Abstract and Keywords

This chapter discusses and illustrates how behavioural theory and science guide many aspects of Dialectical Behaviour Therapy (DBT). Behavioural theory informs the DBT approach to case formulation, the ongoing assessment of behaviour throughout therapy, and the selection, implementation, and evaluation of evidence-based interventions. As described later in this chapter, behavioural theory also influences the style and “flavour” of DBT sessions. As the focus of the first stage of DBT often focuses on the treatment of suicidal and self-injurious behaviour, the chapter emphasizes these behaviours via several examples, and also touches upon some other common behaviours targeted in DBT.

Keywords: behavioural theory, suicidal behavior, non-suicidal self-injury, evidence-based intervention, psychological behaviourism, zen practice

Key Messages from this Chapter

• Behavioural theory guides many aspects of DBT.
• Behavioural theory and practices help DBT therapists assess and understand their clients’ behaviour.
• Functional or chain analyses can help the DBT therapist assemble a case formulation that paves the way to potentially helpful interventions.
• Behavioural theory encourages DBT clinicians to be specific about behaviour; to take an active role in therapy, and to present opportunities for clients to learn new behaviours.
The Development and Theoretical Foundations of DBT

A transaction of theory, science, and clinical experience influenced the development of DBT. When Dr. Marsha Linehan originally set out to develop a treatment to help complex, highly suicidal individuals, she began with the existing state of the art. At the time, the state of the art was cognitive-behavioural therapy (CBT), informed by the “cognitive revolution” and behavioural principles established and refined over a century of theoretical and treatment development. Although CBT might be considered an uneasy marriage of theoretical perspectives (Farmer & Chapman, 2008), evidence has amassed that CBT is efficacious for a variety of clinical problems (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012).

In applying CBT with highly suicidal, complex clients, Linehan discovered some of the pitfalls of a largely change-oriented treatment paradigm. Although treatment led to behaviour change, complex, multi-problem clients often had difficulty accepting the message that they simply need to change their thinking and behaviour in order to develop less painful lives. Clients sometimes experienced this approach as invalidating and overly simplistic (i.e., a simple solution for what they experienced as unbearable, complex suffering). While CBT appeared potentially effective, it was not acceptable enough to implement on a broad scale with complex, highly suicidal individuals with borderline personality disorder (BPD).

To address these limitations of existing approaches, Linehan (1993a) sought ways to incorporate perspectives (dialectical theory, see Chapter XX) and practices (mindfulness, zen practice, acceptance, see Chapter XX) to convey acceptance and help clients accept themselves. A growing emphasis on the balance and synthesis of acceptance and change emerged and was found to be effective. DBT evolved into something akin to an expert martial artist skilfully adapting to different self-defense situations. The martial artist must continually remain focused and adapt to the behaviour of her or his opponent or sparring partner. At times, the most effective approach might be to engage in a preemptive strike or counter the opponent’s attack in a forceful manner. At other times, it can be effective to go with the flow, allowing the partner to attack while deflecting, evading, and redirecting, or to simply step back and observe. The expert martial artist also moves back and forth between a loose, relaxed muscle state, and quick, explosive movements. Indeed, relaxed muscles move more quickly than tense muscles when speed is of the essence. Similarly, the DBT therapist toggles back and forth between acceptance and change-oriented skills and strategies, at times stepping back, observing, assessing, and conveying acceptance, and at other times, moving in to help the client change behaviour. Zen practice and dialectical principles guide the use of acceptance, helping the therapist flexibly navigate the sometimes complex and challenging behaviour of multi-problem clients. The core principles of body mechanics and physics help the martial artist...
effectively navigate a variety of practical situations, and to execute the most effective moves when needed. Similarly, the structure and practice of DBT remains rooted in behavioural theory and science.

Just as the knowledge of when and why to use a ‘hard’ versus ‘soft’ approach helps the martial artist adapt to different situations, zen practice and dialectics work together with behavioural theory in DBT. As with behavioural theory, zen practice emphasizes the present, concrete experience, observable behaviour, and the transient nature of self and identity. Dialectical theory is a transactional world view suggesting that identity and truth are both absolute and relative, similar to the contextual view of “truth” and the inseparability of behaviour and context in behavioural theory (see Hayes & Brownstein, 1986; Skinner, 1953). Given that many of the challenges faced by complex clients involve difficulties understanding and regulating emotions, emotion theory and science also inform DBT. Consistent with behavioural theory, contemporary emotion theory and science frames emotional states as multi-component responses with important, practical social-behavioural functions (Gross, 1998, 2013). This view is consistent with a behavioural perspective, in which emotions can be considered responses, antecedents, or consequences of behaviour (Farmer & Chapman, 2016). While the aim of this chapter is not to explicate commonalities across the perspectives underlying DBT, behaviourism, zen practice, dialectics, and emotion science meld effectively within a treatment that is practical, acceptable, and effective.

**Behavioural Theory and DBT**

Although there are several schools of behavioural theory, the behavioural framework of DBT most closely resembles that of social behaviourism, first described by Arthur Staats and further elaborated in his 1996 book *Behavior and personality: Psychological behaviorism*. As with other behavioural approaches, this framework emphasizes the role of reinforcement contingencies, learning history, and observable environmental events in current behaviour. In comparison with some schools of behaviourism (radical behaviourism, for example), however, psychological behaviourism attempts to integrate a behavioural approach with various areas of psychology (e.g., cognitive, developmental, biological, personality) and more strongly emphasizes the role of classical conditioning, temperament, and biological variables (Chapman & Linehan, 2005; Staats, 1996). Because of this, psychological behaviourism easily accommodates theory and research on emotions and emotion regulation, temperament, and personality.

Psychological behaviourism proposes that “person × environment” transactions occurring throughout an individual’s learning history shape basic behavioural repertoires (another way to describe “personality” within this approach) (Staats, 1996). These basic behavioural repertoires are a person’s characteristic behaviours, emotions, thoughts, and actions in particular contexts, and these repertoires evolve as new learning and experiences accrue. An emotionally vulnerable person raised in an invalidating environment, for example, may have developed a basic behavioural repertoire for
situations involving perceived rejection or abandonment. This repertoire might involve emotions of shame and anger and behaviours of contact seeking, intense emotional expression, or withdrawal. Any of these behaviours may have been reinforced during the individual’s learning history. Withdrawing from those who are critical or rejecting can be self-protective and result in negative reinforcement (through avoidance of mistreatment or punishment), whereas contact-seeking and escalating emotional expression may be intermittently reinforced through increased support and attention (Linehan, 1993a).

Throughout treatment, the individual may learn alternative responses to perceived rejection, such as cognitive reappraisal of the cue for perceived rejection, “checking the facts” (Linehan, 2015), strategies to accept or regulate emotions, relationship-enhancing assertiveness skills, and so on. The behavioural repertoire in situations previously associated with rejection can change in response to new learning.

Consistent with this example, the biosocial theory proposes that BPD develops as a result of transactions between a temperament characterized by heightened emotional vulnerability and an environment that invalidates the individual’s emotions, thoughts, and actions (Crowell et al., 2009; Linehan, 1993a). This transaction results in deficits in the behavioural repertoires or skills required to effectively regulate emotions and navigate interpersonal relationships. The suicidal client with BPD often has developed repertoires characterized by self-damaging escape or avoidance behaviours in the context of strong emotions, perceived rejection, and interpersonal conflict. Close relationships are often both desired and frightening, as the expression of emotions and thoughts were only inconsistently reinforced and periodically punished. Within a DBT framework, due to this transaction of temperament and environment, the individual has not learned the skills needed to understand and regulate emotions and navigate relationships effectively. Thus, the suicidal client with BPD may need to learn and practice new skills regularly in relevant situations. Over time, the basic behavioural repertoires that mark the legacy of her or his learning history and biology can change.

**DBT as a Learning-oriented Treatment**

Based largely on a behavioural, skill-deficit model to understand complex, multi problem clients, DBT is a learning-oriented treatment. This point can be easily lost. The nature of the clients often treated in DBT might suggest that the treatment focuses primarily on the reduction of imminent and harmful problem behaviours, such as self-injury and suicide attempts. The primary purpose of the treatment, however, is not to reduce harmful behaviours, but rather, to increase behaviours that will facilitate and maintain a life worth living. At the same time, it would be impossible to develop a life worth living without eliminating suicidal behaviour and learning new, life-enhancing behaviours. When it comes to multi-problem clients with BPD, the skill-deficit model of DBT suggests that clients often need to learn how to attend to and live in the present moment (mindfulness skills), understand and regulate emotions (emotion regulation skills), tolerate distress and
avoid acting on impulse (distress tolerance skills), and manage interpersonal relationships more effectively (interpersonal effectiveness skills).

These skills typically are taught formally in a structured skills training group (Linehan, 1993a, 2015), but each unique client may need to learn specific behaviours that do not always fall neatly within the skills training curriculum. Some of these might include organization, self-management, navigating specific interpersonal situations (for example, job interviews), and so on. There is, therefore, a balance in DBT of a standardized skills-instruction approach with an idiographic approach targeting challenges and areas of growth for each individual client. This balance is perhaps most challenging to strike in the context of skills training, where there is a structured curriculum and several clients to help at once. The behaviourally oriented DBT therapist, therefore, must be adept at assessing and understanding where clients are on the shaping curve for various skills, what they need to focus on, and how to effectively adapt teaching methods.

An Integrative Behavioural Framework for Understanding Suicidal and Self-Injurious Behaviour

Behavioural formulations of problem behaviours often emphasize a few key variables. It can be useful to organize these variables within the following categories: antecedents, person variables, behaviours, and consequences (following Farmer & Chapman, 2008, 2016; see also the S-O-R-C model first described by Goldfried & Davison, 1976). Antecedents include conditions that set the occasion for a particular behaviour. Person variables include factors such as learning history and individual differences (e.g., temperament, personality). Behaviours comprise relevant actions, emotions, and thoughts, often focusing on the target behaviour (e.g., suicidal or self-injury related actions, emotions, and thoughts). Finally, consequences involve events following the target behaviour that might increase (reinforcement) or decrease (punishment, extinction) the likelihood that the behaviour will occur again under similar circumstances. This section discusses several factors that fit within each domain in view of contemporary theories and research on self-injury and suicidal behaviour. Figure 1 shows how these variables fit together.
Antecedents

Within a behavioral model, antecedents come in a couple of key varieties. Discriminative stimuli signal the likelihood of reinforcing or punishing consequences if the individual were to engage in particular actions (Farmer & Chapman, 2016). Establishing operations, including conditions that alter the reinforcing effects of particular consequences (Laraway, Snyderski, Michael, & Poling, 2003; Michael, 2000). As an example, discriminative stimuli for a woman who self-injures following a conflict with her partner could include the presence of the partner, the time of day, and so forth. These stimuli may signal that, if she self-injures, the conflict will end, the partner will stop demanding that she search for a job, and support and attention will be forthcoming. Establishing operations, including social isolation or deprivation, might make reinforcers involving attention and support particularly potent.

Antecedents occasioning suicidal or self-injurious behaviours often include those related to stress, psychological, or physical pain (including illness). Research consistently has shown that recent stressors, such as loss of employment or relationships, or diagnoses of chronic illnesses, among other adverse life events, are associated with elevated suicide risk. Similarly, NSSI often is preceded by negative emotional states or events (Chapman, Gratz, & Brown, 2006; Kleindienst et al., 2008; Klonsky, 2007). Joiner’s Interpersonal-Psychological Model of Suicide (2005) proposes that two key antecedents include perceived burdensomeness (the perception that one is a burden on others) and thwarted belongingness (e.g., social rejection, exclusion, ostracism, alienation). According to the IPTS model, these factors increase suicide risk by increasing the individual’s desire to commit suicide. Similarly, the three-step model of suicide emphasizes these factors as well as the individual’s sense of connectedness to others (Klonsky & May, 2015). Within this framework, when connectedness is weaker than pain (physical or psychological), suicidal ideation intensifies. Perceived burdensomeness, lack of connectedness, thwarted belongingness, and psychological or physical pain may function as establishing operations, increasing the value of the reinforcement (e.g., emotional escape or relief; social consequences, such as increased support or attention).
Person Variables

Person variables include aspects of the individual’s learning history, temperament, biological, or other individual characteristics that influence the likelihood of NSSI or suicidal behaviour. When it comes to suicidal behaviour, some of these variables include sociodemographic factors, such as age, sex, socioeconomic status, historical or familial factors, among others (Chapman, Ferreira, & Law, in press). Other person variables might include personality traits, such as impulsivity or neuroticism.

Within Joiner’s model, one important person factor includes a history of exposure to painful and provocative events (PPEs) and the resulting development of the acquired capacity to enact suicide behaviours. Indeed, not all people who want to commit suicide are capable of enacting a suicide plan. Attempting suicide requires actions that are painful, distressing, and generally opposed to human survival instincts. According to this model, people acquire the capacity to enact suicidal behaviours through learning experiences involving repeated exposure to PPEs. PPEs can include NSSI, extreme sports, serious injuries, exposure to the injury or death of other people (e.g., in combat or through traumatic events), or other events involving bodily damage. Exposure to PPEs reduces the psychological and physical aversiveness of self-inflicted bodily damage; the individual becomes increasingly courageous and willing to carry out the behaviours required to enact a suicide attempt. In behavioural terms, acquired capacity may build in part through processes often associated with exposure therapy for phobias and other anxiety disorders (e.g., inhibitory learning; Craske et al., 2008). Other related person variables in this framework include factors that reduce aversion to suicidal behaviours, such as high pain tolerance.

The DBT approach to suicide, NSSI, and other target behaviours also emphasize skill deficits as important person variables. People vary in their capacity to engage in behaviours that reduce or prevent risk of NSSI and suicide. Skill deficits may develop through a transaction of individual vulnerabilities (e.g., emotion vulnerability) and developmental environments that do not equip the individual to effectively manage emotions or navigate interpersonal relationships (Crowell et al., 2009; Linehan, 1993a). Some of the skills needed to reduce or prevent NSSI or suicidal behaviour might include recognizing, labelling, and regulating emotions, tolerating distress, solving stressful interpersonal problems, and so forth. The solution often is to first understand the individual client’s skill deficits and then to teach and train the client in relevant skills.

Behaviours

Behaviours include actions, thoughts, emotions, and sensations related to suicidal or self-injurious behaviours. Suicide and NSSI-related actions include a broad range of behaviours. Some examples include planning or preparing for suicide or NSSI, researching methods of NSSI or suicide, talking about or threatening to engage in these
behaviours, acquiring or increasing access to harmful or lethal means, writing suicide notes, and so on. Some clinicians may prefer to keep NSSI or suicide ideation or urges in the category of antecedents, but for the purposes of this chapter, these are included as behaviours. As discussed later in the chapter, a behavioural orientation requires specificity regarding behaviours. In developing a case formulation of a client’s suicidal or NSSI-related behaviours, it is helpful to clearly specify the topography of these actions, in terms of frequency, duration, and intensity.

Consequences

Consequences include events that might reinforce, punish, or extinguish suicide and NSSI-related behaviours. Within the DBT framework, suicidal and self-injurious behaviours function both as solutions to problems and as problems in their own right. Suicide attempts and NSSI often result in negative reinforcement via escape, reduction, or avoidance of emotional pain or other overwhelming or intolerable experiences, such as thoughts or sensations (Baumeister, 1990; Chapman et al., 2006; Gratz, 2003; Gratz, Chapman, Dixon-Gordon, & Tull, 2016; Klonsky, 2007; Reitz et al., 2015). In this way, these behaviours are short-term solutions to the problem of emotional misery and suffering. Self-injurious and suicidal thoughts and behaviours repeatedly occur and periodically are reinforced in distressing situations. In the longer term, suicidal and self-injurious behaviours impede the development of a life that is worth living.

Due to powerfully reinforcing consequences, suicide attempts and NSSI can become over learned and easily prompted in particular contexts. Suicidal, and in particular, self-injurious behaviours, are likely to result in more immediate, reliable reinforcement and require less effort than the skills that the client needs to overcome these behaviours and build a life worth living in the long-run. Consistent with the matching principle (Hernstein, 1961), behaviours that reliably result in immediate reinforcement and require minimal effort are more likely to be maintained compared with more effortful behaviours with less consistent immediate consequences. For a client struggling with depression (see Hopko, Lejuez, Ruggiero & Eifert, 2003; Lejuez, Hopko, & Hopko, 2001, 2002), remaining in bed, for example, is reliably associated with avoidance of discomfort (physical effort, anxiety, etc.) and requires minimal effort. NSSI also can become a low-effort, highly reliable way to achieve immediate negative reinforcement (typically, emotional relief or escape; Brown et al., 2002; Kleindienst et al., 2008). Anecdotally, however, clients periodically report self-injuring without any resulting alleviation of emotional distress or identifiable positively or negatively reinforcing environmental consequences. It is likely, therefore, that these behaviours are subject to intermittent reinforcement schedules, which makes them particularly resistant to extinction.

Other models of NSSI and suicidal behaviour similarly emphasize the functional aspects of these behaviours. Within the Four-Function Model (Nock & Prinstein, 2004), for example, automatic and social forms of positive and negative reinforcement maintain NSSI. The term automatic refers to reinforcement occurring internally, such as changes in
emotions, thoughts, or sensations. *Social* refers to reinforcement occurring externally, in the social environment. For any self-injuring individual, NSSI might be maintained by a combination of social or automatic reinforcement involving the removal (negative reinforcement) or addition (positive reinforcement) of conditions that increase the likelihood that these behaviours will occur again in similar contexts. Given the preponderance of evidence suggesting that NSSI results in relief from internal states (thoughts, emotions, sensations), the experiential avoidance model of NSSI emphasizes the role of automatic negative reinforcement (Chapman et al., 2006) in the maintenance of this behaviour.

### Assessing and Understanding Problem Behaviour

Within DBT, therapists use a behavioral approach to the understanding and treatment of specific behavioural problems. Behavioural approaches to assessment and treatment generally have a few key principles in common. First, the aim of assessment is to generate hypotheses about the factors maintaining the client’s behaviour. Each client is unique; thus, the behavioural therapist takes an idiographic approach to understand factors related to the individual client’s behaviour. Second, treatment is a hypothesis-testing endeavour. DBT therapists assume that assessment will highlight possible hypotheses and related directions for therapy, but that the effects of therapy ultimately confirm or disconfirm what we think we know about our clients. Third, behavioural approaches involve an iterative interplay of assessment and treatment. The expert martial artist in the earlier example must continually assess and re-assess the situation, respond appropriately, adjust, and adapt. Similarly, the behaviourally oriented DBT therapist continually monitors the effects of treatment and adjusts her or his formulation, generates new hypotheses, and further adjusts treatment in an iterative process. With these principles in mind, this section discusses how DBT therapists can use behavioural assessment to build and refine their conceptualization of NSSI and suicidal behaviour.

### Principles for the Use of Chain Analyses in Dialectical Behaviour Therapy

One key way to understand and plan for the treatment of NSSI and suicidal behaviour is to conduct functional or “chain” analyses when these behaviours occur. Fairly specific to DBT, the term “chain analysis” emphasizes the observation that behaviour often occurs within a chain of events. Chain analysis, however, is essentially synonymous with the more widely used behavioural term *functional analysis*. A chain analysis is a detailed assessment of the antecedents, behaviours, and consequences associated with a discrete episode of a problem behaviour. When a client, for example, has self-injured, the therapist and client discuss the events, thoughts, actions, and emotions that preceded NSSI, the
topography of the NSSI, and the events or consequences following this behaviour. The purpose and practice of chain analysis in DBT has been described extensively elsewhere (Chapter XX, this volume; Rizvi & Ritschel, 2013); thus, this chapter makes a few key points about chain analysis and focuses on key principles as well as how this assessment strategy can be used to build a behavioural formulation of NSSI or suicidal behaviour.

The aim of a chain analysis is to assess and understand the variables that control and maintain problem behaviours. In this way, chain analyses form the building blocks of an evolving case formulation, help the client and therapist to understand patterns of behavior, and highlight potentially fruitful directions for intervention. Sometimes, however, the key function of chain analysis as an assessment strategy gets lost in clinical practice. Because chain analyses often involve detailed discussions of behaviours that may elicit shame, clinicians sometimes misconstrue or even use chain analyses as aversive consequences for problem behaviour. In institutional settings, following the occurrence of self-injurious or suicidal behaviour, patients sometimes are required to complete chain analysis paperwork immediately, or prior to their next therapy session. Even when the intention is not to use chain analysis as an aversive strategy, this arrangement still has the trappings of a punishment procedure. It is important to remember that the aim of a chain analysis is to collaboratively determine the factors that need to change in order to help the client overcome problem behaviours and move closer to a life worth living.

Based on these considerations, a chain analysis should ideally be conducted in a collaborative manner with awareness of behaviours to increase or reinforce. As a collaborative exploration of behaviour, chain analyses can teach clients important skills needed to reflect on and understand their own behaviour. Ultimately, clients may benefit if they learn to step back and reflect with curiosity on factors that sometimes lead them astray. When clients are engaged in chain analyses, they are actively thinking through and discussing events leading up to or following NSSI or suicide attempts, and observing and describing associated thoughts, emotions, and actions, and so forth. These are important behaviours to reinforce and build throughout therapy. As a result, it is useful to consider how to reinforce the client’s engagement in chain analyses. While reinforcement is by definition idiosyncratic, some reinforcing behaviours on the part of the therapist could include collaborative, responsive behaviour, non-judgmental discussion of problem behaviours and related events, validation of valid aspects of the client’s behaviour, encouragement, praise, and so forth (for discussions on the use of therapeutic reinforcement, see Farmer & Chapman, 2016; Kohlenberg & Tsai, 1991).

At the same time, therapists might also consider whether the reinforcers for engaging in the chain analysis may actually reinforce the problem behaviour. It is possible that, for some clients, the opportunity to discuss their experiences and receive attention and support from the therapist might reinforce NSSI or suicidal behaviour. These consequences are not likely, however, to be the paramount reinforcers for harmful behaviours. Reinforcers occurring close in time to the target behaviour(s) are likely to be most influential. In standard outpatient therapy, however, the client may not see the
therapist for several days following an episode of NSSI or suicidal behaviour. The most powerful reinforcers for these behaviours (commonly involving negative reinforcement in the form of escape from aversive emotions, thoughts, or sensations; Chapman et al., 2006; Klonsky, 2007) are likely to occur much more proximally, such as within seconds or minutes. Notwithstanding, it is still possible that therapist behaviours during the next meeting might reinforce suicidal behaviour or NSSI. Indeed, this is the primary rationale for the 24-hour rule, whereby therapists are not available for between-session communication (e.g., phone, email, text messaging) within 24 hours of NSSI or suicidal behaviour (Linehan, 1993a). Therefore, if chain analyses could potentially reinforce these behaviours, the therapist might systematically withdraw reinforcement, for example, by taking on a more matter-of-fact demeanour, subtly withdrawing warmth, being less soothing or validating, and so forth (Linehan, 1993a).

Another important consideration is that chain analyses work best when clients have received adequate orientation to this assessment strategy. It is easy to imagine how challenging and offputting it would be to be interrogated about the minute details of a potentially embarrassing behaviour (e.g., NSSI, suicide attempts) without knowing why. Chain analyses, therefore, are often most effective when the therapist has provided a clear rationale for this assessment strategy, as well as orientation regarding what to expect.

For example, “William” was struggling with severe anxiety, depression, and NSSI. His primary goals were to improve his relationship with his wife and children, and to maintain meaningful employment. He came to his therapy session after having self-injured for the first time in a few weeks. Although his therapist had previously orientated him to the value and procedures of chain analyses, it was still very helpful for the therapist to re-orientate William and make the link between the current chain analysis and his therapy goals salient:

Remember how, when this has happened before, we have done what’s called a chain analysis? This involves putting our heads together like detectives to examine in a lot of detail how you ended up going down the path to self-injury this time around. I know that one of your most important goals is to improve your relationship with your wife and your children, and that anxiety and other emotions often have played an important role in your self-injury. While I don’t know exactly what happened at this time, if we figure out ways to better manage your emotions, we could make a big difference in your relationship as well. I know that one of the reasons you have wanted to stop cutting yourself is that it really stresses out and worries your wife. You’ve also mentioned how it’s hard for your wife when you get kind of stuck in anxiety and worry, or when you end up withdrawing to the bedroom when you’re feeling sad and down. If emotions were involved at all in your self-injury this time around, we might be able to start chipping away at those patterns.
Understanding Behavioural Patterns: Moving from Chain Analysis to Case Formulation

Chain or functional analyses can be used, over time, to refine case formulation and identify key behavioural patterns to target in treatment. A clinician, for example, may have conducted several chain analyses focusing on the same behaviour. Over time, the patterns underlying this behaviour start to emerge, and it becomes clear that a few basic patterns are involved. Once enough chain analyses have been conducted that no new substantially patterns are emerging, it can be useful for the therapist to spend less time assessing and more time engaging in targeting these patterns with problem-solving strategies. This idea of key patterns of behaviour to target is similar to the notion of ‘basic behavioural repertoires’ mentioned earlier and include situations, thoughts, emotions, sensations, actions, and consequences associated with a problem behaviour. Repeated chain or functional analyses can coalesce into a story or description of the client’s typical patterns with respect to problem behaviours. Box 1, for example, includes a simplified narrative description of one pattern related to William’s NSSI, labeled ‘Self-Injury at Work.’ See Figure 2 for how this pattern might fit into the functional analysis framework described previously. Figure 2 also includes suggested interventions for each domain.

Box 1: Narrative Description of “William’s” Pattern: Self-Injury at Work.
This pattern typically occurs when William is anticipating an upcoming, regularly scheduled group staff meeting at work. He thinks he is a social misfit, as he doesn’t seem to have established close relationships with coworkers in the same way that others have, and he is generally quite shy and reticent around others. He judges himself as socially inept as well. In anticipation of the meeting, he feels anxious about the prospect of talking in front of others, fearful that he will be chastised for inadequate performance, and thinks he will be judged negatively by coworkers (and his boss) during the meeting. He experiences self-deprecating thoughts and related shame. In the few hours leading up to the meeting, William experiences sensations of heat, tension, and tightness in the jaw. He has the thought that he “can’t take this” and will “mess up” or embarrass himself if he remains this anxious. He also believes, “If I cut myself, I’ll be calmer and more able to get through the meeting.” He then experiences urges to self-injure. Sometimes, he considers or engages in alternative coping strategies (breathing, taking a walk, mindfulness), but on occasions when he self-injures, he normally quickly abandons these other strategies and begins to seek implements with which to self-injure. He then usually surreptitiously cuts or scratches himself on his arm or wrist at his cubicle or in the restroom. During cutting, William feels alert and focused on cutting and does not experience anxiety, shame, or anticipatory thoughts about the upcoming meeting. Afterward, he usually feels calm and relaxed. Sometimes, he experiences delayed feelings of guilt or shame, in addition to worry that that someone might notice or discover his wounds at work, or that his wife will notice his self-injury when he gets home. He typically feels calm and “mellow” up until the meeting, during which he feels slightly tense but comforted and distracted by the sensations and appearance (sometimes, he quickly takes a look at his wound) of his injury. Later that evening, William’s wife sometimes notices a new cut or scar (although he generally conceals his wounds in these situations), expressing frustration and concern. At times, arguments ensue. Relevant aspects of William’s learning history include the experience of inconsistent and unpredictable punishment. He described times when he would be sitting and reading a book, and his father would storm in and start yelling at him about tasks he had not done around the house (often, tasks he did not even realize he should be doing). This history appears to have resulted in hypervigilance about possible negative evaluation or behavioural sanctions and fear of others’ judgments, increasing his vulnerability to anxious apprehension about meetings. William also has reported that he has generally always been shy and socially awkward (not knowing what to say to other peers or how to strike up conversations) and was often left out of activities in school and occasionally bullied. In terms of temperament or personality, William generally tends to be anxious, inhibited, and risk averse. He also has yet to learn and reliably use effective strategies to manage anxiety, and he also appears to have deficits in skills needed to connect socially with acquaintances. William began self-injuring periodically in his late teens.
The Behavioural Flavour and Style of Dialectical Behaviour Therapy

In addition to guiding ongoing assessment, case formulation, and interventions for self-injurious, suicidal and other problem behaviours, behavioural theory also influences the style and manner in which DBT sessions are conducted. The way the therapist speaks with the client, the activities occurring in a session, and so forth, often reflect DBT’s behavioural underpinnings in several ways. Some key aspects of the flavour and style of DBT that are rooted in behavioural principles include (a) non-judgmental behavioural specificity, (b) an engaged, attentive, and mindful therapeutic style, and (c) an emphasis on action.

Non-Judgmental Behavioural Specificity

Behavioural theory emphasizes the importance of specific, observable behavioural targets, often formulated in terms of behavioural excesses or deficits (Farmer & Chapman, 2016; Linehan, 1993a). Accordingly, in DBT, clinicians are expected to formulate and discuss behaviour in a behaviourally specific manner. As mentioned earlier, this often involves clearly specifying the topography of the behaviour in terms of frequency, intensity, and duration. Clearly specifying those behaviours that the client is aiming to increase or decrease helps both the therapist and the client to collaboratively determine whether progress is being made and if therapeutic interventions are affecting important targets.

Therapists encouraging behavioural specificity also can help clients learn to effectively observe and understand their patterns of behaviour, thoughts, and emotions. A client seeking help for problems with anger management, for example, would benefit from clearly and specifically delineating problem behaviours associated with anger (i.e., behaviours that will likely be targeted to decrease in therapy). It is helpful to know that...
the adolescent client yells and curses at her parents two or three times a week and threatens suicide a couple of times per month. These episodes usually occur when the client’s parents have refused her request to borrow money, stay out late with friends, or when they ask her to work on her homework. Suicide threats usually occur if the client’s yelling has not resulted in the parents acquiescing to her demands. This information is more useful than the information that the client simply has anger management problems or has “blow-ups” at home. When the client is aware of her specific target behaviours (and the contexts in which they occur), she can begin to observe, describe, and keep track of them. When she understands the specific contexts in which these behaviours occur, she and her therapist will be able to devise skills and strategies to use in those specific contexts. Simply focusing on anger management or suicide threats generically can result in cookbook-style interventions that neither specifically map onto the client’s unique challenges nor provide the client with the understanding needed to ultimately become her own therapist.

Clients, however, normally do not begin treatment well-practised at specifically observing and describing their own behaviours, thoughts, and emotions (indeed, neither do some therapists), or the contexts in which these occur. As a result, in DBT, therapists often coach clients on how to be behaviourally specific. When a client, for example, states that she “really blew up” on Friday, the therapist is not under any delusion that the client has just conveyed useful information. Instead, the DBT therapist would help the client specifically describe what actually happened on Friday. When hearing the phrase “blew up,” remembering the behavioural framework discussed earlier can help generate several useful questions about the antecedents, behaviours, and consequences involved in this episode.

- When and where did the episode occur?
- What was happening prior to the episode?
- What was the client thinking, feeling, and doing?
- Were other people present, and if so, what were they doing?
- What does she mean by ‘blew up’?
- What behaviours did she engage in?
- How long did this episode continue?
- What thoughts, emotions, sensations, or urges occurred during the episode?
- What thoughts, emotions, sensations, or urges occurred following the episode?
- What events occurred in the immediate environment during or after the episode?
- Were there any delayed or lasting consequences?

It also is helpful for the therapist to model behavioural specificity. Therapists can do this by talking in a behaviourally specific manner about their own behaviours, thoughts, and emotions. They may also demonstrate behavioural specificity by rephrasing what the client has said in more specific terms. Speaking in clear, objective, non-judgmental terms
also helps to model the behavioural specificity. Often, clients also describe emotions in fairly vague terms, such as upset, unhappy, depressed, stressed out, and so on. When this occurs, the therapist can simply ask the client to clarify what she or he means by upset, etc. DBT therapists also are often explicit with their clients regarding the importance of non-judgemental specificity. Along these lines, it can be useful to orient the client to the importance of being specific, as shown in the following example:

I think our treatment is going to work best for you if we get specific about the problems occurring in your everyday life. When you feel “bad,” knowing what kind of bad it is, whether it’s sadness, anger, shame, and so on, will help us figure out what skills will help you deal with your emotions. If you’re having a hard time with problem behaviours, like blowing up at others, it’s important for me to know exactly what happened. So, I’m going to ask you to describe it to me from the perspective of a fly on the wall, or a video camera that can talk. If I have a really clear picture of the problems and challenges you’re facing, I’ll have a better idea of how to help you overcome them. So, whenever you say something that’s not quite specific enough, I might ask you some questions to narrow down exactly what happened, how you’re feeling, what you did, and so on. Does that sound reasonable?

**Active and Attentive Therapeutic Style**

The therapist’s style in DBT often can be described as engaged, attentive, and mindful. Of course, this therapeutic style is not unique to DBT. Many cognitive-behavioural therapists are active, directive, engaged, and attentive. Indeed, the active and sometimes directive style of cognitive and behavioural therapists likely distinguishes them from many humanistic or psychodynamic counterparts. Arguably, behavioural principles contribute to this common flavour of both DBT and CBT.

As described earlier, DBT is a learning-oriented treatment. An overarching goal is for clients to learn behaviours that help them move toward important goals and establish a desired quality of life. To help clients learn new behaviours, the therapist often must teach and model these behaviours, observe the client’s changes in behaviour, and provide instruction and coaching on effective responses (Chapman et al., in press; Farmer & Chapman, 2016; Linehan, 1993b, 2015). Accordingly, behavioural approaches historically have emphasized an active role for the therapist. Traditionally, in behavioural parent training, for example, the therapist takes on an active role as a teacher and a coach. Behavioural parent training often involves instructing and modelling new parenting skills, observing parent-child interactions, coaching parents in effective strategies, and so forth. This work often has occurred in families’ natural environments, which facilitates the generalization and transfer of skills to everyday life (Forehand, Jones, & Parent, 2013).
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In DBT, the therapist also often functions as a teacher and a coach. In the example of William’s self-injury pattern discussed earlier, the DBT therapist might focus on ways to help William communicate his needs effectively to his wife before the chain of events leading to NSSI are well underway. As described below, the therapist might, for example, (a) teach William about potentially helpful skills, (b) model the use of these skills, (c) prompt William to try out the skills, (d) observe his use of skills, (e) provide coaching and feedback, and (f) repeat these steps as needed.

Teaching.

The therapist could teach William about a few key interpersonal effectiveness and emotion regulation skills. As William seems primarily to have trouble connecting with coworkers and feels like an outsider, some of the newer supplementary DBT skills could be useful. These include skills for building new relationships (Linehan, 2015). Emotion regulation skills involving opposite action to shame or anxiety (regarding upcoming gatherings or meetings) and relaxation skills, such as paced breathing, could also be very useful. The therapist could teach William key points about these skills, describe their rationale, and clarify when and why to use them.

Modelling.

The therapist would often then model the use of the skills. The therapist might demonstrate how to use skills to build or enhance relationships, such as how to begin or continue discussions with people, when and how to approach a small group of people, and so on. The therapist could also model the use of paced breathing or other skills by showing how and where to focus the breathing (abdomen/diaphragm), as well as appropriate posture and rate. In terms of opposite action, the therapist might model confidently approaching social situations, using direct and confident body language and eye contact, and so forth. The therapist also can model skill use by describing how she or he has used such skills in the past as well as the associated positive consequences of doing so (Farmer & Chapman, 2016; Linehan, 1993a).

Prompting skills practice and dragging out behaviour.

It also would be essential to prompt William to practice the skills. As a learning-oriented treatment, DBT sessions are not just “talk therapy”. Instead, the therapist is active, often directive, and seeks to facilitate active learning opportunities in each individual or group session. Instruction, discussion, and exploration are valuable, indeed integral components of therapy, but therapy focused primarily on talking would be expected to have limited effects. Imagine trying to learn the violin or martial arts by simply discussing music or martial arts theory with an instructor on a weekly basis. How confident would a martial arts student feel stepping into a competition when she or he has never had the chance to try out new moves, manoeuvres, or self-defense strategies with the instructor present to provide feedback, coaching, and reinforcement of effective performance? (As a martial arts practitioner, I would not feel very confident in this situation!) DBT therapists, therefore, look for opportunities to “drag out” (activate) new behaviours in session. When
clients engage in new behaviours, the therapist observes carefully and provides appropriate coaching and feedback.

Observing.

As mentioned, behavioural theory encourages DBT therapists to take an attentive and mindful approach to therapy. Accordingly, the therapist’s role is often mindfully to observe the client’s behaviour while she or he is trying out new skills. The therapist in the William example would, therefore, attend closely to the ways in which William is using the interpersonal effectiveness or emotion regulation skills. Attention should be given to what William is doing well or correctly as well as areas for improvement.

Coaching.

Coaching involves providing feedback about a client’s behaviour, and emphasizing effective behaviours and areas for improvement. If the skills were new to William, the therapist might focus more on what William is doing correctly, rather than what he needs to do differently. Over time, however, coaching would aim to help William further strengthen, refine, and generalize his use of the skills. Just as a coach during a hockey game is an active participant in the game (albeit from the bench), the DBT therapist is an active participant observer in session with her or his client.

Attention to Content, Context, and Process

Behaviourally oriented DBT therapists also must actively attend to behaviour at both the level of content and process. Content has to do with the particular form or topography of the behaviour and includes what the client is specifically doing or saying. An angry client struggling with road rage, for example, might be scowling and glaring, waving her or his hands, saying, “This fool can’t drive!”, sitting in an overly rigid or tense manner, and so on. When it comes to process, the therapist must be attentive to the type of behaviour the client is engaging in, and determine whether this is a behaviour targeted to increase or decrease. The road rage client, from this perspective, may be engaging in complaining or ruminating about other drivers. The DBT therapist who is attentive to the type of behaviour occurring might consider whether this behaviour is likely to improve or exacerbate the client’s difficulties with road rage. Another example might be the client who says that therapy is not working, that she is feeling very depressed, and that she wishes to quit therapy. Content-based observations would specifically focus on what the client is saying as well as the client’s observable behaviour. At the level of process, the therapist would attend to the type of behaviour the client is engaging in, the likely utility of this behaviour, and how it functions in the current therapeutic context. For some clients, talking about quitting therapy may function to divert discussions from difficult problem areas. For others, this behaviour may be an adaptive way of expressing the desire to quit or pursue other options. Helpful observations at the level of process,
therefore, require the therapist to remain aware of her or his case formulation of the individual client at all times. This, of course, is a hallmark of behavioural therapy.

A behavioural framework encourages attention to the context in which client behaviour occurs, both within and outside of therapy sessions. As described earlier, context is a critical ingredient to attend to in both functional/chain analyses and case formulation. Within any given session, it is also useful for DBT therapists to attend to ways in which the therapeutic context may occasion, reinforce, or otherwise influence client behaviour. When a client repeatedly talks about suicidal ideation, for example, therapeutic discussions might focus on that topic to the exclusion of important quality of life issues. If these quality of life issues were solved, it is possible that the client’s suicidal urges or desires would also reduce. Yet, some quality of life issues are painful to address, such as challenges in relationships, traumatic events, losses, events that occasion feelings of shame, and so forth. The therapists must strike a delicate balance in this situation. While it is always important to attend to and take suicidal behaviours seriously, the therapist also must avoid negatively (by allowing the avoidance of painful discussions) or positively reinforcing (e.g., by differentially providing attention when suicide talk arises) these behaviours. The therapist attending to principles of contingency management will have a greater chance of striking an effective balance in this situation (for further, detailed discussion of the role of context and content in therapy, see Hayes, Jacobson, Follette, & Dougher, 1994; Kohlenberg & Tsai, 1991).

Summary

Behavioural theory forms an essential part of the theoretical foundation of DBT. Behavioural theory informs the DBT therapist’s approach to assessing, understanding, and formulating problem behaviours, including suicidal behaviour and NSSI, as well as any other behaviours targeted in treatment. Regular chain or functional analyses can help illuminate consistent behavioural patterns and coalesce into a useful case formulation. The general behavioural framework specifying antecedents, person variables, behaviours, and consequences can help guide the therapist’s organization and understanding of the client’s behavioural patterns. The case formulation should highlight hypotheses and potentially effective intervention strategies. Behaviourally oriented therapists, however, should always remember that their formulations and hypotheses are simply works in progress to be refined further throughout therapy. Behavioural theory also influences the style of DBT. DBT therapists tend to be active, sometimes directive, and attentive, and to look for opportunities to help clients learn new behaviours by prompting or dragging out behaviour, observing, coaching, and providing feedback. DBT therapists also remain aware of client behaviour in terms of content, context, and process. Together with a dialectical emphasis on the synthesis of acceptance and change, zen principles, and basic emotion science, behavioural theory helps the DBT therapist respond flexibly to new,
complex, and challenging situations, ultimately guiding their clients toward lives that are worth living.

References


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**Alexander L. Chapman**

Dr. Alexander L. Chapman, Ph.D., Clinical Science Department of Psychology, Simon Fraser University, Burnaby, BC, Canada