

ACCEPTABILITY, FEASIBILITY, AND EFFECTIVENESS OF A WEB-BASED DBT-A
SKILLS TRAINING COURSE

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Abstract

There is a well-recognized gap between research and practice that has limited people's access to evidence-based treatments (Chambers et al., 2020). Web-based training offers a uniquely effective way to reduce this gap by expanding clinician training (ABCT, 2008). As there are currently no studies directly examining implementation outcomes for web-based trainings in Dialectical Behavior Therapy for adolescents (DBT-A) skills, the current study sought to examine the acceptability, feasibility, and preliminary effectiveness of a new web-based DBT-A skills training course for clinicians developed by Miller, Rathus, and Linehan (Psychwire, 2020). Participants in this pre-test–post-test open trial were 49 clinical psychology graduate students (73% female) mostly from the NYC metro area. This web-based training resulted in strong acceptability and feasibility. Participants demonstrated, with large effect sizes, significantly more positive attitudes toward ($t = 15.2, p < .001, d = 1.15$) and increased self-rated competence regarding ($t = 8.1, p < .001, d = 2.18$) teaching DBT Skills to multi-problem/high-risk adolescents and their caregivers following the training. Participants' knowledge regarding DBT-A skills also showed a significant pre-post increase with a large effect size ($t = 12.5, p < .001, d = 1.78$). Participants' clinical skills, which are often unstudied, were measured with coded behavior samples in delivering one of 2 offered components of DBT skills training, at post-training were strong. Percentages of correct teaching content averaged 83.9% for introducing Walking the Middle Path and 94.8% for teaching the Observe Skill. This online DBT-A skills course offers a practical and effective way to enhance doctoral students' knowledge, attitudes, and competence in DBT-A skills training; and offers reach, sustainability, satisfaction, and scalability to provide a wide number of clinicians with expert training in this DBT-A modality.

Next steps and clinical implications for applications, training, and engaging new clinicians in evidence-based treatments are discussed.

Acceptability, Feasibility, and Effectiveness of a Web-based DBT-A Skills Training Course

The contrast between the abundance of empirically-based treatments and the relatively low frequency with which they are effectively disseminated and properly implemented in clinical practice has been a significant problem discussed in mental health care literature over the past 20 years (Chambers et al., 2020; Goldfried, 2010; Insel, 2009; Proctor, 2009; Vivian et al., 2012). Although effective treatments are continuously developed, the mental health care system still struggles to meet patient demand to access care (U.S. Department of Health and Human Services, 2012). With such disconnect between research and practice, those who need therapeutic interventions most are often unable to access or afford treatment (Institute of Medicine, 2001; McHugh et al., 2007; McHugh & Barlow, 2010; Powers & Deacon, 2013). The American Psychological Association's (2021) COVID-19 Practitioner Survey showed that this lack of access to treatment is becoming worse in the wake of the COVID-19 pandemic as there is a rising need for mental health services for which providers are struggling to meet demand. People of color and those with less financial resources are disproportionately adversely affected by this imbalance of supply and demand in mental healthcare (Richie et al., 2022), which is particularly concerning given that these communities, especially those of Black Americans, have suffered from increased exposure to COVID-19, increased risk of health complications related to COVID-19, and overall lack of access to health care (Poulson et al., 2020).

In order to reduce this gap between research and practice and address such high demand for mental health services, implementation science has worked to optimize dissemination – the process by which information about a treatment is communicated to clinicians, practices, institutions, and consumers – and expand implementation – the process by which interventions are practically applied. Proctor and colleagues (2011) recognize several variables that affect

implementation and dissemination outcomes, including acceptability (clinician and client satisfaction with and likelihood to use a treatment), feasibility (the practical application considerations of a treatment), and effectiveness (the ability for an intervention to achieve its intended outcomes). Bowen and colleagues (2009) identify several factors of feasibility including: acceptability, demand, and implementation. According to Bowen and colleagues (2009), feasibility concerns the level of relevancy, sustainability, and practical application of an intervention. The researchers also characterize acceptability as whether the intervention is suitable, satisfying, or attractive. Demand measures the actual use and expressed interest in an intervention. Implementation considers the practicality of delivering an intervention as intended in a specific context. For evidence-based treatments to reach a broad base of consumers while still maintaining the treatment model, fidelity (application of the treatment as intended) must be maintained throughout the implementation and dissemination process with treatment manuals, educational workshops, and in-person and, most recently, online or web-based trainings (Santos et al., 2014).

While patients' access to care is a complex issue with many variables, a well-established explanation for the implementation gap is that there are not enough practitioners trained to administer evidence-based treatments (Weissman et al., 2006; Cartreine, Ahern, & Locke, 2010; Southam-Gerow, Rodriguez, Chorpita, & Daleiden, 2012; Khanna & Kendall, 2015). Clinicians are often eager to educate themselves, but training opportunities are typically sparse and costly, especially in rural settings (Jolstedt et al., 2018). The Association for Behavioral and Cognitive Therapies (ABCT) recognized the need to increase the dissemination of evidence-based practices by improving training efforts (ABCT, 2008). In response, both national and local government organizations have devoted funding to refining implementation and dissemination strategies,

including developing cost-effective and fidelitous training methods (e.g., Department of Veterans Affairs, 2008; U.S. Department of Health & Human Services, 2008; McHugh & Barlow, 2010; Nakamura et al., 2011). However, efforts to improve existing training methods and treatment manuals have not significantly reduced the disparity between research and practice (Schoenwald et al., 2008; Cartreine et al., 2010; Proctor & Chambers, 2017). In fact, new training methods often go unstudied or are utilized without demonstrating effectiveness in research that uses statistically powerful methodology, such as randomized trials (Beidas & Kendall, 2010; Herschell, Kolko, Baumann, & Davis, 2010; Dimeff et al., 2015). If the important mission of increased implementation and dissemination through training is going to succeed, training methods must improve in an evidence-based manner like that of the treatments they aim to promote.

Web-based training offers a viable way to improve training methods in an evidence-based manner; it lowers cost, improves therapist availability, optimizes scheduling, increases convenience, increases access, and can be effective (Cartreine, Ahern, & Locke, 2010). With mental health problems on the rise, compounded by the COVID-19 pandemic (Moreno et al., 2020), demand for evidence-based treatments and their training is inevitably increasing (Clipper, 2020). Expert trainers, who were already struggling to keep up with demand (Becker & Stirman, 2011; Beidas & Kendall, 2010; Southam-Gerow, Rodriguez, Chorpita, & Daleiden, 2012), now use methods like web-based training to increase the capacity of their training abilities. The flexibility with which web-based training can be employed allows individuals to access and interact with content from nearly any place or time. By eliminating costly travel, web-based training drives down costs, resulting in increased access. The self-paced format of web-based training also allows for participants to repeat and review sections of materials. Users can also

have continuous access to videos, books, and handouts. Web-based training can also include online-live formats where participants can interact with trainers and even get one-on-one feedback about their performance.

The popularity of web-based trainings can also be attributed to their effectiveness, which has typically been defined by their ability to (1) impart knowledge of the content of an intervention and (2) create behavior change by increasing observable clinical skills (Kobak et al., 2013; Khanna & Kendall, 2015; Sansen et al., 2020). While web-based trainings have been shown to increase clinician knowledge of content (Heck et al., 2015), changes in clinical skills is a critical area that often goes unstudied (Kobak et al., 2013). When studying trainings, it is important to measure clinicians' ability to use the knowledge they learned in practice and over time by measuring behavior change in clinical skills, as lectures and manuals have limited effectiveness on their own (Andersen & Dorfman, 2016; Babeva & Davison, 2017; Washburn et al., 2019) and the evidence for sustained behavior change is weak for training without follow-up supervision (Kobak et al., 2013). Ortiz and colleagues (2020) measured behavior change in clinical skills by administering an online Behavioral Parent Training (BPT) course for practitioners and assessing participants' baseline and post-course clinical skills through a role-play with a mock caregiver. To increase behavior change, the researchers had participants engage in 3 live video conference practice coaching sessions with BPT trainers. Results showed that the training not only increased participants' knowledge of BPT but also improved their clinical skills in BPT. The success of this training supports the idea that didactic training requires coaching, supervision, or feedback to develop clinical skills, which is particularly important because feedback via follow-up, consultation, or supervision can increase the lasting effectiveness of in-person and web-based trainings (Herschell, Kolko, Baumann, & Davis, 2010).

Although follow-up supervision for web-based trainings is a critical component of their lasting effectiveness, scaling supervision to meet the needs of the many web-based trainees world-wide, with various languages and diverse cultures, remains a logistical dilemma.

Dialectical Behavior Therapy (DBT; Linehan, 1993a, 1993b) is an evidence-based treatment for which maintaining fidelity to the model is key to effectively increasing implementation and dissemination (Koerner, Dimeff, & Swenson, 2007; Landes et al., 2017). A gold-standard treatment supported by a myriad of randomized controlled trials (Lynch, Trost, Salsman, & Linehan, 2007), DBT is a multifaceted treatment originally developed for chronically suicidal individuals diagnosed with borderline personality disorder (BPD) that includes individual therapy, group skills training, phone coaching, and clinician consultation meetings. Patients entering DBT typically present with problems associated with emotion dysregulation, behavioral dysregulation, cognitive dysregulation, and interpersonal dysregulation. For these individuals, DBT speaks both to individuals' desire for change and their struggle with creating change. The core dialectic in DBT is the balance of acceptance and change – acceptance of oneself and one's life as it is in the context of improving life quality and reducing self-harm. Such improvements occur through validation and problem solving, respectively acceptance and change strategies. Acceptance and change are balanced throughout the four skills modules: mindfulness, interpersonal effectiveness, emotion regulation, and distress tolerance. Mindfulness provides a base around which all other skills are taught; it centers around the practice of nonjudgmentally bringing awareness of and attention to the present moment. Interpersonal effectiveness focuses on developing effective relationships in which individuals balance their own needs with the needs of others. Emotion regulation includes labeling internal states, reducing emotional vulnerability, and reducing emotional distress.

Distress tolerance is an acceptance-based strategy for when an undesirable situation or emotions occur, to get through without engaging in impulsive behaviors likely to make the situation worse. These 4 modes work together with individual therapy, skills training modules, phone coaching, and a therapist consultation team to increase motivation, improve skillful behavior, increase generalizability of gains, and motivate practitioners to provide quality care, respectively (Linehan, 1993a, 1993b).

Miller and Rathus adapted DBT for adolescents (DBT-A), to provide evidence-based treatment for transdiagnostic multi-problem youth with chronic suicidality, a history of self-injury, and emotion dysregulation (Miller et al., 2007; Rathus & Miller, 2002). DBT-A is similar to adult DBT in that it includes the core DBT principles and strategies, and the DBT skills training modules. The adaptation of DBT to adolescent populations focused on the developmental differences between adults and adolescents (Miller et al., 2007; Rathus & Miller, 2015). Handouts and worksheets were modified to read at a lower grade level and be briefer and visually engaging to teens. Examples of teaching stories, examples, and exercises were changed to include developmentally relevant content that would both increase attention and help adolescents apply the strategies from therapy into their life. Importantly, DBT-A takes into account the family environment in which adolescents are involved and dependent upon; it involves caregivers in the skill groups and provides family therapy sessions. This family involvement is prominently demonstrated in the DBT-A specific fifth skills module called Walking the Middle Path, which includes focus on validation of self and other, behavioral change principles, and adolescent-family dialectical dilemmas (Miller et al., 2007; Rathus & Miller, 2015).

DBT-A has proven to be feasible and efficacious in the treatment of multi-problem high-risk adolescents (Cooney et al., 2012; Goldstein et al., 2015; McCauley et al., 2018; Mehlum et al., 2014; Mehlum et al., 2016; Rathus & Miller, 2002). Glenn and colleagues (2019) conducted a review of evidence-based psychosocial treatments for self-injurious thoughts and behaviors (SITBs) in youth. The review examined 26 RCTs identified DBT-A as the only Level 1 intervention, that is, well-established by at least 2 RCTs, for reducing deliberate self-harm and suicide ideation in youth. They also found DBT-A to be a Level 2 intervention – that is, probably efficacious – for reducing nonsuicidal self-injury and suicide attempts in youth. The authors noted that DBT-A was one of the few treatments supported by more than one RCT. Thus, the adaptation of DBT for dysregulated adolescents was an important stride in the effort to implement and disseminate DBT to adolescents suffering from intense emotional pain.

To improve DBT's implementation and dissemination, efforts to optimize DBT training have been made (Dimeff et al., 2015). Due to the complexity of psychotherapy and the resulting complexity of training practices (McHugh & Barlow, 2010), especially for training in DBT (Brodsky et al., 2016), Behavioral Tech, LLC., a Linehan Institute Training Company, has devoted substantial resources to producing DBT training content with research support (Behavioral Tech, n.d.). The training offered by Behavioral Tech includes several eligibility requirements that promote quality training. For example, because DBT clinicians must support one another in consultation teams, training requires individuals to be on a DBT team. Some training programs require a certain level of experience, as clinicians with previous DBT experience demonstrate more adherence to the model after training; their higher level of mastery in each of the various DBT modalities inclines clinicians with more DBT experience to utilize the whole variety of modalities rather than favoring those with which they are particularly

comfortable or familiar (DiGiorgio, Glass, & Arnkoff, 2010). Since DBT has many components, trainees must read the DBT treatment manuals on their own time. The training is interactive and comprehensive. Modules are taught and practiced through a process of (1) learning the content in training sessions, (2) using this content in their respective DBT practices, and (3) receiving feedback and training after considerable time practicing. DBT trainers are so focused on effective and accurate training that they continuously look to trainees' responses to training to inform their methods (DuBose & Perepletchikova, 2015). These intensive requirements for DBT training programs demonstrate the level of commitment necessary to provide quality training that promotes fidelity in implementation and dissemination (Landes & Linehan, 2012). A primary method for DBT training is the DBT intensive training course, which consists of two 5-day training sessions with 6 months in between for study and practice. Herschell, Lindhiem, and Kogan (2014) demonstrated that intensive training is related to therapists' positive attitude toward working with patients who suffer from BPD. Intensive training also led to increased therapist confidence in the effectiveness of DBT, increased use of DBT, and increased mastery of DBT content (Herschell et al., 2014).

A randomized controlled trial by Dimeff and colleagues (2011) showed that web-based, or e-learning, and manual-based modalities could effectively increase self-efficacy in and knowledge of DBT. Important for assessing the acceptability of the web-based training in DBT, individuals preferred to use the web-based version of the course. Later, Dimeff and colleagues (2015) compared instructor-led training to online training in DBT, specifically focusing on validation and behavioral chain analysis. While instructor-led training resulted in higher satisfaction, self-efficacy, and motivation, online training resulted in stronger content knowledge. Importantly, instructor-led and online training resulted in similar competency in applying the

strategies. Research conducted on web-based training for adult DBT suggests that web-based training in DBT-A could build on the quality training of in-person DBT training and expand the overall implementation and dissemination efforts of DBT.

While comprehensive DBT-A training programs are just as important as comprehensive adult DBT training programs, there are currently studies that directly examine implementation and dissemination outcomes of web-based training programs for comprehensive DBT-A. Behavioral Tech has published webinars on DBT-A (Rathus & Harned, 2015), but they are non-interactive lectures. Further, there are currently no studies that directly examine implementation and dissemination outcomes of web-based DBT-A skills training, a critical component of comprehensive DBT-A.

An increasing base of literature has examined DBT skills training as a stand-alone treatment because skills training is such a critical factor (i.e., mechanism) in treatment outcome (Soler et al., 2009; Uliaszek et al., 2016; Zeifman et al., 2020), because some settings only have the capacity to provide the skills training modality of DBT (Linehan et al., 2015; Neacsiu, Rizvi, & Linehan, 2010), and because skills training only has promising outcome data, especially for patients without the most severe high risk behaviors like self-harm and suicide attempts (McMain et al., 2016). Valentine and colleagues (2014) conducted a systematic review of DBT skills training as a stand-alone intervention and found evidence that DBT skills training alone is a potentially effective way to treat multi-problem individuals. Their follow-up systematic review, comprised of 12 single groups studies and 14 controlled studies, found that DBT skills training as a stand-alone intervention was efficacious for several clinical outcomes (Valentine, Smith, & Stewart, 2020). DBT skills training was effective for eating disorders, including improving emotional eating (Beaulac, Sandre, & Mercer, 2018), eating disorder behaviors (Ben-Porath et

al., 2014), and binge eating (Mushquash & McMahan, 2015). DBT skills improved clinical outcomes for major depressive disorder (MDD), past or current suicidality or self-injury, alcohol or substance use issues, attention deficit hyperactivity disorder (ADHD), and emotion and behavior dysregulation. That DBT skills improved emotion regulation for a diverse array of diagnostic populations reinforces emerging evidence that DBT is a transdiagnostic approach.

Dismantling studies can shed light on the mechanisms of change, especially in a multi-component treatment like DBT. In order to examine the effectiveness of the individual parts and combinations of DBT's component parts, Linehan and colleagues (2015) conducted a randomized clinical trial and component analysis that included giving individuals, who met criteria for BPD and had recent suicide attempts and/or NSSI episodes, (1) standard DBT, (2) DBT skills training (DBT-S) with a manualized case management intervention, or (3) DBT individual therapy (DBT-I) with an activity-based support group. Results showed that standard DBT and DBT-S (interventions that included DBT skills training) were more effective in reducing NSSI and improving other mental health problems than DBT-I (an intervention that did not include DBT skills training). Standard DBT and DBT-S were more effective than DBT-I in improving depression and reducing anxiety. Standard DBT, DBT-S, and DBT-I demonstrated reductions in suicide ideation, suicide attempts, medical severity of NSSI, and use of crisis services. Each condition also improved reasons for living. However, during one year follow up, rates of suicide attempts, ED visits, and hospitalizations were two-times lower for standard DBT. As such, results suggested that standard DBT is more effective at maintaining changes made during treatment, especially for high-risk clients. The authors of this study note limitations in interpreting results because each condition included telephone coaching and *all* providers were trained in crisis management protocols, which limits generalizability to most

real-world settings with skills-only applications. Further, clients assessed to be at imminent risk were referred to their individual treatment provider, rather than what usually happens in treatment settings where individual providers are often not consulted, which may have artificially reduced hospital admissions. Lastly, this study lacked statistical power to compare standard DBT and DBT-S and had high dropout rates, so we are limited in the conclusions we can draw from these comparisons. Thus, while DBT skills training as a stand-alone treatment is preferable to wait lists (McMain et al., 2016), standard DBT is preferable for maintaining gains and for higher risk patients. When standard DBT is not possible, having the option of condensed approaches that include skills training could give treatment providers valuable flexibility in implementing DBT, which is especially important given the higher demand for DBT treatment than traditional training methods can keep up with (Swenson, Torrey, & Koerner, 2002).

The Present Study

Increasing the breadth of research on DBT-A skills training is important because skills training is a vitally important component of multimodal DBT-A. Running multi-family skills groups, an adaptation from standard DBT patient-only skills groups, is also a complicated endeavor in which expert teaching and modeling might be valuable to clinicians. Also, as DBT skills training as a stand-alone treatment can be a viable option when comprehensive DBT is not possible, it is additionally worthwhile to provide high quality training in DBT skills to clinicians. Trainings that teach DBT-A skills can also act as a foot-in-the-door for clinicians interested in DBT-A. It is also important to study the effectiveness of trainings by measuring their ability to (1) impart knowledge of the content of an intervention and (2) create behavior change by increasing observable clinical skills. Examining clinical skills by coding clinician behavior is a critical component of studying trainings, as didactic training alone shows limited improvement in

clinical skills (Herschell et al., 2010; Kobak et al., 2016) and clinical skills are starting to be considered a more important predictor of client outcomes than knowledge of content (Kring et al., 2022), which is particularly problematic because clinical skills often go unstudied in examinations of training effectiveness (Kobak et al., 2013). This growing emphasis on clinical skills is reflected in the American Psychological Association's (2017) updated Standards of Accreditation that require graduate programs to include direct observation of clinical skills via either live observation or video recordings. With a growing interest in and need for DBT-A, it is crucial that DBT-A skills are implemented and disseminated in a way that maintains fidelity to the skills as they were created and researched.

Given the need for increased implementation and dissemination of DBT-A through expanded training efforts, the present study seeks to address the paucity of research on web-based training modes for DBT-A by assessing the acceptability, feasibility, and preliminary effectiveness of a new web-based DBT-A skills training course for clinicians. Miller, Rathus and Linehan (Psychwire, 2020) recently developed this training course for clinicians utilizing Dialectical Behavior Therapy Skills with adolescents and families (see Appendix I for full description of course). The course teaches clinicians how to teach clients the DBT Skills modules (Mindfulness, Distress Tolerance, Emotion Regulation, Interpersonal Effectiveness, Walking the Middle Path). A training course on DBT skills for adolescent is important because (1) DBT-A has adaptations made in content and format for teens and their caregivers, (2) skills training is one of the major treatment modalities in DBT, (3) more research has pointed to the utility of DBT skills as a stand-alone treatment approach and a critical component of multimodal DBT-A.

Study hypotheses are as follows:

- 1) Participants will find the web-based DBT-A skills training acceptable
- 2) Participants will find the web-based DBT-A skills training feasible
- 3) After taking the web-based DBT-A skills training course, participants will have more positive attitudes regarding teaching DBT skills to multi-problem/high-risk adolescents and their caregivers
- 4) After taking the web-based DBT-A skills training course, participants will have higher self-rated competence over teaching DBT Skills to multi-problem/high-risk adolescents and their caregivers
- 5) After taking the web-based DBT-A skills training course, participants will demonstrate significantly more knowledge of the content of DBT-A skills and how to teach them
- 6) After taking the web-based DBT-A skills training course, participants will demonstrate, in coded behavior samples, clinical competence in teaching one of two offered DBT-A skills components

Method

Participants

Participants were contacted by e-mail and provided informed consent in digital format. All participants and procedures were approved by the Long Island University Institutional Review Board (IRB #21/04-065). The participants were offered free access to this otherwise \$590 DBT Skills for Adolescents and Families training course as incentive for participating in the study.

As outlined in Table 1, 65 clinical psychology doctoral students from across the United States participated in this study. Most of the sample was female ($n = 47$; 72.3%), White ($n = 51$; 78.5%), and averaged age 27 ($SD = 5.8$ years). Asked their highest level of education,

twenty-nine participants had a bachelor's degree (44.6%), thirty-two had a master's degree (49.2%), and four had a doctoral-level degree (6.2%), one of which reported holding a doctorate in Neuroscience. All the participants were currently in a doctoral program for clinical psychology ($n = 65$; 100%), with the largest group in their first year of doctoral training ($n = 26$; 42.6%). Since all participants reported that they are currently doctoral students, it is possible that those reporting that they have a doctoral degree have their degrees in other fields or consider themselves to have a doctorate after the completion of their dissertation but before completion of their internship. A strong majority of the participants were currently being trained in dual orientation psychology doctoral programs ($n = 49$; 75.4%). On average, the participants had 4.6 years ($SD = 3.19$) of clinical experience, which included time in related fields such as social work or mental health counseling. Most participants had either no experience ($n = 30$; 46.2%) or moderate experience ($n = 17$; 26.2%) in DBT skills training. Interestingly, although eighteen (27.7%) participants reported that they had significant or extensive experience with training in DBT skills and twenty-eight (43.1%) reported being supervised for more than one year while providing DBT, only seven (10.8%) reported having more than one year of experience in providing individual DBT, eight (12.3%) reported spending more than one year providing DBT skills group, six (9.2%) reported spending more than one year on a DBT team, three (4.6%) reported spending more than one year working at a DBT site, and three (4.6%) reported treating more than ten clients in individual DBT. Thus, a discrepancy exists between self-reported experience in training with DBT skills and items related to experience providing DBT, particularly in providing individual DBT and being on a DBT team, such that participants reported having more DBT training experience than experience practicing DBT and receiving supervision in DBT. In this way, the overall experience level of the sample suggests that these

graduate students had more experience with training with DBT skills than in treating individual clients, working on DBT teams, facilitating DBT groups, and providing individual DBT. Since we did not ask participants to specify what courses or trainings they took, it is unknown exactly what training experiences they had with DBT skills. However, it is known that many LIU students, who made up the majority of participants, have taken a DBT course offered by a DBT expert in the LIU doctoral psychology program and/or have participated in a DBT lab run by the same DBT expert at LIU. This could have led participants to report having more experience with DBT skills training than their reports of experience with individual DBT, DBT skills groups, number of DBT clients, and experience on a DBT team would suggest.

Table 1

Demographic Characteristics

Variable	<i>M (SD)</i>	<i>n (%)</i>
Age	26.9 (5.8)	
Gender		
Female		47 (72.3)
Male		17 (26.2)
Agender, Two-spirit		1 (1.5)
Self-identified race		
White		51 (79.7)
Black or African American		1 (1.6)
Asian		8 (12.5)
Middle Eastern		1 (1.6)
From multiple races		3 (4.7)
Hispanic identity		
Non-Hispanic		60 (92.3)
Hispanic		5 (7.7)
Region Attending School		
Northeast		62 (95.5)
Midwest		1 (1.5)
South		1 (1.5)

West	1 (1.5)
Household Income Level	
<\$49,000	27 (42.9)
\$50,000–70,000	7 (11.1)
\$70,001–100,000	10 (15.9)
\$100,001–150,000	11 (17.5)
>\$150,001	8 (12.7)
Household Status	
Individual	13 (20.0)
Live with parents	11 (16.9)
Live with roommate(s)	14 (21.5)
Live with partner/spouse	14 (21.5)
Live with partner/spouse and children	11 (16.9)
Live with spouse and family	1 (1.5)
Live at university housing	1 (1.5)
Highest educational degree	
Bachelor's	29 (44.6)
Master's	32 (49.2)
Doctoral	4 (6.2)
Year of doctoral study	
1st	26 (42.6)
2nd	7 (11.5)
3rd	11 (18.0)
4th	9 (14.8)
5th	6 (9.8)
Other	6 (9.8)
Program Orientation	
CBT	10 (15.4)
Psychodynamic	2 (3.1)
Dual Orientation	49 (75.4)
Eclectic	4 (6.2)
Years of clinical experience	4.6 (3.19)
Experience in DBT skills training	
No Experience	30 (46.2)
Moderate Experience	17 (26.2)
Significant Experience	5 (7.7)
Extensive Experience	13 (20)
Time Spent Providing Individual DBT	
None	49 (75.4)
1-2 months	1 (1.5)
3-6 months	6 (9.2)
7-12 months	2 (3.1)
>12 months-1.5 years	4 (6.2)
>1.5 years-2 years	0 (0.0)
>2 years-3 years	3 (4.6)
>3 years	0 (0.0)

Time Spent Proving DBT Skills Group

None	37 (56.9)
1-2 months	3 (4.6)
3-6 months	8 (12.3)
7-12 months	9 (13.8)
>12 months-1.5 years	3 (4.6)
>1.5 years-2 years	2 (3.1)
>2 years-3 years	1 (1.5)
>3 years	2 (3.1)

Time Spent on a DBT Team

None	52 (80)
1-2 months	0 (0.0)
3-6 months	3 (4.6)
7-12 months	4 (6.2)
>12 months-1.5 years	1 (1.5)
>1.5 years-2 years	4 (6.2)
>2 years-3 years	1 (1.5)
>3 years	0 (0.0)

Time Spent Working at DBT Site

None	51 (78.5)
1-2 months	0 (0.0)
3-6 months	5 (7.7)
7-12 months	6 (9.2)
>12 months-1.5 years	0 (0.0)
>1.5 years-2 years	2 (3.1)
>2 years-3 years	0 (0.0)
>3 years	1 (1.5)

Time Supervised while Providing DBT

None	0 (0.0)
1-2 months	37 (56.9)
3-6 months	0 (0.0)
7-12 months	0 (0.0)
>12 months-1.5 years	4 (6.2)
>1.5 years-2 years	12 (18.5)
>2 years-3 years	8 (12.3)
>3 years	4 (6.2)

Number of Clients Treated in Individual DBT

None	54 (83.1)
1-2	5 (7.7)
2-5	2 (3.1)
5-10	1 (1.5)
10-20	1 (1.5)
20-40	1 (1.5)
40-60	1 (1.5)

Design

This study utilized a pre-post test design (i.e., open trial) to examine changes in self-rated competence in working with multi-problem high-risk adolescents, preference of in-person or online training, preference of online prerecorded or online-live training, attitudes toward working with multi-problem high-risk adolescents and their families, and knowledge of DBT-A skills. Post-test measures evaluated acceptability, feasibility, and a behavioral sample of clinical skills.

Measures

Demographic Questionnaire (Appendix A). The demographic questionnaire gathered information about age, gender, and race/ethnicity. Questions inquired into clinicians' level of education, former training in DBT, and settings in which they are learning and practicing DBT, DBT skills, and DBT-A, location of practice, area of specialization, and economic bracket.

Acceptability Scale (see Appendix B). The acceptability of this course was measured using an adapted version of the Treatment Acceptability Scale (TAS) used by Rathus, Campbell, Miller and Smith (2015) to measure acceptability of the Walking the Middle Path Skills Module. These items were previously formed from the Treatment Evaluation Inventory–Short Form ([TEI–SF] Kelley et al., 1989), which consists of items derived from Kazdin's (1980) Treatment Evaluation Inventory (TEI) and the Child and Adolescent Mental Health Satisfaction Scale ([CAMHSSS] Ayton et al., 2007). The TEI is both valid and internally consistent (coefficient $\alpha = .85$) (Kelley, Heffer, Gresham, & Elliott, 1989). The CAMHSSS is internally consistent and reliable (Cohen's kappa of items range between .61–.80). Items were adapted to this training course by altering the phrasing of the questions to ask about clinicians' thoughts about the training course rather than adolescents' and families' thoughts about the walking the middle path module. Further drawn from Rathus and colleagues (2015), items inquired into participants'

thoughts about the efficacy of the course and their perspective on how they felt about having been able to participate in the training course. The ten acceptability items were measured on a 5-point Likert-type scale including the options: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. The ten items were averaged to create one global acceptability score ranging from a score of 1–5, for which a higher number reflected a participant rating the course as more acceptable. Items were also considered individually.

Feasibility Scale (Appendix C). To assess feasibility, a measure was created for this study and was based on literature reviewed feasibility studies conducted on DBT-A (Cooney et al., 2012; Katz, Cox, Gunasekara, & Miller, 2004; Tormoen et al., 2014). To the measure of feasibility, or the level of relevancy, sustainability, and practical application of an intervention (Bowen et al., 2009), of the training course, participants were given 9 Likert-type questions, with a 5-point scale of Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree, and 3 open-ended questions to attain participants’ feedback about the course. Open-ended questions included (1) “How could this training course be improved?” (2) “What did you like about this training course?” and (3) “Do you have any other comments or suggestions?” All responses to open ended questions are listed in Appendix J. The nine items were averaged to create one global feasibility score ranging from a score of 1 to 5, for which a higher number reflected a participant rating the course as more feasible. Items were also considered individually. Feasibility was also measured by examining study attrition, which compared the percentage of participants who completed the course with those who did not complete the course.

Attitudes toward working with multi-problem transdiagnostic adolescents (Appendix D). To assess clinicians’ attitudes regarding teaching DBT skills to multi-problem transdiagnostic adolescents and their caregivers, 5 Likert-type questions, with a 7-point

numerical scale of Strongly Disagree, Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Agree, and Strongly Agree, were created for the purposes of this study. Attitudes scores were calculated as the sum of the 5 items that ranged from 1 to 7, with higher numbers reflecting more positive attitudes. Possible scores ranged from 5 to 35. Items 3 and 5 were reverse scored. Since these items asked participants to rate their own attitudes, the items were phrased in the first person. The scores on this measure at pre-test and post-test were compared.

Self-rated Competence (Appendix E). To assess self-rated perceived competence of participants' abilities to teach the DBT-A skills, participants were given 3 Likert-type questions, with a 7-point numerical scale of Strongly Disagree, Disagree, Somewhat Disagree, Neutral, Somewhat Agree, Agree, and Strongly Agree. The answers to each item that ranged from 1 to 7 were added together to create a self-rated competence score ranging from 3 to 21, where higher numbers indicate higher self-rated competence. Since these items asked participants to rate their own competence, the items were phrased in the first person. These items were developed for the present study. The scores on this measure at pre-test and post-test were compared.

Preference Items (Appendix F). To assess preference for in-person or online training, participants were given a single Likert-type item with a 7-point numerical scale, where 1 indicated preference for in-person and 7 indicated preference for online. To assess preference for online-live or online pre-recorded trainings, participants were given a single Likert-type item with a 7-point numerical scale, where 1 indicated preference for online-live and 7 indicated preference for online pre-recorded. The scores on this measure at pre-test and post-test were compared. There were prompts below each item where the participants could have explained why they chose their response. These prompts included (1) "How could this training course be improved?" (2) "Please rate your preference for taking this training in an online-live format (with

live trainers in real time) or an online-prerecorded and self-paced format: Please tell us why you chose the above response.” and (3) “Any other comments or preferences you would like to share.” See Appendix J for a full list of open-ended responses.

Knowledge of content (Appendix G). To assess changes in participants’ knowledge of DBT-A skills, participants completed a 29-item multiple-choice questionnaire, taken directly from quiz questions created by Dr. Alec Miller and Dr. Jill Rathus for the course (Psychwire, 2020). The questions were embedded in the course and selected to represent several items from each course module, before and after completing the course. Knowledge of the DBT-A skills content from the course functions as a measure of the course’s effectiveness. The quiz questions were drawn from each week of the course, including Week 1: An Introduction to DBT Skills, Week 2: The Mindfulness Skills, Week 3: The Distress Tolerance Skills, Week 4: The Walking the Middle Path Skills, Week 5: The Emotion Regulation Skills, and Week 6: The Interpersonal Effectiveness Skills. A correct response received a 1 and an incorrect response received a 0. Answers to each of the 29 questions were added together to create a knowledge of content score that could range from 0 to 29, where higher scores indicated more knowledge. The scores on this measure at pre-test and post-test were compared.

DBT-A Skills Clinical Competence Checklist (Appendix H). To assess participants’ level of clinical competence in teaching the DBT-A skills they learned in the course, participants submitted videos of themselves teaching one of two offered components of the course to an imaginary client after they had completed the course. Participants were asked to record “a short 5-7 minute video of yourself either (1) teaching the Observe skill from Mindfulness (including just mentioning at the end of the video, not actually demonstrating, a relevant way to have group members practice the skill of Observe) OR (2) introducing/describing Walking the Middle Path

Module (as a whole module, NOT teaching each of the separate skills within it) to an imaginary client or family or group.” Each clinician chose which prompt they used. Participants’ videos were evaluated using the DBT-A Skills Clinical Competence Checklist which was developed by treatment co-developer Jill Rathus along with the primary study author and based on Psychwire course content, which for each prompt included 10 core components of the clinical skill they were demonstrating. Participants received a 1 for demonstrating a core component and 0 for not demonstrating it. Scores were calculated out of 10, with higher scores indicating more clinical competence.

Procedure

The present study was approved by the Institutional Review Board (IRB) at Long Island University Post (IRB #21/04-065). Recruitment took place from March 7, 2022, to March 26, 2022. Clinical psychology graduate students attending Long Island University, Hofstra University, and Southwest Behavioral & Health Services’ internship program were contacted via email. Those who received an email were offered free access to the DBT Skills for Adolescents and Families Training Course for Clinicians as incentive for participating in the study. If interested, graduate students contacted the primary investigator. To be eligible to participate in this study, participants needed to be an adult currently attending a clinical psychology doctoral program. The primary investigator reviewed eligibility criteria and those who met study criteria and were willing to participate were sent the pre-test measures, which included informed consent with an electronic signature.

Sixty-eight graduate students expressed interest in participating in this study and sixty-five graduate students signed informed consent and completed the pre-test materials. Out of the 65 graduate students that were given access to the course, 57 started the course and 49

completed the course. After completing the course, participants were sent the post-test measures. Out of the 49 that completed the course, 49 (100%) completed the post-test measures and 34 (69.4%) of those uploaded the video of themselves.

Pre- and post-training assessments. Before participants could access the course, participants completed the demographic questionnaire, the attitudes scale, the self-rated competence scale, the preference items, and the knowledge of content assessment. After completion of the pre-test assessments, participants were given access to the online course and were allotted 6-10 weeks to complete the 12-14 hours of course material. After completion of the course, participants completed the post-test measures, which included the attitudes scale, the self-rated competence scale, the preference items, the knowledge of content assessment, the feasibility scale, acceptability scale, and the prompt for them to upload a video of themselves demonstrating their clinical skills.

Videos of participants demonstrating clinical skills were evaluated by two clinical psychology graduate students with the DBT-A Skills Clinical Competence Checklist (see Appendix H). One evaluator was the primary study author who has been a member of a DBT research lab for over 5 years and was a 5th year doctoral student attending a dual-orientation (CBT and Psychodynamic) graduate program and an APA Accredited internship program. The second evaluator had received didactic training in DBT and had experience utilizing DBT skills and concepts in individual therapy under supervision; he was a 6th year doctoral student attending a CBT/ACT oriented graduate program and was also attending an APA Accredited internship program. The two evaluators coded ten of the same videos, using actual data, yielding 100 points of comparison where raters could have answered “1” to indicate the presence of a

behavior or “0” to indicate that the behavior was not present. Raters found a high level of interrater reliability (Cohen’s kappa = .864). Each rater went on to score half of the videos.

DBT Skills for Adolescents and Families training course. Alec Miller, Jill Rathus, and Marsha Linehan, the world’s leading experts in and developers of DBT and DBT for adolescents, collaborated with Psychwire to produce the DBT Skills for Adolescents and Families training course for clinicians (Psychwire, 2020; visit <https://psychwire.com/linehan/dbt-adolescents-and-families> to see more information about the course). The goal of the course is to give clinicians the ability to introduce teens and families to DBT skills training and teach clinicians how to administer the 5 DBT Skills modules: Mindfulness, Distress Tolerance, Emotion Regulation, Interpersonal Effectiveness, and the teen-family-specific module, Walking the Middle Path (see Appendix I for a complete description of course content). The course includes didactics and demonstrations on teaching the DBT skills to teens and families in multi-family skills groups, individual sessions, family skills sessions, parent sessions, and crisis coaching; it takes a total of 12–14 hours to complete over a span of 6–10 allotted weeks and includes a digital copy of Rathus and Miller’s (2015) *DBT Skills Manual for Adolescents*.

Results

Acceptability

The acceptability of the course was measured with the acceptability scale. Detailed in Table 2, on a scale from 1 to 5, corresponding respectively to strongly disagree, disagree, neutral, agree, and strongly agree, participants found the course highly acceptable ($M = 4.68$, $SD = .34$). Participants found each aspect of the course highly acceptable, as mean acceptability scores per item ranged from the item with an average of 4.45 ($SD = .61$) for the abbreviated item “Those I

treat will improve as a result of this course” to the item with an average of 4.90 ($SD = .31$) for the abbreviated item “I am glad I took this course.”

Table 2

Participant Ratings of Means and Standard Deviations for Items of Acceptability Scale (N = 49)

Abbreviated Item	<i>M</i>	<i>SD</i>
1. This course will help me use DBT-A skills	4.59	.49
2. Positive reaction to this course	4.67	.47
3. This course improved me as clinician	4.80	.41
4. I liked this course	4.76	.48
5. This course can help me treat conflicts/challenges	4.57	.50
6. I am glad I took this course	4.90	.31
7. Those I treat will improve as a result of this course	4.45	.61
8. This course was interesting	4.71	.58
9. This course addresses issues my clients face	4.51	.71
10. I find this course to be helpful	4.73	.45
Global Acceptability	4.67	.35

Note. Items were rated from 1-5, with 5 indicating the most acceptable.

Feasibility

Feasibility of the course was measured with the feasibility scale. Detailed in Table 3, on a scale from 1 to 5, corresponding respectively to strongly disagree, disagree, neutral, agree, and strongly agree, participants found the course highly feasible ($M = 4.57$, $SD = .37$). Participants found each aspect of the course highly feasible, as mean feasibility scores per item ranged from

an average of 4.39 ($SD = .61$) for the abbreviated item “The families I treat will find the skills acceptable” to the most feasible item with an average of 4.82 ($SD = .39$) for the item “This course is relevant to teen-family problems.”

Table 3

Participant Ratings of Means and Standard Deviations for Items of Feasibility Scale (N = 49)

Abbreviated Item	<i>M</i>	<i>SD</i>
1. This course is relevant to multi-problem adolescents	4.57	.58
2. The families I treat will find the skills acceptable	4.39	.61
3. It is clear how to teach the skills I learned	4.39	.73
4. The timeframe is appropriate for the course	4.37	.73
5. I will use what I learned when I teach DBT-A skills	4.71	.50
6. I will use what I learned in multimodal DBT	4.73	.45
7. This course is relevant to teen-family problems	4.82	.39
8. Clients/families will find the skills helpful	4.57	.58
9. I was able to view the course on my own schedule	4.43	.87
Global Feasibility Score	4.55	.38

Note. Items were rated from 1-5, with 5 indicating the highest feasibility.

Feasibility was also measured by assessing engagement in the study and attrition. As such, 68 individuals expressed interest in the course and 65 individuals completed the pre-test measures and received access to the course. Of the 65 participants who received the course, 49 (75.4%) participants completed it. Seven participants did not start the course. Of those who started the course ($n = 58$), 84.5% completed the course ($n = 49$). Of those who completed more

than the first week of the course ($n = 54$), 90.7% ($n = 49$) went on to complete all 6 weeks of the course. All participants (100%, $n = 49$) who completed the course went on to complete the pre-tests and post-tests up to the knowledge of content assessment. Of those who completed the course, 69.4% ($n = 34$) also submitted a video for assessment of clinical skills.

Attitudes

Attitudes regarding teaching DBT skills to high-risk multi-problem adolescents and their caregivers were measured using the attitudes scale with a range of 5 to 35. In Table 4 and Figure 1, an item-by-item comparison is detailed. As seen in Table 6, average scores on the attitudes scale at post-test ($M = 27.7$, $SD = 3.9$) were significantly higher than at pre-test ($M = 24.0$, $SD = 4.2$; $t = 8.1$, $p < .001$). The effect size of the difference was large (Cohen's $d = 1.15$). Participant scores at pre-test were positively associated with participant scores at post-test (correlation = .69, $p < .001$, 95% CI [0.51, 0.81])). Most notable were the large changes on items 2 and 3 which indicated that participants' feelings of confidence to teach adolescents and their caregivers DBT skills went up substantially and their endorsement of the statement "high risk populations are too difficult to treat" decreased substantially.

Table 4

Mean Ratings of Attitudes by Item at Pre and Post (N = 49)

Item	Pre-training	Post-training				
	<i>M (SD)</i>	<i>M (SD)</i>	<i>t</i>	<i>p</i>	<i>d</i>	CI
1. I am willing to work with high risk adolescents with multiple problems	5.94 (1.2)	6.22 (1.1)	2.5	.015	0.36	[0.65, 0.07]
2. I feel confident and	2.98 (1.9)	5.43 (0.9)	10.8	<.001	1.55	[1.96, 1.13]

	ready to teach adolescents and their caregivers DBT skills						
3.	High risk populations are too difficult to treat	5.57 (1.4)	2.06 (1.2)	-10.4	<.001	-1.49	[-1.08, -1.89]
4.	I like working with adolescents who have many different issues	5.47 (1.1)	5.45 (1.2)	-0.1	.904	-0.02	[0.26, -0.29]
5.	Working with people who have multiple problems and diagnoses feels overwhelming	4.04 (1.3)	3.41 (1.4)	-1.93	.060	-0.28	[0.01, -0.56]

Note. Items were rated from 1-7, with 7 indicating the strongest agreement with the statement.

Items 3 and 5 are reverse coded. *d* = effect size. CI = 95% confidence interval for effect size.

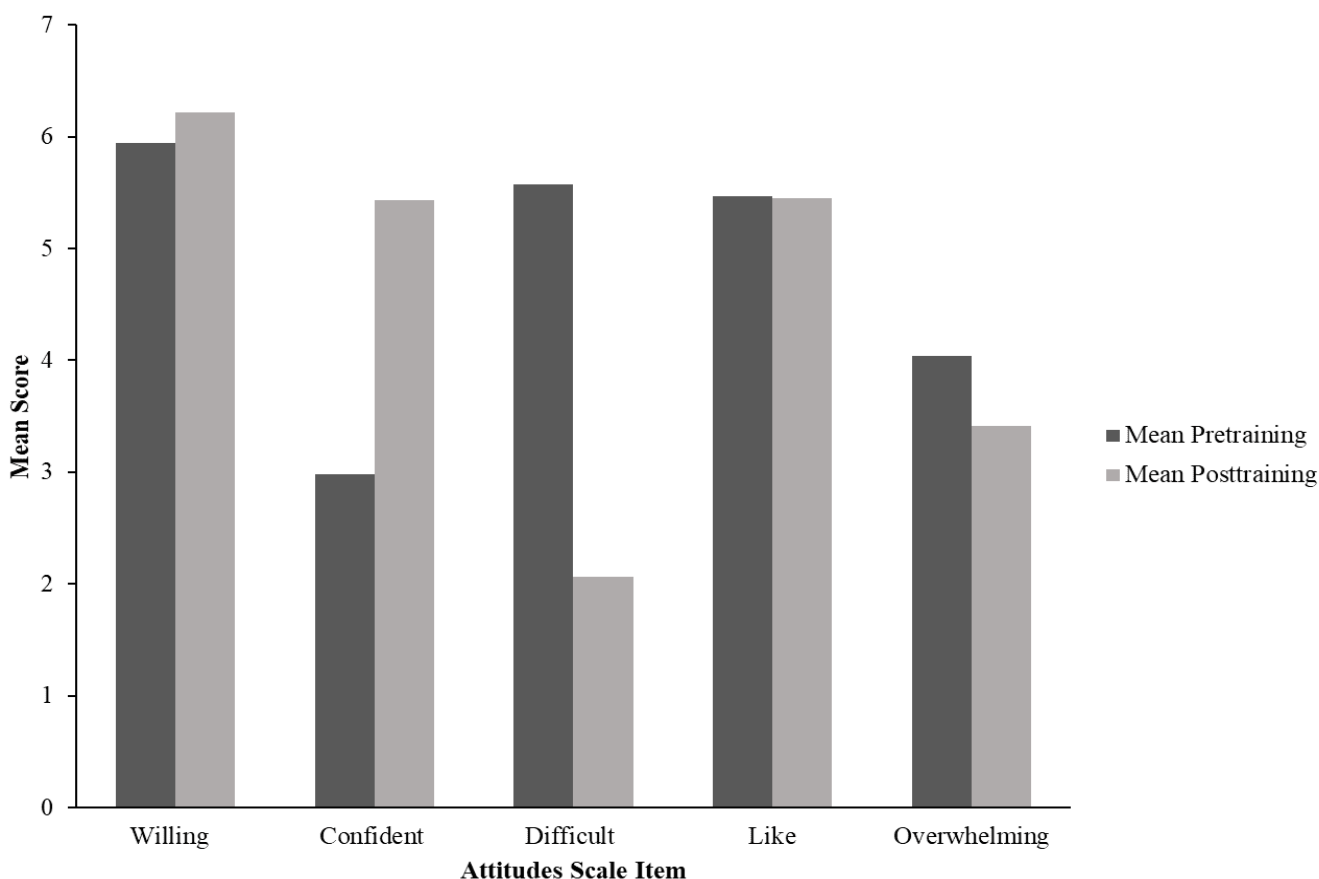


Figure 1. Mean differences of attitudes at pre-training and post-training. Items were rated from

1-7, with 7 indicating the strongest agreement with the statement. Item 3 “Difficult” and Item 5 “Overwhelming” were reverse coded in overall attitudes score.

Self-rated Competence

Self-rated competence regarding teaching the DBT skills to multi-problem high-risk adolescents and their caregivers were measured using the self-rated competence scale. In Table 5 and Figure 2, an item-by-item comparison is detailed. As shown in Table 6, average scores on the self-rated competence scale at post-test ($M = 16.3$, $SD = 2.2$) were significantly higher than at pre-test ($M = 7.1$, $SD = 4.6$; $t = 15.2$, $p < .001$). The effect size of the difference was very large (Cohen’s $d = 2.18$). Participant scores at pre-test were positively associated with participant scores at post-test (correlation = .45, $p = .001$, 95% CI [0.19, 0.65]). Each item showed large changes.

Table 5

Mean Ratings of Self-rated Competence by Item at Pre and Post (N = 49)

Item	Pre-training	Post-training				
	<i>M (SD)</i>	<i>M (SD)</i>	<i>t</i>	<i>p</i>	<i>d</i>	CI
1. I feel like I have mastery over the DBT-A skills	2.51 (1.7)	5.47 (0.9)	13.1	<.001	1.87	[2.34, 1.40]
2. I feel like I can competently teach the DBT-A skills to multi-problem transdiagnostic adolescents and their caregivers	2.10 (1.5)	5.22 (0.9)	14.9	<.001	2.13	[2.63, 1.62]
3. I possess the knowledge and ability to teach the DBT-A skills	2.49 (1.7)	5.59 (0.9)	13.2	<.001	1.89	[2.36, 1.42]

Note. Items were rated from 1-7, with 7 indicating the strongest agreement with the statement. d = effect size. CI = 95% confidence interval for effect size.

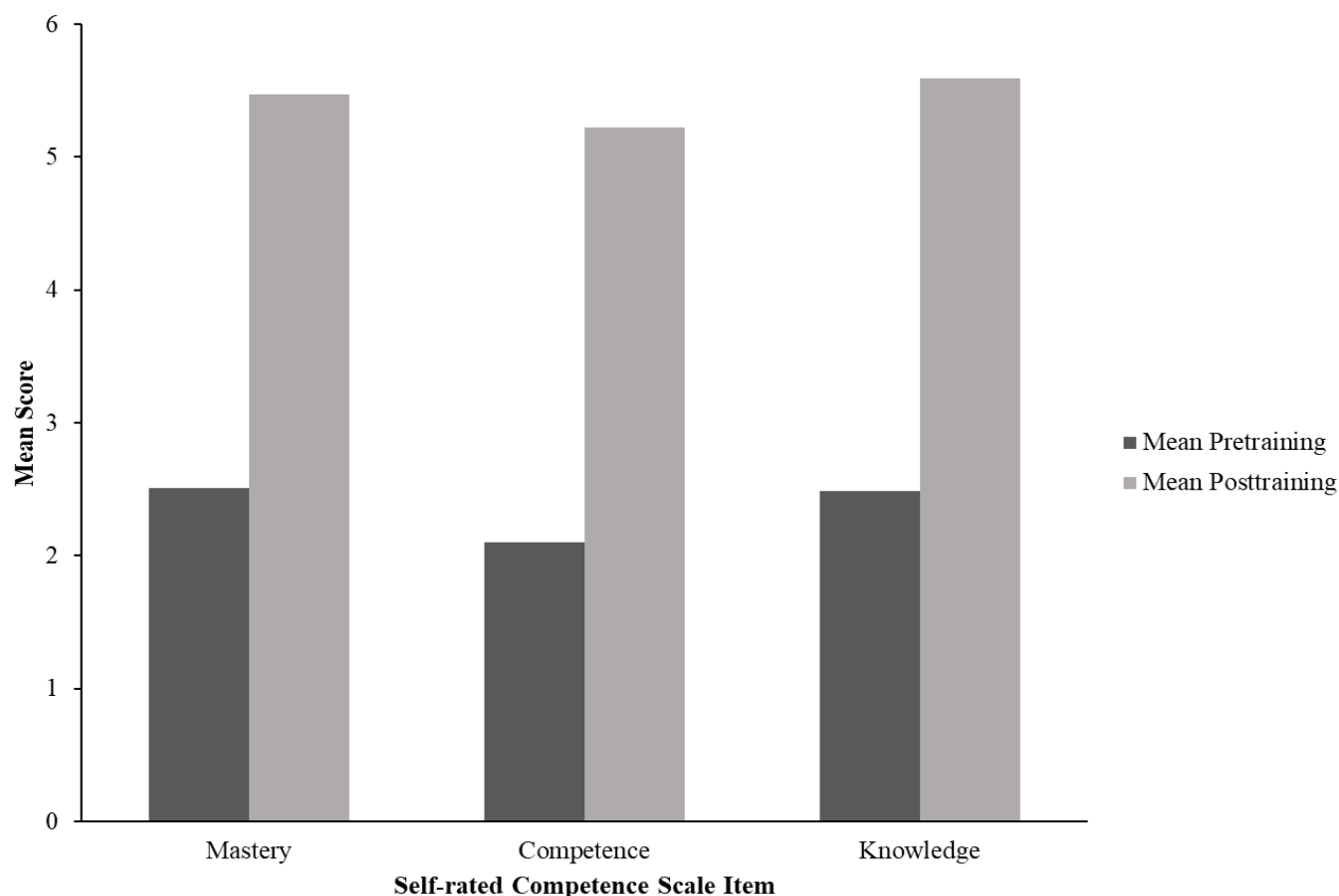


Figure 2. Mean differences of self-rated competence at pre-training and post-training. Items were rated from 1-7, with 7 indicating the strongest agreement with the statement.

Preference

Preference for online or in-person training was measured with a Likert-type item with a 7-point numerical scale, with 1 being “prefer in-person” and 7 being “prefer online.” As shown in Table 6, participants preferred the training to be online. Although participants preferred online training both at pre-test and at post-test, average scores on this item indicated that this preference for online training increased from pre-test ($M = 4.8$, $SD = 2.1$) to post-test ($M = 5.2$, $SD = 1.8$; $t =$

1.7, $p = .106$). The effect size of the difference was small (Cohen's $d = .24$). Propensity to prefer online training at pre-test was positively associated with propensity at post-test (correlation = .44, $p = .001$, 95% CI [0.19, 0.64]).

For preference for online-live or online pre-recorded training, participants were given a single Likert-type item with a 7-point numerical scale, with 1 being “online-live” and 7 being “online pre-recorded.” As shown in Table 6, participants preferred the training to be online pre-recorded. Although participants preferred online pre-recorded both at pre-test and at post-test, average scores on this item indicated that this preference for online pre-recorded training increased from pre-test ($M = 4.9$, $SD = 2.2$) to post-test ($M = 5.5$, $SD = 1.7$; $t = 1.6$, $p = .129$). The effect size of the difference was small (Cohen's $d = .22$). Propensity to prefer online pre-recorded training at pre-test was associated with propensity at post-test (correlation = .31, $p = .032$, 95% CI [0.03, 0.54]).

Knowledge

Participants' knowledge of DBT-A skills was measured using a 29-item multiple-choice knowledge of content questionnaire. As shown in Table 6, average scores on the knowledge questionnaire at post-test ($M = 26.7$, $SD = 1.6$) were significantly higher than at pre-test ($M = 22.9$, $SD = 2.6$; $t = 12.5$, $p < .001$). The effect size of the difference was large (Cohen's $d = 1.78$). Participant scores at pre-test were positively associated with participant scores at post-test (correlation = .60, $p < .001$, 95% CI [0.39, 0.76])). Significant improvements were also found from pre-test ($M = 22.5$, $SD = 3.1$) to post-test ($M = 25.3$, $SD = 3.4$; $t = 9.3$, $p < .001$) for all 65 participants; this analysis included using data from the 16 participants that completed pre-test measures but did not complete post-test measures and using their pre-test scores as their post-test scores.

Table 6

Mean Ratings of Attitudes, Self-rated Competence (SR-C), Preference of in-person or online (PIO), Preference of pre-recorded or online-live (PPO), and Knowledge Pre and Post (N = 49)

Domain	Pre-training	Post-training	<i>t</i>	<i>p</i>	<i>d</i>	CI
	<i>M (SD)</i>	<i>M (SD)</i>				
Attitudes	24.0 (4.2)	27.7 (3.9)	8.1	<.001	1.15	[1.51, 0.79]
SR-C	7.1 (4.6)	16.3 (2.2)	15.2	<.001	2.18	[2.69, 1.66]
PIO	4.8 (2.1)	5.2 (1.8)	1.7	.106	0.24	[0.52, -0.05]
PPO	4.9 (2.2)	5.5 (1.7)	1.6	.129	0.22	[0.50, -0.06]
Knowledge	22.9 (2.6)	26.7 (1.6)	12.5	<.001	1.78	[2.23, 1.33]

Note. *d* = effect size. CI = 95% confidence interval for effect size.

Clinical Skills

The DBT-A Skills Clinical Competence Checklist (see Appendix H) was used to rate participants' clinical skills. Thirty-four participants completed the video, 13 (38.2%) of whom chose to be evaluated on introducing the Walking the Middle Path module and 21 (61.8%) of whom chose to be evaluated on teaching the Observe Skill. Both the Walking the Middle Path (see Table 7) and Observe Skill (see Table 8) sections of the checklist consisted of 10 items each, with higher percentages out of 10 indicating stronger clinical skills. Participants had high scores on both introducing Walking the Middle Path and teaching the Observe skill, as participants averaged 83.9% (*SD* = .96) on Waking the Middle Path and 94.8% (*SD* = .81) on the Observe skill. Average Walking the Middle Path scores per item ranged from 23.1% (*SD* = .23) for the

item abbreviated, “Mentioned validating oneself,” to 100% ($SD = .00$) for the items abbreviated, “Provided rationale for Walking the Middle Path,” “Mentioned dialectics,” “Mentioned validation,” and “Mentioned behavior change.” Mean Observe skill scores per item ranged from 85.7% ($SD = .36$) for the item abbreviated, “Mentioned difference of noticing what is outside versus inside ourselves,” to 100% ($SD = .00$) for the items abbreviated, “Correctly defined Observing,” “Mentioned that Observing is done through the senses,” and “Gave examples of Observing.” The average time for all videos was 4.52 minutes ($SD = 1.51$ minutes).

Table 7

Percentage of clinical skills demonstrated for Walking the Middle Path (N = 13)

Abbreviated Item	Correct (%)	<i>SD</i>
1. Walking the Middle Path was developed for families/family-focused module	92.3	.28
2. Provided rationale for Walking the Middle Path	100.0	.00
3. Mentioned dialectics	100.0	.00
4. Correctly defined dialectics	69.2	.48
5. Provided rationale for dialectics	92.3	.28
6. Mentioned validation	100.0	.00
7. Correctly defined validation	69.2	.48
8. Mentioned validating oneself	23.1	.23
9. Mentioned behavior change	100.0	.00
10. Explained that behavior change emphasizes positive reinforcement	92.3	.28
Average Walking the Middle Path Score	83.9	.96

Note. Items were scored as 1 or 0, based on whether the clinical skill was demonstrated or not demonstrated. Percentages reflect the number of participants that demonstrated the skill.

Table 8

Percentage of clinical skills demonstrated for the Observe Skill (N = 21)

Abbreviated Item	Correct (%)	SD
1. Observe skill is a What skill in mindfulness/helps get into wise mind	95.2	.22
2. Correctly defined observing	100.0	.00
3. Mentioned difference of noticing what is outside versus inside ourselves	85.7	.36
4. Gave an example of noticing outside	95.2	.22
5. Gave an example of noticing inside	95.2	.22
6. Mentioned that observing is done through the senses	100.0	.00
7. Stated importance of not changing or controlling thoughts/emotions	85.7	.36
8. Provided rationale for using Observe skill	90.5	.30
9. Gave examples of Observing	100.0	.00
10. Mentioned ways to practice Observe skill	95.2	.22
Average Observe Skill Score	94.8	.81

Note. Items were scored as 1 or 0, based on whether the clinical skill was demonstrated or not demonstrated. Percentages reflect the number of participants who demonstrated the skill.

Duration of Training

The average number of days it took participants to complete the course was 56.98 ($SD = 13.58$, range = 29–70) or 8 weeks. Regarding each week, 6.1% ($n = 3$) of participants completed the course in five weeks, 16.3% ($n = 8$) of participants completed the course in six weeks, 14.3% ($n = 7$) completed the course in seven weeks, 2.0% ($n = 1$) completed the course in eight weeks, 14.3% ($n = 7$) completed the course in nine weeks, and 46.9% ($n = 23$) completed the course in ten weeks.

Additional Exploratory Analyses

A series of post-hoc analyses were conducted to explore relationships among gender, levels of experience with DBT skills, educational background, type of training program, attitudes, self-rated competence, preference, knowledge, change in knowledge scores from pre-test to post-test, and clinical skills (see Table 9 for Descriptive Statistics).

Table 9

Descriptive Statistics for Duration of Training, Attitudes, Self-rated Competence (SR-C), Preference, Knowledge, Improved Knowledge, and Demographic Data

Variable	<i>n</i>	<i>M</i>	<i>SD</i>
1. Days to Complete	49	56.98	13.58
2. Gender ^a	65	1.75	0.47
3. Individual DBT Experience ^b	65	0.82	1.64
4. Number of DBT Clients	65	0.42	1.17
5. Pre-test Attitudes	65	23.86	4.01
6. Post-test	49	27.69	3.89

Attitudes

7. DBT Skills Group ^a	65	1.35	1.89
8. DBT Team ^a	65	0.74	1.60
9. DBT Site ^a	65	0.69	1.49
10. Pre-test SR-C	65	7.03	4.53
11. Post-test SR-C	49	16.25	2.23
12. Level of Education ^c	65	2.22	1.19
13. Year in Program	65	2.39	1.56
14. DBT Skills Training ^b	65	2.55	1.60
15. Supervised in DBT ^a	65	2.91	2.29
16. Pre-test PIO	65	4.75	2.24
17. Post-test PIO	49	5.24	1.79
18. Pre-test PPO	65	4.74	2.27
19. Post-test PPO	49	5.45	1.65
20. Pre-test Knowledge	65	22.46	3.08
21. Post-test Knowledge	49	26.65	1.64
22. Improved	49	3.69	2.07

Knowledge

23. Age 65 26.99 5.84

^a 1 = male and 2 = female.

^b 0 = None, 1 = 1–2 months, 2 = 3–6 months, 3 = 7–12 months, 4 = >12 months–1.5 years, 5 = 1.5 years–2 years, 6 = >2–3 years, 7 = >3 years.

^c 1 = B.A./B.S., 2 = M.A./M.S., 3 = Ph.D./Psy.D.

* $p < .05$. ** $p < .01$.

Duration of Training. As shown in Table 10, gender was significantly correlated with the number of days to complete the course ($r = -.338, p = .018, 95\% \text{ CI } [-0.57, -0.06]$) such that men on average ($M = 64.7, SD = 7.2$) took more days to complete the course than women ($M = 54.7, SD = 14.4; t = 2.29, p = .027$). The effect size of this difference was large (Cohen's $d = 0.76$). The amount of time spent providing individual DBT therapy was significantly negatively associated with the number of days to complete the course ($r = -.293, p = .041, 95\% \text{ CI } [-0.53, -0.01]$). The number of clients treated in individual DBT was significantly negatively associated with the number of days to complete the course ($r = -.326, p = .022, 95\% \text{ CI } [-0.56, -0.05]$).

Table 10

Correlations for Duration of Training

Variable	1	2	3	4
1. Days to Complete	—			
2. Gender ^a	-.34*	—		
3. Individual DBT Experience ^b	-.29*	.16	—	
4. Number of	-.33*	.28*	.81*	—

DBT Clients

^a 1 = male and 2 = female.

^b 0 = None, 1 = 1–2 months, 2 = 3–6 months, 3 = 7–12 months, 4 = >12 months–1.5 years, 5 = 1.5 years–2 years, 6 = >2–3 years, 7 = >3 years.

* $p < .05$. ** $p < .01$.

Attitudes. As shown in Table 11, the amount of time spent providing individual DBT therapy was significantly positively associated with attitudes about teaching DBT skills to high-risk multi-problem adolescents and their caregivers at pre-test ($r = .353, p = .004$, 95% CI [0.12, 0.55]) and post-test ($r = .319, p = .025$, 95% CI [0.04, 0.55]). The amount of time spent providing DBT skills group was significantly positively associated with attitudes at pre-test ($r = .309, p = .012$, 95% CI [0.07, 0.51]), but not at post-test. The amount of time spent on a DBT team was significantly positively correlated with attitudes at pre-test ($r = .308, p = .013$, 95% CI [0.07, 0.51]) and post-test ($r = .334, p = .019$, 95% CI [0.06, 0.56]). The amount of time spent working or on externship at a DBT site was significantly positively associated with attitudes at pre-test ($r = .291, p = .019$, 95% CI [0.05, 0.49]), but not at post-test. The number of clients treated in individual DBT therapy was significantly positively associated with attitudes at pre-test ($r = .282, p = .023$, 95% CI [0.04, 0.49]), but not at post-test.

Table 11

Correlations for Attitudes at Pre- and Post-test

Variable	1	2	3	4	5	6	7
1. Pre-test Attitudes	—						

2. Post-test Attitudes	.69**	–					
3. Individual DBT Experience ^a	.35**	.32*	–				
4. DBT Skills Group ^a	.31*	.25	.64**	–			
5. DBT Team ^a	.31*	.33*	.84**	.71**	–		
6. DBT Site ^a	.29*	.28	.55**	.77**	.57**	–	
7. Number of DBT Clients	.28*	.17	.81**	.53**	.68**	.52**	–

^a 0 = None, 1 = 1–2 months, 2 = 3–6 months, 3 = 7–12 months, 4 = >12 months–1.5 years, 5 = 1.5 years–2 years, 6 = >2–3 years, 7 = >3 years.

* $p < .05$. ** $p < .01$.

Self-rated Competence. As shown in Table 12, level of education was significantly positively associated with self-rated competence at pre-test ($r = .389$, $p = .001$, 95% CI [0.16, 0.58]) and post-test ($r = .379$, $p = .007$, 95% CI [0.11, 0.59]). The year in doctoral program was significantly positively correlated with self-rated competence at pre-test ($r = .419$, $p < .001$, 95% CI [0.19, 0.61]) and post-test ($r = .525$, $p < .001$, 95% CI [0.28, 0.71]). Level of experience with DBT skills training was significantly positively correlated with self-rated competence at pre-test ($r = .366$, $p = .003$, 95% CI [0.13, 0.56]) but not at post-test. The amount of experience providing individual DBT therapy was significantly positively associated with self-rated competence at pre-test ($r = .455$, $p < .001$, 95% CI [0.24, 0.63]) and post-test ($r = .592$, $p < .001$, 95% CI [0.37, 0.75]). The number of clients treated in individual DBT therapy was significantly positively associated with self-rated competence at pre-test ($r = .312$, $p = .011$, 95% CI [0.07, 0.52]) and

post-test ($r = .463, p < .001, 95\% \text{ CI } [0.21, 0.66]$). The amount of time spent providing DBT skills group was significantly positively associated with self-rated competence at pre-test ($r = .562, p < .001, 95\% \text{ CI } [0.37, 0.71]$) and post-test ($r = .568, p < .001, 95\% \text{ CI } [0.34, 0.73]$). The amount of time spent on a DBT team was significantly positively associated with self-rated competence at pre-test ($r = .452, p < .001, 95\% \text{ CI } [0.23, 0.63]$) and post-test ($r = .632, p < .001, 95\% \text{ CI } [0.43, 0.78]$). The amount of time spent working or on externship at a DBT site was significantly positively associated with self-rated competence at pre-test ($r = .362, p = .003, 95\% \text{ CI } [0.13, 0.56]$) and post-test ($r = .451, p = .001, 95\% \text{ CI } [0.19, 0.65]$). The amount of time supervised while providing DBT skills group or individual therapy was significantly positively correlated with self-rated competence at pre-test ($r = .750, p < .001, 95\% \text{ CI } [0.62, 0.84]$) and post-test ($r = .435, p = .002, 95\% \text{ CI } [0.18, 0.64]$).

Table 12

Correlations for Self-Rated Competence (SR-C) at Pre- and Post-test

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Pre-test SR-C	—										
2. Post-test SR-C	.45**	—									
3. Level of Education ^c	.39**	.38**	—								
4. Year in Program	.42**	.53**	.60**	—							
5. DBT Skills Training ^b	.37**	.24	.49**	.58**	—						
6. Individual DBT Exp. ^a	.46**	.59**	.30*	.48**	.33**	—					

7. Number of DBT clients	.31*	.46**	.22	.37**	.25*	.82**	—			
8. DBT Skills Group ^a	.56**	.57**	.39**	.59**	.52**	.64**	.53**	—		
9. DBT Team ^a	.45**	.63**	.28*	.44**	.28*	.84**	.68**	.71**	—	
10. DBT Site ^a	.36**	.45**	.15	.32*	.32*	.55**	.52**	.77**	.57**	—
11. Supervised in DBT ^a	.75**	.44**	.39**	.59**	.59**	.56**	.42**	.76**	.68**	.57**

^a 0 = None, 1 = 1–2 months, 2 = 3–6 months, 3 = 7–12 months, 4 = >12 months–1.5 years, 5 = 1.5 years–2 years, 6 = >2–3 years, 7 = >3 years.

^b 1 = No Experience, 2 = Some Experience, 3 = Moderate Experience, 4 = Significant Experience, 5 = Extensive Experience.

^c 1 = B.A./B.S., 2 = M.A./M.S., 3 = Ph.D./Psy.D.

* $p < .05$. ** $p < .01$.

Preference. As shown in Table 13, preference for taking the course in-person or online at pre-test was significantly positively correlated with time supervised while providing DBT skills group or individual therapy ($r = .272$, $p = .028$, 95% CI [0.03, 0.48]); this relationship was not statistically significant at post-test.

As shown in Table 13, preference for taking the training in an online-live (with live trainers in real time) or online pre-recorded format was significantly positively correlated with time spent providing individual DBT therapy at pre-test ($r = .323$, $p = .009$, 95% CI [0.09, 0.53]) such that preference for online pre-recorded was associated with more time spent providing individual DBT therapy; this relationship was not statistically significant at post-test. At pre-test, preference for online-live or online pre-recorded was significantly positively correlated with year

in doctoral program ($r = .323, p = .011, 95\% \text{ CI } [0.08, 0.53]$), time spent providing DBT skills groups ($r = .302, p = .015, 95\% \text{ CI } [0.06, 0.51]$), time spent on a DBT team ($r = .255, p = .040, 95\% \text{ CI } [0.01, 0.47]$), time spent working at a DBT site ($r = .267, p = .032, 95\% \text{ CI } [0.02, 0.48]$), and time supervised while providing DBT skills group or individual therapy ($r = .302, p = .015, 95\% \text{ CI } [0.06, 0.51]$). In each of these cases, more experience and time were associated with preference for online pre-recorded training at pre-test but not at post-test.

Table 13

Correlations for Pre- and Post-test Preference of in-person or online (PIO), Pre- Post-test Preference of pre-recorded or online-live (PPO)

Variable	1	2	3	4	5	6	7	8	9	10
1. Pre-test PIO	—									
2. Post-test PIO	.44**	—								
3. Pre-test PPO	.43**	.16	—							
4. Post-test PPO	-.07	.17	.31*	—						
5. Year in Program	.15	.09	.32*	-.04	—					
6. Individual DBT Exp. ^a	.08	.03	.32**	-.08	.48**	—				
7. DBT Skills Group ^a	.14	.05	.30*	-.05	.59**	.53**	—			
8. DBT Team ^a	.06	-.07	.26*	-.22	.28*	.84**	.71**	—		
9. DBT Site ^a	.16	.22	.28*	.15	.32*	.55**	.77**	.57**	—	

10. Supervised in DBT ^a	.27*	.12	.30*	.01	.59**	.56**	.76**	.68**	.57**	–
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^a 0 = None, 1 = 1–2 months, 2 = 3–6 months, 3 = 7–12 months, 4 = >12 months–1.5 years, 5 = 1.5 years–2 years, 6 = >2–3 years, 7 = >3 years.

* $p < .05$. ** $p < .01$.

Knowledge. As shown in Table 14, age was significantly positively correlated with scores on knowledge at post-test ($r = .401, p = .004, 95\% \text{ CI } [0.14, 0.61]$) but not at pre-test. Age was negatively associated with how much knowledge scores improved from pre-test to post-test ($r = -.391, p = .005, 95\% \text{ CI } [-0.61, -0.12]$). Level of education was significantly positively associated with knowledge scores at pre-test ($r = .428, p < .001, 95\% \text{ CI } [0.21, 0.61]$) and at post-test ($r = .387, p = .006, 95\% \text{ CI } [0.12, 0.60]$). Year in doctoral program was significantly positively correlated with knowledge scores at pre-test ($r = .500, p < .001, 95\% \text{ CI } [0.28, 0.67]$) and post-test ($r = .452, p = .001, 95\% \text{ CI } [0.19, 0.65]$). Year in doctoral program was significantly negatively associated with improved knowledge or change in knowledge scores from pre- to post-test ($r = -.421, p = .003, 95\% \text{ CI } [-0.63, -0.15]$). Level of experience with DBT skills training was significantly positively correlated with knowledge scores at pre-test ($r = .439, p < .001, 95\% \text{ CI } [0.22, 0.62]$) and post-test ($r = .398, p = .005, 95\% \text{ CI } [0.13, 0.61]$). Level of experience with DBT skills training was significantly negatively correlated with amount of improvement in knowledge ($r = -.334, p = .019, 95\% \text{ CI } [-0.57, -0.06]$). The amount of experience providing individual DBT therapy was significantly positively associated with knowledge scores at pre-test ($r = .364, p = .003, 95\% \text{ CI } [0.13, 0.56]$), but not at post-test. The amount of experience providing individual DBT therapy was significantly negatively associated with the amount of improvement in knowledge ($r = -.338, p = .018, 95\% \text{ CI } [-0.57, -0.06]$). The

amount of time spent providing DBT skills group was significantly positively associated with knowledge at pre-test ($r = .570, p < .001, 95\% \text{ CI } [0.38, 0.72]$) and post-test ($r = .417, p = .003, 95\% \text{ CI } [0.15, 0.63]$). The amount of time spent providing DBT skills group was significantly negatively associated with improvement in knowledge ($r = -.465, p < .001, 95\% \text{ CI } [-0.66, -0.21]$). The amount of time spent on a DBT team was significantly positively correlated with knowledge at pre-test ($r = .421, p < .001, 95\% \text{ CI } [0.19, 0.60]$) and post-test ($r = .341, p = .016, 95\% \text{ CI } [0.07, 0.57]$). The amount of time spent on a DBT team was significantly negatively associated with improvement in knowledge ($r = -.332, p = .020, 95\% \text{ CI } [-0.56, -0.06]$). The amount of time spent working or on externship at a DBT site was significantly positively associated with knowledge at pre-test ($r = .434, p < .001, 95\% \text{ CI } [0.21, 0.61]$) but not at post-test. The amount of time at a DBT site was significantly negatively associated with improved knowledge ($r = -.409, p = .003, 95\% \text{ CI } [-0.62, -0.15]$). The amount of time supervised while providing DBT skills group or individual therapy was significantly positively correlated with knowledge at pre-test ($r = .518, p < .001, 95\% \text{ CI } [0.31, 0.68]$) and post-test ($r = .362, p = .011, 95\% \text{ CI } [0.09, 0.58]$). The amount of time supervised was significantly negatively associated with improved knowledge ($r = -.477, p < .001, 95\% \text{ CI } [-0.67, -0.23]$). The number of clients treated in individual DBT was significantly positively associated with knowledge at pre-test ($r = .340, p = .006, 95\% \text{ CI } [0.11, 0.54]$), but not at post-test. The number of clients treated in individual DBT was significantly negatively associated with improvement in knowledge ($r = -.349, p = .014, 95\% \text{ CI } [-0.57, -0.08]$).

Table 14

Correlations for Pre- and Post-test Knowledge and Improved Knowledge/Change in Knowledge from Pre- to Post-test

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Pre-test	–												
<hr/>													
Knowledge													
2. Post-test Knowledge	.60**	–											
3. Improved Knowledge	-.78**	.04	–										
4. Age	.18	.40**	-.39**	–									
5. Level of Education ^c	.43**	.39**	-.27	.46**	–								
6. Year in Program	.50**	.45**	-.42**	.54**	.60**	–							
7. DBT Skills Training ^b	.44**	.39**	-.33**	.22	.49**	.58**	–						
8. Individual DBT Exp. ^a	.36**	.24	-.34**	.05	.30*	-.08	.48**	–					
9. DBT Skills Group ^a	.57**	.42**	-.47**	.34**	.39**	.59**	.52**	.64**	–				
10. DBT Team ^a	.42**	.34**	-.33**	.09	.28*	.44**	.28*	.84**	.71**	–			
11. DBT Site ^a	.43**	.21	-.41**	.16	.15	.32*	.32*	.55**	.77**	.57**	–		
12. Supervised in DBT ^a	.52**	.36**	-.48**	.24	.39**	.59**	.59**	.56**	.76**	.68**	.57**	–	
13. Number of DBT Clients	.34**	.21	-.35**	.00	.22	.37**	.25**	.81**	.53**	.68**	.52**	.42**	–

^a 0 = None, 1 = 1–2 months, 2 = 3–6 months, 3 = 7–12 months, 4 = >12 months–1.5 years, 5 = 1.5 years–2 years, 6 = >2–3 years, 7 = >3 years.

^b 1 = No Experience, 2 = Some Experience, 3 = Moderate Experience, 4 = Significant Experience, 5 = Extensive Experience.

^c 1 = B.A./B.S., 2 = M.A./M.S., 3 = Ph.D./Psy.D.

* $p < .05$. ** $p < .01$.

Post-hoc analyses using Tukey's HSD indicated that those with moderate ($M = 23.7$, $p = .005$), significant ($M = 23.5$, $p = .005$), and extensive ($M = 25.4$, $p = .024$) experience with DBT skills training scored significantly higher in knowledge than those with no experience ($M = 20.8$) with DBT skills at pre-test. However, at post-test, there was no significant difference in knowledge among levels of experience with DBT skills training, indicating that this course seemed to "level the playing field" for DBT-A skills training knowledge among these experienced and non-experienced graduate students.

Interestingly, performance in videos demonstrating clinical skills and years of experience working in the field of clinical psychology or related fields were not significantly correlated with any outcome data. This finding pertaining to clinical skills in one of the two skills areas could be because of a restricted range of scores, as the range for both Walking the Middle Path ($SD = .96$) and Observe skill ($SD = .81$) scores was 7–10.

In open-ended responses to the feasibility item, "How could this training course be improved?" some participants reported that they would have liked to have more opportunities to ask questions to the trainers and would have liked to see more demonstrations. They also mentioned that they would have liked to see more disagreeable/challenging clients in demonstrations. Participants also noted that they would have liked to have continued access to course materials for future reference. In response to the feasibility item, "What did you like

about this training course?” participants showed enthusiastic support for the course. Many participants mentioned that they found the demonstrations of the trainers interacting with clients to be very helpful; many also noted that they appreciated the flexibility and convenience that the self-paced format offered. They reported that they found the course to be “well-organized,” “taught in a coherent manner,” and “clear.” Participants also noted that they appreciated the visual components of the course. In response to the feasibility item, “Do you have any other comments or suggestions?” participants continued to show enthusiastic support for the course by describing it as “incredible,” “phenomenal,” and “fabulous.” Many participants expressed gratitude for having been able to take part in the course and noted that they would be interested in taking more courses by the instructors. One participant noted that they found the training to be “basic” for their level of experience. Overall, responses reflected participants’ highly positive regard for the course. See Appendix J for a full list of participant responses to open-ended feasibility questions.

In open-ended responses to the preference item, “Please rate your preference for taking this training in an in-person format or the current online format: Please tell us why you chose the above response.” participants reported that the format of training was convenient and accessible, and appreciated that it could flexibly fit into their busy schedules. Many participants noted that the online self-paced format allowed them to rewind and take notes. Some participants noted that an in-person format would have allowed them to practice in real-time and given them the ability to ask the trainers questions. In response to the item, “Please rate your preference for taking this training in an online-live format (with live trainers in real time) or an online-prerecorded and self-paced format: Please tell us why you chose the above response.” many participants reported that they preferred the pre-recorded format because of the convenience and flexibility of being

self-paced, reporting that many of the benefits of being online would be negated by being online-live. However, some did note that online-live would have allowed for real-time questions and that live trainers would have helped them focus more. In response to the item, “Any other comments or preferences you would like to share:” many participants noted that they enjoyed the course and expressed their appreciation for it. One participant whose response was similar to those of others wrote, “Thank you! I learned a tremendous amount from this course. The demonstration videos in particular were extremely helpful and informative of modeling how to teach the skills.” See Appendix J for a full list of participant responses to open-ended preference questions.

Discussion

The purpose of this study was to examine the acceptability, feasibility, and preliminary effectiveness of a new web-based DBT-A skills training course for clinicians. Results suggest that Miller, Rathus, and Linehan’s DBT Skills for Adolescents and Families (Psychwire, 2020) clinician training course is highly acceptable and feasible. The course also significantly increased participants’ positive attitudes toward working with multi-problem transdiagnostic adolescents and their caregivers and self-rated competence with DBT skills. Results on preference for in-person or online training, and online pre-recorded or online-live training, reflect that participants slightly favor online training that is pre-recorded. Findings also suggest that the training course is effective as it significantly increased participants’ knowledge of how to teach DBT-A skills. Preliminary effectiveness of the course was also established as participants demonstrated a strong ability to teach the skills in a coded behavioral sample. Altogether, this study indicates strong acceptability, feasibility, and preliminary effectiveness of Miller, Rathus, and Linehan’s DBT Skills for Adolescents and Families (Psychwire, 2020) clinician training

course; it suggests that web-based trainings could be a solution to the shortage of accessible training opportunities in DBT and in the field at large.

Acceptability and Feasibility

Strong support was found for the hypothesis that the training course is an acceptable and feasible method of training to clinicians. Demonstrating the high demand for online training in DBT-A, 68 individuals expressed interest in the course during the recruitment period of just 19 days and 49 participants participated and completed pre-test and post-test measures. In open-ended responses (see Appendix J), participants reported that they found that the course was structured in a functional and convenient manner, relevant to their needs as a clinician, and was a useful training resource. They also reported that they liked the course and found it to be helpful. Post-hoc analyses also found that more experience in DBT was associated with finishing the course in a shorter period. These are encouraging findings since acceptability and feasibility are crucial characteristics of effective trainings, as a training must be acceptable and feasible for clinicians to be willing to take part in it, during their already busy schedules, and encourage others to use this training or trainings like it.

Feasibility was also measured by assessing engagement in the study and attrition. The rate of completion of the course was strong as 58 participants started the course and 49 (84.5%) participants completed it. While it is possible that this rate of starting the course could reflect the rate that exists in the population, it is likely that this rate was attenuated by the fact that participants did not pay for the otherwise \$590 course. Furthermore, this study was conducted during a busy part of the semester, including final exams, for many of the graduate students. In real world settings, users would be able to choose optimal times to take the course and fit it into their schedules. Additionally, four participants started the course but did not make progress

further than the first week. Despite these challenges, 90.7% ($n = 49$) of participants who completed more than the first week of the course went on to complete all 6 weeks of the course. Regarding attrition, 100% ($n = 49$) of participants who completed the course went on to complete the pre and post-tests, up to the knowledge of content assessment, and 69.4% ($n = 34$) of those who completed the course also submitted a video for assessment of clinical skills.

Since part of the goal of implementation research is to increase the number of clinicians that are trained in effective and evidence-based ways, clinicians must find the online interface clear, easy-to-use, and professional, as many participants have reported, detailed in the open-questions (see Appendix J). An understandable and smooth user interface is a vital factor for online trainings such as this one since the entire training was conducted online. Participants were also able to reach out to the Psychwire support team via email or through an online chat feature when they were signed into their user profile. This element of customer support is also available to anyone who purchases the course and, therefore, can be considered as a variable that contributes to the high levels of acceptability and feasibility of the course.

Attitudes and Self-rated Competence

Strong support was found for the hypothesis that the training course will increase positive attitudes regarding teaching DBT skills to multi-problem high-risk adolescents and their caregivers. Particularly strong support was found for improvements in the item stating, “I feel confident and ready to teach adolescents and their caregivers DBT skills,” and reductions in the item stating, “High-risk populations are too difficult to treat.” Positive attitudes toward high-risk clients are an important outcome as negative attitudes of clinicians toward these clients can negatively impact client outcomes (Ghuloum et al., 2022; Suokas, Suominen, & Lönnqvist,

2009). Further, attitudes of clinicians toward an intervention can impact whether they use the intervention and how well they adhere to its intended form (Aarons, 2004; Jazmin et al., 2019).

Strong support was also found for the hypothesis that the training course will increase self-rated competence over teaching DBT Skills to multi-problem high-risk adolescents and their caregivers. Self-rated competence in implementing an intervention is an important outcome as higher self-rated competence and confidence improves a provider's ability to practice effectively (Fry & MacGregor, 2014). Participants had relatively low self-rated competence before the training and their scores increased on average by a factor of more than two. Level of experience with DBT training was associated with self-rated competence at pre-test, but not at post-test. This finding suggests that the training course could be particularly helpful for improving the self-rated competence of less experienced and training clinicians..

Preference

As research of online training methods grows, it is important to examine users' preference of online training compared to in-person training. Overall, participants slightly preferred online training over in-person training. After the training, participants preferred online training even more than they did before they took the training; although this finding was just slightly above the statistical significance cutoff of .05 and had a small effect size. That their preference of online training became stronger after the course might be related to the strong acceptability and feasibility of the course. Participants explained that their preference for online training over in-person training was due to the convenience, accessibility, and design of the online format, which allowed for self-paced learning and for users to customize the experience to their own learning style (e.g., rewinding videos, following along with e-book, taking the course

at optimal times of day). While some would have liked to have been able to take an in-person training, they acknowledged that their busy graduate student schedules might not allow for it. Those who preferred in-person training explained that they would have liked to have been able to practice in real-time and have the ability to ask the trainers questions. Participants also slightly preferred the training to be online pre-recorded over online-live. After the training, participants preferred online pre-recorded training even more than they did before they took the training; although this finding just missed the statistical significance cutoff of .05 and had a small effect size. Participants explained that the benefit of online-live training is that it allows for questions to be asked to trainers and opportunities to practice.

These findings of preference of online and pre-recorded training over both in-person and online-live training suggest that graduate students prefer to learn on their own time and at their own pace. While they acknowledge the benefits of in-person learning, if given the option, they tend to choose online. This is an important factor to consider as, in the wake of the COVID-19 pandemic, many graduate schools and trainings navigate the choice of remaining online, utilizing a hybrid of in-person and online, or requiring in-person attendance.

Knowledge

Strong support, with a very large effect size, was found for the hypothesis that the training course will increase knowledge of the content of DBT-A skills and how to teach them. Post-hoc analyses showed that those with less experience in DBT skills training had significantly lower scores than those with moderate, significant, and extensive experience at pre-test but not at post-test. This finding suggests that this course could be particularly helpful for less experienced clinicians or clinicians in training. Knowledge of the content of an intervention is an important outcome because knowledge, attained through schooling, studying literature, and didactic

trainings, is a core component of clinical competence (Barnett et al., 2007). While an assessment of knowledge alone does not fully capture every aspect of clinical competence, including the clinical skills to implement the knowledge, having a knowledge base is a foundation on which all domains of competency can be built (Rodolfa et al., 2005). Thus, these findings suggest that this DBT-A skills training course effectively teaches clinicians about DBT-A skills and how to implement them, laying a strong foundation for clinicians to develop clinical competence in DBT-A.

Clinical Skills in Delivering Specific Content

Strong support was found for the hypothesis that, after taking the web-based DBT-A skills training course, participants will demonstrate the clinical competence to teach a small, selected component of the DBT-A skills. Participants demonstrated strong clinical skills in delivering content both in introducing the Walking the Middle Path Skills module and in teaching the Observe skill. These components of DBT-A are core aspects of the course and of DBT. Walking the Middle Path is a family-focused module that is unique to DBT-A and addresses ways to help adolescents and families get unstuck, deal with conflict, take one another's perspective, become less polarized, think and behave in less extreme ways, and be more effective at changing behaviors. The Observe skill is the first What skill in mindfulness; it lays the foundation for other skills like Describe and Participate. This finding is especially notable since this was a student sample, and 46.2% (n = 30) of participants had no prior experience with DBT skills training, 56.9% (n = 37) had less than 3 months of DBT supervision, 80% (n = 52) was never on a DBT team, 83.1% (n = 54) had never treated a client in individual DBT, 78.5% (n = 51) had never worked at a DBT site, and 56.9% (n = 37) had no experience in co-leading a DBT skills group. Since participants demonstrated strong clinical/teaching skills in

both of these areas, it is possible that they would have also demonstrated strong clinical skills in other areas of DBT-A skills. Thus, these findings suggest that the course could help clinicians develop clinical competence in DBT-A skills through increased knowledge and strong clinical skills.

This finding of strong clinical skills is critically important to the study of the effectiveness of trainings since clinical skills are considered vital predictor client outcomes (Kring et al., 2022) and because clinical skills often go unstudied in examinations of training effectiveness (Kobak et al., 2013). As clinical psychology graduate programs continue to integrate the APA-required direct observation of clinical skills into their evaluation of clinician competence, it is becoming increasingly important for studies on clinician training to examine behavior change in clinical skills through direct observation of clinician behavior.

Limitations and Future Research

This study had limitations that should be considered and that can help inform future research on clinical training. Since there was no control group or randomization to condition, conclusions about causality are limited. This study also only examined sampled clinical skills at post-test, without comparison to pre-test. However, presumably, most of the sample would not have scored between 85 and 94% on teaching the sampled skills before this course, especially because most of them were relatively new to DBT. Since only 69.4% of the participants who completed the post-training measures also sent in videos of their clinical skills, the sample of videos might not represent that of the larger group. Importantly, only two lessons – Walking the Middle Path and the Observe skill – of the training course were examined, which leaves skill level in teaching many critical clinical skills unstudied, and findings might not generalize to other skill areas. Further, since participants chose which skill they were going to teach, the

results might have been affected, particularly if participants chose the skill on which they believed they would score higher.

Since this study did not represent the full range of mental health practitioners, such as social workers and mental health counselors, it is unclear if these findings would generalize to clinicians in fields outside of clinical psychology. Further, the large effect sizes of the study could have been influenced by the overall youth and inexperience of clinical psychology doctoral students. Since post-hoc analyses showed that more experience was associated with higher baseline self-rated competence, attitudes, and knowledge, it is possible that a sample with more experienced clinicians would have had a smaller effect size. However, the finding that at post-training there were no differences in attitudes, self-rated competence, preference, knowledge, or clinical skills, based on experience level in DBT skills training, suggests that more experienced clinicians might still have benefited significantly from this course.

There were also limitations related to the measures used in this study. While the Treatment Acceptability Scale (Rathus et al., 2015) was adapted with minor changes from the Treatment Evaluation Inventory (Kazdin, 1980), which has a strong research basis and established reliability and validity (Kelley et al., 1989), all other measures were either adapted or created for the purposes of this study. Despite the high face validity of these measures, they lack a foundation of research that establishes their reliability and validity for use in this manner. Although the assessment of knowledge was created by the course developers and related directly to the course material, it is possible that practice effects from having the same questions asked at pre-test and post-test influenced the results. Moreover, the assessment of clinical skills was conducted by asking the participants to imagine teaching the skills to an imaginary client and, therefore, did not assess their ability to teach the skills in real-world settings and so may not have

ecological validity. This study also did not measure pre-test clinical skills. However, since the majority of participants had little to no prior DBT experience, it was notable that their adherence or competence ratings in teaching the selected skills samples were so high. Note also that skills teaching adherence/competence was based on the presence or absence of key components of the chosen content areas, but not on finesse in explaining the skills; thus, competence considered in this way is not known. Finally, this study did not examine the long-term maintenance of the effects of this training course so the long-term effects of this course on clinicians is unclear.

Regarding the slight preference for remote and pre-recorded trainings, we cannot know if this finding would hold for people who experienced an in-person DBT Skills training or a remote live training. If people enjoy and learn from their training experience, they might rate the experience they had the most positively. Random assignment to different conditions controlled for time, content, and expertise would provide a more accurate measure of people's preferences. However, the positive ratings and qualitative feedback regarding the remote, pre-recorded format participants received still indicates that participants highly value this training format.

A potential limitation was that many participants were LIU students, many students of Dr. Rathus, and peers of the writer. While there was a potential for this to affect participants' performance or our analysis of the data, when comparing the scores of LIU students to students from other programs, on all measured variables, no significant differences were found.

In light of these limitations, future research can take important steps to examine this training and similar online trainings. Future research should directly compare groups with different experience levels and should compare skills-only DBT-A web-based training to comprehensive DBT-A web-based training. Studies should also directly compare in-person DBT-A skills training to web-based training. A critical extension of this research is to conduct a

randomized controlled trial to limit threats to internal validity. Such research should also work to include a more professionally, ethnically, experientially, culturally, and gender diverse sample to enhance external validity. Future research should also examine all the DBT-A skills modules, including Mindfulness, Distress Tolerance, Walking the Middle Path, Emotion Regulation, and Interpersonal Effectiveness. Future research should examine this training with the component of a forum to ask questions that is available to those who purchase the course but was not included as a component of this study. It will be important for future research to also examine clinical skills at pre-test and post-test, or post-test only in an RCT with a no treatment control group, and to measure the long-term retention of knowledge and skills. Also, since we know that the long-term impact of trainings are significantly enhanced by ongoing supervision or consultation (Herschell et al., 2010), future research might provide this course with ongoing support to clinicians as they implement the skills as a sole modality or as part of full-mode DBT-A, and evaluate acceptability, feasibility, attitudes, knowledge, and clinical skills in teaching the skills over time, as well as clinical outcomes in clients. Finally, it is important for future research to examine the demonstration of these clinical skills in clinical settings with actual clients, going beyond the analogue format used here to assess clinical skills. As online training becomes more prevalent, future research should work to establish standardized, reliable, and valid ways of evaluating trainings.

Future research take expand on the language we used to describe the population treated by DBT-A, that is multi-problem high-risk adolescents with suicidal features. The measures of attitudes and self-rated competence in this study did not fully describe with examples and specific language that multi-problem high-risk adolescents can, and often do, include suicidal and self-harm behaviors. This is specificity important for future research to include because it is

critical to know if the course can increase clinicians' positive attitudes and self-rated competence about working with clients who have suicidal and self-harming behaviors, especially because clinicians are often intimidated by and avoid working with suicidal clients. Influencing clinician attitudes and self-rated competence about working with suicidal and self-harm behaviors could be particularly impactful at the graduate student level.

As graduate training programs continue to utilize web-based modalities, future research should examine if and to what degree graduate programs would be interested in utilizing and funding the use of this course and courses like it. By including this course in fees covered by graduate programs or giving students credits for taking this course, programs could further reduce the cost of clinician training in DBT-A skills and give their students access to trainings for which they might not otherwise have access.

Finally, future research should examine how this training impacts client outcomes. Examining client outcomes is critical to the future of studying all training modalities, but it is particularly important for web-based trainings given the immense scalability offered by web-based trainings. If this web-based DBT-A skills training course demonstrates improvements in client outcomes, teens and families around the world could be positively impacted.

Clinical Implications and Conclusions

Despite the aforementioned limitations, the findings establish strong support for the acceptability, feasibility, and preliminary effectiveness of this DBT-A skills training course, and highlight important clinical implications. As DBT-A skills are both a core component of comprehensive DBT-A and offer a valuable resource to clinicians on their own, this DBT-A skills training course can have an important impact on the field, expanding the access to high quality, standardized training by experts, and thereby expanding implementation (i.e., reach,

scalability, sustainability) of DBT-A skills training with greater fidelity. The online aspect of this training course offers unique benefits of efficiency and accessibility that traditional in-person training cannot offer. This study establishes that the acceptability, feasibility, and effectiveness of DBT-A skills training holds up to and is potentially even more preferable than traditional in-person training. There is limited access to quality in person trainings, and to our knowledge, there are no other pre-recorded online training courses on DBT-A skills. As DBT-A is a front-line treatment for high-risk adolescents with multiple problems or suicidal behavior, who need access to evidence-based treatment now more than ever, this DBT-A skills online training course can help address the well-established gap between research and practice that has been undermining efforts to implement evidence-based treatments. The online training can profoundly increase the number of clinicians with DBT-A skills training and perhaps their positive responses to the material, as found herein, will encourage clinicians to seek further training in DBT (the course makes it clear that it offers training in only one mode of a multi-modal, comprehensive treatment). In addition, training sites or teams can offer this course to trainees or new staff for an efficient and convenient way to train them in providing DBT skills to adolescents and families. Since the participants were all graduate students, and few graduate training programs offer courses in DBT or suicide and risk management (Lungu et al., 2012; Mackelprang et al., 2014; Kerr, 2022), this course can provide a low-cost and practical way to offer useful training in DBT-A skills training as part of a graduate school training curriculum. Follow-up supervision or consultation would likely further enhance this training course; developing scalable ways to provide such consultation to the many Psychwire course participants world-wide would be a worthwhile endeavor for reaching more clinicians, and ultimately more struggling teens and their families.

References

- Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The evidence-based practice attitude scale (EBPAS). *Mental Health Services Research, 6*, 61–74. doi:10.1023/b:mhsr.0000024351.12294.65
- American Psychological Association. (2019). Standards of accreditation for health service psychology and accreditation operating procedures.
<https://www.apa.org/ed/accreditation/about/policies/standards-of-accreditation.pdf>
- American Psychological Association (2021, October 19). *Worsening mental health crisis pressures psychologist workforce: 2021 COVID-19 Practitioner Survey*. American Psychological Association.
<https://www.apa.org/pubs/reports/practitioner/covid-19-2021>
- Andersen, B. L., & Dorfman, C. S. (2016). Evidence-based psychosocial treatment in the community: Considerations for dissemination and implementation. *Psycho-Oncology, 25*, 482–490. <http://dx.doi.org/10.1002/pon.3864>
- Association of Behavioral and Cognitive Therapies. (2008). ABCT's Mission Statement, Nondiscrimination Policy, Purposes, Vision Statement, and Values. *The Behavior Therapist, 31*(3), 48.
- Auerbach, C. F. and Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. New York, NY: New York University Press.
- Ayton, A.K., Mooney, M.P., Silifant, K., Powls, J, & Rasool, H. (2007). The development of the child and adolescent versions of the Verona Service Satisfaction Scale (CAMHSSS). *Social Psychiatry and Psychiatric Epidemiology, 42*, 892-901.
- Babeva, K. N., & Davison, G. C. (2017). A review and critique of continuing education.

- Behavior Therapist*, 40, 4–9.
- Barnett, J. E. (2011). Utilizing technological innovations to enhance psychotherapy supervision, training, and outcomes. *Psychotherapy*, 48, 103–108.
- Barnett, J. E., Doll, B., Younggren, J. N., & Rubin, N. J. (2007). Clinical competence for practicing psychologists: Clearly a work in progress. *Professional Psychology: Research and Practice*, 38(5), 510–517. doi: 10.1037/0735-7028.38.5.510
- Beidas, R. S., & Kendall, P. C. (2010). Training therapists in evidence-based practice: A critical review of studies from a systems-contextual perspective. *Clinical Psychology: Science and Practice*, 17, 1–30.
- Behavioral Tech. (n.d.). Training options for individuals and teams. Retrieved from <https://behavioraltech.org/research/evidence/dissemination-trials/#D>
- Beaulac, J., Sandre, D., & Mercer, D. (2018). Impact on mindfulness, emotion regulation, and emotional overeating of a DBT skills training group: A pilot study. *Eating and Weight Disorders—Studies on Anorexia, Bulimia and Obesity*, 24(2), 373–377. <https://doi.org/10.1007/s40519-018-0616-9>.
- Ben-Porath, D., Federici, A., Wisniewski, L., & Warren, M. (2014). Dialectical behavior therapy: Does it bring about improvements in affect regulation in individuals with eating disorders? *Journal of Contemporary Psychotherapy*, 44(4), 245–251. doi.org/10.1007/s10879-014-9271-2.
- Bowen, D. J., Kreuter, M., Spring, B., Cofta-Woerpel, L., Linnan, L., Weiner, D., . . . Fernandez, M. (2009). How we design feasibility studies. *American Journal of Preventive Medicine*, 36(5), 452–457. doi: 10.1016/j.amepre.2009.02.002
- Brodsky, B. S., Cabaniss, D. L., Arbuckle, M., Oquendo, M. A., Stanley, B. (2016). Teaching

- dialectical behavior therapy to psychiatry residents: the Columbia Psychiatry Residency DBT curriculum. *Academic Psychiatry*.
- Cartreine, J. A., Ahern, D. K., & Locke, S. E. (2010). A roadmap to web-based psychotherapy in the United States. *Harvard Review of Psychiatry*, 18, 80–95. <http://dx.doi.org/10.3109/10673221003707702>.
- Chambers, D. A., Pintello, D., Juliano-Bult, D. (2020). Capacity-building and training opportunities for implementation science in mental health. *Psychiatric Research*, 283. <https://doi.org/10.1016/j.psychres.2019.112511>
- Clipper, B. (2020). The influence of the COVID-19 pandemic on technology: Adoption in health care. *Nurse Leader*, in press. <https://doi.org/10.1016/j.mnl.2020.06.008>
- Comer, J. S., Barlow, D. H., (2014). The occasional case against broad dissemination and implementation: retaining a role for specialty care in the delivery of psychological treatments. *J. Am. Psychoanal. Assoc.* 69, 1–18.
- Cooney, E., Davis, K., Thompson, P., Wharewera-Mika, J., Stewart, J., & Miller, A. L. (2012, November). *Feasibility of comparing dialectical behavior therapy with treatment as usual for suicidal & self-harming adolescents: Follow-up data from a small randomized controlled trial*. Paper presented at the annual meeting of the Association of Behavioral and Cognitive Therapies, National Harbor, MD.
- Delparte, C. A., Power, H. A., Gelinas, B. L., Oliver, A. M., Hart, R. D., & Wright, K. D. (2019). Examination of the effectiveness of a brief, adapted dialectical behavior therapy skills training group for bariatric surgical candidates. *Obesity Surgery*, 29(1), 252261. <https://doi.org/10.1007/s11695-018-3515-2>.
- DiGiorgio, K. E., Glass, C. R., & Arnkoff, D. B. (2010). Therapists' use of DBT: A survey

- study of clinical practice. *Cognitive and Behavioral Practice*, 17, 213 – 221.
- Dimeff, L. A., Harned, M. S., Woodcock, E. A., Skutch, J. M., Koerner, K., & Linehan, M. M. (2015). Investigating bang for your training buck: A randomized controlled trial comparing three methods of training clinicians in two core strategies of Dialectical Behavior Therapy. *Behavior Therapy*, 46, 283-295.
- Dimeff, L.A., Woodcock, E.A., Harned, M.S., & Beadnell, B. (2011). Can evidence-based therapies be learned in highly structured learning environments? Results from a dialectical behavior therapy randomized controlled dissemination trial. *Behavior Therapy*, 42, 263-275.
- Dimeff, L. A., Koerner, K., Woodcock, E. A., Beadnell, B., Brown, M. Z., Skutch, J. M., Paves, A. P., Bazinet, A., & 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.
- DuBose, T. & Perepletchikova, F. (2015, April). *Skills training in DBT: 2015 updates*. Workshop presented by Behavioral Tech, LLC at New York Presbyterian Hospital, White Plains, NY.
- Fry, M., & MacGregor, C. (2014). Confidence and impact on clinical decision-making and behaviour in the emergency department. *Australasian Emergency Nursing Journal: AENJ*, 17(3), 91–97. <https://doi.org/10.1016/j.aenj.2014.03.003>
- Ghuloum, S., Mahfoud, Z. R., Al-Amin, H., Marji, T., & Kehyayan, V. (2022). Healthcare Professionals' attitudes toward patients with mental illness: A cross-sectional study in Qatar. *Frontiers in Psychiatry*, 13, 884947. <https://doi.org/10.3389/fpsy.2022.884947>
- Glenn, C., Esposito, E., Porter, A., & Robinson, D. (2019). Evidence Base Update of

- Psychosocial Treatments for Self-Injurious Thoughts and Behaviors in Youth. *Journal of Clinical Child & Adolescent Psychology*, 48(3), 357-392, DOI: 10.1080/15374416.2019.1591281
- Goldberg, S.B., Rousmaniere, T., Miller, S.D., Whipple, J., Nielsen, S.L., Hoyt, W.T.,... Wampold, B.E. (2016). Do psychotherapists improve with time and experience? A longitudinal analysis of outcomes in a clinical setting. *Journal of Counseling Psychology*, 63(1), 1-11. doi: 10.1037/cou0000131
- Goldfried, M. R. (2010). The future of psychotherapy integration: Closing the gap between research and practice. *Journal of Psychotherapy Integration*, 20(4), 386–396. <https://doi.org/10.1037/a0022036>
- Heck, N. C., Saunders, B. E., & Smith, D. W. (2015). Web-based training for an evidence-supported treatment: Training completion and knowledge acquisition in a global sample of learners. *Child Maltreatment*, 20, 183–192.
- Herschell, A. D., Kolko, D. J., Baumann, B. L., & Davis, A. C. (2010). The role of therapist training in the implementation of psychosocial treatments: A review and critique with recommendations. *Clinical Psychology Review*, 30, 448–466. <http://dx.doi.org/10.1016/j.cpr.2010.02>.
- Herschell, A.D., Lindhiem, O.J., Kogan, J.N. (2014). Evaluation of an implementation initiative for embedding dialectical behavior therapy in community settings. *Eval Program Plan*, 43, 55-63.
- Insel, T. R. (2009). Translating scientific opportunity into public health impact: A strategic plan for research on mental illness. *Archives of General Psychiatry*, 66, 128–133. <http://dx.doi.org/10.1001/archgenpsychiatry.2008.540>.

- Institute of Medicine Committee on Quality of Health Care in America. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: Institute of Medicine, National Academy Press.
- Reyes-Portillo, J. A., McGlinchey, E. L., Toso-Salman, J., Chin, E. M., Fisher, P. W., & Mufson, L. (2019). Clinician experience and attitudes toward safety planning with adolescents at risk for suicide. *Archives of Suicide Research*, 23(2), 222-233. Doi: 10.1080/13811118.2018.1456382
- Katz, L. Y., Cox, B. J., Gunasekara, S., & Miller, A. L. (2004). Feasibility of dialectical behavior therapy for suicidal adolescent inpatients. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(3), 276-282. doi: 10.1097/01.chi.0000106854.88132.4f
- Kazdin, A.E. (1980). Acceptability of alternative treatments for deviant child behavior. *Journal of Applied Behavior Analysis*, 13, 259-273.
- Kelley, M., Heffer, R. Gresham, F, & Elliott, S. (1989). Development of a modified treatment evaluation inventory. *Journal of Psychopathology and Behavioral Assessment*, 11, 235-247.
- Kerr, N. A. (2022). A survey of internship-eligible health service psychology graduate students' experience, training, and clinical competence with suicide [ProQuest Information & Learning]. In *Dissertation Abstracts International: Section B: The Sciences and Engineering* (Vol. 83, Issue 5–B).
- Khanna, M. S., & Kendall, P. C. (2015). Bringing technology to training: Web-based therapist training to promote the development of competent cognitive-behavioral therapists. *Cognitive and Behavioral Practice*, 22, 291–301.
<http://dx.doi.org/10.1016/j.cbpra.2015.02.002>

- Kobak, K. A., Craske, M. G., Rose, R. D., & Wolitsky-Taylor, K. (2013). Web-based therapist training on cognitive behavior therapy for anxiety disorders: A pilot study. *Psychotherapy, 50*(2), 235–247. Doi: 10.1037/a0030568.
- Kobak, K. A., Wolitsky-Taylor, K., Craske, M. G., & Rose, R. D. (2016). Therapist training on cognitive behavior therapy for anxiety disorders using internet-based technologies. *Cognitive Therapy and Research, 41*, 252–265.
<http://dx.doi.org/10.1007/s10608-016-9819-4>
- Koerner, K., Dimeff, L. A., & Swenson, C. R. (2007). Adopt or adapt?: Fidelity matters. In L. A. Dimeff & K. Koerner (Eds.), *Dialectical behavior therapy in clinical practice: Applications across disorders and settings*. (pp. 19–36). Guilford Press.
- Kring, M., Cozart, J. K., Sinnard, M. T., Oby, A., Hamm, E. H., Frost, N. D., & Hoyt, W. T. (2022). Evaluating psychotherapist competence: Testing the generalizability of clinical competence assessments of graduate trainees. *Journal of Counseling Psychology, 69*(2), 222–234. <https://doi.org/10.1037/cou0000576>
- Landes, S. J., Linehan, M. M. (2012). Dissemination and implementation of dialectical behavior therapy: An intensive training model. *Dissemination and Implementation of Evidence-based Psychological Interventions, 187*-208.
- Landes, S. J., Matthieu, M. M., Smith, B. N., & Rodriguez, A. L. (2017). Strategies to overcome barriers to implementing dialectical behavior therapy in the department of veterans affairs: Perspectives from a national program evaluation. *The Behavior Therapist, 40*(7), 251–255.
- Linehan, M. M. (1993a). *Skills training manual for borderline personality disorder*. Guilford Press: New York.

- Linehan, M. M. (1993b). *Cognitive behavioral treatment of borderline personality disorder*. Guilford Press: New York.
- Linehan, M. M., Korslund, K. E., Harned, M. S., Gallop, R. J., Lungu, A., Neacsiu, A. D., . . . Murray-Gregory, A. M. (2015). Dialectical behavior therapy for high suicide risk in individuals with borderline personality disorder: A randomized clinical trial and component analysis. *JAMA Psychiatry*, 72(5), 475-482. doi: 10.1001/jamapsychiatry.2014.3039
- Lungu, A., Gonzalez, M. R., & Linehan, M. M. (2012). Implementing a dialectical behavior therapy training program for graduate students. *The Behavior Therapist*, 35(1), 4–11.
- Lynch, T. R., Trost, W. T., Salsman, N., & Linehan, M. M. (2007). Dialectical behavior therapy for borderline personality disorder. *Annual Review of Clinical Psychology*, 3, 181–205. doi:10.1146/annurev.clinpsy.2.022305.095229.
- Mackelprang, J. L., Karle, J., Reihl, K. M., & Cash, R. E. (2014). Suicide intervention skills: Graduate training and exposure to suicide among psychology trainees. *Training and Education in Professional Psychology*, 8(2), 136–142. <http://dx.doi.org/10.1037/tep0000050>.
- McHugh, R. K., & Barlow, D. H. (2010). The dissemination and implementation of evidence-based psychological treatments. *American Psychologist*, 65, 73–84. <http://dx.doi.org/10.1037/a0018121>.
- McHugh, R. K., Otto, M. W., Barlow, D. H., Gorman, J. M., Shear, M. K., & Woods, S. W. (2007). Cost-efficacy of individual and combined treatments for panic disorder. *The Journal of Clinical Psychiatry*, 68(7), 1038–1044.
- McMain, S. F., Guimond, T., Barnhart, R., Habinski, L., & Streiner, D. L. (2016). A randomized

- trial of brief dialectical behaviour therapy skills training in suicidal patients suffering from borderline disorder. *Acta Psychiatrica Scandinavica*, 135(2), 1-11.
<https://doi.org/10.1111/acps.12664>.
- Miller, A.L., Rathus, J.H. & Linehan, M.M. (2007). Dialectical behavior therapy with suicidal adolescents. New York: Guilford Press.
- Miller, A.L., Rathus, J.H., Linehan, M.M., Wetzler, S., & Leigh, E. (1997). DBT adapted for suicidal adolescents. *Journal of Practical Psychiatry and Behavioral Health*, 3, 78-86.
- Mushquash, A. R., & McMahan, M. (2015). Dialectical behavior therapy skills training reduces binge eating among patients seeking weight-management services: Preliminary evidence. *Eating and Weight Disorders*, 20(3), 415-418. doi.org/10.1007/s40519-015-0177-0.
- Neacsiu, A., Rizvi, S., & Linehan, M. (2010). Dialectical behavior therapy skills use as a mediator and outcome of treatment for borderline personality disorder. *Behaviour Research and Therapy*, 48, 832-839.
<https://doi.org/10.1016/j.brat.2010.05.017>.
- Olfson, M., Mojtabai, R., Sampson, N. A., Hwang, I., Druss, B., Wang, P. S., . . . Kessler, R. C. (2009). Dropout from outpatient mental health care in the United States. *Psychiatric Services*, 60, 898–907.
- Ortiz, C., Vidair, H. B., Acri, M., Chacko, A., & Kobak, K. (2020). Pilot study of an online parent-training course for disruptive behavior with live remote coaching for practitioners. *Professional Psychology: Research and Practice*, 51(2), 125–133.
<https://doi.org/10.1037/pro0000286>
- Poulson, M., Geary, A., Annesi, C., Allee, L., Kenzik, K., Sanchez, S., Tseng, J., & Dechert, T.

- (2020). National disparities in COVID-19 outcomes between Black and White Americans. *Journal of the National Medical Association*, 113(2), 125–132.
<https://doi.org/10.1016/j.jnma.2020.07.009>
- Powers, M.B., Deacon, B.J. (2013). Dissemination of empirically supported treatments for anxiety disorders: Introduction to the special issue. *Journal of Anxiety Disorders*.
<http://dx.doi.org/10.1016/j.janxdis.2013.09.013>.
- Proctor E.K., Landsverk J., Aarons G., Chambers D., Glisson C., Mittman B. (2009). Implementation research in mental health services: An emerging science with conceptual, methodological, and training challenges. *Administration and Policy in Mental Health and Mental Health Services Research*, 36(1), 24–34.
- Psychwire. (2020). DBT Skills for Adolescents. Retrieved from
<https://psychwire.com/linehan/dbt-adolescents>
- Rathus, J. H., Campbell, B., Miller, A. L., & Smith, H. (2015). Treatment acceptability study of walking the middle path, a new DBT skills module for adolescents and their families. *American Journal of Psychotherapy*, 69(2), 163-178.
- Rathus, J. H. & Harned, M. (2015). *Dialectical Behavior Therapy with multi-problem adolescents: Evolution and updates* [Webinar]. Retrieved from
<http://behavioraltech.org/training/webinars.cfm>
- Rathus, J. H. & Miller, A. L. (2015). *DBT skills manual for adolescents*. New York, NY: Guilford Press.
- Rathus, J. H., & Miller, A. L. (2002). Dialectical behavior therapy adapted for suicidal adolescents. *Suicide & Life-Threatening Behavior*, 32, 146-157.
- Richie, F. J., Langhinrichsen-Rohling, J., Kaniuka, A., Wilsey, C. N., Mennicke, A., Harris, Y.-J.,

- Sullivan, S., Gray, G., & Cramer, R. J. (2022). Mental health services for all: Factors influencing desire for mental health services among underresourced adults during COVID-19. *Psychological Services*. <http://dx.doi.org/10.1037/ser0000644>.
- Rodolfa, E., Bent, R., Eisman, E., Nelson, P., Rehm, L., & Ritchie, P. (2005). A Cube Model for Competency Development: Implications for Psychology Educators and Regulators. *Professional Psychology: Research and Practice*, 36(4), 347–354. doi: 10.1037/0735-7028.36.4.347
- Sansen, L. M., Saupe, L. B., Steidl, A., Fegert, J. M., Hoffmann, U., & Neuner, F. (2020). Development and randomized-controlled evaluation of a web-based training in evidence-based trauma therapy. *Professional Psychology: Research and Practice*, 51(2), 115–124. <https://doi-org.www.library.manhattan.edu/10.1037/pro0000262.supp> (Supplemental)
- Schoenwald, S. K., Kelleher, K., Weisz, J. R., & Research Network on Youth Mental Health (2008). Building bridges to evidence-based practice: The MacArthur Foundation Child System and Treatment Enhancement Projects (Child STEPs). *Administration and Policy in Mental Health and Mental Health Services Research*, 35, 66–72.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 2, 420-428.
- Soler, J., Pascual J. C., Tiana, T., Cebria, A., Barrachina, J., Campinsa, M. J., Gichb, I., Alvarez, E., Perez, V. (2009). Dialectical behaviour therapy skills training compared to standard group therapy in borderline personality disorder: a 3-month randomised controlled clinical trial. *Behaviour Research and Therapy*, 47, 353–358.
- Southam-Gerow, M. A., Rodriguez, A., Chorpita, B. F., & Daleiden, E. L. (2012). Dissemination

- and implementation of evidence based treatments for youth: Challenges and recommendations. *Professional Psychology: Research and Practice*, 43, 527–534.
- Suokas, J., Suominen, K., & Lönnqvist, J. (2009). The attitudes of emergency staff toward attempted suicide patients: A comparative study before and after establishment of a psychiatric consultation service. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 30(3), 161–165. doi: 10.1027/0227-5910.30.3.161
- Swenson, C. R., Torrey, W. C., & Koerner, K. (2002). Implementing dialectical behavior therapy. *Psychiatric Services*, 53(2), 171–178.
- Tormoen, A. J., Groholt, B., Haga, E., Brager-Larsen, A., Miller, A., Walby, F.,...Mehlum, L. (2014). Feasibility of dialectical behavior therapy with suicidal and self-harming adolescents with multi-problems: Training, adherence, and retention. *Archives of Suicide Research*, 18, 432-444. doi: 10.1080/13811118.2013.826156
- U.S. Department of Health & Human Services, *National Institutes of Health*. (2008). *National Institute of Mental Health strategic plan*. NIH Publication No. 08–6368. Bethesda, MD
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2012). *Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings* (NSDUH Series H-42, HHS Publication No. [SMA] 11-4667). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Uliaszek, A. A., Rashid, T., Williams, G. E., & Gulamani, T. (2016). Group therapy for university students: A randomized control trial of dialectical behavior therapy and positive psychotherapy. *Behaviour Research and Therapy*, 77, 78 – 85.
<http://dx.doi.org/10.1016/j.brat.2015.12.003>

- Valentine, S. E., Smith, A., Stewart, K. (2020). Chapter 15 - A review of the empirical evidence for DBT skills training as a stand-alone intervention. *The Handbook of Dialectical Behavior Therapy, 15*, 325-358. <https://doi.org/10.1016/B978-0-12-816384-9.00015-4>.
- Valentine, S. E., Bankoff, S. M., Poulin, R. M., Reidler, E. B., & Pantalone, D. W. (2014). The use of dialectical behavior therapy skills training as stand-alone treatment: A systematic review of the treatment outcome literature. *Journal of Clinical Psychology, 71*(1), 120. <https://doi.org/10.1002/jclp.22114>.
- Vivian, D., Hershenberg, R., Teachman, B. A., Drabick, D. A. G., Goldfried, M. R., & Wolfe, B. (2012). A translational model of research-practice integration. *Psychotherapy, 49*(2), 143–151. <https://doi-org/10.1037/a0027925>
- Wampold, B., & Imel, Z.E. (2015). *The great psychotherapy debate: The evidence for what makes psychotherapy work (2nd ed.)*. New York: Routledge.
- Washburn, J. J., Lilienfeld, S. O., Rosen, G. M., Gaudiano, B. A., Davison, G. C., Hollon, S. D.,... Weinand, J. (2019). Reaffirming the scientific foundations of psychological practice: Recommendations of the Emory meeting on continuing education. *Professional Psychology: Research and Practice, 50*, 77– 86. <http://dx.doi.org/10.1037/pro0000235>
- Weissman, M. M., Verdeli, H., Gameroff, M. J., Bledsoe, S. E., Betts, K., Mufson, L., Fitterling, H., & Wickramaratne, P. (2006). National survey of psychotherapy training in psychiatry, psychology, and social work. *Archives of General Psychiatry, 63*, 925–934.
- Zeifman, R. J., Boritz, T., Barnhart, R., Labrish, C., & McMain, S. F. (2020). The independent roles of mindfulness and distress tolerance in treatment outcomes in dialectical behavior therapy skills training. *Personality Disorders: Theory, Research, and Treatment, 11*(3), 181–190. <https://doi.org/10.1037/per0000368>

Appendix A

Demographic Questionnaire

Please mark an "x" or provide a response next to the item that best answers the question.

1. What is your age? _____

2. Please indicate your race.

White _____
Black or African-American _____
American Indian or Alaskan Native _____
Asian _____
Native Hawaiian or other Pacific islander _____
From multiple races _____
Other (Please Specify) _____

3. Are you of Latino or Hispanic origin? Yes _____ NO _____

4. What is your gender?

Male _____
Female _____
Other (Please Specify) _____

5. Please indicate your highest level of education to date.

B.A./B.S. _____
M.A./M.S. _____
Ph.D. _____
Psy.D. _____
Other (Please Specify) _____

6. Are you currently in a doctoral program for clinical psychology? If yes, please indicate your year in the program, 1–5.

Yes _____
No _____

Year _____

7. Please indicate the descriptors below that best capture the DBT training you've received (select all that apply):

None _____

Between one lecture and a half-day workshop (1 - 4 hours total)____
 A one-day workshop or equivalent (5 – 8 hours total)____
 Two-day DBT workshop or equivalent (12-16 hours total)____
 Two-day Skills-Focused Workshop or training or equivalent (12-16 hours total)____
 Completed academic semester-long course on DBT____
 Completed Behavioral Tech Training____
 Foundational (five-day) Training ____
 Intensive (ten-day) Training____
 Completed equivalent of Behavioral Tech Training____
 Foundational (five-day) Training ____
 Intensive (ten-day) Training ____
 UP TO ONE YEAR at a DBT training site/rotation, providing DBT skills group____
 UP TO 2 YEARS at a DBT training site/rotation, providing DBT skills group____
 MORE THAN 2 YEARS at a DBT training site, providing DBT skills group ____
 UP TO ONE YEAR at a DBT training site, providing individual DBT therapy, providing
 skills group, and participating on a DBT team____
 UP TO TWO YEARS at a DBT training site, providing individual DBT therapy,
 providing skills group, and participating on a DBT team ____
 Other Training experiences: (Please Specify): ____

8. Please select the number that best describes your training experiences to date with DBT skills, rating the number that **best** approximates your experience:

No experience (Examples: Heard of DBT or read about it, or attended one or 2 lectures, talks)	Some experience (Examples: Attended DBT Workshop and/or < 3 months DBT clinical experience)	Moderate experience (Examples: 2-day Workshop, training site didactics or graduate school class in DBT, and/or DBT clinical experience for 3 – 12 months)	Significant Experience (Examples: Workshop or training or class in DBT PLUS DBT clinical experience for 1 – 2 years)	Extensive Experience (Examples: Intensive or Foundational training PLUS conducting supervised DBT experience including DBT skills group for 1-2+ years; participating on intensively trained team)
1	2	3	4	5

9. Please indicate how much time you have spent providing individual DBT therapy.

- None ____
- 1–2 months ____
- 3–6 months ____
- 7 – 12 months ____
- >12 months – 1.5 years ____
- >1.5 years—2 years ____
- >2–3 years ____
- >3 years ____

10. Please indicate how much time you have spent providing DBT skills groups.

- None ____
- 1–2 months ____
- 3–6 months ____
- 7 – 12 months ____
- >12 months – 1.5 years ____
- >1.5 years—2years ____
- >2–3 years ____
- > 3 years ____

11. Please indicate how much time you have spent on a DBT team.

- None ____
- 1–2 months ____
- 3–6 months ____
- 7 – 12 months ____
- > 12 months – 1.5 years ____
- > 1.5 years—2years ____
- > 2–3 years ____
- > 3years ____

12. Please indicate how much time you have spent working or on externship or internship at a DBT site (that is, a site at which roughly 50% or more of your time is spent on DBT).

- None ____
- 1–2 months ____
- 3–6 months ____
- 7 – 12 months ____
- >12 months – 1.5 years ____
- >1.5 years—2 years ____
- >2–3 years ____

-> 3 years

13. Please indicate how much time you have been supervised while providing DBT skills group or individual therapy.

-None ____
 -1-2 months ____
 -3-6 months ____
 -7 – 12 months ____
 ->12 months – 1.5 years ____
 ->1.5 years—2years ____
 ->2-3 years ____
 -3> years ____

14. Please estimate how many clients you have treated in individual DBT therapy under formal DBT supervision at a DBT training site.

-1-2 ____
 -3-5 ____
 -6-10 ____
 -11-20 ____
 -21-40 ____
 -41-60 ____
 ->60 ____

15. Please indicate how many years of experience you have worked in the field of clinical psychology or a related field, such as social work, mental health counseling, and psychiatry, in either clinical practice, training, or research. This can include time both before the start of your clinical psychology doctoral program and during your time as a graduate student, including your time in a research lab or spent taking classes.

_____ years

16. Please indicate your current household status:

Individual ____
 Live with parents ____
 Live with roommate(s) ____
 Live with partner/spouse ____
 Live with partner/spouse and children ____
 Live at university housing ____
 Other (Please Specify) ____

17. Please indicate your household's annual economic bracket (select one).

<\$49,999 ____
\$50,000—70,000 ____
\$70,001—100,000 ____
\$100,001—150,000 ____
>\$150,001 ____

18. Please indicate the region where you attend school.

Northeast ____
Midwest ____
South ____
West ____
Outside US (Please specify) _____

Appendix B

Training Course Acceptability Scale

Please circle the answer that best matches how much you agree with the sentence.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I believe this training course will help me use the DBT-A skills in treatment.	1	2	3	4	5
2. Overall, I had a positive reaction to this training course.	1	2	3	4	5
3. I believe this training course is likely to lead me to being a better clinician.	1	2	3	4	5
4. I liked this training course.	1	2	3	4	5
5. This training course has the potential to help me treat individuals with family conflicts or challenges.	1	2	3	4	5

6. I am glad that I took part in learning the skills in this training course.	1	2	3	4	5
7. I think that the adolescents and/or parents I treat will probably improve as a result of my involvement in this training course.	1	2	3	4	5
8. I thought this training course was interesting.	1	2	3	4	5
9. This training course addresses issues my current clients face or my future clients will face in their lives.	1	2	3	4	5
10. Overall, I find this training course to be helpful.	1	2	3	4	5

Appendix C

Training Course Feasibility Scale

Please circle the answer that best matches how much you agree with the sentence.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. This training course is acceptable to me as a clinician and relevant to multi-problem, distressed adolescents.	1	2	3	4	5
2. The families I teach the skills to will find the skills acceptable and appropriate for their problems.	1	2	3	4	5
3. It is reasonably clear how to teach the skills I learned.	1	2	3	4	5
4. The materials of the training course seem to be able to be taught in the timeframe given in the modules.	1	2	3	4	5
5. I will use what I learned in the training course when/if I teach the DBT-A skills.	1	2	3	4	5

6. If I begin providing, or already am providing DBT, I will use what I learned in the training course with clients in individual sessions, skills training, phone coaching, or family sessions.	1	2	3	4	5
7. The material in the training course is relevant to teen-family problems.	1	2	3	4	5
8. The clients/families with whom I apply the training course materials will find the skills helpful.	1	2	3	4	5
9. I was able to view the course on my own schedule, and fit the material into my week.	1	2	3	4	5

1. How could this training course be improved?

2. What did you like about this training course?

3. Do you have any other comments or suggestions?

*Appendix D**Attitudes Scale*

Please circle the answer that best matches how much you agree with the sentence.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat agree	Agree	Strongly agree
1. I am willing to work with high risk adolescents with multiple problems	1	2	3	4	5	6	7
2. I feel confident and ready to teach adolescents and their caregivers DBT skills	1	2	3	4	5	6	7
3. High risk populations are too difficult to treat	1	2	3	4	5	6	7

4. I like working with adolescents who have many different issues	1	2	3	4	5	6	7
5. Working with people who have multiple problems and diagnoses feels overwhelming	1	2	3	4	5	6	7

*Appendix E**Self-rated Competence Scale*

Please circle the answer that best matches how much you agree with the sentence.

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat agree	Agree	Strongly agree
1. I feel like I have mastery over the DBT-A skills	1	2	3	4	5	6	7
2. I believe I can competently teach the DBT-A skills to multiproblem transdiagnostic adolescents and their caregivers	1	2	3	4	5	6	7
3. I possess the knowledge and ability to teach the DBT-A skills	1	2	3	4	5	6	7

*Appendix F**Preference Items*

Please rate your preference for taking this training in an in-person format or the current online format:

Prefer In person			Neutral			Prefer Online
1	2	3	4	5	6	7

Please tell us why you chose the above response.

Please rate your preference for taking this training in an online-live format (with live trainers in real time) or an online-prerecorded and self-paced format:

Prefer online-live			Neutral			Prefer Online pre-recorded
1	2	3	4	5	6	7

Please tell us why you chose the above response.

Any other comments or preferences you would like to share:

*Appendix G**Knowledge Questionnaire*

Correct answers were bolded for the purpose of this appendix.

Prompt at pre-test: Please answer the following 29 questions. We understand that you have not yet taken the course. These pre-test questions are just intended to assess your baseline knowledge, so please answer the questions as best you can at this time.

Prompt at post-test: Please answer the following 29 questions to the best of your ability.

1. Which skills module is unique to DBT-A?

- a) Mindfulness
- b) distress tolerance
- c) nightmare protocol
- d) walking the middle path**

2. Which of the following is true about DBT with adolescents?

- a) DBT is effective for psychosis
- b) DBT is now an established evidence-based treatment for adolescents with multiple emotional and behavioral problems including suicidal and self-harming behaviors.**
- c) DBT can be effective without the skills training component
- d) DBT is effective for amnesia

3. The biosocial theory of emotional dysregulation and Borderline Personality features explains:

- a) the interaction between the teen and the teen's environment
- b) the transaction between the teen's emotional vulnerability and an invalidating environment**
- c) The diathesis-stress model of psychopathology
- d) The high expressed emotion in families

4. The targets for skills training are hierarchically arranged in the following way:

- a) reduce life threatening behavior, therapy interfering behavior, quality of life interfering behavior, increase behavioral skills
- b) reduce group-interfering behavior, reduce life threatening behavior, increase behavioral skills
- c) reduce family conflicts, reduce group-interfering behaviors, increase behavioral skills
- d) reduce treatment-destroying behavior, increase behavioral skills, reduce therapy interfering behavior**

5. Which of the following is true about involving caregivers in DBT?

- a) Each caregiver must be in their own individual therapy
- b) Parents are removed from group if they display judgmental behavior toward their teenagers or group leaders
- c) Caregivers are treated as fully equal participants and held to the same expectations for participation as teens**

d) All of the above

6. The Biosocial Theory helps teens and parents to understand the etiology and maintenance of:

a) emotion dysregulation, reduced focus and awareness, impulsivity, interpersonal problems and teen-family conflicts

b) high expressed emotion, poor communication skills and drug abuse

c) emotional sensitivity, poor reality testing, and conflicts with friends

d) identify confusion, teen-family conflicts, and major depression

7. The mindfulness module is repeated at the outset of each skills training module because:

a) everyone is emotionally dysregulated

b) mindfulness is a core skill that requires repetition and is often necessary to engage in the other skills

c) because parents and teens have to increase their relational mindfulness

d) mindfulness skills are the most abstract

8. The three states of mind include:

a) Wise mind, being mind, and doing mind

b) Emotional mind, reasonable mind, and wise mind

c) Clear mind, detached mind, and engaged mind

d) Caregiver mind, teen mind, and family mind

9. Conducting mindfulness activities with teens and families works best when:

a) The leader provides a story or rational, employs a quiet or active mindfulness practice, and follows this with asking group members for observations

b) Guidelines of silence and stillness are enforced

c) The skills trainer provides sweets or other snacks during the practice

d) The leader completes the practice quickly and moves onto homework review and teaching new skills

10. Mindfulness skills help individuals get better control of their minds rather than:

a) Giving up

b) Calling their therapists

c) Letting their minds control them

d) Becoming psychotic

11. Distress tolerance skills differ from engaging in pleasurable activities because they:

a) don't solve the problem at hand

b) are not as much fun

c) Help keep you from feeling even worse or making the situation worse

d) Make you feel better faster

12. Which of the following is not true about Crisis Survival Skills?

a) Some of the skills help some of the people some of the time

b) People often need to string several of the Crisis Survival Skills together to see a reduction in distress or refrain from acting on impulse urges

c) The skills aren't as much intended to make you feel better as they are to keep you from feeling worse

d) They make you feel better quickly, or it means you haven't used the skill properly

13. When a distressed person storms out of the group skills session,

a) The leaders stops teaching skills to process what happened

b) The co-leader provides brief skills coaching to the distressed teen outside of group

c) The co-leader tells the distressed teen to not worry and come back next week

d) The group leaders conduct a detailed chain analysis once the teen returns, to understand what happened

14. What is radical acceptance?

a) The skill of deeply accepting things you cannot change

b) The skill of accepting a situation in an effort to become radicalized

c) It is a skill that requires asking the question, "Why me?"

d) It is seeing reality the way YOU want to see it

15. When is distracting oneself a useful skill:

a) When things are calm and the person is bored

b) When distress is high and the person is having trouble managing impulsive urges

c) When people are confused and they want to better understand what they are feeling

d) When people don't want to discuss certain topics in their therapy sessions

16. Walking the Middle Path skills were developed to address the following three domains relevant to teens and families:

a) Negotiation skills, communication skill, and meditation skills

b) Dialectical thinking and acting, validation skills, and behavior change skills

c) Behavior change skills, shaping, and punishment

d) Validation of self and other, using kindness, empathic listening

17. Walking the Middle Path Skills are important because:

a) Teens and parents often get polarized and don't have tools to navigate the impasse

b) It enables teens and parents to have more fun together

c) Parents of dysregulated teens need to learn how to become more strict and follow through with punishments

d) All of the above

18. To try to think and act dialectically, one must:

a) Use the words "always" and "never" to make your point

b) Always make your point first before inviting another's opinion

c) Move to "both-and" thinking and away from "either-or" thinking

d) Trust your gut and make safe assumptions

19. Which of the following is not one of the standard adolescent-family dialectical dilemmas?

a) Being loose versus too strict

b) Being too nurturing versus being overinvolved (e.g., "helicopter parenting.")

- c) Making light of problem behaviors versus making too much of typical adolescent behaviors
- d) Forcing independence versus fostering dependence

20. Which of the following is true about how to validate others?

- a) Look for how the feelings, thoughts, or actions make sense given the other's history or current situation.**
- b) Let the person know that you agree with them.
- c) Tell them a story about when you were in a similar situation.
- d) Provide reassurance that their intense emotions will get better soon.

21. What is/are the goals of the DBT emotion regulation skills?

- a) Decreasing emotional vulnerability
- b) Understanding and naming emotions
- c) Decreasing the frequency of unwanted emotions
- d) All of the above**

22. Which of the following is true about emotions?

- a) Can be harmful if experienced over time
- b) Emotions give us information, motivate us and prepare us for action, and communicate to others**
- c) Emotions are to be avoided as much as possible so people stay calm
- d) Strong emotions always lead teenagers to act on their urges.

23. The primary reason for assigning Parent-Teen Shared Pleasant Activities is to:

- a) Increase positive emotions while improving family cohesion**
- b) Increase shared understanding and taking responsibility
- c) Allow for reduced expectations regarding homework and chores in order to have more fun
- d) All of the above

24. Building Mastery is important for teens because:

- a) It helps get them to follow a schedule
- b) It helps them feel more competent and in control of their lives**
- c) It helps them focus better in school
- d) It helps them feel more in control of their relationships

25. The skill of Acting Opposite to the emotion urge works best when:

- a) We realize we were wrong in an interpersonal situation
- b) The emotion fits the facts, is justified, and we want to get our point across or maintain self respect
- c) Someone is giving us feedback that we need to change our emotion about a situation
- d) The emotion doesn't fit the facts or is no longer useful, we want to change the emotion, and we do it all the way**

26. Which skill set do you want to emphasize when the relationship is the primary goal in an interpersonal interaction?

- a) DEAR MAN

- b) FAST
- c) GIVE**
- d) ACCEPTS

27. When teaching interpersonal effectiveness skills to teens and families it is:

- a) Helpful to demonstrate the "anti-GIVE" skills to allow people to experience
- b) Helpful for teens and families to engage in behavioral rehearsal of DEAR MAN, GIVE and FAST skills by mixing up teens and caregivers from different families
- c) Helpful to model the use of effective and ineffective skills between group leaders.
- d) All of the above**

28. The new THINK skill for teens and caregivers can help us to better validate, think dialectically, reduce conflict, and reduce painful emotions by:

- a) Using the list of Thinking Mistakes to challenge our automatic thoughts
- b) Perspective taking, considering benign interpretations, attending to ways the other person might be struggling, and approaching with kindness**
- c) Thinking of all the ways the other person has caused us harm and working toward forgiveness
- d) Thinking in a way that is opposite to our usual thinking patterns

29. Which of the following is true about the interpersonal effectiveness skills?

- a) It is crucial to use only one skill set (i.e., GIVE, DEAR MAN, or FAST) at the same time
- b) Many situations call for using multiple skill sets at the same time**
- c) One should only use them when the relationship is important
- d) DEAR MAN often comes at the cost of one's FAST skills, but it is usually worth it anyway

*Appendix H**DBT-A Skills Clinical Competence Checklist***Teaching Observe Skill**

Prompt: Teach the Observe skill from Mindfulness (including just mentioning at the end of the video, not actually demonstrating, a relevant way to have group members practice the skill of Observe)

Please check each item that the participant demonstrated in the video.

1. Did the participant *explain* that the Observe skill is one of the What skills in mindfulness and/or that Observe helps us get into wise mind? ____
2. Did the participant *define* observing as noticing your experience in the present moment? ____
3. Did the participant mention the difference between noticing outside vs inside? ____
4. Did the participant *give an example* of observing outside ourselves (e.g., observing the environment with senses, like a picture on the wall or the sound of the ocean)? ____
5. Did the participant *give an example* of observing inside ourselves (e.g., watching thoughts and feelings come and go)? ____
6. Did the participant *mention* that observing is done through the senses (e.g., body sensations, visual stimuli, emotions)? ____
7. Did the participant state that it is important not to change or control (or push away or hold onto) our thoughts or emotions or experiences? ____
8. Did the participant *provide a rationale* for using the Observe skill or What skills (i.e., pointing out that the Observe skill can help clients notice their emotions, thoughts, or urges early on, before their emotions become overwhelming or before they act impulsively, or that it helps us become more aware of the present moment)? ____
9. Did the participant *give examples* of observing (e.g., noticing a breeze on skin or temperature on skin; notice the feeling of back against a chair; noticing a picture on the wall; noticing the texture of something they are eating; notice body sensations, temperature of skin, heart beating, breath, thoughts, muscles tensing)? ____
10. Did the participant *mention* a way that clients could *practice* the Observe skill (e.g., touching a table and observing senses; body scan; listening to music; observing/counting thoughts; paying attention to eating; washing dishes)? ____

Introducing Walking the Middle Path

Prompt: Introduce/describe Walking the Middle Path Module (as a whole module, NOT teaching each of the separate skills within it)

Please check each item that the participant demonstrated in the video.

1. Did the participant *mention* that the Walking Middle Path Skills were developed for families or *highlight* that it is a family-focused module? ____
2. Did the participant *explain rationale* for Walking the Middle Path (e.g., as a way to help adolescents and families get unstuck, deal with conflict, take one another's perspective, become less polarized, think or behave in less extreme ways, or be more effective at changing behaviors we want to change in others)? ____
3. Did the participant *mention* that dialectics are a component of the Walking the Middle Path module? ____
4. Did the participant *define* dialectics as the idea that multiple perspectives (even opposing perspectives) can be true at the same time? ____
5. Did the participant *provide a rationale* for learning about dialectics (i.e., pointing out that dialectics can help family members become less polarized, move away from either/or thinking, or work through dialectical dilemmas/extreme ways of thinking/acting)? ____
6. Did the participant *mention* that validation is a component of the Walking the Middle Path module? ____
7. Did the participant *define* validation as seeing the truth in another person's perspective or communicating to another person that their feelings, thoughts, and actions make sense and are understandable in a particular situation? ____
8. Did the participant *mention* that validating also includes validating oneself?
9. Did the participant *mention* that behavior change is a component of the Walking the Middle Path module? ____
10. Did the participant *explain* that behavior change includes learning behavioral principles or emphasizing positive reinforcement rather than over-using punishment? ____

*Appendix I**DBT Skills for Adolescents and Families Course Content***Week 1: Intro and Orientation**

- Intro to Course: DBT Skills for Adolescents
- Adapting DBT skills (content, style and structure) for adolescents and caregivers
- Orienting adolescents and caregivers to DBT skills training
- Building commitment and engaging adolescents in the skills training process
- Coaching skills in multiple modalities of DBT: Individual, family and group
- Managing DBT skills homework

Week 2: Skills Overview; Teaching Mindfulness

- Overview of the 5 skills modules for teens and families
- The transformative power of Mindfulness for teens and parents: Expanding awareness and focusing the mind
- Teaching teens to recognize different states of mind and use them to help manage emotions, behaviors and decision-making
- Breaking down mindfulness into 6 behavioral skills: The What and the How

Week 3: Teaching Distress Tolerance

- Getting through crises without making the situation worse
- Arming teens and families with an array of crisis survival tools for home and school
- Teaching teens how to radically accept circumstances they cannot change

Week 4: Teaching How to Walk the Middle Path

- Walking the Middle Path: Teaching the new skills module developed for teens and families

- Dialectics: Learning how to honor multiple truths in order to enhance perspective taking and problem-solving
- Validation: The powerful tool to increase connection, convey understanding, and soothe emotions in oneself and others
- Behavior change: Teaching teens and caregivers how to effectively change behaviors in the way they want

Week 5: Teaching Emotion Regulation

- Regulating emotions: Why bother?
- Naming and understanding emotions
- Teaching teens and caregivers how to reduce their vulnerability to negative emotions while learning how to increase positive emotions
- Learning how to reduce mood-dependent behaviors: Changing or reducing unwanted emotions

Week 6: Teaching Interpersonal Effectiveness & Skills Graduation Ceremony: Marking the Completion of the Skills Course

- Teaching fundamentals of managing and improving relationships
- Helping teens and parents learn how to ask for what they need, reduce conflict, and maintain their self-respect
- Skills graduation ceremony: Marking the completion of the skills course with adolescents and caregivers

*Appendix J**Open-ended Question Responses***Feasibility***Question:*

- How could this training course be improved?

Participant responses:

- The ability to submit questions at the end of the training to DBT psychologists would be helpful.
- honestly I think it was perfect
- Videos on phone coaching, more examples of individual sessions and common problems that come up in treatment
- I was hoping to see more participants who were less interested/more argumentative since this is what I frequently deal with in my current externship.
- More demonstrations on different skills and maybe more demonstrations on family sessions and individual sessions with the link to skills group
- More individual and family session demonstrations would be helpful.
- If we had indefinite access to the course to reference.
- More demonstrations
- I don't think it can be improved on!
- Honestly not sure, I thought it was great
- A text box or email in which I can ask questions about the course.
- I think more demonstrations of what to do when the teens/parents are less collaborative/unwilling to work in the group session would have been helpful.
- Have an advanced training for those already familiar with DBT-A
- I mentioned earlier that you should have clinicians apply the information they learned in practice while taking the course and set a time for clinicians taking the course to interact.
- Having some non-self-paced components will help me procrastinate less. Also, I like longer videos (6-10 mins) than very short ones (1-3 mins).
- More detailed guidelines of timeline/where you should be at each day or week. Also maybe addressing frequently asked questions. I also think maybe using different families in each week could have been interesting to get more exposure to a variety of family-teen problems.
- I would have loved to see more of the family sessions, though I know that wasn't the express purpose of this training.
- I believe a live remote option would be great or every few weeks having a Zoom meeting so you feel like you are a part of a network of people learning this and have an expert to ask direct questions too.
- Live Training piece for questions, live demonstration
- The course was great.
- I think that the videos could be cut down. I found the training too long.
- It was perfect!
- Allow more time to complete it

- As I commented in the last section, showing more examples of more challenging patients/situations in group would be helpful.
- Merge a couple shorter videos into one, less clicking “next”
- not sure why it is limited to 10 weeks of access - if it is self-paced, people should be able to complete it on their own schedule
- Showing more instances of disagreement/conflict that can arise in families with conflict and safety risks.

Question:

- What did you like about this training course?

Participant responses:

- It was engaging and the material was taught in a very coherent manner. I enjoyed the format such that you get to hear the psychologists’ thoughts relating to DBT and skills and then actually get to see how the skills would be taught in vivo.
- The course was interesting, well-organized, and very clear! I enjoyed learning the skills and seeing the way the trainers handled in-session issues that came up.
- Loved the visuals and the demos of sessions
- How it was organised and the quality of the video. The content was very clear and the professionals were very well prepared
- the real life examples
- I liked being able to see examples of the families and real-life demonstrations
- The videos and the mock sessions
- I liked the demonstration videos-- I thought they were very helpful to see how I can deliver these skills effectively in group. I also liked the few videos that demonstrated how skills can be applied in family and individual sessions (e.g. DEAR MAN)
- Everything. I was able to learn so much in my own space and time. I also was able to understand the content as it was very easily digestible. It does cater well to our world today wherein our attention span cannot take in a lot of information. I loved how concise the videos were and yet how much it covered.
- The length of individual videos were good chunks of information and helpful to move through the course with some natural breaks. The skills demonstrations were probably the most helpful to me to see the teaching in action as well as group management skills for the problems that arise and how people tend to react to different skills.
- The self pace component, along with a change of skills leader throughout the course
- I loved the demos and the illustrations, really engaging and relevant.
- The demonstration videos in particular were extremely helpful. Having the model/example is much appreciated.
- Every part of it. Going through the skills modules slowly and in depth. Watching family sessions in action, watching group in action. Hearing specific examples and ways to teach skills from Alec, Jill, and Marsha. Having access to the "in depth" and worksheets on the bottom of the videos.
- I found the demonstrations to be the most valuable - especially when things "did not go as planned."
- I thought it was really convenient and had great information that was easily attainable.
- Everything
- Loved the mock sessions and visual artwork

- I liked the organization of each module and liked how demonstration videos were given because it brought to life how what the module was going over should be taught and addressed in a session
- Loved the demonstrations, actors were phenomenal, handouts were great
- The demonstrations brought the lessons to life and gave me much better clarity in to the course.
- Visual components
- I found the demonstrations to be the most helpful thing by far.
- I really enjoyed the demonstration videos! I also found both Dr. Miller and Dr. Rathus to be very clear and engaged when explaining concepts.
- Alec Miller, Jill Rathus and Marsha Linehan!!
- Demonstrations were amazing.
- The graphs and visual designs are amazing! It has been truly a pleasure for me to start watching the video and using the graphs every time. Not to mention that all the instructors are amazing at illustrating what they teach.
- I liked the format of the videos and especially the skill demonstrations. I also enjoyed how easy it was to follow and the engaging videos. I also appreciated the handouts and materials that were provided throughout each week.
- I loved the demonstration videos. They were incredibly helpful.
- It was very clear and I like how it showed real life demonstrations and examples.
- online ease, clarity
- I liked the combination of didactic instruction and skills training clips. This really helped tie the material into practical application.
- I got to hear from Alec, Jill, and Martha collectively as well as their unique tips on how to teach DBT not found in the adolescent manual.
- I like the thorough explanations and the in depth demonstrations
- It demonstrated how to do the skills in session.
- I loved the integration of role play group sessions and didactics.
- Demonstration of delivering the material. Inclusion of Linehan in some of the videos.
- Convenient, flexible, the authors are the trainers
- interesting material with an interesting population. Especially enjoyed the demonstration clips with clients
- The skills training courses being acted out and demonstrated.

Question:

- Do you have any other comments or suggestions?

Participant responses:

- No. Incredible training!
- As someone who has a lot of DBT training, most of the material was not new to me, so maybe have a more advanced option for those who already know the skills or offer this to those who need more foundational training
- I liked that we had 10 weeks total to complete because it was hard to fit all the material for each week, so I needed the extra time to catch up.
- Thank You!
- Thank you for this opportunity. I would definitely take more courses given by Alec and Jill. I even liked that for some of it, I could make the speed of the video a bit faster,

especially when I felt that a skills trainer was speaking too slowly for my liking. I would highly recommend this to any therapist working with adolescents or families, and I think each and every client of mine can benefit from learning either some or all of these skills.

- Just a phenomenal course, I already found myself using skills I learned in my session the other day without even realizing it, and it helped explain a concept to my client so much
- This was a pretty intensive training that could be shortened. I'm glad I took the course though despite its length. The course did add slightly to my repertoire, although I already had a strong foundational knowledge of DBT. Some of the videos I found redundant and boring. Other videos were more interesting. Thank you for letting me be a part of your study. Much appreciated!
- Perhaps showing the page number somewhere on the screen to make it easier to follow along with the manual
- Thank you for offering this opportunity! I truly wish that we could distribute DBT training in a more affordable, effective, and accessible way to more clinicians, clients, and family members. I sincerely see its value for everyone.
- This course was fabulous! I feel like I learned an enormous amount and have already started incorporating the skills in my sessions with adolescents and young adults.

Preference

Question:

- Please rate your preference for taking this training in an in-person format or the current online format. Please tell us why you chose the above response.

Participant responses:

- Online is more convenient.
- It was very helpful to be able to go through the course at my own pace and go back and rewatch segments of the course.
- While it was nice to learn from home, it would have been also helpful to have a hybrid course.
- More accessible, able to access at any time, my own schedule
- Because it's more convenient and I can do it whenever I can following my own schedule
- Learn at my own pace, and able to go back
- I liked that it is self paced and there's immediate access to the online PDF resources and that I can rewatch the videos if needed.
- Online is convenient, I can go at my own pace and rewatch videos However, in person would be nice to allow for questions
- I did not have time for an in person training
- I had the flexibility to take the course when I wanted. I also was able to go back and re listen to something which was very helpful.
- The convenience of working through it on my own time was great, as well as seeing the skills group demonstration and being able to re-watch them.
- It is easier and more enjoyable to stay engaged in [in-person] format.

- I really liked the online format because you can work at your own pace. It was nice to be able to fit something like this into my busy schedule rather than carving out two full days for an in person training.
- Flexibility
- I believe both formats are/would be helpful. The online format was very convenient due to the flexible timing and allowing me to re-watch sections as needed. If I were to do in-person training, it would allow for more real-time practice (I imagine at least via live role-play).
- I feel like I would have retained the information better in person. Although I enjoyed having the flexibility of completing the coursework online. I feel like I would have retained the information much better had I completed the course in person.
- Was helpful to be self-paced and do it when I truly had the time to pay attention and internalize. I was able to rewind and take notes. Was able to listen to a module more than once if I was struggling or teaching to patients the next day, so it was helpful for review.
- Taking it online and at my own pace has been convenient, and if I was paying for it, I would only pay this much for a course in person because I think ultimately I learn better that way.
- I think that it's much more convenient to learn it online.
- Flexibility
- Easy and accessible to me whenever I was available
- I can easily pause the course when I need to.
- As a student with a busy schedule it was a lot easier to take the course online because I was able to take it at my own pace and it was less stressful this way
- I felt the online option was awesome because it allowed for a lot more flexibility. I was extremely overwhelmed with coursework when this course was first introduced to me, and it allowed me to complete it at a time when my mind was free and I could grasp the skills rather than attending the class in-person when my mind was somewhere else
- There is value in going at your own pace on an online format, but having questions answered in real time would also be valuable.
- Can move through the course at my own pace and rewind
- I can see the benefit of both equally. Having the flexibility of the online format was amazing and it was really incredible to see all of the demonstration videos but I can imagine that an in-person format would render higher engagement and better overall comprehension of the skills.
- While I enjoyed the self-pacing of the online format (and the convenience/ability to go back), I feel as though I would learn better/more in person and be able to grasp the material better.
- The convenience. However, this course live would probably be amazing
- It was helpful to be able to go at my own pace and at the same time, an in-person format would have allowed for the possibility of asking questions.
- Although online was effective, I think being able to ask the instructor questions and respond to their questions would have been helpful.
- I think the zoom option was fine. I think education is best solidified when one actually has an experience attempting to carry out a skills group. As well, having the opportunity to interact with others taking the course at a separate time to discuss their experiences

applying what they learned. Some of these points I mention are integrated into one of Marsha Linehan's foundational DBT training offered on psychwire.

- Even though I procrastinated, the online format allowed me to absorb as much content as possible. If it were in-person, I would miss some of the teaching points due to spacing out.
- I think doing the training in person would provide more opportunity to practice, observe in-vivo, and engage with the leaders of the training. At the same time, I do appreciate the flexibility and feasibility that the online format offers.
- Given my schedule as a graduate student, this is realistically the only way right now that I would have been able to take the training.
- The online format is much more convenient, while the in-person format may be helpful in increasing focus and participation throughout the course. The in-person format also has many benefits because you can network with instructors and other peers taking the course. However, fewer people may not have time to do the course if it was in person.
- As a learner who appreciates in-person discussion and examples, I feel like I would have enjoyed in person more and sustained engagement versus coming across distractions more easily while online.
- Convenience. I was able to learn at my own pace in a way that fits with my schedule.
- I don't like learning virtually.
- Each format has its pros and cons. I like in person because you get to practice the skills you are learning but I also would not have been able to fit in a scheduled, in person training and would likely have not been able to receive the training had it not been online.
- It's more convenient when it's online
- The online format was incredibly well done and was a great balance between didactics and role plays. I appreciate the ability to complete the course at my own pace and likely would not have been able to dedicate time to do the training during the day if it were offered only in person. I would love to do an add-on course in person.
- Convenience and concern about COVID given I have contact with elderly parents.
- It's more convenient and flexible.
- Much more convenient to not have to travel - can add it to the list of responsibilities we already have more easily
- In person probably would've allowed for more engagement however virtual worked better with my schedule and a lot was covered regardless.

Question:

- Please rate your preference for taking this training in an online-live format (with live trainers in real time) or an online-prerecorded and self-paced format: Please tell us why you chose the above response.

Participant responses:

- I would appreciate the ability to take it in person and be able to ask questions and at the same time, like the convenience of completing the training in the comfort of my own home at my own pace.
- It was very helpful to be able to go through the course at my own pace and go back and rewatch segments of the course.
- Better to stick to a schedule, and have access to a "real" classroom experience with peers and teachers

- More accessible, able to access at any time, my own schedule
- Because it's more convenient and I can do it whenever I can following my own schedule
- pre-recorded so I can go back
- I liked the prerecorded version but I think learning it live could be useful to ask questions in real time, and then have access to the recordings later to rewatch.
- Online is convenient, I can go at my own pace and rewatch videos However, in person would be nice to allow for questions
- I liked the self-pace format
- I was able to see more in action, was able to see demonstrations that felt more real, I was also able to learn easier with no pressure on time.
- Can do it on your own time rather than feel inconvenienced or distracted
- Convenience of working through on my own time and being able to re-watch content
- You could control your own pace.
- Again - moving at your own pace and the flexibility with my own schedule is really ideal.
- Flexibility - can do at your own pace
- Similar to my note above, online-prerecorded allows for flexible/adaptive timing that, in my case, was essential. But, I imagine having real-time trainers would be great for answering questions as they come up.
- I would prefer the flexibility of prerecorded lectures.
- If it's already pre-recorded, I would prefer to do it when I have the time. The only thing that would be helpful if it were live would be the ability to ask questions, though I didn't feel the need to ask anything throughout this module.
- I would choose this response if there was an option to interact with the trainers, otherwise I would rate it a 7
- Flexibility
- I loved that I could do this at my own pace, but it would have also been nice to ask questions or interact w/the trainers
- [Pre-recorded] Make me less nervous about my learning ability.
- An online live-format would require a commitment to a specific day and time and would make it a bit more difficult to commit to. being able to log in whenever i wanted and complete each module truly at my own pace works a lot better for me and my schedule. however, i do think learning with live people does facilitate more learning because you're able to ask questions and get live feedback.
- Definitely self-paced, same reason as above. I don't think the prerecorded format took away from the experience at all. In fact, it helped that I could rewind if I needed to hear something again.
- Again, I see value to both sides.
- Time flexibility!
- I prefer being able to watch the course when convenient and to move at my own pace, especially with a busy schedule.
- If it is live, it might as well be held in person
- It was helpful to be able to go at my own pace and at the same time, an online-live format would have allowed for the possibility of asking questions.
- Once I'm taking it on the computer, I'd rather do it at my own convenience and pace.
- I'm sure having it in a more interactive format would be helpful. I felt comfortable taking it self-paced because I was able to do it whenever I found time, especially with my busy

schedule. Maybe they can offer both options. When I was taking GRE courses, they had both options; self paced, or live.

- I am not too sure about the answer to this question since I believe if it's live online training probably, it will be good, too? Again, I am not quite sure.
- Similar to the previous question, I think having the course be live in real-time would be more engaging and encourage people to participate and remain present. I also think it would provide opportunities to ask questions and have conversations with the leaders. That said, I again appreciate the self-paced nature of the course and how I could complete it on my own time.
- This gives me the flexibility to take the course when I want, as my schedule is hectic and I could not have committed to a weekly 2-hour time block.
- While the online prerecorded option was more convenient, I believe I would have focused more if it was an online live session. I also believe an online live session would have many benefits that taking the course in person would have, such as the ability to ask questions and networking with instructors and other peers taking the course.
- I think being in a online-live format would offer chances to collaborate, engage in Q&As, and sustain more attention
- Convenience. I was able to learn at my own pace in a way that fits with my schedule.
- Again, the scheduling situation.
- It's easier to fit it into my schedule when it's pre-recorded.
- I really enjoyed the online format, but in person would have allowed for time for me to ask questions and potentially practice the skills with instructors.
- I don't know what it would be like live, so no real opinion. I did appreciate self pacing of pre-recorded sessions as I started course in middle- end of a very busy semester and did training in chunks when I had the time.
- Either or a combination of both is fine
- Easier to focus and learn when done with live trainers in real time than pre-recorded and self-paced, but only if the classes are recorded so that if you need to miss a class you have the option to watch it on your own

Question:

- Any other comments or preferences you would like to share:

Participant responses:

- Enjoyed the videos and the demonstrations of the skills!
- Although a set time each week would ensure that a block of time is kept open for this training
- I really enjoyed the course a lot and feel like I learned a ton! This opportunity was really awesome and I'm so glad I did it.
- Thank you! I learned a tremendous amount from this course. The demonstration videos in particular were extremely helpful and informative of modeling how to teach the skills.
- I LOVED this course, especially the ability to watch the multifamily skills groups in action.
- I benefited a lot from this course and appreciated the opportunity to take it. I'll also add that I have had extensive DBT skills training as part of my graduate education and for the most part this was a review (except for the adolescent/family specific material).
- Overall a really great and professional training

- THANK YOU FOR OFFERING THIS COURSE. BEST RESOURCE I'VE HAD AT LIU SO FAR.
- I wish the weekly videos had been one long video that one could pause/go back as opposed to many small ones, as I found it tiring/hindering to have to click through so often.
- Maybe there can be a mix of training modes. For example, the course can be pre-recorded while offering a live Q&A session for each module with the instructor or multiple exercise sessions with facilitators.
- This was an incredibly useful course-especially the skill demonstrations. I really appreciated the format of the videos (a mix of skill instruction, video demonstration, expert interviews).
- I thought the course was extremely engaging and well-done!
- I really enjoyed this opportunity. I felt some of the most interesting lessons were the lessons taken when watching the instructors/ therapists put the skills into action in individual therapy sessions and in group sessions.
- These were very agreeable patients. Many clients are not this agreeable.
- Great course! I really appreciated the last few videos, which showed group members saying goodbye and providing feedback to each other. It's very touching and meaningful.
- This training was an incredible opportunity and I learned so much that I can directly apply to my work with patients. Love middle path!
- Just one general comment about the recorded demonstrations- I really liked them and appreciated seeing examples of delivery of the material. I was just wondering how typical the patients/actors were? I have only seen young adult borderline patients on an inpatient rotation, but the adolescents seemed much more agreeable and easy going than I imagined. I think it might be helpful to show examples of more challenging group situations. However, if those are typical outpatients, it makes sense as is.
- The self paced format allowed for information to be reviewed and returned to without the worry of missing important material.