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Clinical Utility of Dialectical Behavior Therapy: A Practitioner's Perspective

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CLINICAL UTILITY OF DIALECTICAL BEHAVIOR THERAPY: A PRACTITIONER'S PERSPECTIVE

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Establishing the efficacy and effectiveness of psychotherapy is necessary but not sufficient to have a comprehensive understanding of the utility of an intervention. Researchers agree the broader clinical utility of interventions should be examined. Nelson & Steele (2006) provide a framework for evaluating interventions that include outcome, consumer, provider, and economic evaluations. Dialectical behavior therapy (DBT) is one intervention which research has established the efficacy and effectiveness, but research on pragmatic issues (e.g., where and how DBT is being implemented) is lacking. Clinical directors of mental health facilities and therapists conducting DBT around the country were surveyed. The current dissertation sought to understand if DBT is being implemented in the clinical setting, by whom, and for what population. Barriers to treatment implementation and resources of sites were identified and differences among clinical settings delineated. Funding was an important barrier and DBT's fit with reimbursement was a significant resource when participants reflected on implementing DBT. Additionally, participants practicing DBT appeared to be well-trained. The current dissertation assessed if DBT possesses important treatment selection characteristics. Results are discussed in contrast to Nelson & Steele's (2008) study on treatment selection characteristics. Finally, what additional research practitioners would like to see in the DBT literature is highlighted, along with other directions for future research.

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CHAPTER I

INTRODUCTION

Establishing the utility of psychotherapy interventions has been a long, arduous task. Researchers seem to agree that establishing the efficacy of an intervention via randomized controlled trials is a first step in establishing the clinical utility (Nathan, Stuart, & Dolan, 2000; Lueger, 2002; Beutler & Howard, 1998). Following the establishment of treatment efficacy, researchers began investigations in the clinical setting to establish the effectiveness of psychotherapy in the natural clinical setting (Nathan et al., 2000). Although the research on psychotherapy intends to inform practice of useful interventions, a gap between research and practice of clinical psychology exists. Several researchers and practitioners agree there is a need for more integration of psychotherapy practice and research. Integration would both improve practice with appropriate and useful research support and provide feedback to facilitate the research process (Beutler & Howard, 1998; Goldfried & Wolfe, 1998; Lueger, 2002; Nelson & Steele, 2006). However, debates about the criterion for establishing the utility of psychotherapy exist in the literature.

Initially, the validity of psychotherapy was based on research focused on efficacy (Nathan et al., 2000). The necessity of empirical support for psychotherapy continues to increase in the U. S. due to a variety of reasons, such as the desire to utilize the scientific method to improve services, managed care, and the pragmatic nature of the society. Hence, efficacy research utilizes control conditions, random assignment, treatment manuals, and replicability (Nathan et al., 2000). Research in this area continues to be promising because the stringent controls imposed facilitate internal validity allowing for casual inferences to be posited. However, the external validity of these studies can suffer. Chambless & Hollon (1998) suggest it

is important to establish both efficacy and effectiveness of a therapy. Indeed, effectiveness studies continue to assess the validity of therapies in the natural clinical setting (for a review see Chambless & Hollon, 1998; Nathan et al., 2000). Effectiveness research focuses on the external validity of a psychotherapy promoting generalizability to the larger population. Together, efficacy and effectiveness provide a wealth of information on the utility and validity of an intervention.

Establishing the efficacy and effectiveness of an intervention is necessary but not sufficient in understanding if a treatment can be successful (Beutler & Howard, 1998). Several areas (e.g., training expertise, provider perspectives, cost-effectiveness) that may impact intervention implementation are not often explored via efficacy and effectiveness research. It is important to explore these areas to have a comprehensive picture of an intervention and to make an informed decision about the utility of the intervention.

Beutler & Howard (1998) suggest that effectiveness research should be included under the umbrella of clinical utility research which encompasses research on clinician expertise, fit with setting and culture, and flexibility. In clinical utility research, attention is given to the client needs, setting needs, and qualities of the providers (Beutler & Howard, 1998). Other professionals have agreed; Clarke (1995) called for more research to be conducted on pragmatic (e.g., setting, training of clinicians) issues. Since that time, little research has been conducted on how treatments are established in the clinical setting (Hershell, McNeil & McNeil, 2004). A few available studies have focused on consumer satisfaction with mental health services (Llewelyn, 1988; Glass & Arnkoff, 2000; Seligman, 1995; Hodgetts & Wright, 2007), provider views and knowledge (Najavits, 2002; Walrath, Sheehan, Holden, Hernandez, & Blau, 2006).

The seminal Consumer Report study by Seligman (1995) provided the field of psychology with a broad understanding of consumers' perceptions of mental health services effectiveness. The study surveyed a large number of individuals about their use and experiences with mental health services. The study results indicated respondents generally did improve with interventions provided by mental health professionals. Long-term psychotherapy faired better than short-term therapy. Additionally, those individuals who were limited by insurance coverage did worse (Seligman, 1995). One qualitative study indicates that clients find reassurance and problem-solving aspects of therapy most helpful (Llewelyn, 1988). Consistent with research on common factors of therapy, a collaborative relationship was also viewed as helpful by clients interviewed (Glass & Arnkoff, 2000). Qualitative studies addressing consumer experiences with specific interventions (i.e., assertive community treatment, family therapy) revealed the positive and negative impact of the therapeutic relationship (Hodgetts & Wright, 2007). Individuals dissatisfied with family therapy questioned the therapist's understanding and ability to generate suggestions (Kuel, Newfield, & Joanning, 1990). Participants who engaged in cognitive behavioral therapy also valued a trusting, collaborative relationship with the therapist (Messari & Hallam, 2003; for a review see Hodgetts & Wright, 2007).

Available provider research tends to focus on general empirically supported treatments (Nelson & Steele, 2007, 2008), treatment manuals (Najavits, Weiss, Shaw, & Dierberger, 2004), familiarity with empirically supported treatments for children (Walrath et al., 2006), and working with substance use and PTSD (Najavits, 2002). Nelson & Steele (2007, 2008) investigated predictors of empirically based treatment use. Among the top predictors were practitioner training, clinical setting, and practitioner attitudes toward empirically supported treatments (Nelson & Steele, 2007). Factors that influence practitioner use were also surveyed.

Practitioner's identified research in "real-world" clinical settings as most important, followed by flexibility, and colleague recommendations (Nelson & Steele, 2008).

More specific research on clinical utility explored therapist's views of treatment manuals and suggests therapists find them to be a helpful tool in clinical practice (Najavits et al., 2004). Research on evidence-based treatments for children in community settings suggests cognitive-behavioral therapy is among the top treatments utilized, the most familiar to clinicians, and is perceived to lead to positive outcomes (Walrath, et al., 2006). Najavits (2002) surveyed clinicians' perspectives on the difficulties encountered when working with individuals who are diagnosed with PTSD, Substance Use Disorder, and the dual diagnosis of PTSD and Substance Use Disorder. In general, the practitioners indicated the dual diagnosis as most difficult. Specifically, suicidal ideation, parasuicidal behaviors, and case management needs were among the most difficult factors in treating clients with PTSD and substance use disorder (Najavits, 2002).

Researchers have called for more research to be conducted on provider, consumer, and economic considerations (Nelson & Steele, 2006). The majority of research on psychotherapy appears to focus on specific efficacy and effectiveness of various interventions while research on provider and consumer considerations tends to be broad, assessing empirically supported interventions, generally. Hence, a gap exists in the research on clinical utility with specific interventions. Researchers have called for more research to be conducted on provider, consumer, and economic considerations when evaluating a specific intervention (Nelson & Steele, 2006).

Dialectical behavior therapy (DBT) is one such example. The dearth of research on the broader clinical utility of DBT may be due to the relative newness of the intervention and the need to first establish efficacy and effectiveness of DBT. The current dissertation seeks to

contribute to the clinical utility research by exploring provider perspectives of dialectical behavior therapy (DBT).

Dialectical behavioral therapy (DBT) was originally developed by Linehan circa 1980 to treat individuals with borderline personality disorder (BPD; Koerner & Dimeff, 2007). Given the high incidence of BPD (e.g., 14-20% inpatient, 8-11% outpatient) and cost associated with the treatment of BPD, it was important to identify an appropriate and effective treatment for individuals with BPD (Koerner & Dimeff, 2007). Linehan and colleagues were successful in accomplishing the goal of establishing DBT as an efficacious treatment for BPD via randomized controlled trials (Linehan & Heard, 1993 Linehan et al., 2006). DBT has also been found to be effective in quasi-experimental designs across various settings and populations. In particular, DBT has been shown to be efficacious and effective at reducing parasuicidal and therapy interfering behaviors (e.g., dropout). Moreover, DBT has impacted depression scores, hopelessness, binging and purging behaviors, and substance use. Given DBT has been found efficacious and effective, it is important to further examine the utility of DBT in the clinical setting. However, there is a dearth of literature examining the broader clinical utility (e.g., implementation, training of clinicians) of DBT.

Before the impact of an intervention can be assessed, the intervention needs to be available for implementation by mental health professionals. General barriers to treatment access and utilization include but are not limited by community factors (e.g., few specialized resources, travel, impoverished area) and financial factors (e.g., health insurance). Specific barriers to DBT have been identified by Ben-Porath, Peterson, & Smee (2004) and include staff selection, staff turnover, maintaining fidelity to the treatment approach, and support from administration. In short, Ben-Porath et al. (2004) delineate that staff working with individuals with BPD need to be

flexible and skilled at regulating their own emotions. Working with individuals with BPD is challenging; thus, compounding the potential for staff turnover (Ben-Porath et al., 2004). Moreover, training in DBT is important. When staff members who are trained are lost; interest in DBT may also be lost. Administrative support (e.g., time, funding) was also identified by Ben-Porath et al. as an important facet to implementing a DBT program. Hence, beginning and maintaining a consistent DBT program may be challenging due to other factors outside of direct treatment implementation.

The following dissertation seeks to contribute to the literature on the clinical utility of DBT by assessing the use of DBT from a provider perspective. First, the principles guiding dialectical behavior therapy and the current research base on the efficacy and effectiveness of DBT will be considered. The need for more clinical utility research on DBT from a provider's perspective will then be addressed. Finally, important questions about the utility of DBT are presented.

Principles of DBT

DBT outlines three major principles that guide understanding the impact of the social environment, internal conflicts on behavior, thinking, and feeling, and the process of continuous change. The principle of interrelatedness and wholeness accounts for how analyses of parts must be in reference to the whole. Hence, the principle stresses the importance of understanding the individual in the context of the social influences (e.g., gender, class, ethnicity, age) on individual functioning. The principle of polarity addresses the internal opposing forces that reside in all systems regardless of how small (e.g., social, family, individual). The principle of continuous change emphasizes how the opposing polarities that reside in all systems integrate to form two new polarities. The tension among the opposing poles drives the change.

The principle of interrelatedness and wholeness takes a systems approach to reality. The principle states it is important to understand how the parts relate to the whole. It looks at how the larger social context and systems (e.g., gender, social class) influence the experience of the self. For example, individuals who identify the self in terms of a relational or social self may encounter difficulties in a society that values the individuated self (Linehan, 1993a). When examining the individual system the principle of interrelatedness and wholeness emphasis viewing behavior as a sample. For example, in a DBT program that offers individual and group therapy with crisis services, the individual therapist may observe steady progress, the crises worker experiences the same client when they are at their worst, and the skills training therapist may observe the client in need of repair after a damaging comment by another group member. Each worker receives some part of information about the client, but not the whole person (Koerner & Dimeff, 2007). The principle of interrelatedness and wholeness helps in remembering to take a sample of behavior as such and not infer that the sample describes the whole person. Also, the principle supports the need for team conferences to facilitate communication among team members.

The principle of polarity suggests that reality is comprised of opposing forces. This polarity exists within all systems (e.g., function in the dysfunction, construction can be found in destruction), for every argument there can be a counterargument (Linehan, 1993a). For example, one member of a therapy team may have reasons to discharge an individual from therapy while another member of the therapy team has valid reasons the client should not be discharged. Each argument may be well substantiated and it is possible for both to coexist (Koerner & Dimeff, 2007). The push and pull among the opposing forces drives change according to the principle of continuous change. When the opposing forces are integrated the synthesis of the opposing forces

creates two new opposing forces continuing the cycle of change. Linehan (1993b) outlines three major polarities that exist, acceptance and change, meeting needs and losing needs, and validation of views and learning new skills. Briefly, the dialectic, or push and pull, between the client needing to accept themselves in the moment and the need for change is the first synthesis, or integration, that must take place. Another important dialectic the client needs to synthesis is between getting needs met and losing what is needed if one becomes more competent. The third dialectic includes maintaining personal integrity and validating views of difficulties and learning new skills to alleviate suffering (Linehan, 1993b).

The principles of DBT guide understanding of difficulties faced by individuals, especially those with BPD, and provides a framework for treatment intervention. Further, the principles are grounded in science and philosophy making them more akin to a variety of theoretical orientations as opposed to one insular theory. Briefly, DBT utilizes a biosocial theory to understand borderline personality disorder (Linehan, 1993b). A biological predisposition, invalidating environment, and the interaction between biology and environment contribute to the difficulties observed in emotion regulation, a hallmark of BPD.

Both emotional vulnerability (i.e., very high sensitivity to emotional stimuli, very intense response, and a slow return to baseline after arousal) and maladaptive emotion modulation (i.e., inappropriate behavioral responses to emotional stimuli, acting in a mood dependent way) contribute to emotional dysregulation (Linehan, 1993b). An invalidating environment is one where responses to private experiences (e.g., being thirsty) are often erratic and inappropriate (e.g., no response, replying the individual is not thirsty), therefore, teaching one to not trust their inner experiences (Linehan, 1993b). Additionally, an invalidating environment tends to respond to negative affect by punishment or intermittent reinforcement of extreme emotional displays of

behavior, consequently reinforcing the polarity of emotional inhibition and emotional disinhibition (Linehan, 1993b). The extreme polarity in emotional displays and rigidity in dichotomous thinking (e.g., either-or thinking) comprise the borderline "splitting" that may be observed (Linehan, 1993a). However, DBT contends that the paradox can be resolved thru integration of the polarities.

Format of DBT

The form of DBT that was empirically validated by Linehan and colleagues consisted of four treatment modes (individual psychotherapy, group skills training, telephone consultation, and case consultation for therapists). DBT was originally developed and assessed for efficacy in treating individuals with BPD.

In individual psychotherapy, the psychotherapist helps with decreasing maladaptive behaviors, increasing adaptive behaviors, and attending to motivational factors. The principles of DBT are most often explored in individual psychotherapy. Additionally, the individual therapist works to solve crises and to reduce life-threatening and therapy interfering behaviors.

Skills training groups provide the client with adaptive skills necessary to successfully regulate emotions and navigate through the environment (Linehan, 1993a, 1993b). Skills training occur in four key skills: core mindfulness, interpersonal effectiveness, emotion regulation, and distress tolerance. Although Linehan (1993b) suggests that a homogeneous group may be beneficial for working with individuals with BPD, pros (e.g., tailoring of skills, ability of clients to be in a group with similar individuals) and cons (e.g., many individuals with extreme emotional responses, emotional involvement of the members with other members' problems) must be considered when thinking of adopting DBT to the therapist's setting.

The format of the skills training group can be adapted to the setting and needs of the institution using DBT skills training. Linehan (1993b) suggests retaining as much of the original treatment outline due to the empirical validation for the form of skills training outlined in her manual. However, several researchers have provided results suggesting modifications of DBT are effective (Harley, Sprich, Safren, Jacobo, & Fava, 2008; Rathus & Miller, 2002; Lynch et al., 2003; Telch, Agras, & Linehan, 2001). For example, DBT skills group plus non-DBT individual therapy has been suggested to be effective if the individual therapy is offered in the same program as the skills training group (Harley, Baity, Blais, & Jacobo, 2007). Lynch et al. (2003) reports that a DBT skills group plus medication and telephone coaching was effective in decreasing depressive scores in elderly individuals with depression. Safer, Telch, & Agras (2001) adapted the DBT skills manual into a 20-week individual psychotherapy focused on emotion regulation. The study investigated the effects of DBT therapy on binge/purge behaviors. The results suggest DBT was effective at decreasing binging and purging behaviors (Safer et al., 2001).

Telephone consultations provide the client with emergency contact with the therapist for help in applying the skills in vivo (Linehan, 1993a, 1993b). This component is posited to help clients to generalize skills being learned (Lynch et al., 2003). Case consultation for therapists is intended to ameliorate burn out and troubleshoot treatment delivery problems (Linehan, 1993a, 1993b). DBT strategies are utilized in all aspects of DBT; however, some strategies are used more often in some aspects (e.g., individual psychotherapy) than others (e.g., skills training) because of the delegation of tasks among the treatment team. For instance, it is the individual psychotherapist, who is responsible for answering crisis calls from their clients. On some

occasions, a skills training therapist may serve as a back-up therapist to the individual's psychotherapist (Linehan, 1993b).

Although DBT was originally validated for use with individuals with BPD, research indicates it is both efficacious and effective with other presenting problems. For example, DBT has been researched on depression in older adults (Lynch et al., 2003), adolescents with bipolar disorder (Goldstein, Axelson, Birmaher, & Brent, 2007), and adult ADHD (Hesslinger et al., 2002). In addition, many studies allow for comorbidity of some disorders (e.g., depression, anxiety, substance use, other personality disorders; Telch et al., 2001; Linehan et al., 2006). Consistently, the research suggests DBT is effective at improving depression scores, decreasing suicidal behaviors, and improving psychosocial functioning (Goldstein et al., 2007; Harley et al., 2007; Koons et al., 2001; Linehan et al., 2006; Lynch et al., 2003).

Efficacy

Indeed, several randomized control trials assert DBT's efficacy at reducing parasuicidal behaviors, suicide attempts (Linehan, Armstrong, Suarez, Alimon, & Heard, 1991; Linehan, Heard, & Armstrong, 1993, Linehan et al., 2006), and suicidal ideation (Koons et al., 2001) for individuals with BPD. Further, Koons et al. (2001) reports significant decreases in hopelessness and depression for individuals who participated in the DBT therapy group as compared to individuals who received standard treatment available in the community. Interestingly, several of the randomized controlled trials have also reported low attrition rates (Linehan et al., 1991, Linehan, Schmidt, Dimeff, Craft, Kanter, & Comtois, 1999, Linehan et al., 2006).

Linehan, et al. (1991) initiated research on DBT with women who were struggling with BPD, especially chronic parasuicidal behaviors. Twenty-two participants completed DBT and were compared to 22 individuals who completed treatment in the community. Results were

positive; individuals in the DBT group demonstrated decreases in parasuicidal behaviors, medical risk, and inpatient stays. Also, individuals in the DBT group stayed in treatment longer (Linehan et al. 1991). In 1994, Linehan et al. explored the interpersonal outcome of DBT for individuals with BPD. Again, when comparing individuals in a treatment as usual condition to individuals in DBT results suggests individuals in the DBT group improved on scores of anger. In 1999, Linehan et al. investigated the outcome of DBT for individuals with BPD and substance dependency. Individuals were randomly assigned to receive DBT with replacement medication or treatment as usual. Analyses indicated an increase in days abstinent for individuals in the DBT group and a decrease in attrition rate for participants in the DBT intervention.

When DBT is compared to treatment by experts (Linehan et al., 2006) and a comprehensive validation treatment plus 12-step program for substance dependency (Linehan et al., 2002) the results are somewhat mixed. Linehan et al. (2006) evaluated the outcomes (e.g., suicide attempts, self-harm, hospitalizations) in individuals with BPD. For both groups, substance use decreased. Individuals in the DBT group exhibited significant decreases in the likelihood of suicide attempts, self-injury, hospitalizations, and drop-out. Reductions in medical risk were also reported for individuals in the DBT group. In comparison, Linehan et al. (2002) investigated the effects of DBT versus comprehensive validation treatment plus 12-step program in the treatment of individuals with BPD and comorbid opiate dependence. No differences were found between groups on measures of parasuicidal behaviors, hospitalizations, and inpatient days. Notably, the 2002 study comparison treatment included a group component that has been shown to be effective in reducing substance abuse (i.e., 12-step program; Laudet, Stanick, & Sands, 2008). The 2006 study did not include a group component for the comparison group.

Hence, it appears that DBT is effective above what is provided by experts but may perform similarly to treatments that include both an individual and group component.

Other populations that struggle with emotion regulation have also been investigated via randomized controlled trials of DBT including binge eating disorder (Telch et al., 2001), depression (Lynch et al., 2003) and teens presenting with suicidal behaviors (Rathus & Miller, 2002). In general, the results of the studies have been positive. For example, individuals with binge eating disorder participated in 20-weeks of DBT skills groups or a wait-list group (Telch et al., 2001). The investigation indicated individuals in the DBT group had significantly fewer binge days than individuals in the control group. In fact, the study reported 89% of individuals in the DBT group were abstinent from binges at post treatment (Telch et al., 2001). Additionally, Telch et al. (2001) reported individuals in the experimental group had lower scores on measures of anger, weight concerns, eating concerns, and shape concerns. At follow-up, over half of the study's participants continued to practice the skills learned in the DBT group.

Lynch et al. (2003) investigated the efficacy of DBT skills group plus telephone support to address the symptoms of depression in older adults. The authors suggest coping skills may function to improve resiliency and decrease likelihood of another depressive episode (Lynch et al., 2003). Individuals in the experimental group participated in 28 weeks of DBT skills group plus medication management. The individuals in the DBT plus medication group also received brief phone calls (i.e., 20 minutes) to assist with application of the skills. Individuals in the control group received medication management. The results indicated individuals in the study showed significant reductions on observer rated measures of depression. Individuals in the DBT plus medication management group exhibited a reduction in self-reported depressive symptoms. Gains were maintained at follow-up for the DBT plus medication management group. Rates of

remission were also higher in the DBT plus medication management group. Moreover, Lynch et al. 2003 indicated that the DBT skills training plus medication group was the only group that improved on adaptive coping measures.

DBT is being applied to a variety of settings, including university counseling centers. For instance, a recent study addressing the efficacy of implementing DBT in a university counseling center (UCC) setting was published. Pistorello et al. (2012) investigated the effectiveness of DBT for a university student population experiencing BPD symptoms, suicidal ideation, and at least one suicide attempt. As the authors point out, the availability of DBT in UCC may help to reach young adults before symptoms worsen. The study compared DBT to an optimized treatment-as-usual and address several barriers that UCCs experience when implementing manualized DBT (e.g., provide brief psychotherapy, regular university breaks, trainee therapists; Pistorello et al., 2012). The outcome of the study was positive with participants in the DBT condition exhibiting improvement on depression scores, rates of suicidality, social adjustment, and borderline symptomology (Pistorello et al., 2012) as compared to treatment-as-usual. Overall, the authors conclude that DBT may be feasible to implement within UCC systems and efficacious for the population served.

DBT has also been studied internationally via controlled trials in the Netherlands (van den Bosch, Verheul, Schippers, & van den Brink, 2002; Verheul, van den Bosch, Koeter, de Ridder, Stijnen, & van den Brink, 2003). Van den Bosch et al. (2002) randomly assigned 58 women to either 12 months of standard DBT or to “treatment as usual” (TAU) plus clinical case management. Again, results of the trials suggest DBT is effective at reducing self-harm, impulsive behaviors, and attrition.

Effectiveness

In addition to randomized controlled trials, several quasi-experimental studies have been conducted with individuals with BPD in inpatient settings (Barley et al., 1993; Durrant, Clarke, Tolland, & Wilson, 2007; Swenson, Sanderson, Dulit, & Linehan, 2001) and community mental health settings (Ben-Porath et al., 2004; Brassington & Krawitz, 2006; Comtois, Elwood, Holdcraft, Smith, & Simpson, 2007). Studies have investigated the outcome of DBT for individuals with BPD in other countries (van den Bosch et al., 2002; Verheul et al., 2003). Other studies have researched if DBT is effective for individuals in a forensic setting (Trupin et al., 2002; McCann & Ball, 2000; Wix, 2003), residential settings (Wolpow, Porter, & Hermanos, 2000) while others have investigated the effects of DBT on comorbid personality disorders with older adults (Lynch et al., 2007), adult ADHD (Hesslinger et al., 2002), depression (Harley et al., 2008), and eating disorders (Safer et al., 2000; Telch et al., 2001; Wiser & Telch, 1999).

Ben-Porath et al. (2004) investigated the outcome of DBT for individuals with BPD in an urban community mental health setting. DBT was provided in a setting that exclusively treats individuals with severe mental illnesses. Twenty-six individuals with severe Axis I diagnoses and BPD participated in the study. Analyses indicated that during the 6-months of treatment suicidal thoughts and unemployment decreased. Secondary outcomes included improvement on scores on the SCL-90-R (i.e., depression, interpersonal sensitivity, phobic anxiety). Attendance to the intervention was high.

A pilot study at a community mental health center in Australia suggests effectiveness of DBT in treatment of individuals with BPD (Brassington & Krawitz, 2006). After 6 months of standard DBT treatment, participants demonstrated decreased elevations on several of the MCMI-III scales (dependent, masochistic, borderline, anxiety, dsythmia, major depression) and

SCL-90-R scales (obsessive-compulsive, interpersonal sensitivity, depression, anxiety, phobic anxiety, paranoid ideation, psychoticism). A decrease in inpatient days was also noted. At a community mental health center in Seattle, Washington, standard DBT was reported to effectively reduce the incidence of parasuicidal behaviors, psychiatric hospital visits, and number of crises centers contacted (Comtois et al., 2007).

Wix (2003) implemented a DBT program at a forensic service in Colorado. The population was primarily male which differs from previous studies on DBT that include predominately female populations. The sample includes individuals with a variety of diagnoses (e.g., schizophrenia, bipolar, major depression, borderline personality disorder, antisocial personality disorder). Anecdotal data presented in the article suggests reduction in violence and recidivism among participants (Wix, 2003).

Sambrook, Abba, & Chadwick (2006) researched the effectiveness of DBT with individuals with parasuicidal behaviors. The authors outline the importance of the emotion regulation component of DBT to address the difficulties individuals with parasuicidal behaviors face. Individuals in the experimental group attended 18 weekly sessions of a DBT skills group that focused on emotion coping skills, and key workers were provided with monthly support. Individuals in the DBT skills group spent less time on inpatient units and attended fewer outpatient appointments. A measure of psychotherapy outcome and social adjustment showed decreases over the life of the group (Sambrook et al., 2006).

DBT has also been applied to inpatient settings (Barley et al., 1993; Durrant et al., 2007; Swenson et al., 2001). Many of the studies describe the implementation of a DBT program into an inpatient treatment program. Barley et al. (1993) reported a decrease in parasuicidal behaviors. Using a visual analog scale to assess patient perceptions of goal progress, Durrant et

al. (2007) reported clients move closer to their goals after participation in a DBT program. Additional results suggest an increase in coping skills, internal locus of control, and confidence in dealing with emotions (Durrant et al., 2007). In a residential setting, Wolpow et al. (2000) indicated the DBT program provided residents with a language to communicate needs and develop skills to meet needs.

The research on DBT is promising and exciting, but more is needed to have a comprehensive understanding of the benefits of DBT. In a call to research, Smith & Peck (2004) indicated a dearth of literature devoted to case studies utilizing DBT, research on the effectiveness and utility of DBT in community mental health centers, and component analyses of DBT. Some studies have answered the call to research.

Lynch & Cheavens (2008) report a case study of an individual with comorbid personality disorders (i.e., paranoid personality, obsessive-compulsive personality). Lynch & Cheavens (2008) targeted emotional constriction and cognitive-behavior rigidity. The primary adaptation of DBT to target these difficulties included minimizing distress tolerance skills and adding a skills training module on radical openness. The individual in the study demonstrated significant reductions in judgmental thinking, interpersonal sensitivity, interpersonal aggression, bitterness, rumination, and depression scores. Furthermore, the participant rated the following skills as most useful: mindfulness, practicing flexible thinking and doing, opposite action, “love-kindness,” and “forgiveness.”

Nock, Teper, & Hollander (2007) report a case study of an adolescent with self-injury. The individual participated in DBT as modified by Miller & Kraus (2007). At the end of treatment, self-injury, suicidal ideation, and substance use had decreased. Improvements in the adolescent’s relationship with her father and peers also were noted. Another study by Wagner &

Linehan (2006) examined two case studies of individuals with trauma related difficulties. Standard DBT was implemented and the individuals reported significant decreases in PTSD symptoms. Depression scores decreased for one client while the other demonstrated a decrease in BPD symptomology. For one client, suicidal and parasuicidal behaviors were not observed.

Some research addressed previous needs (e.g., Smith & Peck, 2004) for more investigation of effectiveness of DBT in community mental health settings. For example, Harley et al. (2007) examined the impact of DBT with individuals diagnosed with BPD receiving services in a community mental health setting. Participants received one full cycle of DBT skills group training plus individual therapy. Individual therapy in this study was both specific to DBT and non-specific. Results of the study included reductions in scores on the depression, borderline, and suicidal ideation scales of a personality assessment inventory. Interestingly, the attrition rate in Harley et al. was 51% which is in disagreement with studies that taut low dropout rates for DBT (Linehan et al., 1993; Koons et al., 2001; Lynch et al., 2003). Follow-up analyses indicated that individuals who received individual therapy from a source outside of the system providing the skills group were more likely to drop out of therapy than those who were seen by an individual therapist who worked in the system that provided the skills group. This finding challenges Linehan's (1993c) reply that DBT skills group does not add to non-specific individual treatment. Linehan (1993c) cites an unpublished study that looked at DBT skills group plus individual therapy in the community with no significant effects found. Harley et al. points out the individual therapy provided in the Linehan study was provided by therapists outside the health care system where the skills group was provided. The authors further speculate that the positive results of DBT skills group plus non-DBT individual therapy found in their study may be influenced by the better coordination of care found when skills leaders and therapists work at the

same setting. Additionally, therapist support of the group component was suggested as a possible factor of influencing the results (Harley et al., 2007). Alternative explanations may suggest the higher attrition rate of the Harley et al. 2007 study is due to differences among real world and randomized controlled trials.

Although the current literature on DBT has provided information on the efficacy, effectiveness, and addressed some of the calls for more research by Smith & Peck (2004), more research is needed on the aspects not currently addressed (i.e., the utility of DBT in mental health settings, component analysis). Presently, some research is being conducted on a component analysis. Specifically, The Behavior Research and Therapy Clinic (BRTC, 2006) at the University of Washington reported on their website that a component analysis study is underway with women who have borderline personality disorder and suicidal behaviors (BRTC, 2006). The component analyses will examine the outcome of various components of DBT (i.e., individual therapy, skills group) by investigating differences among participants in a full DBT, skills group only, and individual therapy only. More research on the utility of DBT still needs to be addressed to provide a comprehensive understanding of DBT.

DBT is a comprehensive treatment for BPD that directly addresses the client's difficulties with emotion regulation and lack of skills to effectively regulate emotions and behave effectively in the environment. The efficacy of DBT in addressing parasuicidal behaviors, therapy interfering behaviors, and adaptive skill building is established via controlled clinical trials. DBT has been found to be efficacious in reducing the likelihood of parasuicidal behaviors and use of hospital inpatient treatment modalities (Linehan et al., 2006). Given the focus of DBT on acceptance, change, and emotion regulation, it makes both intuitive and logical sense that DBT would be an effective treatment for a variety of difficulties. Indeed the current research suggests

some of the benefits of DBT therapy for individuals with comorbid disorders and BPD (van Alphen, Tummers, & Derksen, 2007; Bornovalova & Daughters, 2007). Moreover, DBT has also been examined for effectiveness in other problems that include emotion dysregulation (e.g., binging/purging, Telch et al., 2001; bipolar disorder, Goldstein et al., 2007). Despite the extensive research on DBT with various populations and in various settings, research is lacking on the broader clinical utility of DBT.

Clinical Utility

Researchers seem to agree that clinical utility is an important part aspect of evaluating a therapy (Beutler & Howard, 1998; Chambless & Hollon, 1998; Goldfried & Wolfe, 1998; Nelson & Steele, 2006). However, disagreements also exist about what should be included in clinical utility research. Chambless & Hollon (1998) outline three major areas of assessing effectiveness: generalizability, feasibility, and cost effectiveness. Nelson & Steele (2006) present a multifaceted approach to evaluating treatments. The multifaceted approach provides a comprehensive framework to guide treatment evaluation by including outcome, provider, consumer, and economic evaluations. In agreement with Nelson & Steele (2006), the current dissertation seeks to understand DBT from a multifaceted approach. Operating from this perspective, available research has presently addressed the outcome (i.e., efficacy, effectiveness) evaluation. A review of the literature on the efficacy and effectiveness of DBT is provided in previous sections. Research on the consumer aspects and therapist adherence to the DBT standard protocol is also available. A brief synopsis of this research follows.

The consumer research available on DBT indicates consumers have positive experiences with DBT (Cunningham, Wolbert & Lillie, 2004; Hodgetts, Wright, & Gough, 2007). Both studies available on consumer experiences are small-scale, qualitative investigations.

Researchers interviewed a group of individuals who had or were currently in a DBT program. Hodgetts et al. (2007) interviewed five individuals and recorded three major themes based on the Interpretive Phenomenological Analysis. The three themes included choice of DBT, experiences of DBT, and evaluation of DBT. Participants indicated that diagnosis often was the reason they were referred to DBT. Moreover, participants indicated a lack of choice of available therapies. Participants cited DBT was helpful due to the high level of structure and organization. Participants' views of individual versus group components were mixed. Some liked both; others did not like one component or the other (Hodgetts et al., 2007).

Cunningham et al. (2004) also investigated client experiences of DBT via interviews with 14 individuals. The results suggest clients emphasized the importance of validation by the therapist, the client-therapist relationship, and the therapist challenging the client. Participants also identified the complementary nature of the skills group. Skills group leader familiarity with skills was emphasized. Participants reported using some, but not all skills learned in DBT. "Self-soothe," "distract," and "one mindfulness" were reported as the skills most commonly used by participants. Telephone consultation also received positive feedback from participants who cited the skills coaching was helpful when they were in crisis. Participants further outlined the positive impact of DBT on their significant relationships, ability to control their emotions, and increasing hope (Cunningham et al., 2004). Despite the small sample sizes, the research provides information indicating clients have positive experiences with DBT.

DiGiorgio, Glass, & Arnkoff (2010) explored therapist's adherence to the standard DBT protocol. Participants in the study were therapists who participated in one type of training provided by Behavioral Tech, the company devoted to training mental health professionals in DBT. Results indicated that therapists adhered more to the standard DBT model when working

with individuals diagnosed with BPD. In addition, participants who were trained at a 10-day workshop more frequently utilized the skills group, consultation team, and telephone coaching in their individual DBT therapy than participants that did not attend the 10-day workshop (DiGiorgio et al., 2010).

Available research on DBT has focused on the effectiveness, efficacy, consumer components, and therapist adherence to DBT when evaluating the clinical utility of DBT; however, a dearth of research from a provider perspective persists. Operating from a multifaceted approach suggested by Nelson & Steele (2006), it is necessary to understand the perceptions of providers regarding the implementation of DBT in order to have a holistic view of DBT's clinical utility. At least one known qualitative study has looked at the perspectives of administrators involved in the implementation of DBT. The study highlighted the concerns of administrators such as resources (e.g., time, funding, reimbursement), staff training and turnover, and client referrals (Herschell, Kogan, Celedonia, Gavin, & Stein, 2009). The current dissertation seeks to add to the literature on the implementation of DBT.

Research Questions and Hypotheses

Given that current literature on DBT focuses heavily on the outcome evaluations and provides some guidance on consumer perspectives, it seems logical that one area of research on DBT that needs continued investigation is provider perspectives. The aims of the current study include describing what settings are implementing DBT, the feasibility of implementing a DBT program, describing how DBT operates in various settings, and investigating what research providers would like to see included in future literature.

In order to investigate and describe what settings are conducting DBT and if any barriers exist to treatment implementation, clinical directors at agencies around the nation were surveyed.

It seems intuitive that settings with more resources (e.g., sufficient funding, access to training, low therapist turnover) will have DBT available. It is also plausible that these settings may encounter fewer barriers to implementation increasing the likelihood that they would have DBT available; it was hypothesized that this study will support these notions.

If a setting had DBT available, the therapist who is most involved was surveyed to gain a better description of how DBT is implemented (e.g., what components are utilized). It was hypothesized that agencies with more available resources will utilize/implement more components (e.g., skills training, individual therapy, telephone consultation) from the DBT protocol. How therapists are trained is also important to investigate and was described. As Chambless & Hollon (1998) point out, therapy utilized in a controlled clinical trial is often provided with the highest level of treatment integrity possible. Therapists are trained and supervised closely. In the natural setting, the same controls are not in place. Hence, it is important to understand and describe therapist expertise in implementing a treatment. One study does suggest clinicians of various backgrounds (e.g., nursing, social work, psychiatry, psychology) receiving training in DBT (e.g., on-site study groups, workshops, supervisory meetings) can effectively master the approach (Hawkins & Sinha, 1998).

Extending on the description of the DBT program, the current dissertation also assessed if DBT possesses the same treatment characteristics rated as desirable to have in an empirically supported treatment by participants in the Nelson & Steele (2008) study. Nelson & Steele (2008) present evidence that characteristics other than research support (e.g., flexibility, recommendation by trusted colleagues) are also influential when practitioners are selecting treatments. It is important to explore if practitioners view DBT as possessing these same desirable treatment characteristics that may play an important role in whether or not DBT is

selected as a treatment. DBT is most often classified under the umbrella of cognitive behavioral therapies and several cognitive and behavioral interventions have been empirically validated; thus, it is hypothesized that participants identifying with a cognitive-behavioral, behavioral, or cognitive theoretical orientations will rate DBT as possessing more characteristics desired in empirically supported treatments.

Given research is important to guide practice, it is important to identify what practitioners would like to see in the literature. The current dissertation surveyed therapists and directors to understand what areas of focus may be important for future research. It is hypothesized that directors will desire to have more research focused on the cost-effectiveness and outcomes of DBT while therapists will desire to have more research on DBT in the natural setting and with clientele they serve.

CHAPTER 2

METHOD

Participants

The final sample was comprised of 91 directors of mental health agencies around the country and 29 therapists at sites with DBT. Of the directors surveyed, 54 (59.3%) were directors of sites without DBT and 37 (40.7%) from sites with DBT. Forty-five percent of directors identified as male while 54.9% identified as female. The majority of directors surveyed held a master's degree, M.S./M.A. (41.8%) and M.S.W. (28.6%), or a Ph.D. (15.4%). Other degrees represented in the sample included Psy.D. (4.4%), Ed.D. (2.2%), M.D. (1.1%), and B.A./B.S. (4.4%). Directors surveyed were asked to report the type of clinical setting where they worked. Table 1 summarizes the percentages of clinical settings identified by respondents.

Directors also identified the catchment area where they practiced. The catchment area was self-defined by participants. Table 2 summarizes the number of respondents in each self-defined and identified catchment area and whether or not the site has DBT.

The sample of therapists identified as mostly white (93.1%) females (93.1%). The majority of therapists reported earning a master's degree, M.S./M.A. (24.1%), M.S.W. (13.8%), M. Ed. (3.4%), or higher, Ph.D. (17.2%) or Psy.D. (6.9%). Therapists were asked to rank the top three theoretical orientations with which they identify. Table 3 provides information for the top ranked theoretical orientations reported by respondents. The majority of respondents (75.9%) reported more than six years post-licensure experience. Although most participants (51.7%) indicated working primarily with adults, some respondents reported working with children or adolescents (10.3%) or both (37.9%).

Measures

Brief questionnaires designed by the primary investigator were self-administered by clinical directors and therapists via Qualtrics, a web-based survey software. Although the surveys utilized do not have established psychometric properties, they have been developed based on available research. Surveys were customized to assess how DBT is implemented in the clinical setting, what barriers may be hindering implementation, to evaluate treatment considerations that may be important in selecting DBT as a treatment option, and to assess what areas future research should address.

The questionnaires are based, in part, on a survey developed by Nelson & Steele (2007). The original survey designed by Nelson & Steele (2007) assessed practitioner perspectives on empirically supported treatment use, including attitudes and importance of treatment considerations. Three surveys were designed to assess perceptions of clinical directors and therapists.

Survey 1 (Appendix A). Clinical directors who indicated there is a DBT program at their agency were asked descriptive questions about the site (i.e., type of clinical setting, population served, reimbursement options, and about themselves). Clinical directors were also asked what areas of research are lacking in the DBT literature and if any barriers to treatment implementation exist or have existed at their agency.

Survey 2 (Appendix B). The therapist most involved in the DBT program at various sites completed a brief online survey about their perceptions of DBT implementation. In general, questions retained from Nelson & Steele (2007) and utilized for the therapist survey include those on treatment characteristics, clinical work, and training (e.g., client gender, therapist degree). Questions about the characteristics of the treatment were retained from Nelson & Steele

(2007). Only characteristics with a mean of 5.35 or higher on a scale from 1-7 with 7 being the "presence of this characteristic would greatly increase the likelihood I would use this treatment" in Nelson & Steele (2007) were retained for the current study. This mean cut off was selected to maintain survey length to a minimum while retaining the ability to assess if DBT possesses desirable treatment characteristics of empirically supported treatments. Questions are framed to assess therapist agreement about whether or not DBT possesses each treatment characteristic (e.g., flexible, has empirical support from clinical research in the natural setting) on a scale from 1-7 with 1 being strongly disagree and 7 strongly agree.

Use of treatment manuals and outcome measures were assessed via a Likert scale ranging from 1-7 with 1 being never and 7 being always. Additionally, therapists were asked the same questions on future research as the clinical directors (e.g., "Please rate the importance of the following areas to be included in future research on DBT"). The importance of future research areas (e.g., randomized controlled trials, training therapists in DBT, implementing DBT at a mental health site) were rated on a scale from 1-4 with one being not important and four being very important.

Specific questions about therapist training in DBT, supervision, and work in DBT, type of clientele served, what types of diagnoses clientele present were included and assessed via checklists and open-ended questions. The question about client diagnoses resembles the question on the Nelson & Steele (2007) survey, with a couple of modifications. The internalizing disorders category was split into two categories of depression and anxiety. Also, borderline personality disorders and other personality disorders were included in the check list. The percentage of time spent on the various components (e.g., individual therapy, skills training, telephone consultation) and skills (e.g., emotion regulation, mindfulness, distress tolerance) were

also incorporated in the survey. Questions about any modifications to the standard DBT protocol and time devoted to DBT were assessed via an open-ended question. Therapist demographics (e.g., race, gender) were assessed by multiple choice questions. Therapist theoretical orientations were assessed by a rank order system.

Survey 3 (Appendix C). Directors at sites without DBT were administered a similar questionnaire as directors with DBT. Two additional questions assessing the fit and desirability of DBT for the site (i.e., "Would DBT be a suitable therapy at your agency given the clientele you serve?, Would you like to have a DBT program at your agency?") were also included on the survey for clinical directors who indicated there is not a DBT program at their site.

Procedures

A sample of clinical directors and therapists working in a variety of settings were drawn via a random sampling strategy. In the first stage, regions of the U. S. were divided into the four regions utilized by the U. S. census: Northeast, South, Midwest, West. States in each region were randomized by Microsoft Access 2007. The first six random states in each region were selected and lists of mental health facilities within each state were generated from the SAMHSA website and Google searches for university counseling centers. Table 4 provides a list of states selected. SAMHSA provides listings for hundreds of sites per state per setting (i.e., inpatient, outpatient) and has been utilized in other research (Nelson & Steele, 2007). The Google search term for university based mental health centers was "University counseling center [state]."

Lists were generated for inpatient, outpatient, and university counseling centers, with every third site on each list selected. Clinical directors, defined as individuals in a clinical administrative role, at mental health facilities in various regions of the U. S. were contacted by telephone or email and recruited to participate in an online survey about DBT implementation.

During the telephone survey, a brief explanation of the study was provided and the director was asked if DBT is currently implemented at their site. The information about whether or not a site has a DBT program was kept in the strictest confidence. Percentages of programs conducting and not conducting DBT is reported along with any descriptive data. If the director chose to participate further in the study, they were emailed a brief description of the study, informed consent, and a link to an online survey to complete. All responses were returned to the researcher electronically and kept in strictest confidence. If the director declined participation in the online survey, verbal consent was sought for inclusion of a single piece of information – whether or not a DBT program is used at their agency.

Additionally, clinical directors at sites with DBT willing to participate in the study were also asked to forward a separate recruitment email including a brief description of the study, informed consent, and a link to an online survey to the therapist who is most involved with DBT at their site. In order to match clinical directors with therapists, each site was assigned a code number which was entered by the therapist and director at the beginning of each survey.

All online surveys were self-administered by participants via Qualtrics, a web-based survey company. Data was returned to the investigator electronically. Completion of the online surveys indicated that the individual consented to participate. Three or more weeks from the distribution of the survey, a reminder email was sent to potential participants requesting participation. Respondents were offered a brief synopsis of the results at the conclusion of the study if they provided the researcher with a mailing address or email. Mailing and email addresses provided electronically were separated from the data upon receipt and kept in a separate secure location. All information was placed in a secure location to maintain the confidentiality of the participants.

Response rate. Initially, 651 directors of outpatient, inpatient, and university counseling centers were contacted via phone or email requesting participation in the study. Of those directors contacted 60 participated (9.2%) in the phone survey and 30 (4.6%) responded to the email survey. Directors at sites with DBT (n = 21; 3.2%) forwarded a recruitment email to the therapist involved in DBT. Of the therapists contacted, 8 (38.1%) responded to the email survey. Given the low response rate, an additional 634 directors were contacted via phone or email. In order to select potential participants for the second round, the same list generated at the beginning of the study was utilized; however, the researcher began at the end of the list, as opposed the beginning of the list, and selected every third site for potential participation. Among the directors contacted, 132 (20.8%) participated in the phone survey and 77 (12.1%) responded to the email survey. Again, directors at sites with DBT (n = 66; 10.4%) forwarded a recruitment email to the therapist involved in DBT and 29 (43.9%) therapists responded to the email survey. Overall, 18 directors declined to participate in the email survey and 8 declined to participate in the study. Time constraints were the most frequent reason for declining participation.

A total of 210 directors participated in the phone survey, and 192 agreed to have the email survey sent them. Eighty-seven directors at sites with DBT agreed to forward a recruitment email to the therapist involved in DBT. Table 4 provides percentages of respondents to the phone survey from each state selected by sites with and without DBT. Among the individuals who were sent and responded to the email survey, 93 directors and 29 therapists completed the email survey.

Of the completed director surveys, two cases were deleted because more than half of the values were missing, bringing the total number of useable director surveys to 91. Eight cases had missing values for all barrier questions and three cases had more than half missing values for

barrier questions. Half of these missing values may be explained by respondents answering “no” to the screening question assessing whether or not the site encounter barriers to implementation of DBT. The remaining cases with missing values were retained for subsequent analyses and excluded if the question was needed for the specified analyses. Missing values for therapist surveys were sparse therefore all cases with missing values were retained for subsequent analyses and excluded if the question was needed for the specified analyses.

CHAPTER III

RESULTS

Analyses are grouped by the research questions: implementing DBT, how DBT operates, and research to include in future literature. Preliminary assumption testing was conducted and results reported with appropriate analyses.

Implementing DBT

First, sites with and without DBT are described and relevant group comparisons reported. One way MANOVAs were employed to investigate differences related to barriers and resources of sites. For the MANOVA analyses, the independent variable was whether or not a site utilized DBT. Chi-Square analyses were utilized to investigate differences among sites based on demographic variables.

Among sites surveyed via phone and online, 45.3% reported providing DBT in some form while 54.7% of sites reported they did not have any DBT services. Table 5 provides information on the types of setting with and without DBT as reported by participants who completed the online survey. The majority of respondents at sites without DBT (66.7%) reported they would desire to have DBT at their site. Likewise, 74.1% indicated that DBT would be suitable for the clientele they serve. Additionally, participants reported on the income of the site which is summarized in Table 6. University tuition fees were cited as the most frequent source of income for participants who selected the “Pay: other” option.

Barriers to implementing DBT. Initially, directors indicated whether or not they experience or experienced barriers when implementing DBT. Chi-square (with Yates Continuity Correction) analyses revealed no significant differences (χ^2 (1, n = 90) = .38, p = .54) among

sites with and without DBT and whether or not the site experienced barriers to implementation. Table 7 delineates the numbers of sites that reported experiencing barriers.

Next, directors were asked to report the strength of several potential barriers that they may have encountered. The influence of each barrier was rated on a 6-point scale, with lower numbers indicating the barrier had less of an impact on implementation while higher numbers suggested the barrier strongly hindered implementation. The questions comprising the group of dependent variables referred to as barriers are listed in Table 8. Three barrier questions were excluded from the MANOVA analyses and are outlined in Table 10. These questions were excluded because statistical comparisons were not relevant given the sample and question. Rather, descriptive data is presented.

Preliminary assumption testing was conducted and checked for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with only one significant violation noted. Levene's test of equality of covariance matrices was significant for two of the dependent variables, groups not available and space limitations; therefore, an adjusted alpha level of .025 was used as recommended by Tabachnick & Fidell (2001).

It was hypothesized that sites without DBT would experience more barriers to implementation than sites with DBT. Indeed, results indicated that sites without DBT differed significantly from sites with DBT on combined measures of barriers, F (7, 58) = 3.02, p = .009; Wilks' Lambda = .73; partial eta squared = .27. When results for dependent variables were considered separately, three variables reached statistical significance, groups not available, F (1, 64) = 7.31, p = .009, partial eta squared = .10, insufficient funding, F (1, 64) = 8.83, p = .004, partial eta squared = .12, and space limitations, F (1, 64) = 12.49, p = .001, partial eta squared =

.16. Utilizing Bonferroni adjusted alpha level of .0025, space limitations was the only variable that remained significant. The mean scores revealed that directors at sites without DBT (*M* = 2.97, *SD* = 2.08) reported space limitations were more of a barrier than directors at sites with DBT (*M* = 1.55, *SD* = .89). Table 9 reports the means and standard deviations for all barrier questions.

Resources of sites. A one-way MANOVA was utilized to explore differences between sites with and without DBT regarding resources of sites. Four dependent variables were utilized for these analyses which are listed in Table 11. Preliminary assumption testing was conducted and revealed only one significant violation; again, Levene's test for equality of covariance matrices was violated for one of the dependent variables, DBT fit with reimbursement model. Therefore, an adjusted alpha of .025 was utilized (Tabachnick & Fidell, 2001).

Resources of sites were assessed on a 6-point scale with scores at the lower end indicating the resource was not present at the site while scores at the upper end suggested the resource was present at the site. It was hypothesized that sites with DBT would experience better funding, have lower therapist turnover, more time to commitment to a new therapy, and have a reimbursement model that fits with DBT. Indeed, the analyses revealed statistically significant differences between sites with and without DBT on the combined dependent variables, F (4, 86) = 6.44, $p < .001$ Wilks' Lambda = .77; partial eta squared = .23. When the results for the dependent variables were considered separately, with Bonferroni adjusted alpha level of .006, the following variables reached statistical significance, sufficient funding (F (1, 89) = 8.98, p = .004, eta squared = .09), time available (F (1, 89) = 11.34, p = .001, eta squared = .11), and DBT fit with reimbursement (F (1, 89) = 13.92, $p < .001$, eta squared = .14). A summary of the mean

scores with standard deviations is located in Table 12. Overall, sites with DBT tended to report resources as more present at their site than sites without DBT.

How DBT Operates

Next, how DBT operates is described and characteristics of DBT analyzed via a one-way MANOVA. Descriptive statistics were employed to describe what populations DBT programs are serving, components of DBT being implemented, training received on DBT, and materials utilized by therapists.

Respondents identified as a DBT individual therapists (n = 9; 31%), skills group therapists (n = 9; 31%), or both (n = 17; 58.6%). The majority of respondents who engaged in both individual and skills group therapy also reported spending 10-50% of their time in group therapy while spending 20-90% of time in individual therapy, respectively. One outlier was excluded because they reported a number that was not plausible (i.e., 100% of time in both group and individual). The most commonly reported division of time in each mode of therapy was 50-50.

Close to 79% of respondents indicated that others at their site were involved in DBT. The number of other individuals involved ranged from 1-45 with a mean of 12.8. Individuals recorded an average of 17.63 (SD = 14.07) hours a week were devoted to direct service in DBT at their agency. The number of clients served by DBT ranged from 4-75 (M = 26.44, SD = 20.79). Percentage of clients served by DBT were mostly female (M = 85.24, SD = 14.65); however, some males (M = 18.27, SD = 13.76) also received DBT. Respondents rank ordered the three most frequent clinical diagnoses of clients who receive DBT. For ease of dissemination, only the top ranked diagnosis is reported. Table 13 summarizes the information. Participants also estimated the SES of the clientele served which is provided in Table 14.

Aspects of DBT utilized. Respondents provided estimated percentages regarding time spent in each aspect of DBT. Table 15 summarizes the results. If telephone coaching was provided, the majority of respondents (44.8%) reported less than one hour a week was devoted to telephone coaching while the remaining respondents indicated up to 4 hours a week were devoted to telephone coaching.

Skills training. If skills training was provided, respondents reported the percentage of time spent in each skill. A synopsis of the results is in Table 16.

Modifications. Respondents were given the opportunity to provide information regarding any modifications to DBT via an open-ended question. Table 17 denotes the common themes recorded with the most common themes listed first. Many of the logistical changes reported tended to be a more flexible attendance policy for skills group participants, not requiring group in order to be part of individual therapy, and frequency of individual therapy.

Characteristics of DBT. Participants also rated DBT on several characteristics identified by research to be important in treatment selection. Table 18 provides the means and standard deviations for the specific characteristics as they relate to DBT.

To better understand how theoretical orientation may impact view of DBT, participants identifying with behavioral or cognitive-behavioral/cognitive as their top theoretical orientation were grouped together and all other theoretical orientations identified were grouped together. Similar to Nelson & Steele (2008), differences among respondents identifying with behavioral or cognitive-behavioral/cognitive and other theoretical orientations on characteristics of DBT were assessed via a one-way MANOVA. The individual characteristics listed in Table 18 served as the dependent variables. Preliminary assumption testing revealed no serious violations.

It was hypothesized that respondents identifying with a cognitive-behavioral theoretical orientation would rate DBT higher on characteristics than respondents identifying with other orientations. For the one-way MANOVA, no significant differences were noted (F (1, 27) = 2.04, Wilks' Lambda = .24, p = .12, partial eta squared = .76) among respondents who identified with behavioral or cognitive-behavioral/cognitive and other theoretical orientations.

Materials utilized. Participants recorded their use of specific materials related to DBT. The majority of respondents (81.7%) utilized Linehan's (1993b) Skills Therapy Manual for Borderline Personality Disorder and the available handouts (86.1%) at least 2-3 times a month. Likewise, a large percentage, 72.3, indicated using Linehan's (1993a) Cognitive-Behavioral Therapy for Borderline Personality Disorder once a month or more. Other DBT Manuals were utilized once a month or more by a number of respondents (70.3%). Over half of participants (68.9%) endorsed using internet resources at least than once a month. Approximately, one third of participants (37.8%) indicating they used outcome measures at least once a month. The results are outlined in Table 19.

Training and experience. Respondents described their training and experience in DBT via several questions. Table 20 summarizes the various types of training respondents received. Respondents reported 2-20 years (M = 7.56, SD = 5.03) of experience conducting DBT. On average, most respondents (55.2%) reported spending several days at workshop trainings. Qualitative data related to time spent at workshops revealed participants engaged in workshops ranging from 2 days to several weeks. The average amount of time spent clinically applying DBT was reported as 6.43 years (SD = 4.46). Additionally, 51.7% of respondents received supervision for DBT.

Future Research on DBT

Finally, the data collected about what future research would be desirable to include in the literature is analyzed and presented. Descriptive statistics were utilized to gain a better understanding of what clinical directors and therapists report as research that is important to include in the literature.

All participants (*N*=120) were asked to rate the importance of various types of research to include in future literature on DBT. Table 21 and 22 provides a list of all the research variables, along with means and standard deviations. Directors were asked to rate the importance of research on a 6-point scale with scores at the lower end indicating less importance while scores on the higher end suggested greater importance. Therapists rated the importance of various research on a 4-point scale, again, with lower scores noting less importance and high scores more importance.

Overall, the mean ratings for directors and therapists suggest that all participants viewed the various types of research as important to include in future research on DBT. Given the scale differences it was not possible to assess any significant differences between directors and therapists on future research desired.

CHAPTER IV

DISCUSSION

Understanding the clinical utility of DBT from a provider perspective was the main aim of this study. Before the clinical utility could be assessed, it was important to establish the availability of DBT. Therefore, the discussion section will first describe the findings on the availability of DBT, followed by topics that more specifically address the clinical utility of DBT (i.e., feasibility of implementation, how DBT operates in the clinical setting, characteristics of DBT). Finally, implications for future research and limitations of the study are discussed.

Availability of DBT

The results suggest that the availability of DBT remains limited, but may be gaining widespread implementation at a variety of settings. Overall, more sites reported that DBT was not available than sites that did. However, DBT was available at a variety of settings including community mental health centers, inpatient centers, and veteran's administrations. Given that DBT was designed to address concerns common among difficult-to-treat populations, and the vast literature available on DBT (for a review see, Smith & Peck, 2004, Bloom, Woodward, Susmaras, & Pantalone, 2012, Koons et al., 2001, Dimeff & Koerner, 2007), it is not surprising that DBT would be available in these settings. It was interesting to find DBT available at a few (i.e., n = 3) university counseling centers (UCCs). The sample included university/college counseling centers (UCCs) to increase the diversity of settings sampled, but it was unclear if DBT would be available at these settings given the dearth of research in the area. Given the recent RCT conducted by Pistorello et al. (2012) that reported positive outcomes and ways to address common barriers to implementation, it will be interesting to see if DBT becomes more readily available in this setting. However, additional research on DBT in university counseling

centers and other settings is a continued need to bolster the empirical support and clinical utility of DBT in various settings.

Populations served by DBT. Most clients served by DBT were identified as female; however, a small percentage of males also received DBT. The most common diagnosis of individuals receiving DBT was BPD followed by depressive and anxiety disorders, respectively. These results are congruent with sample populations often found in current research on DBT. It was surprising that the results did not include a larger eating disorders population given the positive literature on the effectiveness and efficacy of DBT with eating disorders.

Among sites surveyed that do not have DBT, it appears the majority of participants find DBT both desirable (i.e., 66.7%) and suitable (i.e., 74.1%) for the population they serve. DBT's desirability and suitability may be related to the strong efficacy and effectiveness research coupled with widespread efforts to disseminate research on DBT. Currently, DBT is listed as an empirically supported treatment for BPD with strong research support by the American Psychological Association (n.d.). SAMHSA (2006) also identifies DBT as an empirically supported treatment for BPD. Additionally, at least one meta-analysis found moderate effect sizes for suicidal and self-injurious behaviors favoring DBT when compared to "treatment-as-usual" (Kliem, Kruger, & Kosfelder, 2010). DBT's desirability and suitability may indicate that administrators have favorable attitudes towards DBT and believe it would be useful at their organization. This finding supports the continued implementation of and training in DBT across the country. However, the availability of DBT appears to be limited.

Feasibility of Implementation

Barriers to implementation. Part of the availability of DBT may be related to barriers to implementation. In the present study, it was hypothesized that sites that experienced fewer

barriers would have DBT available. The current study did not fully support this hypothesis. Rather, the results suggest sites surveyed experience barriers relatively equally; however, the type and impact of the barrier encountered differed. When asked dichotomously about experiencing barriers, no significant differences were observed in this study. However, when asked about specific barriers they may have experienced, some differences among sites with and without DBT emerged. Caution should be used when interpreting these results because barriers were assessed via self-report and tapped into perceived barriers for sites without DBT. It is unclear if sites with DBT reported actual or perceived barriers, or both.

Participants at sites with and without DBT identified insufficient funding as the most impactful barrier followed by training. These findings imply that insufficient funding is among the top barriers to implementation. Not surprising, space limitations was a significantly larger barrier to implementation at sites without DBT than at sites with DBT. Without space, it seems next to impossible to implement DBT unless funding is gathered to improve or increase space.

Reviewing the means of the barriers clients not interested and lack of skills group attendance indicates that sites with DBT rated these as more of a barrier than sites without DBT. This brief examination of the data may suggest that after implementation begins other hindrances to DBT implementation may exist. It is unclear how impactful these barriers are to implementation or if other unknown barriers exist after implementation begins.

Resources of sites. The present study hypothesized that sites reporting more resources would be more likely to have DBT. The current study seems to support this notion. Sites with and without DBT differed significantly on three of the four assessed resources (i.e., sufficient funding, time available, and DBT's fit with reimbursement model). Specifically, sites without DBT indicated that these resources were less true at their agency. Concerns related to funding,

time, and DBT's fit with reimbursement are not unique to this study. In a qualitative study examining concerns related to DBT implementation, Herschell et al., (2009) participants also voiced concerns with sufficient funding and DBT's fit with the reimbursement model. Moreover, Ben-Porath et al. (2004) also discusses the importance of funding and time to the implementation of DBT. In contrast, this dissertation did not concur with Ben-Porath et al.'s (2004) specific barrier to DBT implementation (i.e., staff turnover). Rather, the results suggest this was not a large of a concern for participants.

It is not surprising that fit with reimbursement model is also an important consideration of administrators when selecting and implementing an intervention. After an intervention is implemented and funding is exhausted, it is important that the program be sustainable. Moreover, sites without DBT, overall, reported less grant funding than sites with DBT, albeit the overall percentage of grant funding as income was small for all sites. Additionally, sites with DBT tended to have Medicaid/Medicare reimbursements as their primary source of income which does not have as many limits to the number of sessions one may receive. Overall, these results point to the potential impact of external factors on implementation.

How DBT Operates

It was hypothesized that the more resources available, more components of DBT would be utilized. The small number of matched responses hindered the assessment of this hypothesis directly. However, descriptive data does provide some information on how DBT operates in the clinical setting.

Approximately, half of respondents identified as both an individual and group therapist. A third identified as individual therapists or group therapists only, respectively. Participants reported focusing on individual and group components with most respondents indicating an even

split (i.e., 50-50) among the time when the therapist was involved in more than one modality. A small percentage of participants reported utilizing skills training in an individual format. Given Linehan's (1993b) recommendation to present skills in a group format, although skills in an individual format is possible, it is not surprising that more sites present DBT skills training via the group modality.

Regarding skills training specifically, participants reported spending approximately a quarter of time on each major skill (i.e., core mindfulness, distress tolerance, interpersonal effectiveness, and emotion regulation). A few sites indicated the time spent on skills was modified (i.e., increased or decreased) based on the age or cognitive functioning of the clients. Also, a few participants indicated that the handouts were modified to fit the clientele served. Clinicians appear to be optimizing implementation based on recommendations from Linehan (1993a, 1993b) and the varying needs of clientele.

For participants in this study, less focus was given to case conferences and telephone coaching. This finding is surprising given Linehan's recommendation that the case conferences are a way to buffer therapist burnout, assist in practicing DBT, and should be conducted weekly. The lack of case conferences may lead to increased therapist burnout, and in turn, DBT may eventually end as a treatment option at the setting. Another potential problem that may emerge if case conferences are not utilized is therapist drift. A lack of adherence to the standard protocol may impact clinical outcomes in DBT. Literature on multisystemic therapy (MST) highlights how treatment fidelity to MST relates to positive clinical outcomes (Henggeler, 2001). Consequently, individuals conducting MST engage in quality assurance protocols that include weekly on-site group supervision and weekly consultation to promote treatment fidelity and addressing organizational barriers (Henggeler, 2001). This information points to a great need to

explore how therapist adherence to the DBT protocol impacts clinical outcomes. If DBT is similar to MST and treatment fidelity is related to clinical outcomes, it would be imperative for sites to include case conferences or other effective forms of supervision and consultation when implementing DBT.

A few participants reported that case conferences were held more sporadically or attendance was not mandatory. It is speculated that this modification may be related to case conferences not being reimbursable. At places where case conferences are part of the regular work week, like UCCs, it may be easier to implement this aspect of DBT fully and with high attendance rates and without the need for reimbursement. Future research should also investigate how to address the potential barrier of case conferences not being reimbursable.

Regarding telephone coaching, a few sites reported telephone coaching was not available. Often participants reported having a crisis line available to clients, but individuals working the crisis line may or may not be trained in DBT. If telephone coaching was available, a minimal amount of time each week was spent in this aspect, suggesting that telephone coaching may not be time intensive to implement. Alternatively, the availability of telephone coaching may also be related to reimbursement constraints. Yet another explanation may be that practitioners may not view client contact at home positively or they may hold other negative attitudes towards telephone coaching that impact the implementation of this component. Future research on practitioner attitudes towards telephone coaching may highlight important relationships with telephone coaching and what external aspects may hinder implementation of this component.

Case conferences and telephone coaching may be among the major concerns of administrators when considering DBT's fit with the reimbursement model. Moreover, the inability to implement these aspects fully may lead some agencies and clinicians to not select

DBT for implementation. However, an increasing amount of literature devoted to the utility of telephone coaching and how to implement it effectively may address some of the provider concerns around implementing the telephone coaching component of DBT (e.g., Manning, 2011; Ben-Porath, 2004; Ben-Porath & Koons, 2005; Linehan, 2011).

Modifications to the standard DBT protocol seem to be ways sites are addressing any barriers to implementation. For example, skills group attendance was identified as a large barrier at sites with DBT. Additionally, some sites indicated they allowed for more flexibility around group skills attendance. It is posited that sites where skills group attendance was more problematic, attendance policies may have been more flexible. This modification may or may not impact the effectiveness of DBT. The lack of clear research on attendance and how it relates to outcome hinders clear conclusions. One study does address this concern in the university counseling center setting and outlines an efficacious modification to the standard attendance policy when regular absences are expected (Pistorello, et al., 2012).

Again, clinicians and administrators seem to be optimizing treatment implementation given experienced barriers and available resources. Additional research is needed to assess fully how attendance impact outcomes in various settings. It is difficult to know how much a client benefits from skills training when they are not in attendance to learn the new skill. Furthermore, it may be important to investigate the impact of each component (i.e., individual, group, case conferences, telephone coaching) of DBT on outcomes. Information along these lines may assist in understanding what components may be modified to facilitate implementation.

On average, several individuals at sites with DBT are involved in the provision of DBT and reported a moderate portion of hours a week practicing DBT. These findings are consistent with the Behavioral Tech (2013, the company devoted to training mental health professionals in

DBT) website recommendations that teams of clinicians participate in the initial intensive training workshop. It also appears that Behavioral Tech, LLC (2013) is assisting in matching individual practitioners with consultation teams given their new training option available which may help in addressing concerns related to working at a small agency or private practice where a consultation team is not readily available.

The average ratio of clients to therapists reported by participants was 2 to 1 which is congruent with recommendations by Linehan (1993a, 1993b) that therapists have a small caseload of individuals with BPD. However, a reduced caseload may also interact with reimbursement and funding concerns. That is, sites may not be able to afford therapists a smaller caseload which may impact implementation decisions.

Training and expertise. In addition to several years of experience, participants appear to be well trained with over half of respondents identifying attending training events (e.g, formal conference/class on DBT) held by Linehan and/or colleagues, intensive workshops on DBT provided by DBT specialists, or a small conference/training lead by an individual trained in DBT. Trainings on DBT appear to be time intensive with participants reporting attending workshops lasting from two days to several weeks. These reports of training are consist with information gathered from the Behavioral Tech, LLC (2013) website that indicates the initial intensive training in DBT from Linehan and colleagues is ten days and follow-up trainings also lasting five days. Indeed, training in DBT is both time intensive and costly with intensive training tuition costing in the thousands of dollars range. Given the time needed for training and cost associated, it makes sense that sites without DBT would identify training and funding as large barriers to implementation.

Additionally, nearly half of the respondents indicated they participated in on-site study group, peer support, and consultation meetings. Approximately half of respondents received supervision. These reports are surprising given most training in new skills require both didactic instruction and supervised experience. It would be interesting to assess, in future research, if individuals considered case conference as part of supervision, if they were only reporting individual supervision, or if they were reporting supervision as both case conferences and individual. Interestingly, one participant reported receiving graduate school training in DBT. Training in graduate school seems to be one cost effective way to disseminate the research and practice of DBT.

Materials utilized. It appears that most respondents utilize relevant materials in their practice. The Skills Training Manual for Borderline Personality Disorder (Linehan, 1993b) and the handouts included were utilized at least weekly by more than half of respondents suggesting this may be among the most used resources for clinicians when practicing DBT. The Cognitive-Behavioral Therapy for Borderline Personality Disorder (Linehan, 1993a) was also utilized by a majority of respondents at least once a month. Other manuals on DBT also appear to be useful given they were also utilized by approximately half of respondents at least 2-3 times a month. Internet resources and outcome measures were utilized less frequently. It was not surprising that participants indicated they utilized manuals on DBT frequently. Not only are the handouts available in the manuals part of the skills training, previous research indicates that clinicians find manuals helpful in clinical practice (Najavits et al., (2004).

Given the large number of available manuals on DBT, possible internet resources, and outcome measures, the current study was not able to assess the utilization of the individual resources. Additionally, survey length also hindered further assessment of the use of individual

skills training handouts. However, at least two known studies have explored consumer perspectives on the usefulness of individual skills. One recent study out of New Zealand reported participants rated "What good are emotions?" as the most useful skill (Dewe & Krawitz, 2007). Another small-scale, qualitative study reported that participants most often used "self-soothe," "distract," and "one mindfulness" (Cunningham et al., (2004). It would be interesting to assess, in future research, if therapists hold a similar or different view on the usefulness of each DBT individual skill.

Characteristics of DBT

The present study hypothesized that participants identifying with a behavior or cognitive-behavioral theoretical orientation would rate DBT higher on important selection characteristics of empirically supported treatments than those identifying with other orientations. The data did not support this notion. According to participants, DBT appears to possess many important selection characteristics of empirically validated treatments. For instance, participants agree that DBT is based on an appealing, well-articulated theory as well as a theory that has worked for participants in the past. It is plausible that DBT may have been selected as a treatment to be implemented because of its clear and applicable theory. DBT's clear and applicable theory may also be a contributing factor to its desirability.

Additionally, DBT's ease of implementation was rated low by participants, which may contribute to the availability of DBT. Although practicing DBT, it appears participants did not find it easy to implement. The Behavior Tech, LLC (2013) seems to be attempting to address this by offering support to large agencies interested in implementation. Participants in Nelson & Steele (2008) rated ease of implementation and treatment flexibility among the top considerations when selecting a treatment. However, participants in the present study rated

DBT's flexibility and ease of implementation lower than most other characteristics. It is plausible that the current rate of implementation may be, in part, related to the view that DBT is not easy to implement.

Future Research

The available data does suggest some future areas for continued research on DBT. Directors seemed to agree that research on training therapists and implementation at mental health agencies is of paramount importance while randomized controlled trials and research with heterogeneous populations were rated as lower importance to include in future research on DBT. Therapists also seemed to agree that research on implementation is very important to include in future research, along with research resembling "real-world" clinical conditions. Therapists also rated research with heterogeneous populations and randomized controlled trials as lower importance to include in future research. It may be that the current literature on DBT has established the efficacy in the views of directors and therapists. Therefore, research on more practical implications continues to be needed.

Along with the explicit desires of directors and therapists regarding future research, the present dissertation points to other areas of potential research. For instance, specific types of materials clinicians find useful in their practice of DBT may assist in both training clinicians and the practice of DBT. If training materials are geared to what is found to be most useful by clinicians and clients, training may be optimized. Some available research has identified the efficacy of various modes of learning (e.g., Skills training manual, e-learning course, multimedia online course, instructor led workshops) when disseminating information and training in DBT (Dimeff, Woodcock, Harned, & Beadnell, 2011; Dimeff, et al., 2009). Overall, both studies

suggest that multimedia e-learning or an online course outperform the manual only learning regarding increased knowledge of the treatment.

Examining how barriers and resources directly impact treatment fidelity may also be important for future research to explore. Participants indicated some modifications were taking place and at some sites telephone coaching and/or case conferences were not available. A component analyses study is needed to understand the impact of the various components on outcome. The researcher attempted to find the component analyses that was purported to be ongoing in 2006 out of the BRTC. However, efforts were fruitless. Research around how to address specific barriers may also assist sites with implementation, especially for sites that encounter numerous, strong barriers and few resources. Additionally, research on barriers that sites with DBT experience after implementation may also be beneficial to assist sites in addressing these barriers and possibly easing implementation.

Future research should also examine practitioner satisfaction with DBT given it was not addressed specifically in this study. Additional research on consumer perspectives, for instance large-scale, quantitative investigations, along with cost-effectiveness studies, will be needed to further address the clinical utility of DBT.

Limitations

Several limitations exist for the current dissertation and should be acknowledged. There is limited information regarding nonrespondents in the study. Therefore, it is uncertain if nonrespondents differed from respondents in important ways. Respondents and nonrespondents were from all 24 states selected. All sites identified as a university counseling center were gathered from the Google search for university counseling center while all other settings were

drawn from the SAMHSA database. The smaller sample size hindered the assessment of two of the hypotheses and limits the generalizability of the study.

The surveys were designed by the primary investigator and not standardized or pilot tested prior to this study. In addition, the survey length, although chosen to minimize participants' time commitment, is a limitation. Information on where a site is with implementation (e.g., contemplating implementation, beginning implementation, fully implemented) was not explored; but may impact how a site perceives barriers and resources. Because the survey only assessed large global barriers, resources, and practice of DBT, it was not possible to provide information on more specific barriers or concerns that may fall into the larger categories that were assessed. Interactions among barriers and resources were likewise not explored in the current dissertation. In addition, the surveys were all self-report and assess perceptions of barriers and resources. If actual observations of barriers and resources were employed, the results may differ.

Moreover, the study did not directly ask therapists about their satisfaction with DBT, nor was actual treatment fidelity investigated. DBT was broadly defined in this study; hence, adherence to the standard protocol likely varied. Assessment of treatment fidelity has been explored by DiGorgio et al. 2010.

An additional limitation of the study is that it was not possible to assess how DBT implementation, income, and funding interact. For instance, do the Medicaid/Medicare or other insurance systems allot for DBT services? Alternatively, how much grant support is needed to facilitate and maintain DBT implementation?

Conclusions

Overall, DBT seems to be gaining more use and popularity. The strong research base on the efficacy and effectiveness likely sparked the implementation of DBT. In turn, this study seeks to inform research by presenting information on the implementation of DBT and provider perspectives of DBT. Although it may not be widely available, the results indicate DBT is being implemented in a variety of settings around the country. It appears that DBT is appealing, but perceived as not easy to implement. Despite encountering barriers and limited resources, sites continue to implement DBT. Funding and DBT's fit with reimbursement seem to be among the top concerns in this study and were echoed in other research. Indeed, as suggested by other authors (e.g., Nelson & Steele, 2007, 2008; Ben-Porath et al., 2004), more than efficacy and effectiveness factors impact the selection of an intervention.

It seems that clinicians and administrators may strive for an optimized implementation by addressing systemic factors with logistical modifications while adhering to the theory of DBT. It is likely that this pattern of optimized implementation is not unique to DBT. Based on the available data, it is theorized that barriers and resources of sites not only determine whether or not DBT is implemented, but also how DBT is utilized and modified, although the present study sample was too small to assess this relationship directly. Future research should explore these hypotheses more fully.

Given the need for funding to implement effective and efficacious interventions, policies should be implemented to enhance to the availability of funding. However, it is not easy to rally politicians and other potential stakeholders around mental health funding in this society given the perceived value of and stigma associated with mental health. Perhaps as cost-effectiveness studies proliferate and efforts to decrease stigma progress, then funding for mental health will

increase allowing for the implementation of needed interventions. The APA works closely with policy makers in Washington, DC to promote mental health; however, efforts should also be made at the state, county, and local levels.

REFERENCES

American Psychological Association. (n.d.). Dialectical behavior therapy for borderline personality disorder. Retrieved from http://www.psychologicaltreatments.org/

Barley, W. D., Buie, S. E., Peterson, E. W., Hollingsworth, A. S., Griva, M. Hickerson, S. C., … & Bailey, B. J. (1993). Development of an inpatient cognitive-behavioral treatment program for borderline personality disorder. J*ournal of Personality Disorders, 7,* 323-240.

Behavioral Research Therapy Clinics. (2006). Component analysis of DBT for suicidal BPD women. Retrieved July 2008 from http://depts.washington.edu/brtc/ongoing-research/current-trials

Behavioral Tech, LLC. (2013). Training. Retrieved http://behavioraltech.org/training/

Behavioral Tech, LLC. (2013). Training: Implementing DBT into a mental health system. Retrieved from http://behavioraltech.org/training/options.cfm

Ben-Porath, D. D. (2004). Intersession telephone contact with individuals diagnosed with borderline personality disorder: Lessons from dialectical behavior therapy. *Cognitive and Behavioral Practice, 11,* 222-230.

Ben-Porath, D. D., & Koons, C. R. (2005). Telephone coaching in dialectical behavior therapy: A decision-tree model for managing inter-session contact with clients. *Cognitive and Behavioral Practice, 12,* 448-460.

Ben-Porath, D. D., Peterson, G. A., & Smee, J. (2004). Treatment of individuals with borderline personality disorder using dialectical behavior therapy in a community mental health setting: Clinical application and a preliminary investigation. *Cognitive and Behavioral Practice, 11,* 424-434.

Beutler, L. E., & Howard, K. I. (1998). Clinical utility research: An introduction. *Journal of Clinical Psychology, 54,* 297-301.

Bloom, J. M., Woodward, E. N., Susmaras, T., & Pantalone, D. W. (2012). Use of dialectical behavior therapy in inpatient treatment of borderline personality disorder: A systematic review. *Psychiatric Services, 63,* 881-888.

Bornovalova, M. A., & Daughters, S. B. (2007). How does dialectical behavior therapy facilitate treatment retention among individuals with comorbid borderline personality disorder and substance use disorders? *Clinical Psychology Review, 27,* 923-943.

Brassington, J., & Krawitz, R. (2006). Australasian dialectical behaviour therapy pilot outcome study: Effectiveness, utility and feasibility. *Australasian Psychiatry, 14,* 313-319.

Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology, 66,* 7-18.

Clarke, G. N. (1995). Improving the transition from basic efficacy research to effectiveness studies: Methodological issues and procedures. *Journal of Consulting and Clinical Psychology, 63,* 718-725.

Comtois, K. A., Elwood, L., Holdcraft, L. C., Smith, W. R., & Simpson, T. L. (2007). Effectiveness of dialectical behavior therapy in a community mental health center. *Cognitive and Behavioral Practice, 14,* 406-414.

Cunningham, K., Wolbert, R., & Lillie, B. (2004). It's about me solving my problems: Clients' assessments of dialectical behavior therapy. *Cognitive and Behavioral Practice, 11,* 248-256.

DiGiorgio, K. E., Glass, C. R., & Arnkoff, D. B. (2010). Therapists' use of DBT: A survey of clinical practice. *Cognitive and Behavioral Practice, 17,* 213-221.

Dimeff, L. A., & Koerner, K. (2007). *Dialectical behavior therapy in clinical practice: Applications across disorders and settings.* New York, NY: Guilford Press.

Dimeff, L. A., Koerner, K., Woodcock, E. A., Beadnell, B., Brown, M. Z., Skutch, J. M., . . . & Harned, M. S. (2009). Which training method works best? A randomized controlled trial comparing three methods of training clinicians in dialectical behavior therapy skills. *Behaviour Research and Therapy, 47*, 921-930.

Dimeff, L. A., Woodcock, E. A., Harned, M. S., & Beadnell, B. (2011). Can dialectical behavior therapy be learned in highly structured learning environments? Results from a randomized controlled dissemination trial. *Behavior Therapy, 42*, 263-275.

Durrant, C., Clarke, I., Tolland, A., & Wilson, H. (2007). Designing a CBT service for an acute inpatient setting: A pilot evaluation study. *Clinical Psychology and Psychotherapy, 14*, 117-125.

Glass, C. R., & Arnkoff, D. B. (2000). Consumer perspectives on helpful and hindering factors in mental health treatment. *Journal of Clinical Psychology, 56*, 1467-1480.

Goldfried, M. R., & Wolfe, B. E. (1998). Toward a more clinically valid approach to therapy research. *Journal of Consulting and Clinical Psychology, 1*, 143-150.

Goldstein, T. R., Axelson, D. A., Birmaher, B., & Brent, D. A. (2007). Dialectical behavior therapy for adolescents with bipolar disorder: A 1-year open trial. *Journal of American Academy of Child and Adolescent Psychiatry, 46,* 820-830.

Harley, R. M., Baity, M. R., Blais, M. A., & Jacobo, M. C. (2007). Use of dialectical behavior therapy skills training for borderline personality disorder in a naturalistic setting. *Psychotherapy Research, 17,* 362-370.

Harley, R., Sprich, S., Safren, S., Jacobo, M., & Fava, M. (2008). Adaption of dialectical behavior therapy skills training group for treatment-resistant depression. *The Journal of Nervous and Mental Disease, 196,* 136-143.

Hawkins, K. A., & Sinha, R. (1998). Can line clinicians master the conceptual complexities of dialectical behavior therapy? An evaluation of a state department of mental health training program. *Journal of Psychiatric Research, 32,* 379-384.

Henggeler, S. W. (2001). Multisystemic therapy. *Residential Treatment for Children & Youth, 18,* 75-85.

Herschell, A. D., Kogan, J. N., Celedonia, K. L., Gavin, J. G., & Stein, B. D. (2009). Understanding community mental health administrators' perspectives on dialectical behavior therapy implementation. *Psychiatric Services, 60,* 989-992.

Herschell, A. D., McNeil, C. B., & McNeil, D. W. (2004). Clinical child psychology's progress in disseminating empirically supported treatments. *Clinical Psychology: Science and Practice, 11,* 267-288.

Hesslinger, B., van Elst, L. T. , Nyberg, E., Dykierek, P., Richter, H., Berner, M., & Ebert, D. (2002). Psychotherapy of attention deficit hyperactivity disorder in adults: A pilot study using a structured skills training program. *European Archives of Psychiatry and Clinical Neuroscience, 252,* 177-184.

Hodgetts, A., Wright, J., & Gough, A. (2007). Clients with borderline personality disorder: Exploring their experiences of dialectical behavior therapy. *Counseling and Psychotherapy Research, 7,* 172-177.

Hodgetts, A., & Wright, J. (2007). Researching clients' experiences: A review of qualitative studies. *Clinical Psychology and Psychotherapy, 14,* 157-163.

Kliem, S., Kroger, C., & Kosfelder, J. (2010). Dialectical behavior therapy for borderline personality disorder: A meta-analysis using mixed-effects modeling. *Journal of Consulting and Clinical Psychology, 78*, 936-951.

Koerner, K., & Dimeff, L. A. (2007). Overview of dialectical behavior therapy. In L. A. Dimeff & K. Koerner (Eds.), *Dialectical behavior therapy in clinical practice: Applications across disorders and settings* (pp. 1-18). New York, NY: Guilford Press.

Koons, C. R., Robins, C. J., Tweed, J. L., Lynch, T. R., Gonzalez, A. M., Morse, J. Q., . . . & Bastian, L. A. (2001). Efficacy of dialectical behavior therapy in women veterans with borderline personality disorder. *Behavior Therapy, 32*, 371-390.

Kuel, B. P., Newfield, N. A., & Joanning, H. (1990). A client based description of family therapy. *Journal of Family Psychology, 3*, 310-321.

Laudet, A., Stanick, V., & Sands, B. (2007). An Exploration of the Effect of On-Site 12-Step Meetings on Post-Treatment Outcomes among Polysubstance-Dependent Outpatient Clients. *Evaluation Review, 31*, 613-646

Linehan, M. M. (1993a). *Cognitive-behavioral treatment for borderline personality disorder.* New York, NY: Guilford Press.

Linehan, M. M. (1993b). *Skills training manual for treating borderline personality disorder.* New York, NY: Guilford Press.

Linehan, M. M. (1993c). Impact of treatment of accessibility on clinical course of parasuicidal patients (Reply). *Archives of General Psychiatry, 50*, 157-158.

Linehan, M. M. (2011). Dialectical behavior therapy and telephone coaching. *Cognitive and Behavioral Practice, 18*, 207-208.

Linehan, M. M., Armstrong, H. E., Suarez, A., Alimon, D., & Heard, H. L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry, 48,* 1060-1064.

Linehan, M. M., Comotois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L., . . . & Lindenboim, N. (2006). Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Archives of General Psychiatry, 63,* 757-766.

Linehan, M. M., Dimeff, L. A., Reynolds, S. K., Comtois, K. A., Welch, S. S., Heagerty, P., & Kivlahan, D. R. (2002). Dialectical behavior therapy versus comprehensive validation therapy plus 12-step for the treatment of opioid dependent women meeting criteria for borderline personality disorder. *Drug and Alcohol Dependence, 67,* 13-26.

Linehan, M. M., Heard, H. L., & Armstrong, H. E. (1993). Naturalistic follow-up of a behavioral treatment for chronically parasuicidal borderline clients. *Archives of General Psychiatry, 50,* 971-974.

Linehan, M. M., Schmidt, H., Dimeff, L. A., Craft, J. C., Kanter, J., & Comtois, K. A. (1999). Dialectical behavior therapy with borderline personality disorder and drug-dependence. *The American Journal on Addictions, 8,* 279-292.

Linehan, M. M., Tutek, D. A., Heard, H. L., & Armstrong, H. E. (1994). Interpersonal outcome of cognitive behavioral treatment for chronically suicidal borderline patients. *American Journal of Psychiatry, 151,* 1771-1776.

Llewelyn, S. P. (1988). Psychological therapy as viewed by clients and therapists. *British Journal of Clinical Psychology, 27,* 223-237.

Lueger, R. J. (2002). Practice-informed research and research-informed psychotherapy. *Journal of Clinical Psychology, 58,* 1285-1276.

Lynch, T. R., Morse, J. Q., Mendelson, T., & Robins, C. J. (2003). Dialectical behavior therapy for depressed older adults. *American Journal of Geriatric Psychiatry, 11,* 33-45.

Lynch, T. R., Cheavens, J. S., Cukrowicz, K. C., Thorp, S. R., Bronner, L., & Beyer, J. (2007). Treatment of older adults with co-morbid personality disorder and depression: A dialectical behavior therapy approach. *International Journal of Geriatric Psychiatry, 22,* 131-143.

Lynch, T. R. & Cheavens, J. S. (2008). Dialectical behavior therapy for comorbid personality disorders. *Journal of Clinical Psychology: In Session, 64,* 154-167.

Najavits, L. M. (2002). Clinicians' views on treating posttraumatic stress disorder and substance use disorder. *Journal of Substance Abuse Treatment, 22,* 79-85.

Najavits, L. M., Weiss, R. D., Shaw, S. R., & Dierberger, A. E. (2004). Psychotherapists' views of treatment manuals. *Professional Psychology: Research and Practice, 31,* 404-408.

Nathan, P. E., Stuart, S. P., & Dolan, S. L. (2000). Research on psychotherapy efficacy and effectiveness: Between scylla and charybdis? *Psychological Bulletin, 126,* 964-981.

Nelson, T. D., & Steele, R. G. (2006). Beyond efficacy and effectiveness: A multifaceted approach to treatment evaluation. *Professional Psychology and Practice, 37,* 389-397.

Nelson, T. D., & Steele, R. G. (2007). Predictors of practitioner self-reported use of evidence-based practices: Practitioner training, clinical setting, and attitudes toward research. *Administration Policy on Mental Health and Mental Health Services Research, 34,* 319-330.

Nelson, T. D., & Steele, R. G. (2008). Influences on practitioner treatment selection: Best research evidence and other considerations. *The Journal of Behavioral Health Services and Research, 35,* 170-178.

Nock, M. K., Teper, R., & Hollander, M. (2007). Psychological treatment of self-injury among adolescents. *Journal of Clinical Psychology: In Session, 63,* 1081-1089.

Manning, S. Y. (2011). Common errors made by therapists providing telephone consultation in dialectical behavior therapy. *Cognitive and Behavioral Practice, 18,* 178-185.

McCann, R. A., & Ball, E. M. (2000). DBT with an inpatient forensic population: The CMHIP forensic model. *Cognitive and Behavioral Practice, 7,* 447-456.

Messari, S., & Hallam, R. (2003). CBT for psychosis: A qualitative analysis of client's experiences. *British Journal of Clinical Psychology, 42,*171-188.

Miller, T. W., & Kraus, R. F. (2007). Modified dialectical behavior therapy and problem solving for obsessive-compulsive personality disorder. *Journal of Contemporary Psychotherapy, 37,* 79-85.

Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS* (4th ed.). New York, NY: Open University Press.

Pistorello, J., Furzzetti, A. E., MacLane, C., Gallop, R., & Iverson, K. M. (2012). Dialectical behavior therapy (DBT) applied to college students: A randomized clinical trial. *Journal of Consulting and Clinical Psychology, 80,* 982-994.

Rathus, J. H., & Miller, A. L. (2002). Dialectical behavior therapy adapted for suicidal adolescents. *Suicide and Life-threatening Behavior, 32,* 146.

Sambrook, S., Abba, N., & Chadwick, P. (2006). Evaluation of DBT emotional coping skills groups for people with parasuicidal behaviors. *Behavioural and Cognitive Psychotherapy, 35,* 241-244.

Safer, D. L., Telch, C. F., & Agras, W. S. (2001). Dialectical behavior therapy for bulimia nervosa. *American Journal of Psychiatry, 158,* 632-634.

Seligman, M. E. P. (1995). The effectiveness of psychotherapy: The consumer reports study. *American Psychologist, 50,* 965-974.

Smith, L. D., & Peck, P. L. (2004). Dialectical behavior therapy: A review and call to research. *Journal of Mental Health Counseling, 26,* 25-38.

Substance Abuse and Mental Health Services Administration. (2006, October). Dialectical behavior therapy. Retrieved from http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=36

Substance Abuse and Mental Health Services Administration. (2008, July 8). *Mental health services locator.* Retrieved July 31, 2008, from http://mentalhealth.samhsa.gov/databases/

Swenson, C. R., Sanderson, C., Dulit, R. A., & Linehan, M. M. (2001). The application of dialectical behavior therapy for patients with borderline personality disorder on inpatient units. *Psychiatric Quarterly, 79,* 307-324.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon.

Telch, C. F., Agras, W. S., & Linehan, M. M. (2001). Dialectical behavior therapy for binge eating disorder. *Journal of Consulting and Clinical Psychology, 69,* 1061-1065.

Trupin, E. W., Stewart, D. G., Beach, B., & Boesky, L. (2002). Effectiveness of a dialectical behaviour therapy program for incarcerated female juvenile offenders. *Child and Adolescent Mental Health, 7,* 121-127.

van Alphen, S. P. J., Tummers, J. H. A., & Derksen, J. J. L. (2007). Reaction to treatment of older adults with co-morbid personality disorder and depression: A dialectical behavior therapy approach. *International Journal of Geriatric Psychiatry, 22,* 702-703.

van den Bosch, L. M. C., Verheul, R., Schippers, G. M., & van den Brink, W. (2002). Dialectical behavior therapy of borderline patients with and without substance use problems: Implementation and long-term effects. *Addictive Behaviors, 27,* 911-923.

Verheul, R., van den Bosch, L. M. C., Koeter, M. W., de Ridder, M. A. J., Stijnen, T., & van den Brink, W. (2003). Dialectical behavior therapy for women with borderline personality disorder: 12-month, randomised clinical trial in The Netherlands. *British Journal of Psychiatry, 182,* 135-140.

Walrath, C. M., Sheehan, A. K., Holden, E. W., Hernandez, M., & Blau, G. M. (2006). Evidence-based treatments in the field: A brief report on provider knowledge, implementation, and practice. *The Journal of Behavioral Health Services and Research, 33,* 244-253.

Wagner, A. W., & Linehan, M. M. (2006). Applications of dialectical behavior therapy to posttraumatic stress disorder and related problems. In: V. M. Follette, & J. I. Ruzek, (Eds.), *Cognitive-behavioral therapies for trauma* (2nd ed., pp. 117-145). New York, NY: Guilford Press.

Wiser, S., & Telch, C. F. (1999). Dialectical behavior therapy for binge-eating disorder. *Psychotherapy in Practice, 55,* 755-768.

Wix, S. (2003). Dialectical behavior therapy observed. *The British Journal of Forensic Practice, 5*, 3-7.

Wolpow, S., Porter, M., & Hermanos, E. (2000). Adapting a dialectical behavior therapy (DBT) group for use in a residential program. *Psychiatric Rehabilitation, 24*, 135-141.

Appendix A

Survey 1: Clinical Director (Yes DBT program)

The following survey asks about your experience with Dialectical Behavior Therapy (DBT). Your input and time are valuable and will assist in understanding the implementation of a new therapy in the natural setting.

Please enter the code number listed in the email _____

Please rate how familiar are you with Dialectical Behavior Therapy (DBT).

I am . . . .

1 2 3 4 5

Not familiar with DBT Very familiar with DBT

When implementing DBT, are there or were there barriers that hinder(ed) the implementation of DBT? _____ Yes _____ No

If so, please indicate the strength of the following barriers that may be hindering implementation. Please feel free to include any additional barriers that may have been left out.

1 2 3 4 5 6

Not a barrier Barrier completely blocks implementation

1	2	3	4	5	6	Payer (e.g., insurance, government funding) will not cover DBT services
1	2	3	4	5	6	DBT does not fit clientele served
1	2	3	4	5	6	Clients will not attend DBT skills groups
1	2	3	4	5	6	Groups, in general, are not available at agency
1	2	3	4	5	6	Inadequate therapist referrals to DBT
1	2	3	4	5	6	Therapist training is not available
1	2	3	4	5	6	Insufficient funding
1	2	3	4	5	6	Space limits (e.g., no group room)
1	2	3	4	5	6	Clients not interested in DBT therapy
1	2	3	4	5	6	Therapists are not interested in conducting DBT
1	2	3	4	5	6	Other (please specify:_____)
1	2	3	4	5	6	Other (please specify:_____)
1	2	3	4	5	6	Other (please specify:_____)

Please answer the following questions about your agency:

1 2 3 4 5 6

Not True about agency — Very True about agency

1	2	3	4	5	6	There is sufficient funding to implement new interventions
1	2	3	4	5	6	Therapist turnover is low
1	2	3	4	5	6	Time is available for therapists to commit to a new intervention
1	2	3	4	5	6	DBT fits with the current reimbursement model

Please rate the importance of the following areas to be included in future RESEARCH on DBT.

1 2 3 4 5 6

Not important — Very important

1	2	3	4	5	6	Randomized controlled trials on DBT
1	2	3	4	5	6	Studies on DBT resembling real-world clinical conditions
1	2	3	4	5	6	Research on the training of therapists in DBT
1	2	3	4	5	6	Research on DBT with Heterogeneous populations
1	2	3	4	5	6	Research on DBT with populations whose primary diagnosis is not borderline personality disorder
1	2	3	4	5	6	Implementing DBT at a mental health site
1	2	3	4	5	6	Studies on the cost-effectiveness of DBT

Which of the following best describes your primary clinical setting?

___Medical center outpatient clinic
___Medical school
___Community mental health clinic
___VA hospital/VA clinic
___Other: _____
___University/college counseling center
___Inpatient psychiatric
___Residential center
___ Other outpatient clinic

Which of the following best describes the catchment area in which you practice:

(a) Urban
(b) Rural
(c) Suburban

Please indicate the percentage of clientele who utilize your services (with the total necessarily equaling 100%):

(a) _____ Low socioeconomic status
(b) _____ Middle socioeconomic status
(c) _____ Upper Middle socioeconomic status
(d) _____ Upper socioeconomic status

Approximately what percentage of your clients' services are paid for by each of these sources (with the total necessarily equaling 100%)?

___Fee-for-service/client pay ___Private insurance company
___Managed Care Organization ___Medicaid/Medicare
___Grant Funding ___Other (please specify)_____

What is your highest degree obtained? (Please check one)
___Ph.D. ___Psy.D. ___M.S./ M.A. ___MSW ___B.A./B.S. ___M.D. ___Ed.D.

Are you: _____Male _____ Female

Would you like a copy of the study results?

_____Yes _____No

If so, please enter the email address where the results can be sent?

Appendix B

Survey 2: Therapist

The following survey asks about your experience with Dialectical Behavior Therapy (DBT). The responses from you and your clinical director are valuable and will assist in understanding the implementation of a new therapy in the natural setting. All responses will be kept strictly confidential and will be considered only in combination with those from other participants.

Please enter the code number listed in the email.
_____

Are you a: _____ DBT individual therapist _____ DBT skills group therapist
_____ Both (if both please indicate what percentage of time is spent in each component, with the percentage necessarily equaling 100%).
_____ Other: _____

Is anyone else at your site involved in DBT? _____ Yes _____ No

Which aspects of DBT are utilized in your program? Please estimate the percentage of time spent on each component (with the total necessarily equaling 100%).
___ Individual therapy: DBT perspective
___ Skills training in a group format
___ Skills training in an individual format
___ Telephone consultation
___ Case conferences for therapists
___ Other: _____

If telephone consultation is provided, approximately how much time is devoted each week to telephone consultation?

A) 0-1 hour
B) 1-2 hours
C) 3-4 hours
D) 5-6 hours
E) 7-8 hours
F) 8-9 hours
G) More than 10 hours

If skills training is available, which skills are taught? Please estimate the percentage of time spent on each skill (with the total necessarily equaling 100%).
___ Core mindfulness
___ Distress Tolerance
___ Emotion Regulation
___ Interpersonal Effectiveness
___ Other:_____

Please describe what types of modifications to the standard DBT protocol have been made in your DBT program? (if any)

Approximately, how many hours a week do you spend in direct client service in the DBT program at your agency?_____

How many clients are served from a DBT perspective? _____

Gender of DBT Clients (Please indicate what percentage of your clients are male and female):
Male _____% Female _____%

Please indicate the 3 kinds of clinical problems you treat most frequently in your DBT program: (Place a "1" next to the problem you treat most frequently, a "2" for the second most frequent, and a "3" for the third most frequent)

_____Depressive Disorders
_____ Anxiety Disorders
_____Borderline personality disorder
_____ Other personality disorders
_____ Externalizing Problems (e.g., Aggression, ADHD, Conduct Disorder)
_____Health/Medical-Related Problems
_____Developmental Disorders (Autism, Asperger's, Mental Retardation)
_____Schizophrenia/Other Psychotic disorders
_____Substance Abuse
_____Eating Disorders
_____Learning Disorders
_____Other:_____

Please rate your agreement with each statement about DBT, in general, from strongly disagree to strongly agree.

1 2 3 4 5 6 7
Strongly disagree Strongly agree

1	2	3	4	5	6	7	DBT has received empirical support in studies resembling "real-world" clinical conditions
1	2	3	4	5	6	7	DBT is flexible
1	2	3	4	5	6	7	DBT is appealing to clients
1	2	3	4	5	6	7	DBT has worked for me in the past
1	2	3	4	5	6	7	DBT is based on a well-articulated theory
1	2	3	4	5	6	7	DBT training is available for learning how to use DBT
1	2	3	4	5	6	7	DBT fits my personality
1	2	3	4	5	6	7	DBT allows me to be creative in my work
1	2	3	4	5	6	7	DBT is cost-effective
1	2	3	4	5	6	7	DBT is easy to implement

1	2	3	4	5	6	7	DBT is recommended by clinical colleagues whom I respect
1	2	3	4	5	6	7	DBT is based on a theoretical orientation that I find appealing
1	2	3	4	5	6	7	DBT has been specifically tested on the clinical population that I most frequently serve
1	2	3	4	5	6	7	The DBT treatment manual anticipates potential problems using the treatment with real clients and offers suggestions for overcoming these obstacles
1	2	3	4	5	6	7	DBT has been tested on ethnically diverse populations
1	2	3	4	5	6	7	DBT focuses on establishing a strong therapeutic relationship
1	2	3	4	5	6	7	DBT clearly articulates its underlying theory of change

Please indicate how often you use the following from Never to Always.

1	2	3	4	5	6	7
Daily	2-3/week	Once a week	2-3/month	Once a month	< once a month	Never

1	2	3	4	5	6	7	The Skills Training Manual for Treating Borderline Personality Disorder
1	2	3	4	5	6	7	The Cognitive-Behavioral Treatment of Borderline Personality Disorder in my practice.
1	2	3	4	5	6	7	I use other DBT manuals available in my practice
1	2	3	4	5	6	7	Handouts available in the Skills Training Manual
1	2	3	4	5	6	7	Internet resources on DBT and BPD
1	2	3	4	5	6	7	Outcome measures (e.g., Beck inventories)

Please rate the importance of the following areas to be included in future RESEARCH on DBT.

1	2	3	4
Not important			Very important

1	2	3	4	Randomized controlled trials on DBT
1	2	3	4	Studies on DBT resembling real-world clinical conditions
1	2	3	4	Research on the training of therapists in DBT
1	2	3	4	Research on DBT with Heterogeneous populations
1	2	3	4	Research on DBT with populations whose primary diagnosis is not borderline personality disorder
1	2	3	4	Implementing DBT at a mental health site
1	2	3	4	Studies on the cost-effectiveness of DBT

What training did you receive in DBT? (Please check all that apply)
____ Formal conference/class on DBT provided by Marsha Linehan and/or colleagues
____ Intensive workshop on DBT provided by DBT specialists
____ Small conference/training lead by an individual trained in DBT
____ On-site study groups
____ Seminar on DBT
____ Graduate School training
____ Supervisory meetings with DBT consultant
____ On-site peer support and consultation meetings
____ Online courses in DBT
____ Time spent clinically applying DBT
____ Read books on DBT
____ Formal training in behavioral modification
____ Formal training in behavior therapy or cognitive-behavioral therapy
____ Other: _____

If you attended a training seminar or workshop, how long was the training? If multiple workshops and/or seminars were attended please indicate the average length of the workshop/seminars. (please mark one)

- ❍ A few hours
- ❍ 1 day
- ❍ Several days (please indicate how many days) _____
- ❍ 1 week
- ❍ Several weeks (please indicate how many weeks) _____
- ❍ Other: _____

How long have you been conducting DBT (Please provide answer in years and months)? _____

Do you receive supervision while conducting DBT? ____ Yes ____ No

What is your highest degree obtained? (Please check one)
___Ph.D. ___Psy.D. ___M.S./ M.A. ___MSW ___B.A./B.S. ___M.D. ___Ed.D.

If you receive supervision for DBT, what is your highest degree obtained by your supervisor? (Please check)
___Ph.D. ___Psy.D. ___M.S./ M.A. ___MSW ___B.A./B.S. ___M.D. ___Ed.D.

How many years experience do you have post-licensure?

- ❍ Student, not licensed
- ❍ not licensed, seeking licensure
- ❍ not licensed, not seeking licensure
- ❍ 1-5
- ❍ 6-10
- ❍ 11-15
- ❍ 16-20
- ❍ 21+

Do you work primarily with: ___Children/Adolescents, ___Adults, ___ or Both

Please indicate which of these theoretical orientations best describes you.
(If more than one applies, please rank order your selections)

___Behavioral
___Cognitive or Cognitive-behavioral
___Psychoanalytic or Psychodynamic
___Existential
___Humanistic
___Interpersonal
___Eclectic or Integrative
___Other _____

Are you:
___Male ___Female

Ethnicity/Race:
___American Indian ___Asian ___Hispanic ___Black ___White ___Other ___Multi-racial/Multi-ethnic ___Prefer not to answer

Would like a copy of the study results?

- ❍ Yes
- ❍ No

If so, please enter the email address where you would like the results sent.

Appendix C

Survey 3: Clinical Director (No DBT program)

The following survey explores the feasibility of implementing a Dialectical Behavior Therapy program at your agency. Your input and time are valuable and will assist in understanding the implementation of a new therapy in the natural setting.

Please rate how familiar are you with Dialectical Behavior Therapy (DBT).

I am . . . .

1 2 3 4 5

Not familiar with DBT Very familiar with DBT

Would DBT be a suitable therapy at your agency given the clientele you serve? ___Yes ___ No

Would you like to have a DBT program at your agency? _____ Yes _____ No

Are there barriers that would hinder implementation of DBT? _____ Yes _____ No

If so, please indicate the strength of the following barriers that may be hindering implementation. Please feel free to include any additional barriers that may have been left out.

1 2 3 4 5 6

Not a barrier Barrier completely blocks implementation

1	2	3	4	5	6	Payer (e.g., insurance, government funding) will not cover DBT services
1	2	3	4	5	6	DBT does not fit clientele served
1	2	3	4	5	6	Clients will not attend DBT skills groups
1	2	3	4	5	6	Groups, in general, are not available at agency
1	2	3	4	5	6	Inadequate therapist referrals to DBT
1	2	3	4	5	6	Therapist training is not available
1	2	3	4	5	6	Insufficient funding
1	2	3	4	5	6	Space limits (e.g., no group room)
1	2	3	4	5	6	Clients not interested in DBT therapy
1	2	3	4	5	6	Therapists are not interested in conducting DBT
1	2	3	4	5	6	Other (please specify:_____)
1	2	3	4	5	6	Other (please specify:_____)
1	2	3	4	5	6	Other (please specify:_____)

Please answer the following questions about your agency:

1 2 3 4 5 6

Not True about agency — Very True about agency

1	2	3	4	5	6	There is sufficient funding to implement new interventions
1	2	3	4	5	6	Therapist turnover is low
1	2	3	4	5	6	Time is available for therapists to commit to a new intervention
1	2	3	4	5	6	DBT fits with the current reimbursement model

Please rate the importance of the following areas to be included in future RESEARCH on DBT.

1 2 3 4 5 6

Not important — Very important

1	2	3	4	5	6	Randomized controlled trials on DBT
1	2	3	4	5	6	Studies on DBT resembling real-world clinical conditions
1	2	3	4	5	6	Research on the training of therapists in DBT
1	2	3	4	5	6	Research on DBT with Heterogeneous populations
1	2	3	4	5	6	Research on DBT with populations whose primary diagnosis is not borderline personality disorder
1	2	3	4	5	6	Implementing DBT at a mental health site
1	2	3	4	5	6	Studies on the cost-effectiveness of DBT

Which of the following best describes your primary clinical setting?

___Medical center outpatient clinic
___ Other outpatient clinic
___Community mental health clinic
___Inpatient psychiatric
___VA hospital/VA clinic
___University/college counseling center
___Medical school
___Residential center
___Other: _____

Which of the following best describes the area in which you practice:

(a) Urban
(b) Rural
(c) Suburban

Please indicate the percentage of clientele who utilize your services (with the total necessarily equaling 100%):

(a) _____ Lower socioeconomic status
(b) _____ Middle socioeconomic status
(c) _____ Upper Middle socioeconomic status
(d) _____ Upper socioeconomic status

Approximately what percentage of your clients' services are paid for by each of these sources (with the total necessarily equaling 100%)?

___Fee-for-service/client pay ___Private insurance company
___Managed Care Organization ___Medicaid/Medicare
___Grant Funding ___Other (please specify)_____

What is your highest degree obtained? (Please check one)
___Ph.D. ___Psy.D. ___M.S./ M.A. ___MSW ___B.A./B.S. ___M.D. ___Ed.D.

Are you: _____Male _____ Female

Would you like a copy of the study results?

_____Yes _____No

If so, please enter the email address where the results can be sent?

Appendix D

Cover Letter: Email Director (Yes DBT program)

Hello,

I recently spoke to someone at your site about my study of Dialectical Behavioral Therapy (DBT). This email is a follow up to that call. You were selected to participate because your site was selected from a list of sites available on the Substance Abuse and Mental Health Services Administration (SAMHSA) website or from a Google search for university counseling centers. The following information is provided in order to help you make an informed decision about whether or not to participate.

I am contacting clinical directors around the United States to learn more about implementing Dialectical Behavior Therapy (DBT) in the natural clinical setting. This study will involve a questionnaire that is estimated to take 5-10 minutes to complete. There are no known risks or discomforts to participating in this study. The results of the survey will provide valuable information on how DBT services are implemented in the natural clinical setting. Understanding the experiences of clinical directors is an important step to understanding the overall impact of an intervention.

Your participation is voluntary. If you choose to participate, all information will be held strictly confidential. Your responses will be considered only in combination with those from other participants. The information obtained in the study may be published in scientific journals or presented at scientific meetings but your answers will not be identifiable.

If you are willing to participate in this study, please click the link below and complete the survey. You will be asked to enter a code number at the beginning of the survey. **Please enter the following code (XXXX) when prompted.** Clicking the below link will be indication that you voluntarily consented to participate. If you would like a copy of the results, please complete the appropriate box at the end of the survey. At the conclusion of the study, results will be mailed to the address provided. Upon receipt of the survey data, the address will be separated from the survey data and kept confidential.

If you have any questions, comments, or have trouble accessing the survey we will be happy to speak with you. You may contact Tina Rose, M. A. via email at t.m.rose@iup.edu or you may write us at the address provided below.

Thank you for your time and consideration. Your participation in this study is valuable and appreciated.
Sincerely,

Tina M. Rose, M.A.
Primary Investigator
Indiana University of PA, Uhler Hall
1020 Oakland Ave
Indiana PA 15705
724-357-3308

Derek Hatfield, Ph.D
Faculty Advisor
Indiana University of PA, 218 Uhler Hall
1020 Oakland Ave
Indiana PA 15705
724-357-4527

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).

Appendix E

Cover Letter: Email Therapist

Hello,

I am writing you to request your help in my study of Dialectical Behavioral Therapy (DBT). You were selected to participate because your site was selected from a list of sites available on the Substance Abuse and Mental Health Services Administration (SAMHSA) website or from a Google search for university counseling centers, and the clinical director of your site indicated you may be interested in participation. The following information is provided in order to help you make an informed decision about whether or not to participate.

I am contacting therapists around the United States to learn more about Dialectical Behavior Therapy (DBT) in the natural clinical setting. This study will involve a questionnaire that is estimated to take 10-15 minutes to complete. There are no known risks or discomforts to participating in this study. The results of the survey will provide valuable information on how DBT services are implemented in the natural clinical setting. Understanding the experiences of the therapist is an important step to understanding the overall impact of an intervention.

Your participation is voluntary. If you choose to participate, all information will be held strictly confidential. Your responses will be considered only in combination with those from other participants. The information obtained in the study may be published in scientific journals or presented at scientific meetings but your answers will not be identifiable.

If you are willing to participate in this study, please click the link below and complete the survey. You will be asked to enter a code number at the beginning of the survey. **Please enter the following code (XXXX) when prompted.** Clicking the below link will be indication that you voluntarily consented to participate. If you would like a copy of the results, please complete the appropriate box at the end of the survey. At the conclusion of the study, results will be mailed to the address provided. Upon receipt of the survey data, the address will be separated from the survey data and kept confidential.

If you have any questions, comments, or trouble accessing the survey we will be happy to speak with you. You may contact Tina Rose, M. A. via email at t.m.rose@iup.edu or you may write us at the address provided below.

Thank you for your time and consideration. Your participation in this study is valuable and appreciated.

Sincerely,

Tina M. Rose, M.A.
Primary Investigator
Indiana University of PA, Uhler Hall
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Derek Hatfield, Ph.D
Faculty Advisor
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This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).

Appendix F

Cover Letter: Email Director (No DBT Program)

Hello,

I recently spoke to you about my study of Dialectical Behavioral Therapy. This email is a follow up to that call. You were selected to participate because your site was selected from a list of sites available on the Substance Abuse and Mental Health Services Administration (SAMHSA) website or from a Google search for university counseling centers. The following information is provided in order to help you make an informed decision about whether or not to participate.

I am contacting clinical directors around the United States to learn more about implementing Dialectical Behavior Therapy in the natural clinical setting. This study will involve a questionnaire that is estimated to take 5-10 minutes to complete. There are no known risks or discomforts to participating in this study. The results of the survey will provide valuable information on how DBT services are implemented in the natural clinical setting. Understanding the experiences of clinical directors is an important step to understanding the overall impact of an intervention.

Your participation is voluntary. If you choose to participate, all information will be held strictly confidential. Your responses will be considered only in combination with those from other participants. The information obtained in the study may be published in scientific journals or presented at scientific meetings but your answers will not be identifiable.

If you are willing to participate in this study, please click the link below and complete the survey. Clicking the below link will be indication that you voluntarily consented to participate. If you would like a copy of the results, please complete the appropriate box at the end of the survey. At the conclusion of the study, results will be mailed to the address provided. Upon receipt of the survey data, the address will be separated from the survey data and kept confidential.

If you have any questions, comments, or have trouble accessing the survey we will be happy to speak with you. You may contact Tina Rose, M. A. via email at t.m.rose@iup.edu or you may write us at the address provided below.

Thank you for your time and consideration. Your participation in this study is valuable and appreciated.

Sincerely,

Tina M. Rose, M.A.
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Derek Hatfield, Ph.D
Faculty Advisor
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This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).

Appendix G

Phone Script

◊ State name and reason for calling

◊ Politely ask to speak with the clinical director

◊ If clinical director is not available, ask for an optimal time to call back or leave a message

◊ When speaking to the clinical director, again state name and purpose of call

i) Provide a brief description of the study

ii) Ask if the site has a DBT program

iii) Request participation in an online survey

iv) Request assistance in contacting the therapist at their site who is most involved in DBT (i.e., will the director be willing to forward an email, may we contact the therapist via postcard).

◊ Note verbal consent to participate or refusal

(1) Request verbal consent to record whether or not the site has a DBT program

(2) Only the percentage of sites that do and do not have a DBT program will be reported; Names of sites will NOT be associated with the data

◊ Thank the director for their time and assistance in the survey

◊ Assign the site a code number to be included in the email/postcard to clinical directors and therapists to facilitate matching directors and therapists

Appendix H

Recruitment Email: SAMSHA

Hello,

I am a doctoral student at Indiana University of Pennsylvania. I am currently working on my dissertation. I am interested in learning more about what programs mental health facilities offer. If possible, I would like to speak with you for about 5-10 minutes about your site. Is there a good time that I or a research assistant may call you to speak more about your site and my dissertation research? Please reply to this email with any available time and the best number to reach you and we will contact you at that time. Thank you in advance for your time.

Please note you were selected to participate because your site was selected from a list of sites available on the Substance Abuse and Mental Health Services Administration (SAMHSA) website. **This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).**

Sincerely,

Tina M. Rose, M.A.
Primary Investigator
Indiana University of PA, Uhler Hall
1020 Oakland Ave
Indiana PA 15705
724-357-3308/724-549-8196
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Appendix I

Recruitment Email: University Counseling Center

Hello,

I am a doctoral student at Indiana University of Pennsylvania. I am currently working on my dissertation. I am interested in learning more about what programs mental health facilities offer. If possible, I would like to speak with someone for about 5-10 minutes about your site. Is there a good time that I or a research assistant may call you to speak more about your site and my dissertation research? Please reply to this email with any available time and the best number to reach you and we will contact you at that time. Thank you in advance for your time.

Please note you were selected to participate because your site was selected from a Google search for university counseling centers. **This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).**

Sincerely,

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Appendix J

Tables

Table 1

Percentage of Clinical Settings Represented in Sample

Setting (N = 91)	Percentage
Community Mental Health Center	50.5
University Counseling Center	15.4
Other outpatient clinic	11
Medical outpatient clinic	6.6
VA hospital/VA clinic	4.4
Inpatient facility	3.3
Medical School	1.1
Other	7.7

Table 2

Number of Respondents at Sites With and Without DBT by Self-defined Catchment Area Where They Practice

Site	Urban	Rural	Suburban
With DBT (n = 37)	9	17	11
Without DBT (n = 54)	23	18	13

Table 3

Theoretical Orientations of Therapists Surveyed

Orientation	Ranked #1	Percent of Sample
Cognitive-behavioral or Cognitive	18	62.1
Eclectic or Integrative	5	17.2
Interpersonal	3	10.3
Humanistic	2	6.9
Behavioral	1	3.4
Psychoanalytic or Psychodynamic	0	0

Table 4

States Selected in Each Region of the US and Percentage of Respondents to the Phone Survey

Region	State	With DBT (n = 87)	Without DBT (n = 105)
Northeast	Pennsylvania	6.9	6.7
	New York	6.9	1
	Rhode Island	2.3	1.9
	Connecticut	4.6	4.8
	New Jersey	1.1	6.7
	Vermont	4.6	0
South	Delaware	2.3	1
	Florida	3.4	11.4
	South Carolina	2.3	6.7
	Maryland	2.3	9.5
	Louisiana	2.3	6.7
	North Carolina	3.4	4.8
Midwest	Ohio	2.3	5.7
	Indiana	10.3	2.9
	Iowa	1.1	5.7
	Wisconsin	5.7	9.5
	South Dakota	3.4	1.9
	Minnesota	9.2	4.8
West	Alaska	2.3	1
	Montana	1.1	0
	New Mexico	4.6	1
	Arizona	8.0	2.9
	Utah	3.4	2.9
	Nevada	5.7	1

Table 5

Settings With and Without DBT

Setting (N = 91)	With DBT (%)	Without DBT (%)
Community mental health clinic	24 (26.37)	22 (24.17)
Other outpatient clinic	0 (0)	10 (10.99)
Medical center outpatient clinic	1 (1.09)	5 (5.49)
Medical school	0 (0)	1 (1.09)
VA hospital/VA clinic	4 (4.39)	0 (0)
Inpatient psychiatric	2 (2.19)	1 (1.09)
Residential center	0 (0)	0 (0)
University/college counseling center	3 (3.29)	11 (12.09)
Other	3 (3.29)	4 (4.39)

Table 6

Mean Percentages and Standard Deviations of Income of Sites With and Without DBT

Income	With DBT (n = 37)	Without DBT (n = 54)
Client Pay	11.92	8.41
Private Insurance	16.95	11.56
Managed Care	6.51	8.48
Medicaid/Medicare	47.05	42.19
Grant Funding	4.76	3.22
Other	12.81	26.64

Table 7

Crosstabulation of Barriers to Implementation as Reported by Directors of Sites With and Without DBT(N=91)

Barrier	With DBT (%)	Without DBT (%)
Yes	28 (77.8)	46 (85.2)
No	8 (22.2)	8 (14.8)

Table 8

Questions Assessing Barriers to Implementing DBT Included as the Dependent Variables Labeled Barriers

Question	Abbreviation used in text
Payer (e.g., insurance, government funding) will not cover DBT services	Payer
DBT does not fit clientele served	DBT does not fit
Groups, in general, are not available at site	Groups not available
Therapists are not interested	Therapist not interested
Therapist training is not available	Training not available
Insufficient funding	Insufficient funding
Space limitations (e.g., no group room)	Space limitations

Table 9

Means and Standard Deviations of Barriers Experienced by Sites With and Without DBT

Barrier	With DBT (n = 31)	Without DBT (n = 35)
Payer	2.55 (1.63)	2.60 (1.85)
DBT does not fit	2.13 (1.38)	2.00 (1.52)
Groups not available**	1.61 (1.28)	2.71 (1.92)
Therapist not interested	2.10 (1.14)	2.71 (1.49)
Training not available	2.97 (1.64)	3.80 (1.94)
Insufficient funding**	3.13 (1.86)	4.46 (1.77)
Space limitations**	1.55 (0.89)	2.97 (2.08)

Notes. **p < .01; Scale: 1 = not a barrier, 6 = barrier completely blocks implementation

Table 10

Means and Standard Deviations of Barrier Questions Not Included in MANOVA Analyses

Question	Abbreviation used in Text	Setting	
		With DBT	Without DBT (n =)
Clients not interested in DBT	Clients not interested	2.91 (1.29) n = 35	2.27 (1.30) n = 44
Clients will not attend DBT skills group	Lack of skills group attendance	3.44 (1.35) n = 34	2.91 (1.59) n = 46
Inadequate therapist referral to DBT	Inadequate referrals	2.54 (1.38) n = 35	2.89 (1.72) n = 45

Table 11

Questions Assessing Resources of Sites Included as the Dependent Variables Labeled Resources of Sites

Question	Abbreviation used in text
There is sufficient funding to implement new interventions	Sufficient funding
Therapist turnover is low	Low therapist turnover
Time is available for therapists to commit to a new intervention	Time available
DBT fits with current reimbursement model	DBT fits with current reimbursement

Table 12

Means and Standard Deviations of Resources of Sites

	Directors with DBT (n=37)	Directors without DBT (n=54)
Sufficient Funding*	3.81 (1.65)	2.81 (1.49)
Low Therapist Turnover	4.41 (1.48)	4.52 (1.60)
Time Available*	3.54 (1.35)	2.59 (1.30)
DBT fits with reimbursement model*	4.22 (1.06)	3.06 (1.68)

Notes. *p < .01; Scale 1 = not true about agency, 6 = very true about agency

Table 13

Frequency of Clinical Diagnoses

Diagnosis	Ranked #1	Percent of Sample
Borderline Personality Disorder	18	62.1
Depressive Disorders	6	20.7
Anxiety Disorders	4	13.8
Substance Abuse	1	3.4

Table 14

Mean Percentages and Standard Deviations of SES of Clientele Served by Sites With and Without DBT

SES	With DBT (n = 37)	Without DBT (n = 54)
Lower	61.44 (28.27)	61.64 (31.16)
Middle	21.19 (13.35)	27.74 (21.29)
Upper Middle	12.00 (15.94)	8.16 (10.83)
Upper	5.36 (14.41)	2.46 (4.40)

Table 15

Mean Percentages and Standard Deviations of Time Spent in Each Aspect of DBT

Aspect of DBT	Mean	Standard Deviation
Individual Therapy: DBT perspective	37.72	27.22
Skills Training in a group format	33.9	30.4
Skills Training in an individual format	13.14	18.35
Telephone coaching	5.07	4.66
Case conferences for therapists	6.93	7.76
Other	3.69	18.55

Table 16

Mean Percentages and Standard Deviations of Time Spent in Each Skill

Skill	Mean	Standard Deviation
Core Mindfulness	23.48	10.49
Distress Tolerance	24.93	14.52
Emotion Regulation	24.07	10.09
Interpersonal Effectiveness	22.52	8.60
Other	5.00	19.18

Table 17

Modifications of DBT

Modification	Frequency
Adapt to client age or functioning	5
Telephone coaching not available	5
Added other EST to DBT	4
Other logistical changes	4
Case conference held more sporadically or not at all	3
Increased or decreased time on skills training	3
Do not require BPD diagnosis or use with a specialized population	3
Modifications to the handouts	3
Extra "graduate" group following skills group completion	2
Added DBT to other EST	2
Use of individual therapists outside of agency	1
Skills only provided	1

Table 18

Characteristics of DBT

Characteristics	Mean	Standard Deviation
DBT is based on a theoretical orientation that I find appealing	5.93	1.10
DBT has worked for me in the past	5.93	1.28
DBT is based on a well-articulated theory	5.86	1.30
DBT clearly articulates its underlying theory of change	5.86	1.30
DBT focuses on establishing a strong therapeutic relationship	5.72	1.44
DBT fits my personality	5.69	1.37
DBT is recommended by clinical colleagues whom I respect	5.69	1.47
DBT training is available for learning how to use DBT	5.66	1.37
DBT allows me to be creative in my work	5.62	1.67
DBT is cost-effective	5.62	1.68
DBT has received empirical support in studies resembling "real-world" clinical conditions	5.48	1.38
DBT is appealing to clients	5.38	1.12
DBT is flexible	5.10	1.76
DBT has been specifically tested on the clinical population that I most frequently serve	4.90	1.88
The DBT treatment manual anticipates potential problems using the treatment with real clients and offers suggestions for overcoming these obstacles	4.72	1.65
DBT is easy to implement	4.10	1.40
DBT has been tested on ethnically diverse populations	3.76	1.41

Note. Scale 1 = strongly disagree, 7 = strongly agree

Table 19

Percentage of Respondents Utilizing Various Materials Related to DBT

	Cognitive-Behavioral Therapy for Borderline Personality Disorder, Marsha Linehan	Skills Therapy Manual for Borderline Personality Disorder, Marsha Linehan	Other DBT Manuals	Outcome Measures (e.g., BDI, BAI)	Handouts in Skills Training manual	Internet resources
Daily	10.3	13.8	6.9	3.4	10.3	6.9
2-3 times a week	17.2	31.0	20.7	10.3	55.2	13.8
Once a week	20.7	20.7	6.9	0	10.3	10.3
2-3 times a month	17.2	17.2	20.7	6.9	10.3	20.7
Once a month	6.9	0	20.7	17.2	3.4	17.2
Less than once a month	20.7	10.3	13.8	20.7	3.4	17.2
Never	6.9	6.9	10.3	41.4	6.9	13.8

Table 20

Percentage of Respondents Engaged in Various Trainings Related to DBT

Training	%
Time spent clinically applying DBT	79.3
Read books on DBT	79.3
Formal conference/class on DBT provided by Marsha Linehan and/or colleagues	69.0
Small conference/training lead by an individual trained in DBT	65.5
Formal training in behavior therapy or cognitive-behavioral therapy	62.1
Intensive workshop on DBT provided by DBT specialists	58.6
On-site study groups	48.3
On-site peer support and consultation meetings	44.8
Formal training in behavioral modification	37.9
Supervisory meetings with DBT consultant	34.5
Seminar on DBT	31.0
Online courses in DBT	24.1
Graduate School training	10.3
Other	6.9

Table 21

Mean Ratings with Standard Deviations by Directors Regarding the Importance of Future Research

	Directors (N=91)
Research on the training of therapists in DBT	5.19 (1.03)
Implementing DBT at a mental health site	5.10 (.94)
Studies on DBT resembling real-world clinical conditions	5.09 (1.13)
Studies on the cost-effectiveness of DBT	4.98 (1.11)
Research on DBT with populations whose primary diagnosis is not borderline personality disorder	4.66 (1.18)
Randomized controlled trials on DBT	4.51 (1.17)
Research on DBT with Heterogeneous populations	4.42 (1.23)

Note. Scale 1 = not important, 6 = very important

Table 22

Mean Ratings with Standard Deviations by Therapists Regarding the Importance of Future Research

	Therapists (N=29)
Implementing DBT at a mental health site	3.72 (.53)
Studies on DBT resembling real-world clinical conditions	3.59 (.68)
Research on DBT with populations whose primary diagnosis is not borderline personality disorder	3.59 (.63)
Research on the training of therapists in DBT	3.52 (.57)
Studies on the cost-effectiveness of DBT	3.34 (.77)
Research on DBT with Heterogeneous populations	3.31 (.71)
Randomized controlled trials on DBT	2.93 (1.03)

Note. Scale 1 = not important, 4 = very important