# **Evidence Review**

# Efficacy of Psychotherapy for Borderline Personality Disorder

# Key messages

- There is consistent evidence to suggest that psychotherapeutic approaches are effective in the treatment of borderline personality disorder.
- In studies which have compared a psychotherapeutic intervention to waiting list controls, patients who receive the intervention show signs of improvement.
- DBT has dominated much of the research in recent years, along with MBT, although many other therapeutic approaches have been examined. However, in most cases the results of comparative studies of different therapies have produced similar rates of improvement for both intervention groups.
- Studies, including the most recent systematic reviews in this area have been unable to consistently identify one particular therapy as being more or less effective than another.
- Additionally the quality of research has generally been moderate-low, with heterogeneous methodologies and outcome measures.
- In terms of cost-effectiveness analysis Blankers et al (21)'s RCT comparing MBT in a day
  hospital setting to outpatient TAU found some evidence that the MBT intervention was
  cost effective but overall results varied.







## You asked

Has there been any updates to the efficacy of psychotherapies for BPD since 2019? Have there been any other publications of service evaluations for BPD in both the UK and across the globe? Have these published about the impact of service utilisation and costs savings?

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## The Evidence

# **Systematic Reviews and Meta-Analyses**

 Storebø OJ, Stoffers-Winterling JM, Völlm BA, Kongerslev MT, Mattivi JT, Jørgensen MS, Faltinsen E, Todorovac A, Sales CP, Callesen HE, Lieb K. Psychological therapies for people with borderline personality disorder. Cochrane Database of Systematic Reviews. 2020(5).

This Cochrane Systematic Review compared psychological therapies: DBT, CBT, Acceptance and Commitment Therapy, Mentalisation-based therapy, Schema therapy, Psychodynamic Therapy and SSTEPS, Cognitive analytic therapy, transference-focussed therapy, motivation feedback, psychoeducation and eclectic therapies in the treatment of BPD. The review found evidence that psychotherapy reduced the severity of symptoms of BPD and suicidality, and some limited evidence that it may reduce self harm and depression while improving psychological functioning. DBT was identified as possibly being better than TAU at reducing self harm, severity and improving psychological functioning while MBT appeared to be more effective than TAU at reducing self harm, suicidality and depression. However the overall evidence base is of low-quality with heterogenous study design and measures, and at a high risk of bias in trials.





2. Jørgensen MS, Storebø OJ, Stoffers-Winterling JM, Faltinsen E, Todorovac A, Simonsen E. Psychological therapies for adolescents with borderline personality disorder (BPD) or BPD features—A systematic review of randomized clinical trials with meta-analysis and Trial Sequential Analysis. Plos One. 2021 Jan 14;16(1):e0245331.

10 trials were included in this systematic review. Of the available evidence, only a few showed better outcomes compared to the control group/intervention and the quality of all RCTs was judged to be low. There was not enough evidence to draw any consistent conclusions regarding the effectiveness of psychological therapies on adolescents with BPD.



3. Wong J, Bahji A, Khalid-Khan S. Psychotherapies for adolescents with subclinical and borderline personality disorder: a systematic review and meta-analysis. The Canadian Journal of Psychiatry. 2020 Jan;65(1):5-15.

This systematic review examined the evidence for effectiveness of psychotherapies in treating adolescents with BPD symptoms, it found a growing body of evidence to suggest psychotherapeutic interventions had a positive effect in reducing symptoms in the short term, but a lack of overall research meant the authors were unable to identify one particular therapy as more or less effective than others, nor reach conclusions on the longer-term effects of these interventions. Additionally, this review received some critical analysis concerning its own risk of bias and the heterogeneity of the research collaged (see 2<sup>nd</sup> PDF below), the authors subsequently offered a response to these critiques, also included (3<sup>rd</sup> PDF) for further information.







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4. Slotema CW, Wilhelmus B, Arends LR, Franken IH. Psychotherapy for posttraumatic stress disorder in patients with borderline personality disorder: a systematic review and meta-analysis of its efficacy and safety. European journal of psychotraumatology. 2020 Dec 31;11(1):1796188.

This systematic review included 14 studies, including 4 RCTs the meta-analysis of which indicated that patients with BPD benefited from trauma-focused therapy. "Analyses of all studies showed similar effect sizes for reductions in PTSD, depression, anxiety, and borderline symptoms, PTSD severity in patients with BPD, with PTSD improvements also being maintained at follow-up (3 months or longer)" with a weighted drop out at 17%.



5. Stewart NA, Wilkinson-Tough M, Chambers GN. Psychological interventions for individuals with a diagnosis of borderline personality disorder in forensic settings: A systematic review. The Journal of Forensic Psychiatry & Psychology. 2019 Sep 3;30(5):744-93.

This review included 13 papers in total, which were found to "demonstrate how a broad range of mainstream interventions developed for individuals with a diagnosis of BPD have been adapted creatively to meet the specific demands of forensic settings" including therapeutic interventions such as DBT, STEPPS and schema therapy. Overall the results of all demonstrated a trend towards improved outcomes for patients with BPD, however the heterogeneity of the studies, design limitations and a lack of reported differences led the authors to conclude that it is "difficult to assess what benefits may be afforded bey treatments specifically designed for a BPD diagnosis over non-specific forms of intervention," and acknowledge that there is no substantive evidence to recommend one specific treatment over another.





6. Volkert J, Hauschild S, Taubner S. Mentalization-based treatment for personality disorders: efficacy, effectiveness, and new developments. Current psychiatry reports. 2019 Apr;21(4):1-2.

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This paper summarises the findings from 14 new effectiveness trials of MBT published since 2015. The review found the research demonstrates some evidence that MBT is an effective intervention, with some suggestion it is superior to both TAU in SCM and associated with long term improved outcomes for patients. Further research, including increased examination of crossover/patterns within other BPD therapeutic treatments, higher methodological qualities, and improved sample sizes is needed.



7. McLaughlin SP, Barkowski S, Burlingame GM, Strauss B, Rosendahl J. Group psychotherapy for borderline personality disorder: A meta-analysis of randomized-controlled trials. Psychotherapy. 2019 Jun;56(2):260.

This paper describes a focused meta-analysis of RCTs examining the effectiveness of group psychotherapy for BPD. Overall, the results indicated that group therapy had a large effect on improved BPD symptoms, and moderate effect on reducing suicidality/parasuicidality symptoms, compared to what was identified as TAU. There was some evidence that showed that groups became less effective at 10 people or more. ACT was the only treatment that showed consistently higher effect sizes for both BPD symptom and suicidality/parasuicidality outcomes compared with DBT, however most studies were around DBT and other studies on treatments were limited. A further limitation to this analysis was the heterogeneity of other studies, particularly as to what constituted 'TAU'.





8. Chakhssi F, Zoet JM, Oostendorp JM, Noordzij ML, Sommers-Spijkerman M. Effect of psychotherapy for borderline personality disorder on quality of life: a systematic review and meta-analysis. Journal of personality disorders. 2019 Oct 14:1-5.

In the few studies available, the findings suggest that psychotherapy for BPD has significant effects on QoL and BPD pathology severity. However, meta-regression analysis of the included studies that examined changes in QoL as well as changes in BPD pathology severity suggests that improvements after psychotherapy in QoL symptoms were not associated with improvements in BPD pathology severity. The review involved papers which looked at dialectal behavioural therapy; mentalization based therapy; the STEPPs programme; CBT and others. DBT was the most common intervention listed, however the review did not identify one method as having more/better effect than others.



9. Vogt KS, Norman P. Is mentalization-based therapy effective in treating the symptoms of borderline personality disorder? A systematic review. Psychology and Psychotherapy: Theory, Research and Practice. 2019 Dec;92(4):441-64.

This systematic review examined research concerning the effectiveness of mentalization based therapy in treating BPD symptoms. It generally found that MBT showed either "superior or equal reductions in psychiatric symptoms compared with other treatments" however the quality of the majority of studies was low, with heterogenous reporting and comparative measures and more substantial and systematic research is needed.



10.Álvarez-Tomás I, Ruiz J, Guilera G, Bados A. Long-term clinical and functional course of borderline personality disorder: A meta-analysis of prospective studies. European Psychiatry. 2019 Feb;56(1):75-83.

REF: 20210109

This meta-analysis examined the functional and clinical course of BPD over time, finding that between 50-70% of patients with BPD experienced remission in the long term. Young age was associated with improved long-term outcomes. Female gender was associated with lower improvement, however the author's acknowledged that other environmental and experiential factors could possible explain this. With regards to therapy, no one treatment format was identified as producing better long-term outcomes than others, with both specialised therapies and TAU seeming to "similarly improve the long term clinical outcome despite observing non-significant differences in mean remission rates...[in contrast with] previous research indicating a higher efficiency of specialised therapies in the short-term". The review suggested that long term functioning appeared to be enhanced by "any kind of controlled treatment, particularly those that are implemented over a long period of time".



11.Zahediabghari S, Boursiquot P, Links P. Impact of psychotherapy on psychosocial functioning in borderline personality disorder patients.

International Journal of Environmental Research and Public Health. 2020 Jan;17(12):4610.

REF: 20210109

This meta-analysis examined the effect of specifically-designed versus non-specifically designed psychotherapies on function in adult patients with BPD, looking specifically at psychosocial functioning. 10 RCTs were included in the analysis, which found a general trend of higher levels of improvement in psychosocial functioning for patients who received specifically designed psychotherapies. Limitations of the review identified however noted the range of tools and heterogeneity of measures in the included studies indicated better and more standardised measurements were needed.



12. Mungo A, Hein M, Hubain P, Loas G, Fontaine P. Impulsivity and its Therapeutic Management in Borderline Personality Disorder: a Systematic Review. Psychiatric Quarterly. 2020 Sep 28:1-30.

This systematic review looked at research concerning the management specifically of impulsivity in BPD. While more articles were available on pharmacological treatment than psychotherapeutic treatment, the authors found that more focus needs to be given to therapeutic methods of management, finding evidence that Schema therapy, dialectical therapy, psychoeducation, STEPPS and mentalization-based therapy "have a positive impact on impulsivity regardless of how they were studied, and more specifically in women for the first three" and recommend further focus is needed on therapeutic approaches to management of impulsivity in BPD.



13.Bo S, Vilmar JW, Jensen SL, Jørgensen MS, Kongerslev M, Lind M, Fonagy P. What works for adolescents with borderline personality disorder: Towards a developmentally informed understanding and structured treatment model. Current Opinion in Psychology. 2020 Jun 21.

REF: 20210109

This paper reviews and summarises research available on effectiveness of treatments for adolescents with BPD. Overall the limited amount of research available meant that the authors were unable to identify one particular treatment being more effective than others. The paper also discusses recent trials in mentalisation-based group therapy, as well as considering aspects of care relating specifically to adolescents and their development.



14.Kramer U, Beuchat H, Grandjean L, Pascual-Leone A. How personality disorders change in psychotherapy: A concise review of process. Current Psychiatry Reports. 2020 Aug;22:1-9.

This paper discusses the importance of the therapeutic relationship across all treatment types for BPD in producing positive outcomes. The reviewers discuss different therapeutic approaches including the evidence around DBT and transference-focussed therapy and suggest that the comparable rates of positive results in several therapeutic approaches suggest that a morse systematic approach on change in sub-components of emotional and sociocognitive processing, as well as on insight and defense mechanisms, is needed. They also suggest studies that examine more than whether one treatment is effective compared to another but instead the need to identify what factors overlap in treatments identified as 'good'.



### **Recent RCTs and other studies**

15. Carlyle D, Green R, Inder M, Porter R, Crowe M, Mulder R, Frampton C. A Randomized-Controlled Trial of Mentalization-Based Treatment Compared With Structured Case Management for Borderline Personality Disorder in a Mainstream Public Health Service. Frontiers in Psychiatry. 2020 Nov 12;11:1252.

REF: 20210109

This RCT involved 71 participants randomised to 18 months Mentalization Based Treatment or Enhanced Therapeutic Case Management. The primary outcome measures were the incidence of non-suicidal self-harm or suicide attempt over 18 months of treatment. The study found that compared to the control, in both groups the total rates of suicide attempts or non suicidal self injury were halved by the 12-18 month stage compared to the 6 month prebaseline, when all had been receiving TAU. Between the two interventions the main findings found little difference, though both sets of patients experienced the same rate of improvement. SA rates were higher in the MBT group and "conversely NSSH rates were higher in the ECTM groups".

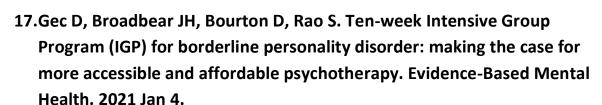


16. Walton CJ, Bendit N, Baker AL, Carter GL, Lewin TJ. A randomised trial of dialectical behaviour therapy and the conversational model for the treatment of borderline personality disorder with recent suicidal and/or non-suicidal self-injury: An effectiveness study in an Australian public mental health service. Australian & New Zealand Journal of Psychiatry. 2020 Oct;54(10):1020-34.

REF: 20210109

162 patients with BPD were randomised to either dialectical behaviour therapy or conversational model and contracted for 14 months of treatment. Although dialectical behaviour therapy was associated with significantly greater reductions in depression scores compared to conversational model, overall both groups demonstrated the same amount of effectiveness/symptom improvement. Both treatment groups showed significant improvement over the 14 month time period.





This paper describes the implementation of a 10 week outpatient programme of bespoke manualised therapy delivered 2 days per week in 4 hour sessions; participants received 80 hours of treatment in total. 44 participants completed the programme, after the 10 weeks statistically significant improvements were identified. Twelve participants completed study questionnaires 4–6 months post discharge and reported that several of these improvements remained with the patients. Patients feedback suggested a high level of acceptability, however the sample size was small and the limited longitudinal feedback suggests more research would be required in this area.



18. Reyes-Ortega MA, Miranda EM, Fresán A, Vargas AN, Barragán SC, Robles García R, Arango I. Clinical efficacy of a combined acceptance and commitment therapy, dialectical behavioural therapy, and functional analytic psychotherapy intervention in patients with borderline personality disorder. Psychology and Psychotherapy: Theory, Research and Practice. 2020 Sep;93(3):474-89.

This relatively small study in Mexico aimed to test the clinical efficacy of a brief combined ACT + DBT + FAP therapy by comparing it with brief versions of ACT or DBT. Sixty-five patients attending a BPD Clinic were included in the study and assigned to ether a DBT group, an ACT group or a group which received combined ACT, DBT and FAP. The results found that the three modalities of brief contextual behavioural therapy were useful for decreasing BPD symptom severity, emotional dysregulation, and negative interpersonal functioning, specifically in regard to hostile conflict resolution, but no differences were observed between the three different treatment groups.



19.Beck E, Bo S, Jørgensen MS, Gondan M, Poulsen S, Storebø OJ, Fjellerad Andersen C, Folmo E, Sharp C, Pedersen J, Simonsen E. Mentalization-based treatment in groups for adolescents with borderline personality disorder: a randomized controlled trial. Journal of Child Psychology and Psychiatry. 2020 May;61(5):594-604.

REF: 20210109

This RCT compared adolescents with BPD randomised to Mentalization based group therapy involving 37 weekly group sessions, five individual case formulation sessions, and six group sessions for caregivers or treatment as usual which included at least 12 months of monthly individual based therapy sessions. Overall no definitive conclusions suggested the superiority of one method, although both produced similar positive effects in both primary and secondary outcomes.



20.Bozzatello P, Bellino S. Interpersonal Psychotherapy as a Single Treatment for Borderline Personality Disorder: A Pilot Randomized-Controlled Study. Frontiers in Psychiatry. 2020;11.

This pilot study examined the efficacy of an interpersonal psychotherapy treatment specifically adapted for patients with BPD. The pilot involved 43 patients in total who were randomly assigned to the treatment or as waiting list control group. Overall the study found that treated with this psychotherapy showed a greater improvement in general psychopathology, social and occupational functioning, and global and specific BPD symptoms (impulsive behavioral dyscontrol, interpersonal disturbance, and identity diffusion) in comparison with control patients in WL/CM. The authors suggest that there is comparable effectiveness with other BPD therapeutic treatments available, although not directly compared in this study.





21.Blankers M, Koppers D, Laurenssen EM, Peen J, Smits ML, Luyten P, Busschbach J, Kamphuis JH, Kikkert M, Dekker JJ. Mentalization-based treatment versus specialist treatment as usual for borderline personality disorder: Economic evaluation alongside a randomized controlled trial with 36-month follow-up. Journal of personality disorders. 2019 Nov 4:1-20.

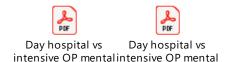
This paper offers an economic evaluation alongside a RCT for Mentalizationbased therapy in a day hospital setting, compared to specialised treatment as usual, involving 95 patients. MBT-DH comprises an intensive day hospitalization program of a maximum of 18 months followed by up to 18 months of maintenance mentalizing (group) therapy, which S-TAU was varied involving outpatient manualized treatments for patients with severe personality disorders, with varying treatment length and duration. "Consisting of supporting and structuring sessions, extensive diagnostic investigations, writing a crisis plan, family interventions, Systems Training for Emotional Predictability and Problem Solving (Blum et al., 2008) or Linehan training, social skills training, aggression/impulse regulation training, cognitive schemafocused or traditional insight oriented treatment, pharmacotherapy, and/or inpatient treatment." Overall the findings found some evidence that the mentalization-based therapy was more cost effective, but results overall were varied. Both MBT-DH and S-TAU showed improvements on all outcome measures at follow up.



22.Smits ML, Feenstra DJ, Eeren HV, Bales DL, Laurenssen EM, Blankers M, Soons MB, Dekker JJ, Lucas Z, Verheul R, Luyten PJ. Day hospital versus intensive out-patient mentalisation-based treatment for borderline personality disorder: Multicentre randomised clinical trial. The British Journal of Psychiatry. 2019 Feb 22.

REF: 20210109

This paper reports on an RCT comparing Day Hospital Mentalization-based treatment (MBT-DH) and Intensive Outpatient MBT (MBT-IOP). 70 patients were in the day hospital group compared to 44 in the outpatient group. Overall, both groups showed noticeable improvement in outcome measures, the day hospital showing some higher effectiveness on secondary outcome measures. The authors suggested that while both interventions showed improvement, the trajectory of these improvements differed and more research was needed into this aspect, though both showed high to moderate levels of effectiveness.



23. Navarro-Haro MV, Botella VG, Badenes-Ribera L, Borao L, García-Palacios A. Dialectical Behavior Therapy in the Treatment of Comorbid Borderline Personality Disorder and Eating Disorder in a Naturalistic Setting: A Six-Year Follow-up Study. Cognitive Therapy and Research. 2020 Oct 31:1-4.

This study examined long term outcomes for patients with BPD and comorbid eating disorder who received either DBT or TAU (identified as CBT) for a 6 month treatment period, and were subsequently followed up at 4 and 6 months. Both groups showed improvement in outcome measures with no statistically significant difference between them, though it was noted the CBT group was a smaller no comparatively. A high percentage of participants showed a clinically significant improvement over time in the DBT condition.



24.Lind M, Jørgensen CR, Heinskou T, Simonsen S, Bøye R, Thomsen DK.
Patients with borderline personality disorder show increased agency in
life stories after 12 months of psychotherapy. Psychotherapy. 2019
Jun;56(2):274.

REF: 20210109

This study found that after 12 months of psychotherapy BPD patients showed an increase in describing elements of agency and control when telling their life stories, compared to the control group. The authors suggest this demonstrates a positive aspect of psychotherapy in reconstructing thoughts around life stories and history and their sense of control and agency about their experiences. However this was a small scale study and more research would be required.



### **Indicative search strategy**

"borderline personalit\*"; BPD; "personality disorder\*"; borderline AND Psychotherap\*; cost effect\*; service eval\*; cost sav\*;

#### **Sources searched**

Cochrane, PsycINFO, Pubmed; Medline

A structured public domain search for unpublished research.

# Did this help?

We'd love to know if this information helped you. Let us know at: <a href="mailto:library@merseycare.nhs.uk">library@merseycare.nhs.uk</a>

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