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Contingencies Create Capabilities: Adjunctive Treatments in Dialectical Behavior Therapy That Reinforce Behavior Change

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Dialectical behavior therapy (DBT) has been shown to be effective in the treatment of borderline personality disorder (BPD), a disorder associated with poor functional outcomes and high utilization of behavioral health services. Contingency management strategies are one of the four primary change procedures in DBT. This paper provides an overview of the use of contingency management strategies in DBT with a particular focus on how adjunctive treatments can be utilized as a reinforcer for positive behavior change. We focus specifically on two adjunctive DBT treatments with evidence of efficacy, including the DBT Prolonged Exposure protocol (DBT PE), which targets PTSD, and DBT–Accepting the Challenges of Exiting the System (DBT-ACES), which targets getting off of psychiatric disability by obtaining and maintaining employment. This paper describes how contingency management strategies are used to help clients make the changes necessary to become eligible to receive these adjunctive treatments, as well as the process of clarifying and managing contingencies to maintain and increase adaptive behaviors as these treatments are implemented. Considerations for how DBT therapists and larger health systems can apply contingency management strategies to enhance behavioral capabilities in the treatment of individuals with BPD are discussed.

Individuals meeting criteria for borderline personality disorder (BPD) use an inordinate amount of psychiatric services, including inpatient admissions, crisis and emergency services, residential and day treatment, and outpatient therapy (Bender et al., 2001; Goodman et al., 2010; Linehan & Heard, 1999). Clients with BPD have been found to use several of these psychosocial treatments at a significantly higher rate compared to a group of individuals with depression (Bender et al., 2001; Linehan, Kanter, & Comtois, 1999). High utilization of acute psychiatric services (defined as three or more inpatient psychiatric hospitalizations or any hospitalization of 30 days or longer in a 2-year period) financially strains many systems of care. Up to 42% of high-service utilizers meet criteria for BPD and few crisis and inpatient services are designed to meet their needs (Comtois & Carmel, 2014). That acute psychiatric services have not been effective in the treatment of clients with BPD is demonstrated by a longitudinal study on the remission rate of BPD symptoms for a period of 16 years after participants' discharge from an index psychiatric hospitalization. Only 40% to 60% of participants with BPD achieved recovery (defined as diagnostic remission from BPD, working or going to school full time, and having at least one emotionally sustaining relationship) and 44% of those who demonstrated recovery at one point were unable to sustain their recovery gains over time (Zanarini, Frankenburg, Reich, & Fitzmaurice, 2012).

Community outpatient treatment of clients with BPD often involves a similar pattern of overtreatment. Clients with BPD features were found to attend more individual and group treatment sessions, require a greater number of providers, and have a significantly higher mean number of treatment sessions compared to individuals without BPD features (Bagge, Stepp, & Trull, 2005). Other studies examining the utilization of outpatient services have determined that clients with BPD have higher rates of mental health and psychopharmacological treatment than control groups with depression or other personality disorders (Bender et al., 2001). In a longitudinal study of 290 individuals with BPD, nearly 75% of those receiving outpatient services at baseline continued to remain in treatment after a 6-year follow-up assessment. (Zanarini, Frankenburg, Hennen, & Silk, 2004).

Keywords: dialectical behavior therapy; borderline personality disorder; contingency management

One potential explanation for this pattern of high utilization of community treatment is that additional treatment can function to reinforce maladaptive behavior. Within many systems of care, receiving higher levels of care are contingent upon more severe maladaptive behaviors. For example, clients may only receive individual therapy sessions by displaying out-of-control behaviors or expressing suicidal ideation, while simultaneously having individual therapy sessions withdrawn when crisis behaviors remit or when they show an increased amount of self-control (Koerner, 2012). This becomes problematic when additional contact with the therapist or extra therapy sessions are desired, as is often the case for clients with BPD (Linehan, 1993). The contingencies in this scenario are likely to strengthen behavioral dyscontrol and crisis behavior, which arguably contributes to both the financial burden associated with overtreatment and the limited improvement of clients with BPD (Koerner, 2012; Linehan et al., 1999; Soeteman, Busschback, Verheul, Hoomans, & Kim, 2011).

In contrast to this common pattern in the treatment of clients with BPD, dialectical behavior therapy (DBT; Linehan, 1993) offers an approach that makes the provision of additional treatment contingent upon the display of adaptive rather than maladaptive behaviors. DBT was developed as a treatment for acutely and chronically suicidal individuals and has been shown to reduce suicide attempts, psychiatric hospitalizations, and emotional distress, and it is also the only treatment for BPD that has been widely disseminated (Linehan et al., 1991; Linehan, 1993; Rizvi, Steffel, & Carson-Wong, 2013; Stoffers et al., 2012). DBT has established cost-effectiveness largely due to decreases in acute psychiatric services including hospitalization (Linehan et al., 1999; Wagner et al., 2014; Wunsch, Kliem & Kroger, 2014). DBT was developed by Linehan (1993) and typically includes 1 year of treatment that prioritizes targeting of life-threatening behaviors followed by behaviors that interfere with treatment and those that prevent clients from having a reasonable quality of life. The overall goal is to help suicidal clients not only survive, but to build a life worth living (Linehan, 1993; Salsman & Linehan, 2006).

DBT includes a multitude of treatment strategies that are balanced in terms of acceptance (e.g., validation) and change (e.g., problem solving). Contingency management (CM) is one of the four primary change procedures in DBT. CM strategies can be applied in-session (i.e., during therapist-client interactions) as well as more broadly (e.g., using CM plans to shape desired behaviors at home, in social interactions, at the emergency department, etc.). The goal of this paper is to describe the process of clarifying and managing contingencies within DBT, with a particular focus on the use of adjunctive treatments as a way to reinforce behavior change. Overall, we aim to illustrate how strategic and planned reinforcers of adaptive behavior change in therapy eventually give way to natural reinforcers in the client's life to create capabilities for clients with BPD.

Overview of Contingency Management Strategies in DBT and Principles of Operant Conditioning

CM derives from operant conditioning theory and generally refers to the use of consequences to either increase (i.e., reinforce) or suppress (i.e., punish) a specific behavior (Skinner, 1988). There are four general types of contingencies (see Table 1) and examples of how each may be used within DBT are provided below.

Positive Reinforcement

Positive reinforcement is the primary CM strategy used by DBT therapists to facilitate behavior change. Positive reinforcement involves providing consequences the client finds rewarding in response to desired behaviors in order to increase them. It is essential that positive reinforcers are consistently delivered in response to adaptive behavior, and are not delivered indiscriminately or immediately following maladaptive behaviors (Linehan, 1997). It is

Table 1
Overview of Contingency Management Strategies and Principles of Operant Conditioning

	Increase Behavior	Decrease Behavior
Add Consequence	***Positive Reinforcement*** Adding a consequence following an individual's behavior that increases the likelihood of that behavior occurring in the future	***Positive Punishment*** Adding a consequence following an individual's behavior that decreases the likelihood of that behavior occurring in the future
Remove Consequence	***Negative Reinforcement*** Removing a consequence following an individual's behavior that increases the likelihood of that behavior occurring in the future	***Negative Punishment*** Removing a consequence following an individual's behavior that decreases the likelihood of that behavior occurring in the future