

Dialectical Behaviour Therapy: Description, Research and Future Directions

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Abstract

Dialectical Behaviour Therapy (DBT) is a cognitive behavioural treatment initially developed for adult women with a diagnosis of borderline personality disorder (BPD) and a history of chronic suicidal behaviour (Linehan, 1993a; 1993b). DBT was the first treatment for BPD to demonstrate its efficacy in a randomised controlled trial (Linehan, Armstrong, Suarez, Allmon & Heard, 1991). Adaptations of the treatment (Dimeff & Koerner, 2007) and further randomised trials followed this initial study. This paper provides an overview of the theoretical and philosophical foundations of DBT and how these inform the major treatment strategies. Next, structural aspects of the treatment are described, and how the treatment structure allows for the adaptation of the treatment to different clinical settings. Finally, the paper reviews research evidence for the efficacy and effectiveness of the treatment and considers future research directions.

Keywords: Dialectical Behaviour Therapy, Behaviourism, Zen, Dialectics, Acceptance.

Theoretical and Philosophical Foundations of DBT.

A central dialectic between acceptance and change lies at the heart of DBT. In developing DBT, Linehan initially attempted to apply behavioural theory and change strategies to clients presenting with BPD and suicidal behaviour. She experienced several difficulties in these early stages of treatment development. Clients' were frequently non-collaborative in-session, did not practise agreed homework assignments and often did not return for subsequent treatment sessions at all. Linehan hypothesised that these 'therapy-interfering behaviours' arose because the clients experienced the strong focus on changing emotions, thoughts and behaviours as invalidating. Indeed, as clients often believe they are incapable of change, the whole notion of a treatment based on change is fundamentally invalidating. In response to these concerns, she searched for a philosophy / theoretical approach that strongly emphasised acceptance. Zen principles and practise underpin the acceptance-based components of DBT. To house these two contrasting approaches, Linehan uses dialectical philosophy. The following sections of this paper discuss these three foundations of the treatment in more detail.

Pushing for Change: Behavioural Theory & Problem-Solving

DBT like 'first wave' cognitive-behavioural treatments emphasises *behavioural* theory, rather than *cognitive* theory common to second wave treatments such as Cognitive Therapy for depression (Hayes, Follette & Linehan, 2004). Like 'first wave' therapies 'third wave' therapies, of which DBT was perhaps one of the first, take a radical behaviourist perspective to mental phenomenon. Thus, any response of an organism, such as thinking, emoting, sensing, as well as overt motor behaviour constitutes behaviour. The emphasis on behavioural theory in DBT influences the treatments approach to diagnosis and case conceptualisation.

Consistent with a radical behaviourist stance, DBT views the diagnostic criteria of BPD (DSM-IV, 2000, p. 710) as simply descriptions of the overt and covert behaviours of the client and, crucially, that when these behaviours stop the diagnosis ceases to exist. Indeed, to a radical behaviourist:

'A self or personality is at best a repertoire of behaviour imparted by an organized set of contingencies' (Skinner, 1974, p. 167).

This approach contrasts with other theoretical models of personality and personality disorder that consider the diagnostic criteria as symptoms of an underlying ‘borderline personality’ organisation. A behavioural approach to diagnosis provides a more hopeful perspective to clients. In pre-treatment, DBT therapists describe the behavioural understanding of the diagnosis, identify behavioural targets for treatment and describe and demonstrate how DBT delivers behavioural change. Outlining that changing both their overt and covert behaviours removes the diagnosis orients clients towards recovery.

DBT emphasises classical and operant conditioning in case conceptualisation. DBT therapists conduct behavioural analyses to comprehend both the classically conditioned links in the chain of events leading up to problematic behaviour and the functional (operant) consequences of the behaviour. For example, a client with a history of childhood sexual abuse frequently experienced increases in guilt and suicidal ideation whilst preparing for bed. Analysis of the increases in ideation revealed a classically conditioned association between going to bed and thoughts of suicide. The client learnt this association in childhood as the perpetrator would tell her she deserved to die during the abusive episodes, which occurred in her bed, for which she experienced intense guilt. In the present, following the increases in suicidal ideation, the client would search for self-harm implements. As she began to search, she experienced relief from guilt as she now believed that she was doing ‘the right thing’. Substantial relief from both guilt and suicidal ideation occurred when the client acted on her self-harm or suicidal urges. Client and therapist identified that the relief from the negative affect and the suicidal thoughts negatively reinforced suicidal and self-harming actions, whereas the belief that the client was now doing ‘what was right’ positively reinforced these same behaviours. Behavioural analyses enable clients and therapists to understand what triggers and maintains problematic behaviours and thus they form the first step in problem-solving, the core set of change strategies in DBT.

DBT therapists use the conceptualisation derived from behavioural analyses to develop comprehensive solution analyses. DBT employs standard cognitive behavioural problem-solving procedures, albeit with some novel twists (Linehan, 1993a; Swales & Heard, in press), to decrease problematic behaviours and increase the acquisition, strengthening and generalisation of new more skilful behaviours. The therapist both assists the client to acquire new behaviours but also analyzes and solves motivational factors that interfere with the utilisation of new behaviours. In developing solution analyses, DBT therapists use four sets of change procedures from the cognitive-behavioural canon: skills training, exposure, contingency management and cognitive modification. During the process of repeated behavioural and solution analyses, DBT therapists determine which of these four procedures will deliver maximum benefit to the client in stopping problematic behaviours and shaping new more functional behaviours. If the therapist identifies that the client has a skills deficit, for example, the client does not know how to be appropriately assertive, then the therapist will teach the client relevant skills. If the client does possess the relevant skills but unwarranted emotion or dysfunctional cognitions inhibit the client from using them, the therapist will use exposure and cognitive modification respectively to ameliorate the difficulty. For example, a client may have assertion skills but not use them because they experience overwhelming anxiety or think ‘I’m a bad person for asking for what I want’. The therapist in this circumstance may teach anxiety management techniques, cognitive restructuring of the judgement that asking for what you want is ‘bad’ combined with exposure to making appropriate requests. If the skilful behaviour is too low in the response hierarchy, then the therapist will use contingency management procedures. For example, the client may know how to ask for what they want but both past and current environments punish such requests. In this circumstance the therapist encourages and reinforces the client asking for what they want, helps the client find environments that reinforce requests for help and coaches the client in how to manage environments that punish requests for help.

DBT therapists generate, evaluate and implement comprehensive solution analyses using the full range of procedures to problematic responses in the behavioural analysis. For example, in the situation of the client experiencing increased suicidal ideation on getting ready for bed described above, the therapist employed several procedures. To decrease the classically conditioned increases

in suicidal ideation and guilt occurring on preparing for bed, the therapist conducted imaginal exposure to the bed-time sequence in session. For the client to experience non-reinforced exposure during this intervention, the therapist first rehearsed the client in some of the mindfulness skills that the client had learnt in skills group. A more detailed analysis of the bed-time routine revealed that the client tended to recall past distressing events and to anticipate an increase in suicidal thinking as she prepared for bed. The therapist encouraged the client to remain very mindful of the present moment by describing, in detail, her current actions in preparing for bed and to simply notice intrusive thoughts about the past or worry thoughts about the future, if they occurred, before refocusing on the present. During the exposure, the therapist remained alert to the client becoming unmindful and coached her on refocusing on the present. Following exposure during sessions, the client practised remaining more mindful at home when preparing for bed. When the client began to use these new skills at home in the evening, she called her therapist for additional coaching in the application of the skills in vivo (see section on Treatment Structure). To address the functional consequences of the behaviour, therapist and client focussed on solutions both to decrease guilt and suicidal ideation and to increase a sense of 'doing what was right'. Cognitive restructuring of thoughts of self-blame for the abuse proved effective in reducing guilt. To decrease the suicidal ideation and to increase her sense of 'doing the right thing', the client reminded herself of the negative consequences to herself and her family of self-harm and reviewed her DBT skills manual to identify a skill to utilise during the current crisis. As she practised the chosen skills she repeated to herself, 'Now I really am doing what's best for me and my family'.

Focussing on Acceptance: Validation & Zen

Balancing the behavioural focus on change, DBT strongly emphasises acceptance. Linehan drew on her knowledge of Zen principles to inform the use of acceptance in the treatment. Zen principles recognise the perfection of each moment, as each moment is caused by all that preceded it, and could not, therefore, be otherwise or more perfect than it is (Aitken, 1982; Swales & Heard, in press). Acceptance in the context of Zen implies an acknowledgement of what is rather than approval or agreement. The practice of validation within DBT draws on both this sense of acceptance and the recognition of the perfection of each moment. The client is perfect as he or she is, so is the therapist, as is the relationship between them – for how could the client, the therapist and the relationship be anything other than they are given all that has occurred prior to this moment. Zen principles also inform two significant aspects of Zen practise within DBT: mindfulness and radical acceptance. Each of these aspects of the treatment will now be considered further.

In validating the client, the DBT therapist seeks to find the truth, wisdom and accuracy in the client's responses and to highlight these. Clients with a BPD diagnosis have long histories, and often current realities, of invalidation where those around them have described their beliefs, emotions, inner experiences and behaviours as inappropriate. Consequently, clients may experience confusion about which aspects of their responses are valid and legitimate in any one context. Focussing on which aspects of the clients' behaviours, emotions and thoughts make sense enables them to begin to accept their responses and ultimately themselves.

Validation helps clients tolerate the extreme difficulty of change. Swann's Self-Verification Theory (Swann, Stein-Serussi, & Giesler, 1992) supports Linehan's early conceptualisation of validation (Linehan, 1993a). Swann highlights that arousal results when individuals receive feedback inconsistent with their self-construct. For some individuals, inconsistencies between feedback received and self-constructs may lead to extremely high levels of arousal. In the presence of high levels of arousal, the client both works hard to regain emotional control, resulting in less collaboration, and becomes less able to learn i.e. change. The therapeutic challenge for clients with a borderline diagnosis in a therapy with a strong focus on change is that the therapy invalidates their belief in their incapacity to change. Thus, whenever the therapist attempts to help the client to change the client's arousal increases, their capacity to learn decreases and non-collaboration increases. Given this challenge, the therapist must titrate pushing for change with validation of both the difficulty of change and the understandable disbelief in the possibility of change.

Since the publication of the treatment manual, Linehan's conceptualisation of validation has developed significantly (Linehan, 1997). In her revised formulation, she describes six levels of verbal validation and introduces the concept of functional validation. Verbal validation involves essentially saying to the client that his or her responses make sense in some way. The first four levels of verbal validation (unbiased listening and observing, accurate reflection, articulating unverballed thoughts and emotions and validation in terms of past learning or biological dysfunction) are common in many psychotherapeutic models. The two higher levels of verbal validation (validation in terms of present context and radical genuineness) although not necessarily unique to DBT, are highly characteristic of the treatment. For example, clients frequently report that self-injurious behaviour reduces anxiety, subjective tension or other negative affective states. In this circumstance, self-injury is valid if the client's goal is to reduce anxiety. So a DBT therapist faced with a client who has cut herself may say, 'It makes sense to me that you cut yourself. This is the only way you know to reduce your anxiety and most people in a similar situation would want to get their anxiety down' (current context validation). The DBT therapist would also push for change. For example, the therapist may say, 'We need to work on other ways for you to get your anxiety down though, as the cutting has serious negative consequences for you'. In this response the therapist invalidates the invalid aspects of the behaviour. For example with a client whose goals are to improve her relationship with her spouse and to train as a nurse, continuing to harm herself is an invalid behaviour in relation to these goals.

Radical genuineness describes a way of responding to the client as the therapist would respond to anyone else in his or her life i.e. the therapist does not treat the client as fragile. For example, a client returned to the therapy room and apologised grudgingly for storming out of the session and threatening not to return. The therapist said, 'You're right, that was not your shining moment'. The client looked visibly relieved at the response, as she knew that her behaviour of storming out was a problem and the therapist's response confirmed her own response to her behaviour. The client then gave a more fulsome apology, to which the therapist responded with further validation, 'I'm glad you came back to work on it as I know change is hard for you'. This example illustrates the difference between validation and making positive comments about the client. Validation requires the therapist to verify or ratify the *accuracy* of the client's self-perception, behaviour or experience even when these are negative. Such responses (regardless of valence) may not be easy for the client to hear but they increase the client's capacity to accept and understand herself and also can increase trust in the therapist.

In functional validation the therapist validates the veracity of the client's responses by responding to them with problem-solving. For example, the client reports that her boss has said that if the client's behaviour does not improve at work she will fire her. The DBT therapist may say "That sounds like a complete disaster we have to solve that problem now." The therapist then moves immediately to defining the problem and helping the client generate and implement solutions for the problem (functional validation).

The Zen principle of the essential perfection of each moment links to two key aspects of Zen practice within DBT, mindfulness and radical acceptance. Kabat-Zinn, who was perhaps the first practitioner to introduce mindfulness into Western psychological treatment, defines mindfulness as 'paying attention in a particular way: on purpose, in the present moment and non-judgementally' (Kabat-Zinn, 1994, p.4). To help clients learn mindfulness DBT teaches three *what* and three *how* component skills. The former describe the practices and the latter, the manner in which to conduct the practices. *Observing* requires noticing the raw experience of reality both inside and outside the self. *Describing* involves using words to articulate the contents of observation remaining aware of the possibility that language may introduce constructs or interpretations that obscure seeing reality as it is. Indeed *describing* does not form part of traditional Zen practice because of the risk that using words may hinder direct contact with experience. Linehan introduced *describing* as a mindfulness skill, however, to assist clients with borderline personality disorder to approach the difficult task of *observing*. *Participating* refers to the experience of becoming 'at-one' with the current moment, where the division between self and the world dissolves and there is an experience of 'flow'.

Becoming so engrossed in an activity that time seems to stand still, represents an everyday experience of participating. Regardless of the nature of the practice, mindfulness requires the application of all three of the *how* skills. Non-judgemental practice requires noticing and letting go of value judgements. For example, a client frequently stated that she was 'stupid' whenever she had difficulty applying a new skill. The therapist noticed that as a consequence of using the judgement the client's motivation to work in therapy decreased. The therapist encouraged the client to simply notice the judgement ('I'm stupid') as a judgement and either to just notice it or to restructure the judgement by describing the facts ('I find learning new skills hard'). Applying mindfulness in this way prevented major decreases in motivation during the application of new skills. *One-mindfully* simply requires doing one thing at a time. So if walking, walk; talking, talk; eating, eat. But do not walk, talk and eat at the same time! For example, every time the client who described herself as 'stupid' tried a new skill, she would think back over all her previous failures. Unsurprisingly this process generated hopelessness and demotivated her further. The therapist encouraged the client to remain focussed on this present moment so that whenever her mind wandered, to notice that it had done so and to then gently escort her attention back to the task at hand. Focussing on being effective asks both therapists and clients to do what works most effectively in any given situation rather than focussing on what is right or wrong.

DBT therapists practise, model and teach radical acceptance. This strong focus on acceptance of the client as he or she is and of reality as it is in this moment provides a further counter-point to the behavioural focus on change. Radical acceptance requires a complete and total acceptance of the facts of current reality and involves the supposition, based in Zen principles, that all events are caused and as such reality as it is in this moment can not be other than it is because of all that has preceded it. Radical acceptance also relates to the assumption that suffering arises from the combination of pain and non-acceptance of the pain. For example, a client with a substance abuse problem was working very hard to remain abstinent from alcohol and cocaine. After 8 months in treatment she had been abstinent for four months. She reported increasing frustration and dissatisfaction with her family who refused to believe she was abstinent and if any money or possessions went missing accused her first. The client thought that her family should now believe her and that their response was unjustified and unfair. The DBT therapist encouraged the client to practice radical acceptance of the facts of the situation. Firstly, that at present her family did not believe that she was abstinent. Secondly, that she, the client, experienced extreme sadness and frustration about their stance. Finally, that a natural consequence of having a past where you have lied and stolen is that it takes a long time for people to trust you again, and some people will not. Practising radical acceptance enabled the client to become more validating of her family's position and to respond more effectively when she was unjustly accused. Perhaps unsurprisingly, this led to a gradual reduction in accusations by her family.

DBT teaches both mindfulness and radical acceptance to clients during skills training modules that emphasise acceptance of the present moment rather than changing a current situation. Clarifying with clients that the aim of such skills is not to help them feel better but rather to assist in tolerating and managing difficult and painful experiences more effectively is important in motivating them to both learn and persist in the practice of these challenging skills. Paradoxically, however, if the client succeeds in fully accepting herself and the current moment most likely she has fundamentally changed!

Dialectical Philosophy

To house the two contrasting principles of acceptance and change, Linehan uses dialectical philosophy. Dialectical philosophy encompasses both a world view and a conceptualisation of the process of change (Linehan, 1993a; Linehan & Schmidt, 1995). Both aspects are relevant in DBT. A dialectical world view describes reality as complex, inter-related and consisting of opposing forces. Dialectics acknowledges the relationship between parts of a system to the whole and consequently has a systemic perspective on reality. DBT thus considers how multiple systems within the individual impact on one another (for example, emotional dysregulation impacts on systems of behavioural and cognitive regulation, interpersonal functioning and sense of self) and how the individual and his or her

social and cultural contexts mutually influence each other. The connection and tension between opposing forces leads to change. Dialectics as a process of change recognises the validity in opposing or contradictory positions or perspectives and synthesises these positions into a new perspective which then develops further tensions requiring synthesis. The dialectical approach in the treatment influences the balancing of treatment strategies and the constant search for synthesis of contrasting views.

The central dialectic in DBT is that of acceptance and change. All treatment strategies align on this central dialectic. In addition to the core strategies of the treatment already described, problem-solving (change) and validation (acceptance), the stylistic and case management strategies are also positioned on this dialectic. The stylistic strategies consist of reciprocal communication strategies on the acceptance side and irreverent communication on the change side. Reciprocal strategies subsume the standard psychotherapy style of warmth and genuineness, but in DBT also include self disclosure. Self disclosure is of two types: personal and self-involving. Modelling self-disclosures, in which the therapist discloses ways in which he or she has utilised the principles or skills of the treatment to solve a problem in his or her own life, are a distinctive form of self-disclosure used in DBT. The therapist uses irreverent communication strategies when the client or client and therapist together have reached an impasse in therapy. Irreverence challenges the established ways of perceiving, experiencing and acting to facilitate movement within the therapy. The most basic level of irreverence uses a matter-of-fact tone to discuss topics which ordinarily elicit a more affective response. For example, DBT therapists discuss suicidal behaviours and communications in a matter-of-fact tone, often to the surprise of clients frequently used to therapists increasing their levels of warmth and concern during discussions of current suicidal behaviours. Therapists may also employ 'off beat' irreverence. For example, in response to a client threatening to kill herself a therapist may say 'But you can't possibly kill yourself - you promised not to drop out of therapy'. If the client becomes more flexible and willing in response to an irreverent strategy, the therapist usually responds with reciprocal communication strategies to reinforce the change on the client's part.

Case management strategies are also aligned on the acceptance and change dialectic. Consultation to the patient, in which the therapist consults primarily with the client about how to obtain maximum help from the treatment network, lies on the change end. This stance of the treatment contrasts with the often standard approach to suicidal clients that frequently emphasises communication between members of the treatment network about the client, rather than emphasising the client's role in communicating with the treatment network. Environmental intervention by the therapist on behalf of the client acts as a dialectical counter-point to consultation-to-the-patient strategy and recognises those circumstances in which the client cannot act effectively on his or her behalf. As such this set of strategies lies on the acceptance end of the dialectic.

DBT therapists teach four sets of skills to clients also arranged on the acceptance and change dialectic. Mindfulness and Distress Tolerance, of which radical acceptance is a component part, constitute the acceptance modules. As described, these modules teach skills to assist clients to remain in the present moment and to tolerate crises without engaging in behaviours that may worsen a situation. The other two modules, interpersonal effectiveness and emotion regulation, focus on teaching skills to manage relationships more effectively and to understand and regulate affect. Practitioners familiar with cognitive behavioural approaches to assertiveness and emotion regulation will find much that is familiar in these two modules.

In addition to balancing treatment strategies on the acceptance and change dialectic, DBT also uses a set of dialectical strategies that embody both acceptance and change within them. For example, DBT therapists may use and develop metaphors to help clients both recognise where they are (acceptance) but also how they might change. A therapist may also highlight paradoxes within therapy. For example, to a client so attached to her therapist that her desperation to remain in therapy outweighs her desire to move forward in her life, the therapist may say 'the harder you work on decreasing your dependency on me, the longer I'll work with you!'

Dialectics encourages a search for synthesis when tensions arise in the treatment and thus describes the process of change within the treatment. Tensions can arise within the client (e.g. “I’m to blame for my problems” versus “Others are to blame for my problems”) between the client and the therapist (e.g. “Suicidal behaviour is the solution” [client] versus “Suicidal behaviour is the problem” [therapist]) and between different members of the treatment team (e.g. “This client is a vulnerable victim” versus “This client is a manipulative bully”). Dialectics as a philosophy accepts that there is no absolute truth and that truth evolves and develops through the synthesis of opposing views and the emergence of new theses. DBT views the occurrence of dialectical tensions in the therapy as an opportunity to work on synthesis thus promoting growth and change. Synthesis of opposing views requires the therapist to work with the client or other therapists to identify, non-judgmentally, the validity in both poles of the dialectic and to work on finding syntheses that recognise this validity. For example, suicidal behaviour is a solution to the client who experiences relief from tension and shame when she thinks of suicide or engages in suicidal behaviour. Suicidal behaviour also constitutes a problem as the client feels ashamed and guilty about the behaviour and feels increasingly stressed by continuing the behaviour. The synthesis requires finding solutions for the client that involve relieving shame and tension without suicide and solving the problems that lead to contemplation of suicide as a solution.

Structure of DBT.

DBT therapists use the principles of the treatment described above within a highly structured treatment frame. DBT programmes address clients’ problems with a comprehensive multi-function treatment with multiple modalities. As a therapy, DBT also structures the therapeutic journey into stages, and within stages hierarchically addresses clients’ problems.

Functions & Modes of treatment

DBT programmes have five functions designed to comprehensively address the problems of clients with a borderline diagnosis (see Table 1). DBT presumes a capability and motivational deficit model of borderline personality disorder. Linehan hypothesised that, as a consequence of a biological vulnerability transacting with invalidating environments, clients develop deficits in key self-management skills (e.g. emotion regulation, interpersonal effectiveness, distress tolerance) and in sustaining motivation to change. Each function of the treatment addresses some aspect of these capability and motivational deficits. For example, DBT programmes devote an entire modality of treatment to skill acquisition; most commonly skills training groups fulfil this function. Without sustained attention to the motivational factors that interfere in changing behaviour and the effective utilization of new skills, skills’ training alone is unlikely to be effective. DBT individual psychotherapy is the most common modality addressing motivational problems. The DBT therapist, through repeated behavioural and solution analyses reaches a comprehensive understanding of the motivational difficulties of the client and implements strategies to ameliorate them. DBT recognises, however, that for clients with high levels of emotional dysregulation whose skill level is highly context dependent, these two modalities alone will not comprehensively solve the clients’ difficulties. To ensure effective generalisation, DBT treatment programmes develop modalities to assist clients in transitioning new behaviours acquired and strengthened in therapy to their non-therapy environments. The most frequently used modality to fulfil this function is telephone consultation, where the DBT therapist provides skills coaching to the client in vivo. DBT therapists may also involve significant others from the clients’ environments in the change process if the response of those in the environment significantly affects the capacity of the client to change.

Table 1: Functions and treatment modalities in DBT

FUNCTION	AIM	EXAMPLE MODALITIES
Capability enhancement	Acquisition and a degree of strengthening of new skills.	Skills training groups.
Motivational enhancement	Identification and treatment of factors that inhibit the utilisation of more skilful means, such as emotions, cognitions, reinforcement contingencies.	Individual DBT psychotherapy.
Generalisation	Further strengthening and generalisation of new skills to the non-therapy environment.	Telephone consultation.
Structure the environment	<ol style="list-style-type: none"> 1. Assist environment of the client to support and reinforce behavioural change. 2. Intervene in the system around the treatment programme to ensure effective delivery of the treatment. 	<ol style="list-style-type: none"> 1. DBT Family Therapy. 2. DBT Project group meetings.
Enhance Therapist Capabilities and Motivation	Acquisition of new skills and sustaining motivation of therapists.	DBT Consultation Team.

Consistent with dialectical philosophy, DBT recognises the impact of the process of therapy on the therapist and places a strong emphasis on enhancing the therapists' capabilities and motivation to treat the clients. Treating clients with multiple comorbidities and high risk where change is often slow places a significant demand on therapists and can frequently lead to burnout. DBT programmes, therefore, mandate that all therapists on the team meet regularly, usually weekly, for case consultation. Distinctively DBT is a *recursive* treatment i.e. it encourages therapists to apply the treatment to themselves to resolve problems that arise for them in therapy and explicitly requires that consultation team members use the therapy to treat each other when problems arise for the therapist or within the therapy. For example, a team noticed that one client was not making progress in reducing self-harm. On discussing this in the team, the therapist described extreme difficulty in conducting behavioural and solution analyses of the self-harm behaviour as the client became very angry and threatening towards the therapist during the analysis. The therapist often became highly anxious when threatened and frequently terminated analyses the moment the client became mildly angry, thus reinforcing the client's angry response to conducting chain analysis. The team rehearsed with the therapist several components to a solution to this problem: orienting the client to the current reinforcement contingencies, motivating the client to work on the problem by linking reducing anger and threats in therapy with the client's stated goal of becoming more interpersonally effective, conducting a chain analysis of the links leading to the angry response and possible solutions for these, including helping the client manage shame about her self-harm, the most important link in the chain leading to the anger response, in order to proceed with the chain analysis. The team also helped the therapist let go of judgements that she was a 'bad' therapist when she experienced urges to abandon chain analyses, as this judgement interfered with her implementing more effective solutions to the client's angry and threatening behaviour, by simply stating more mindfully 'I notice I am avoiding

dealing with my client's anger and threats – which strategy might be helpful for me to try now to return to the analysis.”

The use of treatment functions to structure treatment delivery allows for a degree of flexibility in adapting the treatment to different settings. For example, in inpatient settings, milieu therapists may provide in vivo skills coaching on the unit to promote generalisation (Swenson, Witterholt & Bohus, 2007), or in adolescent programmes parents or guardians may be included in skills training groups to enhance skills generalisation or to structure the adolescents' environment to reinforce clinical progress (Miller, Rathus & Linehan, 2007). Since the initial development of the treatment clinicians have adapted the treatment to new populations and for different treatment settings. Several adaptations are described in the book edited by Dimeff & Koerner (2007).

Stages & Targets

DBT structures the treatment in stages (Linehan, 1999). Before treatment can begin the therapist engages the client in the pre-treatment stage, during which the therapist establishes the client's goals and links them with the treatment. The therapist also completes orientation and commitment to the treatment during this stage. This stage usually lasts between four and six sessions. DBT therapists shape commitment to the goals of treatment such as stopping suicidal and self-harming behaviour and working to resolve difficulties in the therapy (therapy-interfering behaviour). Following completion of pre-treatment, clients enter Stage 1 that focuses on the achievement of behavioural stability. Once the client has achieved a more stable life, if appropriate, he or she may enter Stage 2, emotionally processing the past, including the resolution of childhood trauma if appropriate. The majority of research in DBT has involved clients in Stage 1 treatment.

Treatment in stage 1, involves tackling identified problems in a hierarchical manner. The top target in this stage of treatment is life-threatening behaviours encompassing suicidal, parasuicidal, homicidal and other imminently life-threatening behaviours. Therapy-interfering behaviours form the second target for treatment. Therapy interfering behaviours include both client and therapist behaviours that interfere in the effective delivery of the treatment. Examples of client behaviours may include not practising skills, not attending therapy sessions and repeatedly saying 'I don't know'. Therapist therapy-interfering behaviours may include avoidance of targeting identified target behaviours, too little or too much validation or irreverence. The third target is quality-of-life interfering behaviours that severely destabilise the client. Behaviours that form part of other psychiatric diagnoses are included here, for example, low mood in the depressed client or flashbacks in the client with PTSD, as would behaviours such as seeking frequent psychiatric hospitalisations, forming or maintaining seriously abusive relationships or forensic behaviours.

Distinctively each function of DBT has its own unique hierarchy. The target hierarchy in individual therapy follows the overarching target hierarchy of Stage 1 of treatment as outlined above. In modalities devoted to enhancing capabilities, the therapists' top priority is reducing therapy destructive behaviours (e.g. self-harm in group). In practice, such behaviours occur rarely. The next target, that forms the main focus, is skills acquisition and some strengthening. Therapy-interfering behaviour follows this target. The ordering of targets in this way results in two major characteristics of DBT skills training groups. Firstly, the groups operate more like a class than a psychotherapy group and secondly, skills group leaders mostly ignore therapy-interfering behaviours. DBT skills group therapists will remain aware of group process and manage it proactively but such processes do not form part of group discussion. In telephone coaching the top target is reduction of suicidal crisis behaviours followed by increasing generalisation of skills. Therapy-interfering behaviours occurring during telephone calls are not targeted during the call itself. The therapist may highlight them when they occur and agenda them for the next scheduled therapy session.

Research Evidence

As a behavioural treatment, DBT strongly emphasises collecting empirical data in relation to efficacy and effectiveness. Consistent with the dialectical philosophy, the treatment also endeavours to respond to new theoretical and technical developments in psychotherapy. The following two sections review the current evidential basis for DBT and consider future research directions.

DBT for adult women with BPD and suicidal behaviour

There are now five randomised clinical trial examining the efficacy of DBT for women with BPD and suicidal behaviour; investigators other than the treatment developer conducted three of these trials. The first clinical trial of DBT (Linehan, Armstrong, Suarez, Allmon & Heard, 1991) demonstrated that recipients of DBT, in comparison to recipients of treatment as usual (TAU), had significantly fewer, and less medically severe, parasuicidal acts, higher treatment retention rates (DBT=83% vs TAU=42%) and spent less time as in-patients in psychiatric hospital. In addition, those in the DBT condition had significantly lower anger scores and higher social and global functioning. Both the DBT and TAU groups demonstrated improvements in suicidal ideation and depression. Treatment gains, although less marked at one year follow-up, were generally maintained (Linehan, Tutek, Heard & Armstrong, 1994). A recent replication of this study by the Linehan group (Linehan, Comtois, Murray, Brown, Gallop et al, 2006) utilised a more rigorous control condition, comparing a year of DBT treatment with non-behavioural treatment by experts (TBE). Both treatments were community based. Intention-to-treat analyses revealed that recipients of DBT were significantly less likely to make a suicide attempt, to require hospital admission for suicidal ideation and to drop out of treatment. DBT clients also had fewer psychiatric hospitalisations and psychiatric emergency room visits. Their medical risk scores for all parasuicidal behaviours were lower than for those receiving TBE.

Verheul, van den Bosch, Koeter, dr Ridder, Stijnen & van den Brink (2003) also compared DBT to TAU. DBT resulted in greater reductions in self-mutilation, decreases that were especially marked in those with the highest rates of the behaviour at baseline, and self-damaging impulsive behaviours (e.g. substance misuse, gambling, binge-eating). At 6 months follow-up, DBT treatment gains in parasuicidal and impulsive behaviours and alcohol use were sustained, although improvements in drug use other than alcohol were not (van den Bosch, Koeter, Stijnen, Verheul & van den Brink, 2005).

Koons, Robins, Tweed, Lynch, Gonzalez et al, (2001) compared DBT with a predominantly CBT control condition with women veterans, only 40% of whom had a recent history of parasuicidal behaviour. After six months of treatment, reductions in suicidal ideation, depression, hopelessness and anger expression were evident in the DBT group. Parasuicidal acts (low in both conditions), treatment retention, anger experienced and dissociation were equivalent in both groups.

Clarkin, Levy, Lenzenweger & Kernberg (2007) conducted the first 'horse race' study involving DBT. This study was also the first to include male as well as female participants. Their study was a three-armed trial comparing DBT, Transference Focussed Psychotherapy (TFP) and a dynamic supportive treatment. As is common in such studies, all treatments performed well on a substantial number of measures; in this case on depression, anxiety, global functioning and social adjustment. Both TFP and DBT showed significant improvements in suicidality. TFP and supportive treatment demonstrated additional gains in impulsivity. TFP recipients also had decreased verbal and direct assaults, as well as reductions in irritability.

These data support the efficacy of DBT as a treatment for adult women with suicidal behaviour. A recent study by Comtois and colleagues (Comtois, Elwood, Holdcraft, Smith & Simpson, 2007) demonstrated that the results obtained in efficacy studies may translate into effective clinical services. This study summarised the outcomes of clients from a DBT programme in a

community mental health centre and benchmarked them against the results from three of the efficacy studies. Results from the community clinic sample were comparable to those in the randomised trials.

DBT for adult women with BPD, suicidal behaviour and substance dependence

Clients with personality disorder and drug dependence frequently fall between two-stools in terms of service delivery. Personality disorder services frequently require that clients with drug dependence have this problem treated prior to treatment of their personality disorder; drug dependence services often do not treat individuals with a diagnosis of a personality disorder. In response to this dilemma Linehan & colleagues adapted DBT for individuals with a diagnosis of BPD who met criteria for drug dependence or abuse (Linehan & Dimeff, 2007). In a randomised controlled trial of this modification (Linehan, Schmidt, Dimeff, Craft, Kanter & Comtois, 1999), DBT participants had significantly greater reductions in substance misuse compared to TAU at one year and greater treatment retention rates (DBT=55%; TAU=19%). During the follow-up period of four months, DBT participants had significantly greater reductions in substance abuse and greater gains in global and social adjustment. In a second trial of this adaptation with women diagnosed with BPD and opioid dependence, Linehan and colleagues again used a more rigorous control condition, Comprehensive Validation plus 12-step (Linehan, Dimeff, Reynolds, Welch, Heagerty et al, 2002). Both treatments effectively reduced opioid use. Treatment retention was excellent in the Comprehensive Validation condition (100%) although still high in the DBT condition (64%). Clients in the DBT condition were significantly more likely to maintain treatment gains during the follow-up period.

DBT for diagnoses other than BPD and for other age groups

Several researchers have adapted DBT for the treatment of other conditions and other age groups. Some of these adaptations show limited if promising evidence for the efficacy of DBT. Telch, Agras & Linehan, (2001) demonstrated significant benefits for an adapted form of DBT in the treatment of binge-eating disorder. An adaptation of DBT for the treatment of older adults with comorbid personality disorder, not specifically BPD, and depression has also shown promise in two randomised controlled trials (Lynch, Morse, Mendelsohn & Robins, 2003; Lynch, Cheavens, Cukrowicz, Thorp, Bronner & Beyer, 2007). Miller, Rathus & Linehan (2007) describe the adaptation of DBT for adolescents. A controlled trial of this adaptation demonstrated some preliminary evidence for the effectiveness of the treatment (Rathus & Miller, 2002). Adolescents in the DBT-A condition despite more severe pre-treatment pathology, had significantly fewer psychiatric hospitalisations during treatment and better treatment completion than a comparison group also receiving treatment. Adolescents receiving DBT demonstrated a trend towards fewer parasuicidal behaviours during treatment and a significant pre-post reduction in symptoms of BPD, suicidal ideation and general psychiatric symptoms.

Future Research Directions

At the time of writing, compared to other treatments for BPD, DBT has the most extensive evidence base in support of its efficacy. Future directions to build on this success lie in three main areas. Firstly, DBT encompasses a wide range of strategies, many of them apparently contradictory as highlighted in the section of dialectics. It is probable that only a proportion of these are necessary for effective outcomes. Indeed, the Linehan et al (2002) study with substance dependent clients demonstrated that a treatment based on validation alone demonstrated certain therapeutic benefits. Future studies may find examining the relative importance of the change procedures (skills training, exposure, contingency management, cognitive modification) useful in increasing the effect sizes obtained by the treatment. Secondly, DBT is a multi-function, multi-modal treatment that requires a significant degree of organisational commitment for implementation. At present, evidence is lacking to indicate whether all or only a proportion of modalities is necessary to obtain effective outcomes. A three armed study is underway currently comparing standard out-patient DBT, Individual DBT psychotherapy plus a coping group and DBT Skills Training groups plus case management. Other

studies examining the importance of the telephone modality to support generalisation may also prove useful, as many services find this component of the treatment the most challenging to implement. A second area for future research also relates to implementation, in particular to the levels of adherence and competency in the treatment required to deliver effective outcomes. Efficacy studies select therapists for the potential to learn and deliver the treatment, indeed some studies only select already competent therapists to participate. Study therapists also receive training, supervision and monitoring in the delivery of the treatment. Consequently, in most studies, therapists deliver treatment that is both adherent to the manual and competent. In routine clinical settings, staff rarely receive extensive training in any specific treatment model and supervision is often limited. Supervision frequently relies on self-report rarely using more reliable monitoring methods, such as audio or video-recording. Staff are also unlikely to receive feedback in the form of routine outcome monitoring of the effectiveness of their work. The impact of these differences in staff training and supervision form a useful focus for research. For most psychotherapeutic interventions the levels of adherence and competence necessary to obtain effective outcomes is unknown, and which methods of training are the most successful in achieving these levels of therapeutic skill also remain a matter of opinion. Research into these areas would move forward the implementation of DBT specifically and evidence-based psychotherapies more generally.

References

- Aitken, R. (1982). *Taking the path of Zen*. San Francisco: North Point.
- Clarkin, J.F., Levy, K.N., Lenzenweger, M.F. & Kernberg, O.F. (2007). Evaluating three treatments for borderline personality disorder: A multiwave study. *American Journal of Psychiatry*, *164*, 922-928.
- Comtois, K.A., Elwood, L., Holdcraft, L.C., Smith, W.R. & Simpson, T.L. (2007). Effectiveness of Dialectical Behavior Therapy in a Community Mental Health Centre. *Cognitive and Behavioral Practice*, *14* (4), 406-414.
- Dimeff, L.A. & Koerner, K. (2007). *Dialectical Behavior Therapy in Clinical Practice: Applications across Disorders and Settings*. New York: Guildford Press.
- Diagnostic and Statistical Manual of Mental Disorders. (2000). *DSM-IV-TR*, (4th Ed.). Washington, DC: American Psychiatric Association.
- Hayes, S.C., Follette, V.M. & Linehan, M.M. (2004). *Mindfulness and acceptance: Expanding the cognitive-behavioral tradition*. New York: Guildford Press.
- Kabat-Zinn, J. (1991). *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness*. New York: Dell Publishing Group.
- Koons, C.R., Robins, C.J., Tweed, J.L., Lynch, T.R., Gonzalez, A.M., Morse, J.Q., Bishop, G.K., Butterfield, M.I., & Bastian, L.A. (2001). Efficacy of Dialectical Behavior Therapy in Women Veterans with Borderline Personality Disorder. *Behavior Therapy*, *32*, 371-390.
- Linehan, M.M. (1993a). *Cognitive-Behavioural Treatment of Borderline Personality Disorder*. New York: Guildford.
- Linehan, M.M. (1993b). *Skills Training Manual for Treating Borderline Personality Disorder*. New York: Guilford Press.
- Linehan, M.M. (1997). Validation and psychotherapy. In A. Bohart & L. Greenberg (Eds) *Empathy Reconsidered: New Directions in Psychotherapy*. Washington DC: American Psychological Association.

- Linehan, M.M. (1999). Development, evaluation, and dissemination of effective psychosocial treatments: Stages of disorder, levels of care and, stages of treatment research. In M.G. Glantz & C.R. Hartel (Eds.). *Drug Abuse: Origins and Interventions*. Washington, DC: American Psychological Association.
- Linehan, M.M., Armstrong, H.E., Suarez, A., Allman, D. & Heard, H.L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry*, 48, 1060-1064.
- Linehan, M.M., Comtois, K.A., Murray, A.M., Brown, M.Z., Gallop, R.J., Heard, H.H., Korslund, K.E., Tutek, D.A., Rynolds, S.K. & Lindenboim, N. (2006). Two-Year Randomized Controlled Trial and Follow-up of Dialectical Behavior Therapy vs Therapy by Experts for Suicidal Behaviors and Borderline Personality Disorder. *Archives of General Psychiatry*, 63, 757-766.
- Linehan, M.M. & Dimeff, L. (1997). *Dialectical behaviour therapy manual of treatment interventions for drug abusers with borderline personality disorder*. Seattle: University of Washington.
- Linehan, M.M., Dimeff, L.A., Reynolds, S.K., Comtois, K.A., Shaw-Welch, S., Heagerty, P. & Kivlahan, D.R. (2002). Dialectical behavior therapy versus comprehensive validation plus 12-step for the treatment of opioid dependent women meeting criteria for borderline personality disorder. *Drug and Alcohol Dependence*, 67, 13-26.
- Linehan, M.M. & Schmidt, H. III. (1995). The dialectics of effective treatment of borderline personality disorder. In W.T. O'Donohue & L. Krasner (Eds.). *Theories in Behaviour Therapy: Exploring behavior change*. Washington: American Psychological Association.
- Linehan, M.M., Schmidt, H., Dimeff, L.A., Craft, J.C., Kanter, J. & Comtois, K.A. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug-dependence. *The American Journal on Addictions*, 8(4), 279-292.
- Linehan, M.M., Tutek, D.A., Heard, H.L. & Armstrong, H.E. (1994). Interpersonal outcome of cognitive behavioural treatment for chronically suicidal borderline patients. *American Journal of Psychiatry*, 151 (12), 1771-1776.
- Lynch, T.R., Morse, J.O., Mendelson, T. & Robins, C.J. (2003). Dialectical behavior therapy for depressed older adults: A randomized pilot study. *American Journal of Geriatric Psychiatry*, 11(1), 33-45.
- Lynch, T.R., Cheavens, J.S., Cukrowicz, K.C., Thorp, S., Bronner, L. & Beyer, J. (2007). Treatment of older adults with co-morbid personality disorder and depression: A dialectical behaviour therapy approach. *International Journal of Geriatric Psychiatry*, 22(2), 131-143.
- Miller, A.L., Rathus, J.H. & Linehan, M.M. (2007). *Dialectical Behavior Therapy with suicidal adolescents*. New York: Guildford Press.
- Rathus, J.H. & Miller, A.L. (2002). Dialectical behavior therapy adapted for suicidal adolescents. *Suicide and Life-Threatening Behavior*, 32, 146-157.
- Skinner, B.F. (1974). *About Behaviorism*. New York: Knopf.
- Swales, M.A. & Heard, H.L. (In press). *Distinctive Characteristics of Dialectical Behaviour Therapy*. London: Routledge.

- Swann, W.B., Stein-Seroussi, A., & Giesler, R. B. (1992). Why people self-verify. *Journal of Personality and Social Psychology*, 62, 392-401.
- Swenson, C.R., Witterholt, S. & Bohus, M. (2007). In L. A. Dimeff & K. Koerner (Ed.). *Dialectical Behavior Therapy in Clinical Practice: Applications across Disorders and Settings*. New York: Guildford Press.
- Telch, C.F., Agras, W.S. & Linehan, M.M. (2001). Dialectical Behavior Therapy for binge eating disorder. *Journal of Consulting and Clinical Psychology*, 69(6), 1061-65.
- van den Bosch, L.M.C., Koeter, M.W.J., Stijnen, T., Verheul, R., & Van den Brink, W. (2005). Sustained efficacy of dialectical behaviour therapy for borderline personality disorder. *Behaviour Research & Therapy* 43, 1231-1241.
- Verheul, R., Van Den Bosch, L.M.C., Koeter, M.W.J., De Ridder, M.A.J., Stijnen, T & Van den Brink, W. (2003). Dialectical behaviour therapy for women with borderline personality disorder: 12-month, randomised clinical trial in The Netherlands. *British Journal of Psychiatry*, 182(2), 135-140.

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