., & Cohen, D. (2021). **Adolescents with borderline personality disorder show a higher response to stress but a lack of self-perception: Evidence through affective computing.** *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, 111, 110095. <https://doi.org/10.1016/j.pnpbp.2020.110095>.

HOW. Twenty adolescents with BPD and 20 non-clinical adolescents performed a socially evaluated mental arithmetic test to induce stress. Participants' body movements, facial expressions, physiological responses (e.g., blood pressure, heart rate, and cortisol levels), and self-reports were measured to analyze both observed and perceived stress levels. **WHAT.** Adolescents with BPD experienced more stress than non-clinical adolescents, with stress levels being higher when externally observed than when self-reported, implying a lack of emotional self-awareness from adolescents with BPD. Deficits in self-perception among adolescents with BPD were consistent with the literature.

4

Bozzatello, P., Morese, R., Valentini, M. C., Rocca, P., & Bellino, S. (2021). **How Interpersonal Psychotherapy Changes the Brain: A Study of fMRI in Borderline Personality Disorder.** *The Journal of Clinical Psychiatry*, 83(1), 21m13918. <https://doi.org/10.4088/JCP.21m13918>.

HOW. Forty-three patients with BPD were randomly assigned to one of two conditions: BPD-adapted interpersonal psychotherapy (IPT-BPD-R), and clinical management while on a waiting list. Both groups underwent fMRI scans at pre- and post-intervention to analyze changes in brain functioning. **WHAT.** Results showed that the efficacy of IPT-BPD-R on BPD symptoms may be explained by functional changes in the brain related to self-related processing, social cognition, and mentalization. Decrease in activity in the anterior cingulate cortex after psychotherapy was consistent with similar studies using dialectical behavior therapy and transference-focused therapy as interventions.

5

Caveliti, M., Thompson, K., Betts, J., Fowler, C., Luebbers, S., Cotton, S. M., & Chanen, A. M. (2021). **Borderline Personality Disorder Diagnosis and Symptoms in Outpatient Youth as Risk Factors for Criminal Offenses and Interpersonal Violence.** *Journal of Personality Disorders*, 35(Supple C), 23–37. https://doi.org/10.1521/pedi_2021_35_503.

HOW. A data linkage study connected demographics and diagnostic data with criminal offense and intervention order information of young people. A sample of 492 people ages 15-25 was used from an Australian Government-funded mental health clinic serving those with BPD. Demographics included age, sex, socioeconomic status, education, and occupation. **WHAT.** Those with BPD were at significantly higher risk for being charged with violent and nonviolent offenses or being placed on a family violence intervention order than those who did not meet BPD criteria. BPD characteristics of impulsivity and anger specifically predicted higher risk for these offenses as well.

6

Dehlbom, P., Wetterborg, D., Lundqvist, D., Maurex, L., Dal, H., Dalman, C., & Kosidou, K. (2022). **Gender differences in the treatment of patients with borderline personality disorder.** *Personality Disorders*, 13(3), 277–287. <https://doi.org/10.1037/per0000507>.

HOW. Gender differences in treatment were analyzed among patients diagnosed with BPD during a 4-year period in Stockholm County (n = 5530), where 15% of the sample were men. **WHAT.** Male patients were less likely to be diagnosed with BPD than women, had lower levels of education and were more likely to receive social welfare support. Additionally, men with BPD were less likely to receive psychotherapy and psychiatric medication. Various potential explanations are discussed as to why gender imbalances remain for seeking and receiving BPD treatment.

7

Epshteyn, I., & Mahmoud, H. (2021). **Enhancing Mental Health Treatment for Borderline Personality Disorder in Corrections.** *Journal of Correctional Health Care: The Official Journal of the National Commission on Correctional Health Care*, 27(4), 220–225. <https://doi.org/10.1089/jchc.19.10.0076>.

HOW. This article discusses two approaches for increasing access to substantial mental health care among incarcerated people with BPD in correctional facilities. **WHAT.** The first approach is expanding evidence-based treatment programs, and the article summarizes studies in which EBT was implemented into forensic or correctional settings. The second approach is utilizing telemental health to deliver care remotely. Future directions are further discussed.

8

Fernández-Felipe, I., Díaz-García, A., Marco, J. H., García-Palacios, A., & Guillén Botella, V. (2021). **"Family Connections", a DBT-Based Program for Relatives of People with Borderline Personality Disorder during the COVID-19 Pandemic: A Focus Group Study.** *International Journal of Environmental Research and Public Health*, 19(1), 79. <https://doi.org/10.3390/ijerph19010079>.

HOW. In this focus group study, participant experience was explored in a DBT-based program, "Family Connections" (FC), for families of people with BPD during the confinement period of the COVID-19 pandemic. Participants (n = 7) were four families receiving FC prior to and during the pandemic. Participants underwent a semi-structured interview asking about their experiences with FC and living with their family member during the pandemic. **WHAT.** Participants reported positive, negative, and neutral experiences with their family member in confinement. The results also highlighted the need for caregivers to use skills themselves in order to support their family member with BPD. The most useful skills for family members were validation and radical acceptance. Acceptability and satisfaction with FC were further explored.

BPD RESEARCH TAKEAWAYS

4th QUARTER, 2021



BORDERLINE PERSONALITY DISORDER

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Frederiksen, C., Solbakken, O. A., Licht, R. W., Jørgensen, C. R., Rodrigo-Domingo, M., & Kjaersdam Telléus, G. (2021). **Emotional dysfunction in avoidant personality disorder and borderline personality disorder: A cross-sectional comparative study.** *Scandinavian Journal of Psychology*, 62(6), 878–886. <https://doi.org/10.1111/sjop.12771>.

HOW. Participants with BPD ($n = 25$) or avoidant personality disorder (APD; $n = 36$) completed measures of quality of life, symptom distress, interpersonal problems, and emotional dysfunction to assess group differences. **WHAT.** Emotional dysfunction levels were highly similar between those with APD and BPD, but interest levels were lower in the APD group and anger and jealousy levels were higher in the BPD group.

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Gleeson, J., Alvarez-Jimenez, M., Betts, J. K., McCutcheon, L., Jovey, M., Lederman, R., Herrman, H., Cotton, S. M., Bendall, S., McKechnie, B., Burke, E., Koval, P., Smith, J., D'Alfonso, S., Mallawaarachchi, S., & Chanen, A. M. (2021). **A pilot trial of moderated online social therapy for family and friends of young people with borderline personality disorder features.** *Early Intervention in Psychiatry*, 15(6), 1564–1574. <https://doi.org/10.1111/eip.13094>.

HOW. Seventeen participants enrolled in a novel online intervention for caregivers of youth with BPD features. Acceptability of the intervention, and aspects of both the caregivers' and youth's mental health and well-being were measured (e.g., burden, stress, expressed emotion, and coping). **WHAT.** The intervention was deemed as promising for acceptability and safety and was associated with a significant reduction in caregiver's burden and expressed emotion. Improvements in stress, communication, quality of life, coping, and knowledge of personality disorders were also found. Implications of increasing accessible and effective support for burdened families are discussed.

11

Guénolé, F., Spiers, S., Gicquel, L., Delvenne, V., Robin, M., Corcos, M., Pham-Scottez, A., & Speranza, M. (2021). **Interpersonal Relatedness and Non-suicidal Self-Injurious Behaviors in Female Adolescents With Borderline Personality Disorder.** *Frontiers in Psychiatry*, 12, 731629. <https://doi.org/10.3389/fpsy.2021.731629>.

HOW. Differences in interpersonal relatedness, self-criticism, and self-confidence of female adolescents with BPD ($n = 59$) were analyzed between those participants who engage in non-suicidal self-injury (NSSI) versus those who do not. **WHAT.** Those with NSSI behaviors displayed higher dimensions of "neediness" and "connectedness" compared to those who do not have NSSI behaviors. However, they did not score significantly higher on self-criticism and self-confidence.

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Henriques-Calado, J., Gonçalves, B., Marques, C., Paulino, M., Gama Marques, J., Grácio, J., & Pires, R. (2021). **In light of the DSM-5 dimensional model of personality: Borderline personality disorder at the crossroads with the bipolar spectrum.** *Journal of Affective Disorders*, 294, 897–907. <https://doi.org/10.1016/j.jad.2021.07.047>.

HOW. Participants diagnosed with BPD ($n = 63$), major depressive disorder (MDD; $n = 89$), and bipolar disorder ($n = 65$) were compared in a cross-sectional study to understand the pathological and normative differences in personality traits and features between those with BPD and bipolar disorder. **WHAT.** Traits that discriminated between BPD and bipolar disorder were the personality pathology facet of unusual beliefs and experiences, the normative personality trait of extraversion, and the pathological traits of impulsivity. All of these traits and facets were higher among those with BPD than the participants with MDD and bipolar disorder.

13

Hepp, J., Kieslich, P.J., Schmitz, M., Schmahl, C., & Niedfeldt, I. (2021). **Negativity on two sides: Individuals with borderline personality disorder form negative first impressions of others and are perceived negatively by them.** *Personality Disorders*, 12(6), 514–525. <https://doi.org/10.1037/per0000412>.

HOW. Target participants, perceived by rater participants, were 26 people with BPD and 26 healthy controls. Rater participants were 40 women with BPD, 29 women with social anxiety disorder (SAD), and 37 healthy women. Target participants were filmed describing different parts of their personality. Rater participants completed a game assessing cooperative behavior to control during data analysis and rated targets' trustworthiness, likeability, and similarity between rater and target. **WHAT.** Rater participants with BPD rated targets as less trustworthy, less likeable, and less similar than the healthy controls. Healthy raters rated BPD targets as less trustworthy, less likeable, and less similar than healthy targets.

14

Koivisto, M., Melartin, T., & Lindeman, S. (2021). **"If you don't have a word for something, you may doubt whether it's even real"—How individuals with borderline personality disorder experience change.** *Psychotherapy Research: Journal of the Society for Psychotherapy Research*, 31(8), 1036–1050. <https://doi.org/10.1080/10503307.2021.1883763>.

HOW. A mixed methods study was conducted with eight participants with BPD. After a 40-session psychoeducation group intervention, participants completed in-depth interviews discussing their experiences with meaningful change. BPD symptom scores were measured at pre- and post-intervention. **WHAT.** Based on BPD symptoms scores, two participants experienced reliable change, two participants remained unchanged, and four participants were remitted. Based on in-depth interviews, 22 areas of change were coded, but three overarching themes emerged: improved ability to understand mental events in oneself and others, decreased disconnection from emotions, and new adaptive experience of self and autonomy.

15

Lamers, A., Toepper, M., Fernando, S. C., Schlosser, N., Lenz, E., Woermann, F., Driessen, M., & Beblo, T. (2021). **Caudate hyperactivation during the processing of happy faces in borderline personality disorder.** *Neuropsychologia*, 163, 108086. <https://doi.org/10.1016/j.neuropsychologia.2021.108086>.

HOW. Women with BPD ($n = 22$) and female healthy controls ($n = 26$) were shown happy faces and neutral faces during an fMRI. **WHAT.** In both groups, increased temporal, limbic (including the amygdala), and occipital activation were observed. Women with BPD showed stronger activation in the bilateral caudate during the processing of the happy faces than the healthy controls. The caudate is crucial for goal-directed behavior and reward-related information. Further research and clinical implications of this finding are discussed.

16

Lekgabe, E., Pogos, D., Sawyer, S. M., Court, A., & Hughes, E. K. (2021). **Borderline personality disorder traits in adolescents with anorexia nervosa.** *Brain and Behavior*, 11(12), e2443. <https://doi.org/10.1002/brb3.2443>.

HOW. 168 participants with a diagnosis of anorexia nervosa or non-specified eating disorder completed the Borderline Personality Questionnaire and Eating Disorder Examination. **WHAT.** The prevalence of BPD among those with anorexia nervosa is relatively low, but eating disorder symptom severity is closely related to severity of BPD symptoms, particularly with disturbances to self-image and feelings of emptiness.

BPD RESEARCH TAKEAWAYS

4th QUARTER, 2021

BORDERLINE PERSONALITY DISORDER

17

May, T., Pilkington, P. D., Younan, R., & Williams, K. (2021). **Overlap of autism spectrum disorder and borderline personality disorder: A systematic review and meta-analysis.** *Autism Research: Official Journal of the International Society for Autism Research*, 14(12), 2688–2710. <https://doi.org/10.1002/aur.2619>.

HOW. A systematic review and meta-analysis were conducted to assess the overlap between autism spectrum disorder (ASD) and BPD, including 19 studies, 12 of which were suitable for meta-analysis. **WHAT.** Evidence of overlap between ASD and BPD in the general population was weak, and there were no strong conclusions about symptom overlap between ASD and BPD in analyzed studies. The neurocognitive deficits found in ASD such as attention, impulsivity, empathy/mentalization, and communication problems that arise in childhood may predispose those to develop BPD in adulthood. However, this area needs further research. Lastly, children with ASD experience higher rates of bullying and abuse, which may also predispose individuals to develop BPD as adults due to trauma.

18

Morales-Muñoz, I., Durdurak, B. B., Bilgin, A., Marwaha, S., & Winsper, C. (2021). **Understanding the Relationship Between Sleep Problems in Early Childhood and Borderline Personality Disorder: A Narrative Review.** *Nature and Science of Sleep*, 13, 2175–2202. <https://doi.org/10.2147/NSS.S311672>.

HOW. A narrative review analyzed 96 articles to explore the connection between sleep problems in early childhood and the development of BPD, through the lens of the biosocial model. **WHAT.** There is evidence to show the link between sleep issues and key features of BPD such as dysfunction in various parts of the brain, emotion dysregulation, and impulsivity. Other common risk factors explored were family psychopathology and childhood maltreatment.

19

Rickman, S. R. M., Bernard, N. K., Levendosky, A. A., & Yalch, M. M. (2021). **Incremental effects of betrayal trauma and borderline personality disorder symptoms on suicide risk.** *Psychological Trauma: Theory, Research, Practice and Policy*, 13(7), 810–813. <https://doi.org/10.1037/tra0001022>.

HOW. Students enrolled at a large public university (n = 915) complete a survey which assessed suicide risk, BPD symptoms, and trauma (specifically betrayal trauma). **WHAT.** BPD symptoms were the largest predictor for suicide risk, and high betrayal trauma had an incremental effect. Both BPD and trauma were more influential for women than men. These findings hold clinical impact that clinicians should consider both trauma history and personality pathology to assess suicide risk.

20

Rüfenacht, E., Pham, E., Nicastro, R., Dieben, K., Hasler, R., Weibel, S., & Perroud, N. (2021). **Link between History of Childhood Maltreatment and Emotion Dysregulation in Adults Suffering from Attention Deficit/Hyperactivity Disorder or Borderline Personality Disorder.** *Biomedicine*, 9(10), 1469. <https://doi.org/10.3390/biomedicine9101469>.

HOW. Participants with ADHD (n = 279), BPD (n = 70), ADHD and BPD (n = 60), and clinical controls (n = 61) completed measures assessing emotional reactivity, emotion regulation, childhood trauma, and attachment styles. **WHAT.** Childhood maltreatment was associated with higher scores on emotional reactivity, and childhood emotional abuse had the strongest effect on emotional reactivity and emotion regulation across all groups.

21

Ruocco, A. C., Rodrigo, A. H., Lam, J., Ledochowski, J., Chang, J., Wright, L., & McMain, S. F. (2021). **Neurophysiological biomarkers of response inhibition and the familial risk for borderline personality disorder.** *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, 111, 110115. <https://doi.org/10.1016/j.pnpbp.2020.110115>.

HOW. Psychiatric diagnoses and impulsive traits were measured in participants with BPD (n = 86), relatives who were psychiatrically affected and not affected (n = 60), and controls (n = 83). Participants also underwent neuroimaging during response inhibition tasks. **WHAT.** Participants with BPD showed lower activation in the prefrontal cortex (PFC) than in controls and relatives. Affected relatives showed higher activation in the PFC compared to non-affected relatives and controls. Non-affected relatives, however, engaged the PFC higher than those with BPD and controls, showing a familial risk biomarker for BPD, even for those who have no history of psychiatric disorders.

23

Sommer, J. L., Blaney, C., Mota, N., Bilevicius, E., Beatie, B., Kilborn, K., Chang, U., Sareen, J., & El-Gabalawy, R. (2021). **Dissociation as a Transdiagnostic Indicator of Self-Injurious Behavior and Suicide Attempts: A Focus on Posttraumatic Stress Disorder and Borderline Personality Disorder.** *Journal of Traumatic Stress*, 34(6), 1149–1158. <https://doi.org/10.1002/jts.22726>.

HOW. Participants with ADHD (n = 279), BPD (n = 70), ADHD and BPD (n = 60), and clinical controls (n = 61) completed measures assessing emotional reactivity, emotion regulation, childhood trauma, and attachment styles. **WHAT.** Childhood maltreatment was associated with higher scores on emotional reactivity, and childhood emotional abuse had the strongest effect on emotional reactivity and emotion regulation across all groups.

24

Wojciechowski, T. (2021). **The dual mediating roles of impulsivity and emotion regulation of the borderline personality disorder-violence relationship: A structural equation modeling approach.** *Journal of Forensic Sciences*, 66(6), 2329–2339. <https://doi.org/10.1111/1556-4029.14807>.

HOW. The Pathways to Desistance study dataset used 1,354 juvenile offenders to analyze the relationship between violent offenses, BPD symptoms, emotion dysregulation, and impulsivity. **WHAT.** BPD symptoms showed a significant direct effect on violent offending risk, and BPD symptoms predicted lower impulse control. The path from impulsivity to violent offending risk was significant, but not the path from emotion dysregulation to violent offending risk.