What is new in the treatment of personality disorders? Updates of recent research and implications for service delivery

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Hot topics and new studies 2009-2010
Current debates and service delivery
Introduction to the NSW treatment of personality disorders project
2007 Conference: Comparative studies of different types of psychotherapies for BPD yield equivalent results:


A Randomized Trial of Dialectical Behavior Therapy Versus General Psychiatric Management for Borderline Personality Disorder

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Tim Guimond, M.D.
Robert J. Cardish, M.D.
Lorne Korman, Ph.D.
David L. Streiner, Ph.D.

Objective: The authors sought to evaluate the clinical efficacy of dialectical behavior therapy compared with general psychiatric management, including a combination of psychologically informed therapy and symptom-targeted medication management derived from specific recommendations in APA guidelines for borderline personality disorder.

Method: This was a single-blind trial in which 100 patients diagnosed with borderline personality disorder who had at least two suicidal or nonsuicidal self-injurious episodes in the past 5 years were randomly assigned to receive 1 year of dialectical behavior therapy or general psychiatric management. The primary outcome measures, assessed at baseline and every 4 months over the treatment period, were frequency and severity of suicidal and nonsuicidal self-harm episodes.

Results: Both groups showed improvement on the majority of clinical outcome measures after 1 year of treatment, including significant reductions in the frequency and severity of suicidal and nonsuicidal self-injurious episodes and significant improvements in most secondary clinical outcomes. Both groups had a reduction in general health care utilization, including emergency visits and psychiatric hospital days, as well as significant improvements in borderline personality disorder symptoms, symptom distress, depression, anger, and interpersonal functioning. No significant differences across any outcomes were found between groups.

Conclusions: These results suggest that individuals with borderline personality disorder benefited equally from dialectical behavior therapy and a well-specified treatment delivered by psychiatrists with expertise in the treatment of borderline personality disorder.
Randomized (N=180)

Assigned to dialectical behavior therapy (N=90)
- Discontinued intervention (N=35)
- Completed intervention (N=55)

Intent-to-treat analysis (N=90)

Allocation

Assigned to general psychiatric management (N=90)
- Discontinued intervention (N=34)
- Completed intervention (N=56)

Follow-Up

Analysis

Intent-to-treat analysis (N=90)
<table>
<thead>
<tr>
<th>Theoretical basis</th>
<th>Dialectical Behavior Therapy</th>
<th>General Psychiatric Management</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Learning theory, Zen philosophy, and dialectical philosophy. Pervasive emotion dysregulation is the primary deficit in borderline personality disorder.</td>
<td>Psychodynamic approach drawn from Gunderson (23); emphasized the relational aspects and early attachment relationships. Disturbed attachment relationships related to emotion dysregulation as a primary deficit.</td>
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<tr>
<td>Treatment structure</td>
<td>Multimodal: Individual sessions (1 hour weekly); skills group (2 hours weekly); phone coaching (2 hours weekly)</td>
<td>One mode: Individual sessions (1 hour weekly) including medication management based on structured drug algorithm</td>
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<td></td>
<td>Consultation team for therapists mandated (2 hours weekly)</td>
<td>Therapist supervision meeting mandated (90 minutes weekly)</td>
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<td></td>
<td>Organized according to a hierarchy of targets: suicidal, treatment-interfering, and quality-of-life-interfering behaviors</td>
<td>Patient preference is given priority—no hierarchy of targets.</td>
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<tr>
<td></td>
<td>Explicit focus on self-harm and suicidal behavior</td>
<td>Focus is expanded away from self-harm and suicidal behaviors.</td>
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<tr>
<td>Primary strategies</td>
<td>Psychoeducation about borderline personality disorder</td>
<td>Psychoeducation about borderline personality disorder</td>
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<td></td>
<td>Helping relationship</td>
<td>Helping relationship</td>
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<tr>
<td></td>
<td>Here-and-now focus</td>
<td>Here-and-now focus</td>
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<td></td>
<td>Validation and empathy</td>
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<td></td>
<td>Emotion focus</td>
<td>Emotion focus</td>
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<td>Dialectical strategies</td>
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<td>Irrelevant and reciprocal communication style</td>
<td>Active attention to signs of negative transference</td>
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<td>Formal skills training</td>
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<td></td>
<td>Behavioral strategies: exposure, contingency</td>
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<tr>
<td></td>
<td>management, diary cards, behavioral analysis</td>
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<tr>
<td>Crisis management protocols</td>
<td>Bias toward managing crises on an outpatient basis; phone coaching to assist in managing crises</td>
<td>Hospitalization seen as helpful if indicated</td>
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<tr>
<td>Psychotropic medications</td>
<td>Patients encouraged to rely on skills over pills where appropriate (e.g., anxiolytics). Tapering from medications was a treatment goal. Psychopharmacologic intervention was uncontrolled.</td>
<td>Patients were encouraged to use medications concurrently. Two medication algorithms, one related to mood lability and one related to impulsive-aggressiveness, were prioritized as symptom targets. Medication intervention was delivered according to the predominant symptom pattern.</td>
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<tr>
<td>Outcome Measure</td>
<td>Therapy (N=90)</td>
<td>(N=90)</td>
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<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
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<tr>
<td><strong>Non-normally distributed count outcomes</strong></td>
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<tr>
<td>Suicidal and self-injurious episodes</td>
<td></td>
<td></td>
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<tr>
<td>Baseline</td>
<td>20.94</td>
<td>33.28</td>
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<tr>
<td>4 months</td>
<td>10.60</td>
<td>20.96</td>
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<tr>
<td>8 months</td>
<td>8.94</td>
<td>19.07</td>
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<td>12 months</td>
<td>4.29</td>
<td>9.32</td>
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<tr>
<td>Emergency department visits</td>
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<tr>
<td>Baseline</td>
<td>1.99</td>
<td>3.01</td>
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<tr>
<td>4 months</td>
<td>1.42</td>
<td>3.44</td>
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<tr>
<td>8 months</td>
<td>0.71</td>
<td>1.26</td>
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<tr>
<td>12 months</td>
<td>0.93</td>
<td>1.47</td>
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<tr>
<td>Emergency department visits for suicidal behavior</td>
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<td></td>
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<tr>
<td>Baseline</td>
<td>1.01</td>
<td>1.47</td>
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<tr>
<td>4 months</td>
<td>0.74</td>
<td>2.89</td>
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<tr>
<td>8 months</td>
<td>0.29</td>
<td>0.67</td>
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<tr>
<td>12 months</td>
<td>0.41</td>
<td>1.00</td>
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<tr>
<td>Days in psychiatric hospital</td>
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<tr>
<td>Baseline</td>
<td>10.52</td>
<td>24.42</td>
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<tr>
<td>4 months</td>
<td>2.32</td>
<td>11.92</td>
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<tr>
<td>8 months</td>
<td>1.91</td>
<td>8.57</td>
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<tr>
<td>12 months</td>
<td>3.73</td>
<td>14.90</td>
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<tr>
<td></td>
<td>Baseline</td>
<td>4 months</td>
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<tr>
<td>Symptom severity (Zararini Rating Scale for Borderline Personality Disorder, total score)</td>
<td>15.49</td>
<td>6.14</td>
</tr>
<tr>
<td>Depression (Beck Depression Inventory)</td>
<td>10.50</td>
<td>5.98</td>
</tr>
<tr>
<td>Anger (State-Trait Anger Expression Inventory, anger expression-out subscore)</td>
<td>8.57</td>
<td>6.20</td>
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<tr>
<td>Health-related quality of life (EQ-5D)</td>
<td>7.93</td>
<td>6.11</td>
</tr>
<tr>
<td>Symptom distress (Symptom Checklist–90–Revised, total score)</td>
<td>37.19</td>
<td>12.46</td>
</tr>
<tr>
<td>4 months</td>
<td>29.06</td>
<td>15.01</td>
</tr>
<tr>
<td>8 months</td>
<td>24.16</td>
<td>15.34</td>
</tr>
<tr>
<td>12 months</td>
<td>22.18</td>
<td>16.14</td>
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</tbody>
</table>
Conclusion about equivalence in outcomes remains; authors expected DBT superiority

At least one year of treatment, twice a week, provides significant gains

Specialised psychiatric management using practice guidelines is effective

Retention rates over one year are estimated at 57% - 63% from RCT trials – retention in field studies is not known

Are gains in the two treatments due to common factors or different pathways?
Dialectical behavior therapy skills use as a mediator and outcome of treatment for borderline personality disorder

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ARTICLE INFO

Article history:
Received 12 November 2009
Received in revised form 6 May 2010
Accepted 19 May 2010

Keywords:
Dialectical behavior therapy
Borderline personality disorder
Mechanism of change
Suicidal behavior
Major depression
Anger

ABSTRACT

A central component of Dialectical Behavior Therapy (DBT) is the teaching of specific behavioral skills with the aim of helping individuals with Borderline Personality Disorder (BPD) replace maladaptive behaviors with skillful behavior. Although existing evidence indirectly supports this proposed mechanism of action, no study to date has directly tested it. Therefore, we examined the skills use of 108 women with BPD participating in one of three randomized control trials throughout one year of treatment and four months of follow-up. Using a hierarchical linear modeling approach we found that although all participants reported using some DBT skills before treatment started, participants treated with DBT reported using three times more skills at the end of treatment than participants treated with a control treatment. Significant mediation effects also indicated that DBT skills use fully mediated the decrease in suicide attempts and depression and the increase in control of anger over time. DBT skills use also partially mediated the decrease of nonsuicidal self-injury over time. Anger suppression and expression were not mediated. This study is the first to clearly support the skills deficit model for BPD by indicating that increasing skills use is a mechanism of change for suicidal behavior, depression, and anger control.

Published by Elsevier Ltd.
Component Analyses

Design: N=54 DBT vs N=54 Treated Control
Patients taken from two RCT trials on BPD and Drug Treatment
All demographics were equally matched
Research question: does the use of DBT skills mediate outcome?

Outcomes: Both groups improved equally
DBT group had more skills use over time
Component Analyses

Fig. 1. Change in DBT skills use across time in dbt and control treatment. Note: Treatment ended at 12 months. The 16 month assessment point is a follow up assessment. Skills use was rated on a scale from 0 to 3, 0 denoting no skills use and 3 denoting using all the skills most of the time.
1. All participants – even those in the control group – used some DBT skills prior to active treatment. DBT skills are general skills used by all of us (e.g. distraction)

2. DBT group used more skills than the control group

3. Greater use of skills mediated the change over time in suicide attempts, anger control, and depression.

4. Supports a skills deficit model of BPD – OR – that DBT skills is one pathway to clinical improvement
Further Theory Developments


Issue of core deficits in BPD:

Affect dysregulation
Impusivity
Unstable relationships
Mentalisation

Mentalisation – capacity to understand the minds of others and self; regulates emotional life

Mentalisation failure – increases hypersensitivity and contagion by other people's mental states -> affect dysregulation and interpersonal conflict cycles

Increased arousal -> switch from cortical to subcortical systems, from controlled to automatic mentalising and subsequently to nonmentalizing modes
Mentalisation

Figure 1. A biobehavioral switch model of the relationship between stress and controlled versus automatic mentalization (based on Luyten, Mayes, et al., 2009).

- Prefrontal/Controlled
- Posterior cortex and subcortical/automatic

Switch Point
Figure 2. A mentalization-based model of BPD.

Distal Factors
- Constitutional factors

Proximal Factors
- Early caregiving context
- Stress/Arousal

BPD: Core Features
- Dysfunctional relationships
- Affect dysregulation
- Impulsivity
- Pre-mentalizing modes of social cognition
  - Identity diffusion
  - Dissociation
  - Feelings of inner pain and emptiness

Attachment disruptions → Poor self-other differentiation → Hypersensitivity to mental states → Low threshold for attachment activation and controlled mentalization deactivation → Impairments in integration of cognition and affect → Pre-mentalizing modes of social cognition
Conflict begets conflict: Executive control, mental state vacillations, and the therapeutic alliance in treatment of borderline personality disorder

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(Received 18 August 2009; revised 13 January 2010; accepted 18 January 2010)

Abstract
Clinicians routinely note the challenges involved in psychotherapy with individuals with BPD, yet little research exists on the therapeutic alliance with this population. An important question is, what patient factors contribute to a disturbed alliance with individuals with BPD? Executive attention has been identified as a mechanism of BPD, and mental state vacillations (e.g., idealization/denigration, incoherence in self-concept) are a hallmark of the disorder. The goals of this study were to examine the link between executive attention and the alliance and assess mental state vacillations as a mediator. Thirty-nine participants diagnosed with BPD, participating in a randomized clinical trial, were administered the Attentional Network Task (ANT). Early psychotherapy sessions were coded using the Working Alliance Inventory (WAI). In addition, six items were generated and coded representing in-session vacillations in mental states. Performance on the ANT was related to the alliance ($r = .34, p = .035$), as were in-session mental state vacillations ($r = .59, p < .001$). A model was supported in which in-session mental state vacillations mediated the relationship between executive attention and alliance. Executive attention was related to therapeutic alliance, and this relationship was found to be mediated by in-session mental state vacillations. These findings emphasize the importance of executive attention in the disorder and uncover a link between poor executive attention and mental state vacillations. Mental state vacillations as a mediator suggests a path in which poor executive attention leads to greater vacillations, which leads to poorer working alliance.
Experience of BPD in Treatment

N=39 BPD

Executive Attention Task: Participants completed a button press reaction time task

Task included alerting, orienting and conflict components

Flicker task with arrows going across screen at different rates and angles – task is to identify cue vs non-cue

Cognitive conflict = Reaction time congruent vs noncongruent trial

Working Alliance Inventory – Observer: 2 early sessions
Experience of BPD in Treatment

Therapist rating scale for BPD: observer rated measure of in-session vasillations in:

- sense of self
- conceptualisation of problems
- perception of therapist
- commitment to therapy
- help and evasion from help
- splitting
Experience of BPD in treatment

Figure I. Model demonstrating a link between executive attention and alliance, with mental state vacillation (MSV) as a mediator. MSV and Working Alliance Inventory (WAI) total, controlling for Attentional Network Task (ANT)-conflict, $\Delta F(1, 36) = 14.43, \Delta R^2 = .25, p < .001$. ANT-conflict and WAI total, controlling for MSV, $\Delta F(1, 36) = 1.23, \Delta R^2 = .02, p = .274$. 
Issues

Poorer executive attention -> worse alliance
Vascilation in mental states in session -> worse alliance
Highlights difficulties in psychotherapy with BPD
Does executive attention improve from psychotherapy?
i.e. improvements in mentalising (dynamic)
i.e. improvement in mindfulness (DBT)
-> lead to neurocognitive improvement? Imaging studies needed
Experience of BPD in treatment

Psychotherapy Research
2010, 1–12, iFirst article

Psychotherapists’ response to borderline personality disorder: A core conflictual relationship theme analysis

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(Received 12 June 2009; revised 13 June 2010; accepted 14 June 2010)

Abstract
This study examined therapists’ emotional and cognitive responses to patients with borderline personality disorder (BPD) versus patients with major depressive disorder (MDD). Therapists’ narratives (N=80) were elicited using the Relationship Anecdotes Paradigm interview method and then scored according to the core conflictual relationship theme—Leipzig/Ulm method (CCRT-LU; Albani et al., 2002). The emotional valences of therapists’ responses were significantly more negative toward patients with BPD. Therapists differentially experienced patients with BPD as typically withdrawing and patients with MDD as attending within sessions. Therapists felt less satisfied in their therapeutic role with BPD despite a consistent wish to help patients. Findings support the utility of the CCRT-LU method in investigating therapist relational experiences and underscore the challenges for BPD treatment.
Data Analysis: Multilevel Modelling (MLM)

Valence of therapist responses

Hierarchical Data Structure

THERAPISTS
N = 20

PATIENTS
N = 80

Theoretical Orientations
CBT (n = 13) Dynamic (n = 7)

Years of Clinical Experience

Diagnostic Groups
BPD (n = 40) MDD (n = 38)

Pretreatment GAF
Therapists’ wish

WSO

“I want to help and support patient”

“I want to help and support patient”

Response of patient to therapist

ROS

PATIENT WITH MDD

“Patient listens to me”
“Patient is open and responds to me”
“Patient sees me as someone who can help”

PATIENT WITH BPD

“Patient withdraws from me”
“Patient bombards me with criticism”
“Patient rejects me”

Therapists’ response to themselves

RSS

THERAPIST

“I feel comfortable”
“This was a rewarding experience. I felt like I could make a difference”

THERAPIST

“I felt incompetent”
“I feel I make no difference in the session”
“I was constantly trying to remain in control of my emotions”

36.90%
Disharmonious

77.50%
Disharmonious
Current research:

Therapeutic equivalence between DBT, Schema, Dynamic and Clinical Management treatments

Underlying deficits in personality disorders

Underscore difficulties encountered by therapists

Suggest neurocognitive components

Mindfulness and Mentalisation similar targets for skill development through behavioural and talking treatments
“development and provision of a 3 year trial program to enhance treatment options for people with Personality Disorder.”

“issues remain around the capacity of mainstream mental health services to manage this population and the efficacies of specific treatments”

This project seeks to improve the capacity of mainstream mental health services to manage and treat Personality Disorder in particular the Cluster B spectrum, i.e. borderline, narcissistic and histrionic”
Deliverables in summary

1. expand specialist treatment options, including improved referral pathways between generic and specialist treatment
2. deliver well constructed and supported education and supervision programs
3. provision of expert interventions
4. evaluate specialist intervention models to provide guidance for future service development in NSW

-> Clinical Guidelines and Staff Development
Illawarra Health and Medical Research Institute (IHMRI)