Dialectical Behavior Therapy for Substance Abuse: A Pilot Application to Methamphetamine-Dependent Women With Borderline Personality Disorder

Linda Dimeff, Shireen L. Rizvi, Milton Brown, and Marsha M. Linehan, University of Washington

The primary aim of this paper is to describe key modifications made to standard Dialectical Behavior Therapy (DBT) for use with substance-dependent individuals with borderline personality disorder (BPD). Key modifications include application of dialectics to issues surrounding abstinence, a new set of substance abuse behavioral targets, a set of attachment strategies for difficult-to-engage and easily lost clients, and modification of some skills geared for substance abusing clients. Treatment outcome findings from a small 12-month uncontrolled pilot trial of DBT for methamphetamine-dependent women with BPD are presented. Of the 3 participants who commenced treatment, 2 completed treatment and were abstinent from use of all illicit drugs by 6 months; results were maintained for the duration of the assessment period 6 months later. These encouraging results suggest that DBT may hold promise for treating methamphetamine dependence.

SE AND ABUSE of methamphetamine, a relatively cheap and easy-to-produce¹ form of amphetamines, has increased dramatically in recent years, with usage in the United States highest in the West, followed by the South and Midwest, and lowest in the areas east of the Mississippi (Center for Disease Control, 1995; Substance Abuse and Mental Health Services Administration, 1998). Methamphetamine-related deaths tripled between the years 1991 and 1994 (Center for Disease Control). Negative consequences of methamphetamine use are considerable. Animal studies indicate that high doses of methamphetamine cause permanent nerve cell damage to regions of the brain containing dopamine with as little as a single administration of the drug (Swan, 1996). Despite the seriousness of the problem, there is no known efficacious treatment for methamphetamine abuse and dependence.²

At present, there is a dearth of knowledge about methamphetamine use among women and among multidisordered individuals with borderline personality disorder (BPD). Recent tracking of methamphetamine usage has

¹At the time of this publication, street value for a 16th of a gram of methamphetamine costs between \$50 and \$100. Methamphetamine can be manufactured synthetically using inexpensive ingredients available from a common hardware store.

²The White House Office of National Drug Control Policy has recently launched research initiatives specifically for methamphetamine basic and treatment research. The research described in this paper was funded by the National Institute on Drug Abuse through this research initiative.

Cognitive and Behavioral Practice 7, 457–468, 2000

1077-7229/00/457-467\$1.00/0

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relied extensively on data gathered at substance abuse treatment facilities, emergency rooms, and through fatality reports, which have identified several at-risk populations, including men who have sex with men, truck drivers, and street youth. Anecdotal evidence has suggested that methamphetamine use may be on the rise among some women who use the drug as an appetite suppressant and by female sex workers who use the drug to increase their sexual arousal so that they appear more interested and engaged when working in order to earn higher tips (Darlene Pearson, personal communication, November 1998). While little is known about the prevalence specifically of methamphetamine among women with BPD, a number of studies have documented the general prevalence of substance abuse among individuals with BPD; others have documented the severity of complications that result from this particular comorbidity (see Linehan & Dimeff, 1997, for a review of this literature). Specifically, these studies demonstrate that addicted individuals with BPD are more likely to have considerably more psychiatric problems, including higher rates of suicidal thoughts and behaviors, than individuals with BPD or a substance use disorder alone (Links, Heslegrave, Mitton, van Reekum, & Patrick, 1995) as well as more severe and problematic behavior than individuals with other personality disorders (Kosten, Kosten, & Rounsaville, 1989).

We recently applied Dialectical Behavior Therapy for Substance Abusers, an empirically supported treatment for substance-dependent individuals with BPD (Linehan & Dimeff, 1997; Linehan et al., 1999), to a population of methamphetamine-abusing women with BPD to evaluate its promise in treating methamphetamine addiction. Prior evaluation of DBT in a randomized controlled trial comparing DBT to treatment-as-usual (TAU) found that DBT subjects had significantly greater reductions in drug use throughout the treatment year and at follow-up than did

subjects assigned to TAU, and had significantly greater gains in global and social adjustment at follow-up than did TAU subjects. Furthermore, DBT had a significantly lower dropout rate than TAU. This paper overviews the treatment provided in this trial and highlights outcomes from this study.

DBT for Substance Abusers: Treatment Description

The primary goal of this treatment is to eliminate substance abuse and dependence and other relevant severely dysfunctional behaviors while simultaneously increasing

The primary goal of DBT for Substance Abuse is to eliminate substance abuse and dependence and other relevant severely dysfunctional behaviors while simultaneously increasing behavioral control through the use of functional, skillful behavior.

behavioral control through the use of functional, skillful behavior. This form of DBT is an extension of Linehan's standard DBT and includes all functions and modes as described in her original treatment manual (Linehan, 1993a) and evaluated in previous clinical trials (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991; Linehan, Heard, & Armstrong, 1993; Linehan, Tutek, Heard, & Armstrong, 1994). This includes weekly individual psychotherapy and group skills training, as-needed skills coaching phone calls with the primary therapist, and weekly team meetings of all therapists aimed at reducing therapist burnout and increasing therapist treatment capability. Individual sessions are based on clearly prioritized targets and

focused on enhancing motivation (e.g., to quit using drugs); the foci of specific sessions is determined by the client's behavior since the previous session. Group skills training includes two full rounds of all four DBT skills modules (i.e., core mindfulness, distress tolerance, emotion regulation, interpersonal effectiveness) as well as self-management skills (Linehan, 1993b). Like parasuicidal behaviors, substance abuse was viewed as impulsive dysfunctional behavior that functions to regulate emotions during moments of intense affective dysregulation.³

Several modifications, additions, and changes in emphasis were added to standard DBT for use with this substance-dependent population (Linehan & Dimeff, 1997). Primary modifications involved (a) explicit application of dialectical philosophy in addressing the problem of relapse (i.e., "Dialectical Abstinence"); (b) development of a treatment target hierarchy relevant to substance abuse (i.e., "DBT Path to Clear Mind"); (c) a new set of "attachment" strategies designed to increase the positive valance of the therapy and the therapist as well as engaging "lost" clients; (d) new and modified skills relevant to substance abusers; and (e) increased emphasis on using natural and arbitrary reinforcers for maintenance of abstinence.

Use of Dialectical Abstinence in DBT

A dialectical stance on substance use was developed in recognition that, on the one hand, cognitive-behavioral relapse prevention approaches are effective in reducing the frequency and intensity of a drug relapse following a period of abstinence from drug use (Carroll, 1996; Dimeff & Marlatt, 1998; Marlatt & Gordon, 1985) and, on the other hand, "absolute abstinence" approaches are effective in lengthening the interval between periods of use (Hall, Havassy, & Wasserman, 1990; Supnick & Colletti, 1984). "Dialectical abstinence," a synthesis of unrelenting insistence on total abstinence before any illicit drug abuse with an emphasis on radical acceptance, nonjudgmental problem-solving, and effective relapse prevention after any drug use followed by a quick return to the unrelenting insistence on abstinence, seeks to balance these two positions.

The essence of the absolute abstinence end of the dialectic involves teaching clients specific cognitive selfcontrol strategies that allow them to turn their minds fully and completely to abstinence. Specifically, clients are taught how to anticipate and treat willfulness, hopelessness, as well as waffling on one's commitment to get off drugs that commonly arise and complicate treatment once an individual makes a commitment to give up a dysfunctional habit. Clients are taught that the key to absolute abstinence lies in convincing one's brain that use of drugs is completely out of the question. One does this by committing to stay abstinent for a specified period that is no longer than the individual can fully commit (and with absolute certainty) to remaining abstinent (and not a moment longer). Like the popular 12-Step slogan, "Just for Today," the commitment to 100% abstinence may be for only 1 day, for 1 month, or for 5 minutes, depending on how long the individual can commit to this goal with 100% certainty. The commitment then is a series of "slamming the door shut" recommitting behaviors, each for a specified period of time, and each with full intent. Upon expiration, the individual recommits again to absti-

³Indeed, methamphetamine facilitates the release of high levels of dopamine in the brain that temporarily alters brain chemistry to enhance mood, increase physical energy and stamina, and improve alertness. Unlike cocaine, which produces a similar drug effect that is relatively short in duration, methamphetamine effects are relatively long lasting with peak levels maintained for up to 5 hours.

nence. In this sense, absolute abstinence is achieved by a series of recommitted "slamming the doors shut." Hence, abstinence is sought only in the moment and only for a given set of moments. The goal of this strategy is to block the ability to make half-hearted commitments or to easily deny the reality of a commitment after the fact while simultaneously limiting the duration to a period that is perceived by the person's brain, so to speak, as achievable. Other cognitive self-control strategies used to trick one's brain during this phase include immediate "adaptive" denial of desires and options to use during the specified period of commitment, practicing radical acceptance of the absence of drug use and the difficulties involved, making an inner deal with oneself that the option to use drugs is left open for the future, as well as the promise to oneself of using drugs when close to death or upon learning of a terminal illness. Determining which strategy to utilize depends on which is most effective in promoting abstinence and the willingness to maintain it.

With no allegiance to a particular ideology or approach other than therapeutic effectiveness in achieving the ultimate treatment goal (i.e., a drug-free life that is worth living), the therapist teaches clients to rapidly shift to the harm-reduction pole once a slip has occurred and drugs have been used. Here the emphasis is on acquiring and strengthening the skill of failing well—admitting that drug use has occurred and learning from one's mistakes by conducting a thorough chain analysis and identifying solutions for future use should the event that prompted use of drugs occur again. In teaching how to fail well, emphasis is placed on "what if" and "just in case" skills. Consistent with a relapse prevention approach (Marlatt & Gordon, 1985), the therapist and client discuss realistic skills and game plans the client can use should he or she be faced with a similar situation in the future while simultaneously ensuring that the harm caused by the slip is minimized. In addition to teaching the clients to learn from past mistakes and proceed forward toward the goal, failing well includes analysis and reparation of the harm done from using drugs. This particular emphasis on correcting the harm caused to others and to oneself is similar to making amends in 12-Step programs.

DBT Path to Clear Mind: Substance Abuse Behavioral Hierarchy

In standard DBT, drug abuse, along with other Axis I disordered behaviors, is targeted under the rubric of behaviors that interfere with the quality of life (following in importance life-threatening and therapy-interfering behaviors). In a treatment focused on drug abusers, drugspecific targets are necessarily at the top of the quality-of-life-interfering behaviors hierarchy. The drug-specific targets, in order of importance, are as follows: (a) de-

creasing abuse of substances, including use of illicit drugs, abuse of legally prescribed drugs, and use of legally prescribed drugs in a manner not prescribed; (b) decreasing the intensity and duration of urges and cravings to use drugs; (c) decreasing physical discomfort associated with abstinence and/or withdrawal; (d) decreasing "apparently unimportant behaviors" (i.e., all public and private behaviors on the path to a client's use of drugs that are indeed relevant and important but are treated by the client as unimportant and unrelated), including selling drugs or drug paraphernalia, socializing with drug users or dealers, or going to old drug hangouts; and (e) decreasing "keeping options to use drugs open" instead of closing off drug-use options, including such behaviors as lying about drug use to the therapist and/or others, keeping names of drug dealers around "just in case," hedging commitments, avoiding places where leaving to get drugs would be hard, etc. Behavioral targets closest in proximity to substance abuse are listed first, as are behaviors known to predict a lapse or relapse.

Attachment Strategies for the Butterfly or Lost Client

What is the best method of engaging a population notoriously known for "resisting" or avoiding treatment?

While some insist that the addict must first "hit bottom" (e.g., using until the natural aversive consequences of drug use are directly experienced), others advocate preparing the individual for treatment by matching the therapeutic approach to the individual's degree of readiness for change and gradually moving the person in the direction of change (Miller & Rollnick, 1991). An analogous problem arises in treating BPD individuals: While some clients quickly and effortlessly attach to their therapist, others have considerable difficulty doing so and instead behave like butterflies that frequently fly in and out of the therapist's hands, often flying away as soon as you believe they are attached (Linehan, 1993a). "Butterfly" problems include episodic engagement in ther-

Some substance abusing clients with BPD behave like butterflies. flying into and out of the therapist's hands, increasing the probability of continued drug use and treatment dropout. A set of attachment strategies were added in this treatment to address this problem.

apy, not returning phone calls or participating in treatment, and ultimately early termination from treatment.

In our experience, this problem arises more commonly (although not exclusively) among stimulant-dependent clients compared to those dependent on opiates and other central nervous system depressants. In addition to increasing the odds that the client will drop out of treatment, the other major butterfly problem is that the therapist wields less leverage with the client in assisting him or her to change and grow (Linehan). A "butterfly" client can also lead to a "butterfly" therapist. Attachment strategies were developed in DBT as an antidote for the butterfly/engagement problem. While they are by no means the only strategies within DBT that function to obtain client attachment, they nonetheless bolster the other strategies.

A number of specific attachment strategies were developed in DBT to increase the client's positive valence of the therapist and treatment and prevent deleterious con-

With an emphasis on effectiveness, "alternate rebellion" was added to satisfy the desire to rebel without destroying or complicating one's life.

sequences that commonly occurred during periods when our clients fell out of contact with their therapist (e.g., one client lost her job, her child, and her housing in 3 days while out of contact with her therapist). The essence of these strategies is for the individual therapist (with the consultation team's help and assistance as needed) to behave actively and effectively to secure the attachment and to get "lost" clients back into

treatment. Specific strategies include orienting the client to the butterfly-attachment problem, increasing contact with the client during the first several months of treatment either by adding scheduled check-in phone calls during the period between sessions or having contact via voice mail or e-mail, conducting therapy in vivo (e.g., at their home, in a park or car, at a diner), shortening or lengthening therapy sessions, having family and friends networking sessions to build connection with the client's social network, and actively finding clients when they are lost. Because therapists who treat these clients are more likely to get burned out more quickly, it is very important that the consultation team provide support, validation, and help to avert the therapist becoming passive, demoralized or otherwise burned out, particularly during times in which getting activated is needed to (re)engage the butterfly or lost client. Indeed, it is the team as the "community of therapists" that mobilizes into high gear to pull a client back into treatment after missing the third session of one treatment mode and on the brink of losing therapy (the four-session rule in DBT). Once the client is solidly attached to the therapy or therapist and the client is fully oriented to the forthcoming change, attachment strategies are steadily tapered off.

Modification of Skills and Skills Training Group

The usual 150-minute group skills training mode was divided into a 90-minute skills acquisition group and a 30to 40-minute individual skills consultation that focused extensively on skills strengthening through skills and homework review, behavioral rehearsal, feedback, and coaching. This modification was made for two reasons. First, we quickly discovered that many of our substance abusing clients with BPD had a high degree of social anxiety (indeed, nearly one-third met criteria for social phobia at the pretreatment assessment, including all three of our methamphetamine-dependent clients) and found it very difficult to attend group, let alone speak up during group to review their homework or ask questions. Practicing different behavioral approaches through role-plays was particularly difficult for these clients. In our early work with this population, we learned through repeated chain analyses of non-group attendance (therapy-interfering behavior) that socially phobic clients were not attending group in order to avoid talking in a group setting. As a result of their considerable social anxiety and avoidance of group, these clients had greater difficulty acquiring the DBT skills. To further increase the odds of group attendance, individual skills consultation was provided by one of the two group therapists. This allowed the client and group therapist to develop a more personal one-on-one relationship that aided the group-avoidant client to attend group.

The standard DBT skills are easily applicable to problems of substance abusers who meet criteria for BPD. To keep the focus more tightly on reducing drug use, we added the following six skills to the standard set of DBT skills: alternate rebellion was added to the mindfulness module, and observing urges was emphasized; (adaptive) denial and burning your bridges were added to the distress-tolerance module; building a life worth living was emphasized in the emotion regulation skills; and avoiding and eliminating cues to use was emphasized as a self-management skill. These skills, as well as examples of each, are described below:

Alternate rebellion (to satisfy the wish to rebel without destroying life by using drugs) is just what it says: encouraging drug abusers to find an alternate way to rebel against the restrictions and deprivations of their lives, society, their parents, and so on, without needlessly complicating or destroying their lives. Although drug use is certainly not always rebellion, it often is, and, thus, the focus here is on using the mindfulness skills of "being effective" in one's method of rebellion (i.e., not cutting off your nose to spite your face). Examples of alternative rebellion

may include getting a temporary or out-of-sight tattoo or piercing, dyeing your hair or shaving your head, wearing men's boxer shorts underneath a very fancy dress, going bungee jumping or sky-diving, wearing a black leather jacket.

Observing urges. Clients are encouraged to apply the mindfulness "what" skill of observe to their urges and cravings to use drugs. Clients can observe their drug urges like clouds moving across the sky, as boxes coming down a conveyer belt, or as a wave that builds, crests, then diminishes over time (Marlatt & Gordon, 1985). This skill is a particularly useful method of gaining distance from the action urge itself. The key to this mindfulness practice is to separate the thought or experience of urge from entering into the experience of drug use.

Adaptive denial is the skill of actively blocking or pushing away thoughts or aspects of reality that would be harmful or unendurable if attended to or accepted. Many drug addicts, for example, feel as if they would "go crazy" if they had to accept that they would never use drugs again or socialize with their drug-using friends again now that they are abstaining. Adaptive denial is a form of outsmarting your brain by making effective use of denial.

Burning your bridges to drug use has to do with accepting at the most radical level that one is not going to use drugs again and then moving actively to cut off all options to use drugs. It is the behavior opposite to the targeted behaviors of "keeping your options to use drugs open." Included here are such behaviors as throwing out all drug dealer phone numbers, getting rid of a pager you used to receive messages from your drug dealer, telling the truth "ruthlessly," telling your therapist the name, phone number, and address of every person that you would be tempted to use drugs or move in with if you gave up on treatment, and telling all your friends that you are now clean and sober.

Building a life worth living. An emotion-regulation skill (building structure and mastery) informed by the success of the Community Reinforcement Approach (see Meyers & Smith, 1995), building a life worth living is based on the idea that increased (or restored) functionality is one of the most effective ways of preventing a relapse. This skill encourages individuals to build a life worth living by engaging in behaviors that are compatible with such a life and that are incompatible with using drugs. A second component of this skill is an active building up of structure in one's life. Examples of practicing this skill include working or volunteering on a regular basis, going to school, developing and improving relationships with non-drug-using friends, joining a hiking club and going hiking, repairing relationships with old non-drug-using friends.

Avoiding and eliminating cues to use. Without doubt, one of the most consistent triggers of relapse are cues in the

environment that have been classically conditioned with using drugs. Cues commonly trigger urges to use and put the individual on the slippery slope to drug use. Common examples of cues include syringes, spoons used for cooking cocaine, a bag used to store drugs, a drug-using friend, the bathroom at home where the client commonly shot drugs, a particular neighborhood. Avoiding and eliminating cues to use is a self-management strategy with the individual practicing stimulus control. Some examples of practicing this skill include throwing away syringes, redecorating the bathroom in which a person historically used drugs, taking a different route home from work that bypasses the neighborhood associated with drug use.

Increased Use of Arbitrary Reinforcers and Increased Awareness of Natural Reinforcers

Standard DBT has historically favored the use of natural reinforcers over arbitrary reinforcers because natural reinforcers occur more reliably in the natural environment and are therefore more likely to be strengthened in the natural environment. However, numerous studies have demonstrated the efficacy of arbitrary reinforcers in treating substance abuse (Higgins et al., 1994; Higgins et al., 1993; Higgins, Delaney, & Budney, 1991; Iguchi, Belding, Morral, Lamb, & Husband, 1997; Kidorf, King, & Brooner, 1998). Reinforcers are also ubiquitous in 12-Step programs and function to reinforce various lengths of abstinence from drug use (e.g., "chips" or key chains for various lengths of continuous abstinence from drugs). Key chains are also provided to newcomers to welcome them into the program. In light of the successful and customary use of arbitrary reinforcers in substance abuse treatment and recovery programs, we incorporated a systematic use of arbitrary reinforcers. Fashioned after 12-Step "chips," we provided "Clearing Mind" key chains to clients for various periods of continuous abstinence (28 days, 8 weeks, 12 weeks, 16 weeks, 24 weeks, 32 weeks, and 48 weeks, and each full year after that). Key chains were handed out by the DBT group skills trainer on a weekly basis at the conclusion of group. "Clearing Mind" cards, redeemable quarterly for raffle tickets for prizes donated from local businesses, were also distributed weekly in group. The number and value of these cards increased steadily with each continuous abstinent day.

In addition to the systematic use of arbitrary reinforcers, more emphasis was placed on paying attention to the natural reinforcers associated with abstinence. This may be particularly important during the first several months of abstinence as neurobiological changes in the brain (increased levels of corticotrophin releasing factor in the brain that results in increased sympathetic nervous system activity) may result in increased agitation, irritability,

panic, and other aversive emotions and physiological sensations (Leshner, 1997; Leshner & Koob, 1999). As a reminder to attend to natural reinforcers on a daily basis for drug-free days, clients recorded on the diary card occasions during the week when they attended to aspects of their life going better (e.g., more consistent with values or achieving their goals) on non-drug-using days.

Treatment Challenges

Several themes have consistently emerged in our work with substance-dependent women with BPD that have interfered with the speed in which these clients get off drugs, as well as their willingness to do so. The first theme is the enormous fear and trepidation of the immediate and short-term negative consequences associated with abstinence. In addition to the obvious fear of experiencing intense, negative and unmodulated emotions in difficult

Many BPD clients with substance abuse are reluctant and/or are fearful of giving up or losing their current identity that is associated with using drugs and drug culture.

situations where they previously used drugs to cope, many of our clients also describe a more distal fear that they will fall into a ceaseless and unrelenting abyss of depression. Others express fear that their loved ones prefer them on drugs than abstinent because they are less depressed and more enjoyable to be around when using drugs.

It is essential that the therapist take seriously these concerns, validate the valid aspects of their concerns (e.g.,

most people do go through hell when getting off drugs;⁴ in general, people prefer to be around people who are not depressed) while simultaneously invalidating the invalid (e.g., they can and will get through the hell if they continue to abstain and work actively on developing a life worth living; their brain's natural biochemistry will be restored over time; there are other, more effective and enduring routes to treating depression other than relying on a temporary and illegal solution). Other effective strategies to treat these fears include: *functional validation*

(e.g., treating physical and emotional discomfort with crisis survival and acceptance-focused distress-tolerance skills, reducing one's vulnerability to negative emotions and increasing mastery using emotion-regulation skills; treating depression with behavioral activation and opposite-to-emotion action); cheerleading as well as reinforcing clinical progress while simultaneously validating difficulty of the task and validating their pain (e.g., actively communicating that the abstaining client can do it, is doing fabulously, and it's very, very hard); irreverent communication (e.g., "What better time to go through hell than when you've got me around to make sure you get out?"); as well as generating hope (e.g., "Listen, you're going to make it!").

One of the most difficult negative consequences faced by some of our clients has been the reluctance to give up and/or fear of losing their current identity that is strongly associated with using drugs and drug culture and fearing the absence of an identity without using drugs. This includes the following set of behaviors: worry that they will not fit in with "normal" or "straight" people, appearing awkward and acting strangely around non-drug users, not knowing what to talk about or how to dress with non-drug using people, or how to explain their hiatus from living an ordinary life (e.g., going to school, working) for several years. Other clients perceive themselves as rebels or outcasts and prefer socializing with others who are also on the fringes of society.

The solution to this set of problems is by no means an easy one. When the problem is one of being a nonconformist, the solution may include helping the client identify other ways to rebel or not conform to societal conventions while not using drugs (alternate rebellion) or helping the client identify and get involved in an alternative and non-drug-using community (e.g., 12-Step groups, religious or medication groups, communities of artists, environmentalists, or political activists). When the problem is fear of not having an identity, the solution may rest in assuring the client that their "true self" will indeed emerge during abstinence. For individuals who fear not knowing how to fit in, the solution will be helping them to fit in by coaching them on what to wear, how to act, questions to ask an acquaintance, and the art of "small-talk."

The transcript below illustrates (a) the identity problem and (b) fearing loss of a relationship because of depression. The client is in her second month of therapy at the time of this session. Earlier in this session, the therapist had learned that the client had used a 16th of methamphetamine in the preceding week following a breakup with her boyfriend. Following the breakup, she described pulling off the highway to purchase drugs from her former dealer while driving home. While performing a chain analysis to determine what led up to the client's drug use, the therapist (M. M. Linehan) had identified

⁴Indeed, brain imaging studies using PET scans show the extent to which the brain chemistry is altered by drug addiction. Over extended drug use, for example, the brain loses its capacity to naturally (e.g., without drugs) generate dopamine spikes associated with pleasure. Furthermore, changes in the brain following abstinence include increased production of cortocotropin releasing factor in the brain which activates the sympathetic nervous system and can cause heightened irritability, sleep difficulties, and panic attacks in some individuals

several dysfunctional links and treated each before moving to the next link in the chain. The transcript begins mid-session with the therapist resuming the chain analysis. In addition to its value in highlighting unique themes in treating substance-dependent clients with BPD, the session also illustrates the quickness and rapidity of movement in DBT as well as the balance between focus on change and acceptance and validation. Concomitantly, the session demonstrates shifting focus from treating out-of-session dysfunctional behaviors when the in-session dysfunctional behavior begins interfering with the progress of the session. DBT strategies are in parentheses.

- T Okay, so . . . so how do things escalate to where you've broken up? [*T resumes chain analysis*.]
- C We got home and he said, umm . . . Oh, I can't remember, he just brought it up again that he doesn't feel like my boyfriend. I lost my temper and I screamed and I pounded on the table, and I started to go outside and he grabbed me and he pulled me in and of course I made a fit and started pounding him and screaming at the top of my lungs.
- T So is this one of the anger episodes you were telling me about when you first started therapy? That you would just lose it?
- C Yeah, and I was screaming and kicking him and hitting him and kicking any furniture that was in the way, knocking tables down and stuff.
- T Now let me ask you something. Have you ever had any one of these episodes, where you get this out of control, on a day when you didn't wake up grumpy? I mean, do you think there's a relationship between waking up in that mood? [T assesses waking up irritable as vulnerability factor for extreme behavioral dyscontrol.]
- C I'm sure. I'm sure there is.
- T Then we need to really watch it and see if you ever get that out of sorts on days where you wake up feeling good. That's very interesting. Okay, so you just sort of lost it. [T orients and highlights pattern of another dysfunctional behavior, namely, out-of-control anger, then resumes chain analysis of events leading to drug use.] Okay. So, who broke up with whom? You
- C He did 'cause I was screaming, "Let go of me!" and "Go away!" and he said, "I will, I will," and he was holding me down on the couch and I was screaming and kicking and crying and he said, "I think it would be in our best interest to not be together anymore." So of course, I burst out and collapsed all over again with this new thing, and he said, "I'm just, you need somebody who is more patient and somebody

- who is more understanding and somebody who . . . " umm, and all this stuff. So then I panicked and freaked out and said, "Oh no, what am I gonna do?"
- T So you started feeling like you were gonna have a panic attack? [C nods yes.] Okay. Now, let's assume that, right there, you knew that if you let that go on, you were going to use drugs. 'Cause at that point we both know you were in big-time trouble, right? [C nods yes.] What could you do if you knew you were going to use drugs then and you had to prevent it, like it was life and death. What would you have done? What could you do? [T increases active problem solving, drags out low probability solutions. T conveys expectancy that C can generate effective problem-solving behaviors.]
- C What I did was I eventually turned over and said "Look," you know, 'cause it wasn't just the fight, it wasn't just about mood, it was this big, huge, always existing emptiness that he feels, this void, this something, this always being afraid of how to act around me and not getting what he needs and thinking that if he just loves me and comforts me and tries to support me with everything that it will all turn out, but he's actually not very happy and . . . But see, in the past when this kind of thing happened, I'd say "I don't want you to be with me just because you feel trapped; I don't want to be letting you down all the time. You know, I need you to tell me when things are not right." He would reassure me that I'm not always bringing him down and that I'm not always being a difficult person to be around. And then, yesterday, he was telling me that I am being the difficult person all the time and he mentioned that I take him for granted and I said "The last thing I do is take you for granted. I always think you're gonna leave me."
- T So did you then talk about it?
- C He told me that I bring him down all the time, which I always know but he always denies it, you know.
- T So what did you do to try to correct things and get yourself feeling better? [*T increases active problem solving.*]
- C Well, I kept trying to see if he really was ending it, because he has a way of dragging it out so that I'm not sure if he really is really breaking up even as I'm packing all of my stuff up. He never said, "Oh yes, I'm breaking up." He just said, "It's in our best interest to not be together." So then, he's gives this whole "let's be friends" thing and "then we can try and work on our relationship" thing, and I said, "How is that possible?" Basically I was supporting my feeling of what was realistically possible.
- T That sounds really good. So you were very honest.

- [T validates C by accentuating the effective while also offering praise.]
- C Yeah. And I didn't try to bring him back. I didn't try to back him, make him back down, and get him all trapped and feel like he has to or I'll just kill myself ... so ...
- T Yeah, right. That's fabulous. Okay, so that was really effective.
- C Yeah. So then I guess eventually it was his idea, because I never mentioned it, umm, that we haven't broken up and, umm, he just doesn't know what to do, he suggested maybe *you* know something to do. I said "I think we would need couple therapy."
- T What I really think is this, is that the only possible hope for your relationship is for you to be off drugs. And there's no way to even think about a relationship when you're on drugs, because it so dysregulates you that who knows what's going on. [T links C goals to treatment goal of getting off drugs; T uses contingency clarification.]
- C I know. The hard part about that is . . .
- T Is what?
- C He, he likes me better when I'm on drugs.
- T It's possible that he does like you when you are on drugs, but he doesn't like you better as a drug addict [T validates the valid and invalidates the invalid.]
- C No, he doesn't.
- T Okay. So he may like you better when you're on the drugs, but he doesn't like you better as a drug addict. So what you can say is, he likes you better when you're not depressed, tearful, crying, and upset. Okay? So my guess is it's not that he likes you better on drugs. He likes you better when you're cheerful, happy, and . . . [T defines problem behaviorally, clarifies contingencies.]
- C ... not being a downer ...
- T ... not being a downer. But everybody likes people better then. The real problem is he likes you better when you're happy, right? [C nods.] Okay. What you have to do is stop associating being happy with drugs. I just wanted to point this out to you. Because, if you can get happy without drugs, then he'll really like you. [T confronts ineffective behavior and clarifies contingencies.]
- C Yeah, I know. But then my thing comes up, where . . .
- T Which is what? . . . What would I ever do if he really liked me?
- C No, no, no. It's just . . . Umm . . . I don't know. [C's head down with shoulders slumped.]
- T Okay. So I'm getting the feeling you've gotten down. You came in feeling reasonably up because we got through this little problem, and now you've

- gone down. [T observes C's in-session behavior as C appears sad and hopeless at this juncture; T mind-reads C's emotion.]
- C Yeah, I know, because I . . . I'm losing my identity here.
- T You're what? . . . You're losing your identity? . . . How so? [T gets specifics.]
- C I guess. I guess . . . I don't . . .
- T Is it me saying you're a drug addict or is it your relationship with him?
- C No, it's with my relationship with myself. 'Cause, see, when you say, what would it take for me to drive past the exit without getting off. . . . The only thing I can think of is feeling, I don't know, not being upset about something. If I just wasn't upset about something and . . . that's the identity thing.
- T What's the identity thing? [T gets specifics.]
- C I don't know what . . . I realize that who I'm searching for I haven't found yet and I haven't met yet, but I don't know, I don't know how to just feel good about it.
- T About what?
- C Besides not feeling bad.
- T Okay, good about what?
- C Umm, basically the only thing that will get me past the exit without taking drugs is feeling good about my achievements and what's going on with me and, and where I'm going. But, I hardly ever feel that, unless it's, unless it's interacting with someone else.
- T You're not thinking this is hopeless, are you? [*T tests hypothesis; attempts mind-reading of emotion.*]
- C No, no. I just, I just. I think that's what I need . . . is to know.
- T Okay. Here's the thing. What you have to find then is a way to remind yourself. And my guess is you just didn't get what other kids get. You know how you see some kids and they fail. They don't play well at the piano recital, and they say, "Oh, I'm a failure, how terrible I am." And then their parents say, "Oh no, you're not a failure, remember the last one, last year and the year before that? You've always done really well, you've just done badly tonight." Okay. Kids learn to remember their successes when they're failing by having other people tell it to them at the beginning. Now, are you a person who heard that? I mean, was that usual, that if you failed someone said, "Oh no, you're not a failure, look at all of these other successes you have?" [T validates C by linking present difficulties to prior learning experiences; T tests hypotheses.]
- C No. I probably could have heard it more than I did.
- T Okay. So, you just have to learn how to give it to yourself. It's really truly unfortunate at this point in your life, you've got to give yourself all the things you didn't get from anyone else. That's okay,

because you can learn how to do that. [T cheerleads.] So right now, your task for the week is: One, . . . are we starting over now? [T gets commitment from C to begin abstaining; T uses "we" to communication collaboration between $T \, \mathcal{E} \, C$.] Are you going to go out of here . . . see, you're already upset [T observes insession emotional response.] So why should I think you're not going to go out and use drugs? [T troubleshoots.]

- C Because I believe in this.
- T Okay. So we agree that you're not going to use this particular upset [as a cue for drugs]. Okay, so now you have to have something to believe in and feel good about yourself, or you might turn off at the wrong place. So, what are you going to feel good about yourself? What are you going to believe in and feel good about yourself, walking out of this room tonight? Right now. Walking out of here. [T drags out new behavior from C and troubleshoots.]
- C Umm . . . I don't know.
- T Well, you're going to have to find something or you can't leave. Because it's obvious, you're probably very right about yourself. [*T validates C.*] On the other days, before Sunday, what were you feeling good about yourself for doing and being that help you not use?

The therapist focuses the remaining session on treating the absence of having something positive to feel good about by helping the client learn how to find positive aspects of her identity through the use of the mindfulness skill of activating wise mind while also using the analogy of finding a magnifying glass to not overlook positive aspects of her identity that already exist but are being ignored. The session concludes with the therapist assigning the client the task of obtaining a magnifying glass before the next session to continue this pursuit. By this time, the client's mood is elevated and she is again recommitted to not using drugs.

Summary of Findings From Methamphetamine Pilot Study

The purpose of this small, uncontrolled trial of DBT was to determine its promise as a treatment for methamphetamine-dependent women with BPD. We intended to recruit 5 methamphetamine-dependent women with BPD to participate in this 12-month treatment trial of DBT. After actively recruiting participants for approximately 9 months, we received only 5 inquires: 1 was deemed ineligible for the study on the phone, 1 never called back, and 3 were successfully screened and recruited. In comparison to other treatment outcome trials involving substance-abusing women with BPD (Linehan,

Dimeff, Comtois, & Kanter, 1998; Linehan et al., 1999), completion of the pretreatment interview took approximately three times longer for all three clients due to more client "no-shows," cancellations, tardiness, and inability to sustain attention for lengthy periods. In one case, for example, the client no-showed to the screening interview on five occasions and required eight sessions to complete the pretreatment assessment that is typically completed in less than 1 full day. The primary outcome variables for this study were parasuicidal behaviors, treatment dropout, and drug use. Secondary variables included social and overall adjustment. All interviews and

instruments were conducted at baseline, 6 months, and 12 months.

Demographic and descriptive data for the 3 women who participated in the trial is as follows. The average age of the sample was 27.7 years, ranging from 22 to 37 years. All women were of European descent and were single; 2 were dating men who were also heavily involved in the use and/or sale of drugs and the other had lied extensively to her boyfriend about her drug problem, believing that he preferred her on drugs because she was less depressed. All women had attended some college; only 1 had achieved a

Methamphetamine use is on the rise in most areas of the United States. Despite the seriousness of the problem, there is currently no known efficacious treatment for methamphetamine abuse and dependence.

B.A. degree. Using the Lifetime Parasuicide Count (LPC; Linehan & Comtois, 1996), all 3 participants reported extensive histories of suicidal and nonsuicidal parasuicide. Participants had engaged in a median of 66 nonsuicidal parasuicidal acts in their lifetime (range = 22 to 80), a median of 9 suicide attempts with ambivalent intent (range = 4 to 99), and a median of 27.7 suicide attempts (range = 2 to 68). Diagnostic data from the Structured Clinical Interview for DSM-IV, Axis I (SCID; First, Spitzer, Gibbon, & Williams, 1995) were available for 2 of the 3 subjects (1 dropped out before completing the diagnostic interview) and revealed a high level of psychiatric comorbidity. At pretreatment, participants met current DSM-IV (American Psychiatric Association, 1994) criteria for the following non-substance-use disorders: social phobia, panic without agoraphobia, and obsessive-compulsive disorder, in addition to methamphetamine dependence and BPD. In addition, 1 of the 2 who completed the diagnostic interview met criteria for posttraumatic stress disorder and major depressive disorder. One participant met criteria for alcohol dependence, in partial re-

mission; the other met criteria for alcohol abuse, heroin dependence (mild), and marijuana dependence (moderate). Two reported histories of severe attention-deficit disorder and 2 experienced severely disordered sleep. All 3 women reported previously receiving psychological treatment. One participant was evicted from her apartment within the first 3 weeks of treatment and dropped out of treatment during the 5th week, having met only once (and without an appointment) with her primary therapist. No data are available for this participant after the pretreatment assessment. The other 2 participants fully completed the treatment as well as all assessments. In both of these cases, use of drugs steadily declined over time (see Table 1). Abstinence from illicit drugs (measured by urinalyses and self-report) was achieved by both during the first 6 months and was maintained throughout the duration of the assessment period (6 months). Neither subject attempted suicide during the 12-month assessment period (see Table 2). One participant continued to engage periodically in self-mutilation until Week 40.

Global assessment of functioning was derived from the Social History Interview (SHI; Linehan & Heard, 1994), an adaptation of the Social Adjustment Scale and the Longitudinal Interview Follow-Up Evaluation base schedule (Keller et al., 1987). Scores for the Global Adjustment Scale (GAS) and for Global Social Adjustment (GSA) from the SHI are summarized in Table 3 and are based on interviewer ratings for the worst week of the last month of the assessment period and for the best week overall. A steady increase in GAS is apparent in both subjects over time, particularly in comparing scores over time on the worst week with a 9-point gain. Interestingly, very little change was observed on GSA. A considerable

Table 1Self-Reported Number of Drug Use Days—Baseline, Mid-,
Posttreatment

	Time of Measurement				
_	Client	6 Months Before Treatment ^a	0 to 6 Months	6 to 12 Months	
Methamphetamine	S1 S2	67 34	61 40	0	
Cocaine	S1 S2	0 3	0	0	
Opiates	$rac{ m S1^b}{ m S2^c}$	14 5.5	1 11	0	
Benzodiazapines	S1 S2	0	0 12	0	

^a Since days were reported for the entire last year, a 6-month estimate was computed (half of the year report); ^b Demerol; ^c Heroin.

 Table 2

 Parasuicidal Behavior-Baseline, Mid-, and Posttreatment

	Time of Measurement				
_	Client	6 Months Before Treatment ^a	0 to 6 Months	6 to 12 Months	
Suicide attempt	S1	1 ^a	0	0	
	S2	0	0	0	
Nonsuicidal self- harm	S1	$1^{\rm b}$	3 ^c	2^{c}	
	S2	1	1	2^{d}	

^a Overdose for which client reported an ambivalent intent to die; ^b one act of head banging; ^c self-cutting; ^d one episode of cutting and a second episode of both cutting and burning.

reduction in trait anger as measured by the State-Trait Anger Expression Inventory (STAXI; Spielberger, Krasner, & Solomon, 1988) was observed in both subjects; state anger was reduced at 12 months in both subjects compared to baseline but did not reflect the same magnitude of change as trait-anger. Depression, as measured by the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) decreased considerably in 1 subject over the course of treatment (from 34 to 19) and was more variable in the other (see Table 3).

Summary

Substance-dependent individuals with BPD are notoriously difficult to treat, due in part to the myriad of co-occurring disorders, the severity, chronicity, and lethality of the behaviors, and the high rate of therapy-interfering behaviors that slow (and at times appear to stall) the pace of change and the course of treatment. Participant char-

Table 3Global Adjustment Scale and Global Social Adjustment –
Baseline, Mid-, Posttreatment

	Time of Measurement				
	Client	Pretreatment	6-Month	12-Month	
GASa	S1	31-39	31-50	40-51	
	S2	31 - 42	40 - 45	40 - 45	
GSAb	S1	3-4	3-5	3-4	
	S2	3-5	4	4	
BDI	S1	34	19	19	
	S2	40	8	42	
STAXI-trait	S1	23	18	14	
	S2	24	19	17	
STAXI-state	S1	57	48	48	
	S2	58	60	54	

 $^{^{}a}$ 0–100, 100 = highest functioning; b 1–5, 5 = "very poor" adjustment.

acteristics in our uncontrolled methamphetamine trial are illustrative, although in no way unique, of the complexion of problems presented by these clients at pretreatment: All 3 had extensive histories of suicidal and nonsuicidal parasuicide, received psychotherapy as children, and had histories of multiple addictions. As a result, therapist and client alike are more likely to become demoralized over time, and the therapist may be at greater risk to become burned out compared to therapists treating BPD clients without drug addiction or addicted individuals without BPD.

DBT is an efficacious treatment for this multidisordered and substance-dependent population (Linehan & Dimeff, 1997; Linehan et al., 1999). DBT for substancedependent persons modifies and extends standard DBT (Linehan, 1993a, 1993b) but includes all of its components. Adjustments made for substance-abusing clients include application of dialectical philosophy to the problem of chronic relapse, DBT "Path to Clear Mind" targets for treating substance abuse, a set of attachment strategies to engage those who are easily lost or are otherwise difficult to engage in treatment, six new and modified skills as well as an addition of an individual skills consultation mode, and increased emphasis on the use of arbitrary reinforcers and natural reinforcers. When applied to a specific population of substance abusers, namely individuals with methamphetamine dependence, DBT appears to be a promising treatment. Overview of findings from our recent uncontrolled trial of DBT for methamphetamine dependence include abstinence from illegal drugs by the 6-month assessment, which is maintained at 12 months, as well as an increase in functionality by the conclusion of treatment.

While acknowledging the very small N of our uncontrolled methamphetamine pilot study, several differences with other drug studies conducted in our laboratory are noteworthy. First, we were unable to recruit our intended N for this trial despite anecdotal evidence of the prevalence of methamphetamine use among women in the Pacific Northwest region and targeted announcement of this no-cost treatment to public health professionals in the community serving methamphetamine addicts. We remain uncertain whether our difficulty with subject recruitment was due to a rather small population of substance-dependent women with BPD, was an artifact of how we recruited subjects, or illustrative of the difficulty of engaging this particular drug-using population. Future epidemiological studies are needed to identify characteristics of this population by region. Secondly, we had considerably more difficulty completing our standard assessment battery with this population compared to our efforts with suicidal women with BPD and with other drug-dependent women with BPD. Specifically, subjects took approximately three times longer to complete the

pretreatment standard assessment battery due to attentional difficulties. Additionally, client no-shows, cancellations, and tardiness to the scheduled assessment appointments occurred at a much higher rate. Thirdly, all clients reported severely disturbed sleep that not only interfered with completion of the assessment but also interfered with attending therapy sessions (particularly early on in therapy).

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This research was supported by grant DA08674 from the National Institute of Drug Abuse, National Institute of Health, awarded to Marsha M. Linehan, Ph.D.

The authors would like to express our gratitude to the following individuals and organizations for their significant contribution to this project: Kris Adams, Audra Adelberger, Katherine Anne Comtois, Kelly Doyle, Mary Ellen Fowler, Rebecca Gangloff, Michael Gann, Angela Murray Gregory, Eric Levensky, Joshua McDavid, Wayne Smith, King County Department of Public Health, Project NEON, Seattle Needle Exchange, and Stonewall Recovery. We are grateful to Elizabeth Krause, Seth Noonan, and Clare Shann for their contribution to gathering relevant material for this article. We would also like to express our sincere thanks to Jack Blaine, M.D., Lisa Onken, Ph.D., and Bruce Rounsaville, M.D., for their continued support and championing of research for severely disordered substance abusing people.

Address correspondence to Linda A. Dimeff, Ph.D., Department of Psychology, Box 351525, University of Washington, Seattle, WA 98195-1525; e-mail: ladimeff@u.washington.edu.

Received: October 20, 1999 Accepted: July 7, 2000

Treatment of Elderly Depression With Personality Disorder Comorbidity Using Dialectical Behavior Therapy

Thomas R. Lynch, Duke University Medical Center and Duke University

Depression among older adults is a particularly distressing problem, not only because of high rates but also because of higher risks for suicide among this population. In addition, personality disordered depressed elderly have been shown to be less responsive to depression-specific therapies. This article reviews the rationale and treatment modifications under development for treatment of elderly depressed patients with comorbid personality disorders using Dialectical Behavior Therapy.

I NCIDENCE RATES of depression among the elderly in the United States have been reported to range up to 18% (Gurland, Dean, Cross, & Golden, 1980; Rovner et

Cognitive and Behavioral Practice 7, 468-477, 2000

1077 - 7229 / 00 / 468 - 477 \$ 1.00 / 0

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al., 1991) and suicide rates are higher among older adults than any other age group (McIntosh, 1992). Depressive symptoms have been correlated with the presence of one or more chronic diseases, as well as greater disability (e.g., Borson et al., 1986; Murrell, Himmelfarb, & Wright, 1983). There is also growing empirical evidence to suggest that a large number of patients who have chronic depression often fail to respond to depression-specific interventions (e.g., antidepressant medication, psychotherapy alone) and frequently have comorbid personality disor-