CHAPTER 1

The Development and Foundations of DBT PE

A history of trauma is the norm rather than the exception among individuals receiving dialectical behavior therapy (DBT). Many clients in DBT have experienced multiple traumas that often started in childhood, occurred repeatedly over a prolonged period of time, and were perpetrated by caregivers and other important people in their lives. Posttraumatic stress disorder (PTSD) is a common outcome of these traumatic experiences that causes tremendous suffering and often contributes to the primary problems targeted in DBT. People with PTSD are haunted by intrusive trauma memories, experience intense distress when reminded of their trauma, and feel as if they are constantly under threat. To cope with PTSD, clients in DBT often engage in high-risk and self-destructive behaviors—like suicide attempts, self-injury, substance use, and binge eating—that provide short-term relief but lead to long-term suffering. Over time, clients' lives typically become very restricted and disconnected due to efforts to avoid people and situations that elicit trauma-related distress and prompt dysregulated behavior. This difficulty functioning in daily life often strengthens the messages they internalized from past trauma—that they are bad, unlovable, and worthless people—and contributes to pervasive shame and self-hatred. Trapped in a life of trauma-related suffering that they feel unable to either change or tolerate, many clients come to view suicide as the only solution. As one of my clients aptly remarked, "It's all in the trauma."

Given the pervasiveness of trauma among individuals receiving DBT, it is critical that DBT therapists have the ability to effectively treat PTSD. Indeed, many DBT clients will not be able to fully reach their life-worth-living goals until PTSD has been resolved. The treatment described in this book is designed to provide a structured method of integrating PTSD treatment into DBT for the many clients who need such treatment. The treatment combines an adapted version of prolonged exposure (PE) therapy for PTSD (Foa, Hembree, Rothbaum, & Rauch, 2019), called the DBT Prolonged Exposure protocol (DBT PE), with standard DBT (Linehan, 1993, 2015). In this chapter, I begin by providing an overview of the treatment, including the history of its development, as well as its theoretical and empirical foundations.

The Origins of DBT PE

My primary goal in developing the DBT PE protocol was to make effective PTSD treatment available to high-risk, complex, and severely impaired clients who are typically unable to access these treatments. I first became aware of this treatment gap as a psychology intern at McLean Hospital in Belmont, Massachusetts, where I worked in a partial hospital program that provided intensive treatment for adults. In this setting, I encountered clients for the first time who were actively suicidal and self-injuring and had multiple severe conditions, such as mood, anxiety, personality, eating, and substance use disorders. Given my research background in interpersonal trauma, I was highly attuned to the presence and impact of trauma in many of these clients' lives, and PTSD often appeared to contribute greatly to their suffering. Armed with a healthy dose of naiveté and a limited therapeutic skill set, early in my training year I suggested to one of my supervisors that perhaps I could use the exposure procedures I had learned in graduate school to treat PTSD with one of my clients. While I don't remember my supervisor's exact response, the message was clear: No way! I was advised that these types of clients were too high risk and unstable for trauma-focused treatments. Instead, a skills-based treatment was needed to help them achieve safety and stability and learn to cope effectively with current life stressors. In this context, I was first exposed to DBT as a way to help clients achieve these important goals.

I then immersed myself in learning DBT and sought out a postdoctoral fellowship at Two Brattle Center in Cambridge, Massachusetts, that specialized in providing DBT in intensive outpatient programs. As I became more adept at delivering DBT, I was thrilled to see that many of my clients were clearly benefiting. Clients who began DBT with severe and often life-threatening behavioral dysregulation were able to gain control over these behaviors by using DBT skills to better tolerate and regulate the painful emotions that typically prompted them. I was convinced—these skills were truly lifesaving! At the same time, for some clients, achieving behavioral control was not enough to enable them to reach their life-worth-living goals. Although they were no longer trying to kill or harm themselves and generally had reasonable control over their behavior, they remained in a state of extreme emotional pain that was often driven by past unresolved traumas.

After searching the DBT manual for an answer, I became convinced that DBT's second stage of treatment, which was supposed to focus on targeting posttraumatic stress, was what was needed for these clients. I again approached my supervisors to ask about moving on to Stage 2 with some of my clients so that we could treat their PTSD. The answer this time: Not yet. It soon became clear that nobody was quite sure what this elusive Stage 2 was or when exactly it was supposed to occur. The DBT manual provided little guidance about how and when to approach the treatment of PTSD in Stage 2, while also clearly warning therapists about the potential of causing serious harm to their clients if they focused on trauma too soon. Given this, it was completely understandable that I was advised to remain focused on helping clients solve current life problems and to avoid trauma-focused treatment. At the same time, this felt both unsatisfying and insufficient.

I decided to go directly to the source to try to find a solution to this problem. In 2004, I began a postdoctoral fellowship with Marsha Linehan, the developer of DBT, at the University of Washington in Seattle. In my first meeting with her, she asked about my goals for my fellowship and I told her rather boldly that I wanted to help figure out how to do Stage 2 of DBT. I shared my prior clinical experiences with her and said that it seemed as if PTSD was often not treated during DBT because therapists, myself included, were unsure of when and how to do

this. Marsha agreed that Stage 2 was not as well developed as Stage 1 of DBT, but was unconvinced that therapists were not already treating PTSD when it was needed. Always a scientist at heart, she told me that first I would have to prove to her that something more was needed and invited me to analyze data from her clinical trials of DBT to see what I could discover. I eagerly agreed to this plan and set off to evaluate my clinically driven hypothesis.

Several months later I returned with results showing that PTSD was both highly prevalent and unlikely to remit during DBT. Specifically, in a recent randomized controlled trial (RCT) with suicidal and self-injuring women with borderline personality disorder (BPD), 50% met criteria for PTSD at the beginning of treatment, and of these, 87% still had PTSD after 1 year of DBT (Harned et al., 2008). This 13% remission rate was considerably lower than what was typically found in active PTSD treatments in which about half of clients who start treatment and two-thirds of those who complete treatment achieve remission from PTSD (Bradley, Greene, Russ, Dutra, & Westen, 2005). In a second set of analyses, I also learned that by the end of 1 year of DBT a majority of the clients with PTSD had successfully eliminated behaviors, such as suicidal and nonsuicidal self-injury, that are commonly used as exclusion criteria for PTSD treatments (Harned, Jackson, Comtois, & Linehan, 2010). Marsha and I agreed that the data were clear: DBT was effective in stabilizing clients so that they would be suitable candidates for PTSD treatment, but needed to be better at treating PTSD itself. Marsha encouraged me to take on this project and, just as she had done when developing DBT, suggested that I start by trying to treat PTSD with some of my own clients. Thus, with equal parts fear and determination, I began my journey to develop what is now known as the DBT PE protocol or "DBT PE" for short.

The Foundations of DBT PE

Fortunately for me, I had an incredibly strong base of existing treatments from which to start. DBT is an evidence-based, principle-driven treatment that was originally developed to treat chronically suicidal individuals with complex clinical presentations and has become best known as a treatment for BPD. In its standard format, DBT is delivered across four treatment modes. DBT individual therapy focuses on helping clients to reduce, in hierarchical order, life-threatening behaviors (e.g., suicidal and nonsuicidal self-injury), therapy-interfering behaviors (e.g., nonattendance, noncompliance, noncollaboration), and serious quality-of-life-interfering behaviors (e.g., severe mental disorders, relationship problems, functional impairment), while increasing their use of behavioral skills. These skills are taught in DBT group skills training and include mindfulness, emotion regulation, distress tolerance, and interpersonal effectiveness. Brief telephone contact between sessions is used for problem solving and in-the-moment skills coaching. Finally, therapists attend a structured weekly consultation team meeting to assist one another in the implementation of the treatment.

Given the multiproblem nature of the client population, DBT is intended to be a comprehensive treatment that can address the full spectrum of problems that clients have. To that end, DBT has a variety of protocols that are used on an as-needed basis to flexibly target many different problems. However, DBT did not have a formal protocol for treating PTSD, and this, Marsha and I believed, was what was needed. Although other treatments were being developed that blended elements of DBT with trauma-focused treatments (Bohus et al., 2013; Cloitre, Koenen, Cohen, & Han, 2002), these treatments differed considerably from standard DBT. In contrast, my goal was not to change DBT, but rather to develop a new protocol that could

be added to it for those clients who needed PTSD treatment. As she had written in the DBT manual, Marsha recommended the use of formal exposure procedures to treat PTSD and suggested that this could be done by either inserting or concurrently delivering a well-developed exposure-based PTSD treatment into DBT. My first task, therefore, was to identify an existing PTSD treatment on which to base this new protocol. After only a short deliberation, I selected PE (Foa et al., 2019).

PE was originally developed for women with sexual assault–related PTSD and is now used in a wide variety of trauma populations. PE is a structured protocol that is typically delivered in 9–15 weekly or biweekly 90-minute individual therapy sessions and includes three primary components: *in vivo* exposure to avoided but safe situations, imaginal exposure to trauma memories, and processing of the emotions and beliefs elicited by imaginal exposure. My primary reason for selecting PE was that it was the most well-studied manualized, exposure-based PTSD treatment available and had been shown to be highly effective in treating PTSD in multiple RCTs at the time (e.g., Foa, Dancu, et al., 1999; Foa, Rothbaum, Riggs, & Murdock, 1991). In addition, there was preliminary evidence suggesting that PE was effective in reducing PTSD in clients with borderline personality characteristics (Feeny, Zoellner, & Foa, 2002), which gave me hope that it would also work for clients with more severe BPD. Although I had some concerns about our clients' ability to tolerate PE, I was reassured by several studies that had shown that PE was unlikely to result in symptom exacerbation or treatment dropout (Foa, Zoellner, Feeny, Hembree, & Alvarez-Conrad, 2002; Hembree et al., 2003). Another notable benefit of PE was that it had recently been found to be readily transportable to therapists in community practice settings who were able to achieve outcomes comparable to PE experts (Foa et al., 2005). For these reasons, I believed that PE would make the ideal foundation of DBT's protocol for treating PTSD.

Theoretical Influences

While developing the DBT PE protocol, I was completely immersed in the theory and practice of DBT. As described in detail elsewhere (e.g., Linehan, 1993; Swenson, 2016), DBT is rooted in the theories of cognitive-behavioral therapy (CBT), incorporates acceptance strategies derived from Zen, and balances these two opposing approaches with dialectical theory. The three paradigms of DBT—change, acceptance, and dialectics—were my theoretical home base and influenced all aspects of my thinking about how to treat PTSD among high-risk, complex, and emotionally dysregulated clients. From CBT, I believed that effective treatment would require precision, technical skill, and a scientific approach to generating, testing, and evaluating theory-driven hypotheses about the factors maintaining PTSD. I also viewed the principles of acceptance as critical to reducing trauma-related suffering, including mindful awareness, radical acceptance of reality as it is, and compassion toward oneself and others. Consistent with a dialectical worldview, I believed in the importance of helping clients to let go of extreme trauma-related emotions, beliefs, and behaviors by actively searching for what was being left out, working to find a synthesis between opposing sides, and embracing change. As in DBT, I expected that therapists would need to skillfully and flexibly shift back and forth between change, acceptance, and dialectical strategies while treating PTSD to help clients keep moving toward their goal of a life without trauma-related suffering.

In addition to the three-paradigm framework of DBT, I was particularly influenced by the biosocial theory of the development of BPD that Marsha first articulated in the DBT manual (Linehan, 1993). According to this theory, BPD is primarily a disorder of pervasive emotion

dysregulation that develops as a result of transactions between biological emotional vulnerability (increased emotional sensitivity and reactivity combined with a slow return to emotional baseline) and an invalidating environment. An invalidating environment is one that chronically and pervasively communicates to the individual that they are bad, wrong, and unacceptable, and, at its most extreme, may include abuse and trauma. This type of environment is a particularly poor fit for an emotionally sensitive child as it is likely to regularly prompt painful emotions and then respond to these emotions by minimizing, judging, and/or punishing their expression. In addition, the child is typically expected to maintain constant control over their emotions but is not taught how to do so effectively. As a result, the individual does not learn how to understand, regulate, or tolerate their emotional responses and instead learns to invalidate and inhibit them. To achieve this, they often rely on maladaptive strategies, such as self-injury, substance use, and dissociation, that provide short-term emotional relief but worsen emotion dysregulation in the long run by contributing to a pattern of oscillating between emotional inhibition and extreme emotional states. Other common consequences of the invalidating environment include learning to set unrealistic standards for one's behavior, distrust one's perceptions of reality, hold extremely negative views about oneself, and expect rejection from others.

The biosocial theory provided a unifying framework for understanding the many trauma-related problems I was observing in my clients as either having an emotion regulation function or as being the natural consequence of pervasive emotion dysregulation. In the case of clients with PTSD, the core problem that seemed to be fueling their suffering was extreme emotional avoidance. My clients were terrified to experience their emotions because they were sure, based on their history, that doing so would result in the loss of behavioral control, intolerable pain, and rejection by others. Indeed, the experience of emotion was so excruciating that they were willing to do just about anything to avoid it—even if it increased their misery, including PTSD, in the long run. Based on this conceptualization, I believed that successful treatment would therefore need to address this core deficit by building clients' capacity to experience and tolerate their emotions so that PTSD and many other problems that were being driven by emotional avoidance would improve.

The biosocial theory also made me aware of the profound effects of pervasive invalidation on my clients' lives, including their experiences of and responses to trauma. Nearly every client I treated blamed themselves for the traumas they had experienced, judged their reactions during and after these events, and believed these experiences meant they were bad and unacceptable people. These self-invalidating beliefs could almost always be traced back to the negative messages they had absorbed from the invalidating environments in which they had lived. Although the biosocial theory focuses primarily on invalidation in the family of origin, it became clear to me that many clients had experienced severe invalidation from other important people (e.g., intimate partners), groups (e.g., peers in school), institutions (e.g., the mental health system), and the broader culture (e.g., due to systemic sexism, racism, and heterosexism). Accordingly, I thought that successful treatment of PTSD would need to help clients contextualize their traumatic experiences within both the micro- and macro-level invalidating environments in which they had occurred and replace the negative messages they had internalized from these environments with self-validation and compassion.

Although I was a DBT therapist at my core, I was also heavily influenced by the theories underlying PE that explain why PTSD develops, how it is maintained over time, and what needs to be done to change it. PE is based on emotional processing theory (EPT; Foa & Kozak, 1986), which proposes that PTSD develops when pathological fear structures form after trauma. Fear structures include stimuli that elicit physiological and behavioral responses, as well as thoughts about the meaning of the stimulus and response. These fear structures become pathological

when someone who has experienced a trauma (e.g., sexual abuse) encounters a stimulus that is objectively safe (e.g., a memory of the abuse or a person who resembles the perpetrator); responds with intense distress (e.g., racing heart, sweating, urges to run away); and assumes negative meaning about themselves, others, or the world (e.g., "I am incompetent" or "People are likely to harm me"). Pathological fear structures are maintained by avoidance of trauma-related stimuli, which provides short-term relief from distress but maintains PTSD in the long run by preventing inaccurate meanings from being disconfirmed. PE works to modify these fear structures through exposure to feared but safe trauma-related stimuli (e.g., talking to a person resembling the perpetrator or thinking about the abuse) so that the person can learn that their beliefs about the stimuli and their responses to it are inaccurate (e.g., they do not get attacked or become unable to function). With repeated exposure to feared stimuli in the absence of negative consequences, fear will eventually decrease through a process of extinction (commonly referred to as "habituation") and PTSD will improve.

While EPT provides a compelling and science-based conceptualization of problematic fear and how to change it, fear was not the primary trauma-related emotion many of my clients were experiencing. Instead, they were plagued by intense levels of shame, guilt, and disgust at themselves that stemmed from the invalidating environments in which they had lived and the extreme negative self-construct they had developed as a result. I felt sure that these negative self-directed emotions would also need to be directly targeted during PTSD treatment and that exposure alone may not be sufficient to do so. To that end, I relied on DBT's model of emotions and its full-system approach to emotion regulation to identify additional strategies that could be used to change emotions when needed.

Another point of divergence was PE's emphasis on the role of problematic trauma-related beliefs as the primary factor that fuels the avoidance that maintains PTSD. This conflicted with DBT's emotion-focused approach that formulates problems as related to emotions, including deficits in emotion regulation skills, intense emotions that interfere with skillful responses, and/or inhibited emotional experiencing. Indeed, it is considered anti-DBT to formulate problems solely in terms of cognition. Given this, I believed it was important to emphasize the role of intense trauma-related emotions and efforts to avoid them as core problems that also maintain PTSD over time. I soon came to realize that *in vivo* and imaginal exposure provided a powerful method not only of treating PTSD but also of teaching clients how to experience and tolerate intense emotions without engaging in maladaptive escape behaviors. To that end, I incorporated ideas from inhibitory learning theory (Craske et al., 2008), such as emphasizing emotional tolerance rather than habituation during exposure and viewing exposure as an opportunity to violate clients' expectancies (e.g., about the negative outcomes of experiencing and expressing emotions).

In sum, I believed we needed to help clients develop the capacity for normative emotional experiencing in the process of using exposure to treat their PTSD while also correcting the damaging messages of invalidating environments, all of which I viewed as necessary to enable clients to achieve freedom from trauma-related suffering.

The Development of DBT PE

When I first began to develop the DBT PE protocol, I was bolstered by the theory and research supporting both DBT and PE as independent treatments, as well as a strong sense of conviction that PTSD was an important problem that needed to be solved for many of our DBT clients. What I did not have were any data or experience to draw upon about exactly how to treat PTSD in this particular client population. As far as I knew, other than a few clients Marsha had treated

earlier in her career, nobody had tried to treat PTSD—let alone with exposure!—with the types of high-risk and complex clients I was trying to reach. Given this, I proceeded with an abundance of caution due to concern that one misstep might literally result in the death of a client.

The first client I decided to try this with was a woman who had been brutally gang raped by a boyfriend and his friends 5 years before she began treatment with me. Prior to this trauma, she had also experienced intimate partner violence in two relationships, as well as physical and verbal abuse by her mother since early childhood. She had a long history of nonsuicidal self-injury (NSSI) beginning in adolescence; two prior suicide attempts, including one that occurred several months before treatment; and chronic problems with binge eating and impulsive spending. She met criteria for PTSD, BPD, and bipolar II disorder. The first stage of DBT primarily focused on helping her to obtain control over her self-injurious behaviors. She cut herself three times in the first 2 months of treatment and had one serious suicide attempt via overdose in the fourth month of DBT. Chain analyses reliably indicated that these behaviors were related to trauma-related problems, including intense guilt and shame, thoughts that she was "bad," and exposure to trauma reminders. Her PTSD was also negatively impacting her quality of life as evidenced by frequent nightmares and flashbacks, chronic irritability with her children and boyfriend, avoidance of many anxiety-provoking situations (e.g., leaving the house alone), and excessive time spent engaging in safety behaviors (e.g., checking the locks on her doors). Based on her learning of DBT skills and abstinence from suicidal and self-injurious behavior, at the end of her sixth month of DBT we agreed that she was ready to begin PTSD treatment.

Before I began PE with this client, I had already decided to make several changes to its standard format. In the preexposure sessions (Sessions 1 and 2), I thought it would be important to use DBT strategies to obtain, strengthen, and troubleshoot commitments to actively participate in completing exposure and to not engage in suicidal or self-injurious behaviors during the treatment. I also wanted clients to create a DBT skills plan that they could use during and between sessions to manage urges to self-injure or kill themselves that may arise. Due to my worry about clients' ability to tolerate trauma-focused exposure, I made several modifications designed to create a more titrated approach to exposure, including having clients complete their first *in vivo* exposure with the therapist rather than on their own, and then conducting several weeks of in-session *in vivo* exposure before starting imaginal exposure. To monitor risk and increase the focus on emotions and acceptance, I also created the Exposure Recording Form for clients to complete before and after every exposure task that tracked their urges to kill and harm themselves, obtained ratings of specific emotions (e.g., fear, shame, guilt, sadness, anger) in addition to the usual Subjective Units of Distress Scale (SUDS) rating, and assessed the degree to which they radically accepted that the trauma had occurred.

With these initial modifications in place, I began to deliver PE with my client in weekly sessions that occurred concurrently with her ongoing weekly DBT individual and group therapy. Although she regularly reported increases in urges to self-injure and, to a lesser extent, kill herself after exposure tasks, she did not engage in either behavior during PE. Since her PTSD was primarily related to the gang rape she had experienced, we used *in vivo* exposure to target situations related to this event, as well as imaginal exposure to the trauma memory itself. After 11 sessions, she reported that no trauma-related stimuli elicited a SUDS rating greater than a 5 (out of 100) and she no longer met criteria for PTSD. I remember beaming with happiness and pride as I shared these results with Marsha and my DBT team. At this point, another postdoctoral fellow, Lizz Dexter-Mazza, agreed to try out this new protocol with one of her clients, a woman with chronic rape-related PTSD, BPD, and alcohol dependence who had presented to DBT with a pattern of regular NSSI; more than 40 suicide attempts in the past 2 years; and repeated psychiatric hospitalizations. When Lizz succeeded in obtaining comparably positive results with her

client, I began to think we might be on to something. The results of these first two case studies were eventually published (Harned & Linehan, 2008), and I began to try to obtain a grant to formally develop and test this fledgling protocol. Little did I realize what a struggle this would be.

In 2005, I submitted my first grant to the National Institute of Mental Health (NIMH). It did not even receive a score. On the positive side, reviewers described my proposal to develop Stage 2 of DBT as "being as innovative as a proposal can be, with tremendous potential benefit to the field." Nonetheless, they viewed my plans as "overly ambitious" and questioned whether "a recently minted PhD with minimal experience with this population is the right person to develop what will surely be one of the most important treatments to be developed over the next decade." One reviewer flat-out said, "It does not seem appropriate to delegate this to someone who is relatively new to the BPD and DBT field." I might have quit then if it were not for Marsha who, having weathered more than her fair share of criticism in the process of developing DBT, stood firmly by my side and told me I had to keep trying. I then began what felt like an unending process of revising and resubmitting this grant, each time attempting to address the critiques that were raised by modifying the research design, collecting more pilot data, and refining the proposed treatment approach. Along the way, I was also fortunate to have Edna Foa, the developer of PE, agree to join the research team as a consultant. By the sixth submission, the main critique I was up against was that some reviewers believed that adding PE to DBT "might make some patients worse." I gathered as much data as I could to support my stance that worsening was unlikely to occur, while also acknowledging that this remained a largely unanswered empirical question; indeed, this was why this research needed to be done. If not now, then when? If not this team of researchers, which included the developers of both DBT and PE, then who? This argument finally worked and, 4.5 years and two children later, I received my first grant.

In 2009, I began this 4-year treatment development grant by assembling a team of DBT therapists who agreed to work on this project with me, including Katie Korslund, Annie McCall, Bob Goettle, and Julia Hitch. Those of us who would be delivering individual therapy then set off to attend a 4-day intensive workshop in PE led by Edna Foa and her colleagues at the University of Pennsylvania in Philadelphia. It was both an eye-opening and sobering experience for us as the reality of what we were about to do set in: Nobody before us had tried to use PE with the kinds of high-risk and complex clients we were planning to treat. While we were there, I met with Edna to discuss the proposed treatment protocol in more detail, including describing the modifications to PE that I had made with our early pilot cases. She agreed with most of the changes I had made but expressed concern about the cautious approach I had taken to exposure. Instead, Edna encouraged me to adhere to PE's standard format without titrating it, including asking clients to begin *in vivo* exposure on their own following Session 2 and starting immediately with imaginal exposure in Session 3. Despite my urge to fragilize our clients, I agreed to try this. (Not surprisingly, Edna was right: Our clients were able to tolerate this less titrated approach.) We then returned to our clinic at the University of Washington and began the first phase of the project involving an open trial with 13 suicidal and self-injuring women with BPD and PTSD who came to call themselves—with good humor—"the guinea pigs."

I am forever grateful to my team of therapists as well as the clients who agreed to participate in this first study for trusting that we would figure out how to do this even if I was not yet entirely clear on the specifics. Our weekly DBT consultation team meetings became focused on identifying problems, generating solutions, trying out new strategies, and constantly refining what we were doing with precision and rigor. Just as important, we kept one another motivated and willing to "plunge in where angels fear to tread" even when we were terrified that it might all blow up in our faces (and when it sometimes did). Our clients taught us how to be better at what we were doing, suggested changes we could make, and inspired us to keep going with

their courage and commitment. I met with Marsha and Edna regularly to discuss our progress, obtain their feedback, and learn from their enormous clinical wisdom. Our team also benefited greatly from the consultation provided by PE experts in Edna's clinic who watched many of our sessions and helped us to hone our skills and gain clarity about the similarities and differences between our DBT-infused approach and standard PE.

With the support of this impressive team, by the end of the open trial I had developed the key elements of the integrated DBT and DBT PE protocol treatment that are described in this book. In this process, I tried to stick as closely as possible to standard PE and make adaptations only when I believed it was necessary to either better address the needs of our clients or increase compatibility with DBT. We were also thrilled to discover that this new synthesis of DBT and PE seemed to be working: By the end of treatment, 60% of the clients who had started treatment and 71% of those who completed it had remitted from PTSD and nobody got worse (Harned, Korslund, Foa, & Linehan, 2012).

I then proceeded to the second phase of the project: an RCT that compared DBT with and without the DBT PE protocol in a sample of 26 suicidal and self-injuring women with BPD and PTSD. This time I had a larger team of therapists, including several graduate students and postdoctoral fellows, and an even higher-risk sample of clients who had twice the rate of suicide attempts in the year prior to treatment as our original group. We lost our first client to suicide in this study, a woman who was in the standard DBT condition and therefore did not receive DBT PE. This incredibly sad event both reminded us of the reality of the risk we were facing and made us even more determined to keep going. At the end of this study, we found that most clients who completed DBT PE remitted from PTSD (80%), whereas those who received DBT alone did not (40%). Yet again, nobody who received DBT PE got worse. Indeed, adding DBT PE to DBT appeared to be making clients less rather than more likely to attempt suicide and self-injure (Harned, Korslund, & Linehan, 2014).

As these positive results were emerging, there was an increasing demand for me to start providing training to DBT therapists in this newly developed approach. After completing the initial open trial in 2012, I had somewhat tentatively begun to provide an introductory 2-day workshop in DBT PE while being clear about the preliminary nature of the evidence. In 2015, bolstered by the findings of the RCT, I expanded this to a 4-day intensive DBT PE workshop and began to train DBT therapists around the United States and internationally. Determined to make sure that what I was doing was helpful rather than harmful, I collected data from over 260 therapists who attended these workshops to evaluate whether they seemed to be effective in promoting the use of DBT PE in ways that were beneficial to clients. The results indicated that most therapists who attended these workshops used DBT PE in the 6 months after training, and those who did reported that it was safe and typically resulted in improvements in PTSD for their clients (Harned, Ritschel, & Schmidt, 2021).

In 2015, I received a second grant from NIMH to evaluate the effectiveness of the integrated DBT and DBT PE treatment in community practice settings. For this project, I partnered with four public mental health agencies in Philadelphia that were providing DBT to adolescents and adults across multiple levels of care. Together with Katie Korslund and Sara Schmidt, we provided training and consultation to these teams to help them implement DBT PE in their existing DBT programs. Over the next 4 years, I became intimately familiar with the challenges of delivering treatment in these underresourced settings, which are characterized by high rates of clinician turnover and an incredibly disadvantaged client population. Despite these challenges, we found that DBT PE could be transported effectively to these settings and that it continued to improve PTSD and other outcomes beyond the effects of DBT alone (see Harned, Schmidt, Korslund, & Gallop, 2021).

A Note on the Name

I am often asked why this treatment is called the DBT PE protocol (or DBT PE for short) as opposed to one or the other of its component treatments. The main answer is that this treatment is a true synthesis of both DBT and PE. Calling the treatment DBT would fail to acknowledge the reality that it is based on PE. At the same time, calling it PE would leave out the ways in which DBT has been infused into all aspects of its delivery. Therefore, the inclusion of both DBT and PE in the name of the protocol is intended to reflect a dialectical "both–and" approach that honors the importance of both treatments while also acknowledging that their synthesis has yielded something new and distinct.

After 14 years of working as the director of research in Marsha's clinic at the University of Washington, in 2018, I accepted a position at the Seattle division of the VA Puget Sound Health Care System. As part of my new position, I was tasked with establishing a comprehensive DBT program and training staff in both DBT and DBT PE. Building on the work of Laura Meyers and her team at the Minneapolis Veterans Administration (VA) who had shown that DBT PE was effective in a veteran population (see Meyers et al., 2017), my team and I began using the treatment with high-risk and behaviorally dysregulated veterans with BPD. Nearly every veteran we treat in our VA DBT program has PTSD, and DBT PE has become a standard, and typically successful, part of the treatment they receive. In this process, I have learned a lot about how to make DBT PE fit the needs of a new population of clients: in this case, veterans of all genders who often have a complex history of both military and nonmilitary traumas. These lessons on how to tailor DBT PE to different client populations are reflected throughout this book, and I expect the treatment will continue to evolve as we learn more about how to make it work as effectively as possible for the diverse clients who need it.

Evidence Base

A significant benefit of basing the DBT PE protocol on two gold standard evidence-based treatments is that there was already a large body of research supporting the effectiveness of its component parts. At this point, more than 35 RCTs have demonstrated the efficacy and effectiveness of DBT in reducing suicidal and self-injurious behavior (DeCou, Comtois, & Landes, 2018), symptoms of BPD (Storebø et al., 2020), and a wide range of other problems in both adults and adolescents (Miga, Neacsiu, Lungu, Heard, & Dimeff, 2019). Similarly, more than 35 RCTs of PE have been conducted that support its efficacy and effectiveness in reducing PTSD among adults (Powers, Halpern, Ferenschak, Gillihan, & Foa, 2010) and adolescents (Foa, McLean, Capaldi, & Rosenfield, 2013; Gilboa-Schechtman et al., 2010) with a wide range of traumas. Given the large evidence base for DBT and PE, research on the integrated DBT + DBT PE treatment has focused on confirming that they remain effective when adapted and combined and that doing so is feasible, acceptable, and safe for high-risk and multidiagnostic clients.

Efficacy Studies

As described above, the two original studies of DBT + DBT PE were conducted in an outpatient research clinic at the University of Washington and included an open trial (n = 13; Harned et al., 2012) and an RCT that compared DBT with and without the DBT PE protocol (n = 26;

Harned et al., 2014). Both studies involved 1 year of treatment and included adult women with recent (past 2–3 months) and recurrent suicide attempts and/or NSSI, PTSD, and BPD. On average, clients had attempted suicide between two and three times and engaged in NSSI more than 60 times in the year prior to treatment. Participants were 33–39 years old on average, primarily White (69–80%), low income (75–91% earned <$20,000 per year), and 13–54% identified as a sexual minority. Additional information about the clinical characteristics of these samples is provided in Chapter 2, and the specific racial/ethnic and sexual minority subgroups are described in Chapter 17.

Acceptability and Feasibility

Across both studies, 74% of clients reported a preference for DBT + DBT PE at intake compared to DBT alone (26%) or PE alone (0%), and this was predicted by more severe PTSD reexperiencing symptoms and an index trauma that occurred in childhood (Harned, Tkachuck, & Youngberg, 2013). Over the course of DBT, 46–77% of clients initiated the DBT PE protocol and this occurred after an average of 20 weeks of DBT; of these, 70–75% completed it in an average of 13 sessions (range = 6–19) during which two to three trauma memories were typically targeted. The primary barrier to initiating the DBT PE protocol was treatment dropout during Stage 1 of DBT, which occurred for 23–41% of clients and, in the RCT, was related to lower therapist adherence to DBT. Overall, the treatment was highly acceptable to clients and therapists in terms of positive treatment expectancies and satisfaction.

Safety

The DBT PE protocol was found to be safe to deliver. During the year of treatment, few clients in the open trial attempted suicide (9%) or self-injured (27%). In the RCT, clients who completed the DBT PE protocol were 2.4 times less likely to attempt suicide (17% vs. 40%) and 1.5 times less likely to self-injure (67% vs. 100%) than those completing DBT alone. These findings suggest that adding the DBT PE protocol to DBT is likely to decrease rather than increase the risk of suicidal and self-injurious behaviors. In addition, completing *in vivo* and imaginal exposure tasks was not associated with an increased risk of engaging in self-injurious behaviors. During the DBT PE protocol, urges to attempt suicide and self-injure rarely increased immediately following exposure tasks (6–11% of tasks) and, in the RCT, average pre- and postsession urges to engage in these behaviors were higher in DBT than in DBT + DBT PE. Overall, 20–25% of clients engaged in suicidal and/or self-injurious behavior during the DBT PE protocol portion of the treatment, which is no higher than what is found during DBT.

Clinical Outcomes

At posttreatment, DBT + DBT PE clients in the intent-to-treat samples (i.e., those who had the option to receive the DBT PE protocol) showed large and significant improvements in PTSD severity (Hedges's *g* effect sizes = 1.6–1.8), as well as high rates of reliable improvement (70–83%) and diagnostic remission of PTSD (58–60%). Clients who completed the DBT PE protocol showed even larger improvements in PTSD severity (*g*s = 1.9–2.9), as well as higher rates of reliable improvement (86–100%) and diagnostic remission of PTSD (71–80%). In the RCT, clients who completed the DBT PE protocol were two times more likely than those who completed DBT alone to achieve diagnostic remission from PTSD (80% vs. 40%). In both studies, clients in DBT + DBT PE also showed large improvements in dissociation, depression, anxiety,

guilt, shame, and social and global functioning and, in the RCT, these improvements were larger in DBT + DBT PE than in DBT.

Mechanisms and Processes of Change

Using data from these efficacy trials, several studies have evaluated factors associated with improvement in PTSD during DBT + DBT PE. The first study examined the pattern of change in emotions during imaginal exposure and found that only global distress (SUDS) and fear significantly decreased during imaginal exposure trials (within-session habituation), whereas global distress, fear, guilt, shame, and disgust each showed significant reductions across imaginal exposure trials (between-session habituation; Harned, Ruork, Liu, & Tkachuck, 2015). This study also found that achieving remission from PTSD was predicted by greater between-session habituation, but not within-session habituation or emotional activation. Another study found that clients with higher levels of shame, guilt, experiential avoidance, and posttraumatic cognitions exhibited a slower rate of improvement in PTSD during treatment, suggesting the need to specifically target these maintaining factors to accelerate treatment gains (Harned, Fitzpatrick, & Schmidt, 2020).

Two studies have examined the timing of change in PTSD and other outcomes over the course of DBT + DBT PE. Across the three stages of the treatment, PTSD severity does not change in Stage 1 but does significantly improve in Stages 2 and 3, whereas BPD severity and state dissociation significantly improve only in Stage 3 (Harned, Gallop, & Valenstein-Mah, 2018). In addition, improvements in PTSD severity and posttraumatic cognitions both predict subsequent improvements in functional outcomes, such as social adjustment, global functioning, and health-related quality of life (Harned, Wilks, Schmidt, & Coyle, 2018).

Taken together, these findings indicate that (1) PTSD is unlikely to significantly improve in DBT until it is directly targeted in Stage 2 via the DBT PE protocol; (2) reducing trauma-related emotions, experiential avoidance, and posttraumatic cognitions are critical to achieving improvement in PTSD; and (3) improvements in many comorbid problems are likely to occur after, and as a result of, successful treatment of PTSD.

Effectiveness Studies

Since these original efficacy trials, two effectiveness studies have examined DBT + DBT PE in community practice settings. Meyers and colleagues (2017) evaluated the treatment in a 12-week intensive outpatient program at a VA medical center. This open trial included 33 veterans (mean age = 43, 52% male, 76% White) with PTSD and BPD traits that had interfered with prior attempts to receive standard PTSD treatments, including PE, in the VA. To accommodate the intensive outpatient model, the treatment was shortened to 12 weeks of standard DBT (three DBT skills groups and one DBT individual session per week) with the DBT PE protocol integrated into treatment beginning in Week 2. On average, clients received 12 DBT PE sessions. Overall, 67% of clients successfully completed the program, no clients dropped out during DBT PE, and there were no adverse events. Among treatment completers, there were large and significant reductions from pre- to posttreatment in PTSD severity, suicidal ideation, and dysfunctional coping. At posttreatment, 91% had experienced a reliable improvement in PTSD and 64% were below the clinical cutoff for a PTSD diagnosis.

As mentioned previously, my second NIMH grant involved a nonrandomized controlled trial that compared DBT with and without DBT PE in four public mental health agencies in Philadelphia (Harned, Schmidt, et al., 2021). These agencies included an adult outpatient DBT program, two residential DBT programs (one for adults, one for adolescents), and one DBT

program embedded within an Assertive Community Treatment program for adults with severe mental illness. Clients were required to meet criteria for PTSD and to be enrolled in DBT in one of these programs; no exclusionary criteria were applied. The sample included 35 clients ranging in age from 12 to 56 years old (average = 30) of whom 80% were female, 65% were racial/ethnic minorities (primarily African American [41%] and Latinx [27%]), and 44% identified as sexual minorities. Most clients (85%) earned less than $5,000 per year and were receiving state or federal financial assistance or benefits. In the past year, 60% had engaged in NSSI, 46% had attempted suicide, and 49% had been psychiatrically hospitalized. Per clinician report, the most common co-occurring diagnoses were BPD (54%), bipolar disorder (34%), major depression (31%), substance use disorder (20%), and psychotic disorder (17%).

In this demographically and clinically diverse sample, 46% of clients initiated the DBT PE protocol during the course of DBT. The primary barrier to initiating DBT PE was therapist turnover: 58% of clients who did not receive DBT PE lost their therapist due to turnover during the course of their treatment. The rate of client-initiated dropout from treatment was 29% and did not differ between those who did or did not receive DBT PE. Clients who initiated and/or completed DBT PE had very large pre–post improvements in PTSD severity (*g*s = 1.1–1.4), high rates of reliable improvement of PTSD (54–71%), and 40–44% no longer met criteria for PTSD by posttreatment. In contrast, clients who did not initiate DBT PE exhibited moderate improvements in PTSD severity ($g = 0.5$) and had relatively low rates of reliable improvement (31%) or remission (23%) of PTSD. Similarly, clients who initiated DBT PE showed significant improvements in posttraumatic cognitions, emotion dysregulation, general psychological distress, and functional impairment, whereas clients who received DBT only either did not significantly change or improved less on these outcomes. The rate of suicide attempts and/or NSSI during treatment was significantly lower among clients who initiated DBT PE (27%) than those who received DBT alone (65%), and there was no evidence of increases in these behaviors or use of crisis services among clients who received DBT PE. Client age, gender, race/ethnicity, and sexual orientation did not significantly predict DBT PE initiation or impact the rate of improvement in PTSD and other outcomes, suggesting that the effects of DBT PE may generalize to clients from diverse sociodemographic groups.

Benchmarking analyses compared these results to those obtained in the two original efficacy studies (Harned et al., 2012, 2014) and found that the degree of improvement in PTSD severity in this sample, although very large, was significantly smaller than in the efficacy trials. This was likely due to differences in how the treatment was implemented in these settings—for example, clients received both shorter and less adherent DBT as well as fewer DBT PE sessions on average than in the efficacy trials. In addition, differences in the client samples may have contributed to these reduced treatment gains, as the effectiveness trial included a higher rate of racial/ethnic minorities, clients living in extreme poverty, clients with and without BPD, and individuals with psychotic and bipolar disorders.

Dissemination and Implementation Studies

Two studies have examined methods of training therapists to deliver the DBT PE protocol. The first study surveyed 266 therapists who self-selected to attend 2- or 4-day DBT PE workshops (Harned, Ritschel, et al., 2021). These therapists were delivering DBT in a wide variety of practice settings and, prior to the workshop, 78% reported feeling "very" comfortable using DBT. The workshops were effective in increasing therapists' confidence in DBT PE and their ability to deliver it, while also decreasing their concerns about potential client worsening. In the 6 months after training, therapists who attended the 4-day workshop were significantly more likely to use DBT PE in their practice than those who attended the 2-day workshop (66% vs.

39%) and use of DBT PE was predicted by greater self-efficacy and perceived treatment credibility at posttraining. The primary reason therapists reported for not using DBT PE in the 6 months after training was a lack of appropriate clients.

Among therapists who used DBT PE, 81% reported that on average their clients' PTSD had improved and 67% reported that PTSD was much to very much improved on average. In addition, most therapists reported that their clients' comorbid problems did not get worse during DBT PE. If worsening occurred, it typically involved temporary increases in internal distress (e.g., emotion dysregulation, dissociation, depression) and not loss of behavioral control. Few therapists reported having clients who exhibited temporary increases in suicide attempts (5%) or NSSI (17%), and sustained worsening of these behaviors was rare (NSSI = 3%) to nonexistent (suicide attempts = 0%). Taken together, these findings suggest that workshops, particularly the standard 4-day DBT PE workshop, appear to be an effective method of training therapists to deliver DBT PE in a manner they experience as being safe and effective for their clients. This workshop-only training model may be most effective for therapists who are motivated to learn and use DBT PE and have a high degree of confidence in their ability to deliver DBT.

The second therapist training study was embedded in the grant that evaluated DBT PE in public mental health agencies in Philadelphia. In this project, we used a more intensive implementation model that included the 4-day DBT PE workshop followed by 16 months of bimonthly team-based consultation with an expert who also regularly reviewed DBT and DBT PE sessions and provided adherence feedback (Harned, Schmidt, et al., 2021). Therapists in this study (n = 28) did not self-select to attend the training (they were asked to participate by their team leaders) and were primarily master's-level counselors and social workers who had been providing DBT at their agency for an average of 15 months. Half of these therapists (50%) reported feeling "very" comfortable using DBT prior to the workshop. From the beginning to the end of the workshop, there were significant increases in therapists' confidence in DBT PE and their ability to deliver it, as well as a decrease in negative beliefs about exposure therapy. Overall, 62% of eligible therapists used DBT PE after training and did so with high levels of adherence (96% of rated DBT PE sessions were deemed adherent). These findings support the potential effectiveness of a multicomponent implementation model for providing training and ongoing support to therapists learning to deliver DBT PE, perhaps particularly those who are less confident in their ability to deliver DBT.

Concluding Comments

The integrated DBT and DBT PE protocol treatment described in this book was born out of my determination to find a way for even the most high-risk and complex clients to receive effective treatment for PTSD. Starting from the tremendously strong foundations of DBT and PE, the DBT PE protocol was developed using an iterative trial-and-error approach that was guided by the theories underlying these treatments and the needs of the clients we were treating. Along the way, many therapists, clients, the DBT and PE treatment developers, and other experts have helped to shape it into its current form and make it better than it otherwise would have been. The research to date supports the feasibility, acceptability, safety, and effectiveness of this treatment approach in a variety of client populations and treatment settings, and when delivered by DBT therapists with diverse training backgrounds. After many years of treatment development and research, I am excited to share this manual with you and hope that it helps you to provide effective treatment for PTSD and change the lives of clients who have been trapped in a seemingly endless cycle of trauma-related suffering.