Published in final edited form as:

Community Ment Health J. 2019 April ; 55(3): 409–419. doi:10.1007/s10597-018-0358-1.

Perspectives on a Stage-Based Treatment for Posttraumatic Stress Disorder Among Dialectical Behavior Therapy Consumers in Public Mental Health Settings

Melanie S. Harned, PhD¹ and Sara C. Schmidt, PhD²

¹Senior Research Scientist, Department of Psychology, Box 351635, University of Washington, Seattle, WA 98195, USA. mharned@uw.edu

²Research Scientist, Department of Psychology, Box 351635, University of Washington, Seattle, WA 98195, USA. scs35@uw.edu

Abstract

Difficulties with consumer engagement are a common barrier to implementing trauma-focused evidence-based psychotherapies (TF-EBPs). Potential methods of increasing engagement include utilizing a stage-based treatment approach, and involving consumers in implementation efforts. This mixed method study explored consumers' perspectives on a stage-based TF-EBP, Dialectical Behavior Therapy (DBT) with the DBT Prolonged Exposure (DBT PE) protocol.

Nineteen DBT consumers in two public mental health agencies targeted for implementation of DBT + DBT PE participated in focus groups and completed questionnaires assessing treatment preferences and expectancies.

Consumers reported positive treatment expectancies and a strong preference for DBT with DBT PE (89.5%) over DBT alone (5.3%) or PE alone (5.3%). This was primarily due to beliefs about the treatment's efficacy, a perceived need for PTSD treatment, and the stage-based approach.

Consumer-focused strategies for increasing uptake and reach of TF-EBPs are discussed.

Keywords

Consumers; PTSD; Implementation; Dialectical Behavior Therapy; Prolonged Exposure

Over the past decade, there have been increasing efforts to implement trauma-focused evidence-based psychotherapies (TF-EBPs) for posttraumatic stress disorder (PTSD) in routine practice settings (Rosen, Ruzek, & Karlin, 2017). Encouragingly, research has shown that community clinicians can be trained to deliver TF-EBPs in a manner that leads to significant improvements in PTSD (e.g., Eftekhari et al., 2013). However, achieving widespread penetration of TF-EBPs has been a considerable challenge and relatively few patients with PTSD receive these treatments in many implementation settings. For example,

Compliance with Ethical Standards

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

despite a system-wide implementation effort and federal mandate requiring Prolonged Exposure (PE; Foa, Hembree & Rothbaum, 2007) and Cognitive Processing Therapy (CPT; Resick & Schnicke, 1996) to be available in all United States Veterans Health Administration (VHA) clinics, fewer than 15% of treatment-seeking veterans with PTSD are estimated to receive these treatments (Lu, Plagge, Marsiglio, & Dobscha, 2016; Watts et al., 2014). Although barriers to expanding the reach of TF-EBPs exist at multiple levels, difficulties with consumer engagement have been identified as the most common reason for the limited uptake of these treatments (Rosen et al., 2016).

Providers trained to deliver TF-EBPs indicate that consumer unwillingness to engage in these treatments is a primary reason for their limited use, and they report a variety of reasons for clients' lack of receptivity to TF-EBPs, including unwillingness to talk about traumatic experiences, perceived lack of tolerability, and logistical barriers (Hamblen et al., 2015; Lu et al., 2016; Osei-Bonsu et al., 2017; Zubkoff et al., 2016). Consistent with these provider reports, one study found that, among veterans enrolled in a VHA PTSD clinic, none (0%) preferred or initiated TF-EBPs when presented with multiple treatment options according to usual care procedures (Mott, Stanley, Street, Grady, & Teng, 2014). Even among veterans who have received TF-EBPs, many report originally being ambivalent and delaying initiating these treatments due to fear of symptom worsening, beliefs that avoidance of trauma-related cues is helpful, skepticism about the treatment rationale, and lack of knowledge about the treatment (Hundt et al., 2015). In contrast, substantial research has demonstrated that a majority of individuals in clinical and non-clinical samples report a preference for PTSD treatments that involve psychotherapy over medication and for treatments that include talking about the trauma – a core component of TF-EBPs (see Simiola, Neilson, Thompson, & Cook, 2015 for a review). Taken together, these findings suggest that there are likely important barriers to increasing consumer engagement in TF-EBPs that extend beyond individual treatment preferences.

From a treatment perspective, many providers report trying to increase consumer engagement in TF-EBPs by using a stage-based approach in which preparatory treatments focused on increasing readiness and motivation are provided prior to initiating TF-EBPs (Hamblen et al., 2015; Zubkoff et al., 2016). These preparatory treatments are typically skills-based and provided to clients who are viewed as not ready for TF-EBPs due to lack of receptivity and/or concerns about safety, insufficient coping skills, and the presence of severe comorbid conditions (e.g., Lu et al., 2016; Osei-Bonsu et al., 2017; Raza & Holohan, 2015; Zubkoff et al., 2016). Although there is lack of consensus about which types of clients are appropriate for stage-based versus stand-alone PTSD treatments (de Jongh et al., 2016), stage-based approaches are generally recommended for individuals with acute suicidality, recent serious self-injurious behaviors, and severe comorbid conditions that are likely to interfere with TF-EBPs (van Minnen, Zoellner, Harned, & Mills, 2015).

An exemplar of this type of stage-based approach is the integrated Dialectical Behavior Therapy (DBT; Linehan, 1993) and DBT Prolonged Exposure (DBT PE) protocol treatment (DBT + DBT PE; Harned, Korslund, Foa, & Linehan, 2012; Harned, Korslund, & Linehan, 2014). This treatment begins with a stabilization stage in which DBT is used to address higher-priority targets (e.g., life-threatening behaviors) and increase behavioral skills (e.g.,

emotion regulation, distress tolerance) before progressing to a trauma-focused treatment stage in which DBT is delivered concurrently with the DBT PE protocol for PTSD. The DBT PE protocol is an adapted version of PE (Foa et al., 2007) that incorporates strategies and principles of DBT and is designed specifically to be integrated into DBT to treat PTSD among high-risk and multi-diagnostic clients. The core treatment strategies of the DBT PE protocol include *in vivo* exposure to avoided but safe situations and imaginal exposure to trauma memories followed by processing of trauma-related emotions and beliefs. In efficacy trials with suicidal and self-injuring women with PTSD and borderline personality disorder, a majority (74%) reported a preference for the combined DBT + DBT PE treatment over either DBT or PE alone at intake (Harned, Tkachuck, & Youngberg, 2013), and 47-77% subsequently initiated the DBT PE protocol during their DBT treatment (Harned et al., 2012; Harned et al., 2014). These findings suggest that skills-based preparatory treatments may help to increase client receptivity to and initiation of subsequent TF-EBPs, perhaps particularly among high risk clients with severe comorbid conditions.

From an implementation perspective, including consumers in TF-EBP implementation efforts may also help to increase client engagement in these treatments. Consumer-focused implementation strategies are recommended as part of a multi-level approach to increase the uptake of EBPs (Proctor et al., 2009) and include strategies such as obtaining and using consumer feedback on the implementation effort and developing strategies with consumers to enhance uptake (Powell et al., 2015). Including these types of consumer-focused strategies in TF-EBP implementation efforts may help to enhance client receptivity to these treatments, which, in turn, may improve both implementation and effectiveness outcomes. For example, providers may be more willing to use TF-EBPs if clients express a preference for these treatments (Raza & Holohan, 2015) and providing clients with their preferred treatment may lead to better adherence and outcomes (Zoellner et al., 2018; Swift & Callahan, 2009).

The primary aim of the present study was to explore DBT consumers' perspectives on DBT + DBT PE and was conducted as part of a larger project focused on implementing this stage-based, integrated TF-EBP in public mental health agencies using the Exploration, Preparation, Implementation, and Sustainment (EPIS) model, a multi-level implementation framework developed for use in the public sector (Aarons et al., 2011). The present data were collected during the Exploration phase, which focuses on identifying appropriate treatments to address areas of unmet need. Accordingly, the primary aim of the present study was to obtain feedback from consumers in the target DBT programs to determine if PTSD was an area of unmet need and assess the appropriateness of DBT + DBT PE as a treatment to address this need. Overall, these data were used to inform the design of the later implementation effort. Given the lack of prior knowledge about public mental health consumers' perspectives on this treatment, a mixed-methods approach was used to enable in-depth exploration of client perspectives on the appropriateness, acceptability, and feasibility of DBT + DBT PE.

Method

Agency Selection

Data collection took place in two public mental health agencies in Philadelphia, Pennsylvania in September 2015. Since 2007, the Philadelphia Department of Behavioral Health and Intellectual disAbility Services has funded initiatives to implement multiple EBPs in its public mental health system, including cognitive therapy, trauma-focused cognitive behavioral therapy, PE, and DBT. The DBT initiative began in 2011 with training and ongoing support provided by the treatment developer and her colleagues. The agencies targeted for implementation of DBT + DBT PE were already participating in the DBT initiative. None of the target agencies had participated in the PE initiative, nor were they using PE in their DBT programs. The present purposive sample was recruited from two agencies who were considering participating in the DBT + DBT PE implementation project. Both agencies had comprehensive DBT programs, including weekly DBT individual therapy, DBT group skills training, therapist consultation teams, and between-session phone coaching. The DBT team leaders at each agency completed a survey to provide descriptive data about the agencies (level of care, length of treatment, DBT program inclusion/exclusion criteria, numbers of clinicians and clients) and the clients they serve (Medicaid status, racial/ethnic minority status, and typical presenting problems and diagnoses). This descriptive information is presented in Table 1.

Participant Selection

Researchers asked the DBT team leaders at both agencies to distribute information about the study to the consumers in their programs, including a Study Information Statement and a one page handout describing PTSD, PE, and DBT + DBT PE. All consumers in these programs were eligible to participate regardless of PTSD diagnosis, previous PTSD treatment, or trauma history. At Agency 1, 16 current DBT clients were given information about the study at weekly DBT skills groups and 10 (62.5%) participated. At Agency 2, 12 current and former DBT clients were individually approached by staff about the study and 9 (75%) participated. Characteristics of the 19 participants are described in Table 2.

Measures

Demographics.—A demographic questionnaire assessed participants' self-reported gender, age, education, racial and ethnic background, PTSD diagnostic status, and number of months receiving DBT at the agency.

Treatment expectancies.—A 2-item adapted version of the Expectancies Questionnaire (EQ; Shaw et al., 1999) identical to the one used in Harned et al. (2014) was used to assess expectations of improvement and helpfulness of DBT + DBT PE. Items were rated on a 1-7 scale with higher scores indicating more positive treatment expectancies.

Treatment preference.—Treatment preference was assessed using an adapted version of Zoellner and colleagues (2003) treatment choice measure that has been used in previous research on DBT and/or PE treatment preference (Harned et al., 2013). Participants responded to a forced choice item asking if they would they prefer to receive DBT alone, PE

alone, or a combined DBT and PE treatment. Participants were then asked to list and rank the top five factors that influenced their treatment choice using an open response format.

Procedure

Two 90-minute focus groups were conducted (one on-site at each agency, n 's = 9 and 10) and moderated by the authors. At the beginning of the focus groups, all participants were given a copy of the Study Information Statement and the handout describing PTSD, PE, and the combined DBT + DBT PE treatment (see Appendix A). The lead moderator then described the study procedures, the purpose of the focus group, and established several ground rules (e.g., confidentiality, that there were no right or wrong answers) intended to create a non-judgmental environment in which participants would feel comfortable sharing their opinions and experiences. After this initial orientation was complete and all procedural questions were answered, the audio-recording was started. The focus group began with the lead moderator reviewing the information in the handout and answering participant questions about the treatment. Participants were then asked to provide feedback about the perceived appropriateness, acceptability and feasibility of DBT + DBT PE. A semi-structured approach was used in which the moderator asked several prepared questions (e.g., "Would you consider participating in the combined DBT and DBT PE treatment? Why would you? Why wouldn't you?"), responded in an unstructured way to topics that emerged during the groups, and allowed natural interactions to occur among participants. These methods are consistent with recommendations for conducting focus group research, which typically involve multiple one to two hour groups consisting of six to ten people in which moderators introduce the topic and then facilitate an interactive discussion among participants (Liamputtong, 2011). At the end of the focus group, participants were given a brief anonymous survey that included the measures described above and received \$50 for completing the study.

Data Analysis

Qualitative and quantitative data were collected simultaneously for the primary purpose of exploration, with qualitative methods as dominant (QUAL + quan; Palinkas et al., 2011). Data derived from each set of methods was used complementarily to answer related questions (Palinkas et al., 2011). For the qualitative focus group data, coding was conducted on the entirety of the discussion, including the psychoeducational portion and the focus group questions. Audio recordings were transcribed and then checked for accuracy. A qualitative content analysis with an inductive approach (Elo & Kyngäs, 2008) was used in which the authors independently reviewed transcripts from both focus groups in order to identify emerging broad themes and sub-themes. Content related to participants' perspectives on the appropriateness, acceptability, and feasibility of DBT + DBT PE was coded, whereas content not directly relevant to this research question was not coded (e.g., the process of the focus groups). Both authors then coded the transcripts, allowing for any additional categories to emerge. After coming to an agreement on all categories, each author re-coded the transcripts independently and any areas of disagreement were discussed until a consensus was reached. Qualitative data on the factors influencing treatment preference were also independently coded by both authors into *a priori* categories identified inductively in previous research with this measure in similar clinical samples (Harned et al., 2013). In

addition, new themes that were not captured by the *apriori* categories were noted. After agreeing on additional categories, both authors re-coded the data and came to a consensus around any discrepancies. All coding was completed using QSR NVivo 10 software. Quantitative data on treatment expectancies and preference were examined via descriptive analyses, and potential differences between the two agencies were evaluated via a *t*-test and Chi-square test. All study procedures were approved by the University of Washington and Philadelphia Department of Public Health Institutional Review Boards.

Results

Qualitative Analysis of Focus Group Themes

Several themes emerged from the focus group discussions that fell into the broad categories of barriers and facilitators to engaging in DBT + DBT PE.

Barriers.

Concerns about trauma-focused treatment.: Some clients ($n = 5$, 26.3%) reported concerns about engaging in trauma-focused treatment. For some clients, this concern was due to fear about talking about their traumatic experiences in detail. For example, one client said, “I’m kind of afraid to talk about it and deal with it and get into the details about it, because I’m afraid I might break down. And I don’t want to do that because I don’t like breaking down.” Others reported being concerned that trauma-focused treatment might cause some problems to get worse. For example, one client asked, “Well I have dissociation, that won’t increase while I’m doing that will it?” Several clients reported negative prior experiences with trauma-focused treatments that impacted their receptivity to DBT + DBT PE. For example, one client had previously engaged in PE as a stand-alone treatment and reported that it “did more harm than good” and led to increases in self-harm and other destructive behaviors. She said, “[PE] and DBT definitely needs to be combined. [Because] you leave [session] and you can’t put it away. And you’re no longer there with a therapist... with anyone who can help keep you safe...if you don’t have certain skills.” Another client reported previously engaging in exposure therapy for PTSD during which she felt as if the goal of the treatment was “trying to get us to not feel anything.” She reported, “I was pissed off that people were trying to desensitize me to something horrible that happened because it almost seems like, Oh you’re overreacting just think about, just be around it enough and you won’t feel that way anymore.” As a result of this prior experience, this client was skeptical about the appropriateness of exposure as a strategy for addressing PTSD.

Practical concerns.: Several clients ($n = 5$, 26.3%) identified practical issues as potential barriers to engaging in DBT + DBT PE. One client mentioned travel time as a barrier and said it would be helpful to have “more places that do DBT because it takes me two hours to get here.” Other issues were related to the agency facilities such as “I think you can hear in the rooms.” At the residential facility, there was concern about not being able to have time alone after intense therapy sessions. For example, one client said, “You come out of session and you’re bombarded with people...Whereas in a more private office setting, in typical outpatients, you know you come out and you can just go about your day.” There was also some concern about being transitioned out of the residential program before the treatment

was complete. For example, one client said, “I don’t know how safe I feel doing it while at [the agency]. Because you only get like a certain amount of time to be at [the agency] before you’re Level 3 and then you have to work your way to transition out of here.” Some clients described practical concerns related to their therapist’s willingness or ability to provide trauma-focused treatment to them. For example, one client reported having been told by her therapist that she could not talk about her trauma in DBT. She said, “Going back to what you said about saying the trauma out loud and I guess acknowledging it, but in DBT they tell us we can’t bring that.” Another client expressed concern about whether therapists were adequately trained to deliver DBT PE. She said, “So does it mean that the therapists in the DBT are not even equipped to do this?”

Facilitators.

Need for PTSD treatment.: A majority of clients ($n = 12, 63.1\%$) described significant ways in which their past experiences of trauma continued to negatively impact their lives, including PTSD symptoms, other trauma-related problems (e.g., substance use, dissociation, self-harm), and functional impairment. For example, one client stated:

[This is] something I’ve been straggling with for years that has kept me going in and out of my drag addiction or whatever. I’ve been abused as a child growing up ...it led to my pain and suffering I’m going through now in my mind, my mental health. And DBT helps, but it’s hard every day...And then I have flashbacks. It’s very painful.

Several clients also talked about being chronically revictimized and continuing to experience trauma in their current lives. One client remarked, “[T]he thing that you want is to stop being the one who is picked by predators...you don’t know why, you don’t know what it is, but for some reason you’re the one he’s picked.”

Along with these stories of trauma-related suffering, many clients expressed a desire to obtain relief from their pain. This desire for relief appeared to increase clients’ willingness to engage in the treatment despite fear of how hard it might be. For example, one client said, “[I’m] really scared to go into [DBT PE], But... you get your DBT skills first [and] I think that’s what’s going to help me the most... I don’t want to live like this anymore... I deserve to be happy.”

Buy-in for the treatment rationale.: Clients’ ($n = 7, 36.8\%$) understanding and belief in the treatment rationale, particularly the need to stop avoidance of trauma-related memories and situations in order to reduce PTSD also appeared to increase their willingness to engage in the treatment. One client said, “I think avoiding is not a good thing. I think you should face your fears.” Another client believed it was important to talk about her trauma, saying, “I’d rather personally just get into the different events because I’ve been avoiding it so much. So I mean the skills are helping, but I’d rather talk about it.” Others reported understanding the need to tolerate short-term increases in distress when doing exposure in order to achieve long-term relief.

[E]ven if it gets us upset when we do talk about it and everything, wouldn’t that be progress towards reaching it? Because if you avoid it and all, it’s like being scared

of being hit by a car, every time you see a car, you're gonna get freaked out...So, you're gonna have to address it sometime.

Stage-based approach to PTSD treatment.: Many clients ($n = 8, 42.1\%$) expressed that DBT + DBT PE's stage-based approach made them more willing to engage in the treatment. Often this was related to beliefs that receiving DBT first would be necessary for them to safely engage in trauma-focused treatment. For example, one client stated, "I feel like it would only really work for me personally if you did both [DBT and PE], Because if I like talk about [trauma] in regular therapy...after that I don't have the skills to not go home and not self-harm or anything." Another client said, "So I think the piece there that you say about making sure that...a lot of the safety factors are there so that you can safely re-experience certain traumas and certain events before exposure, I think that is very, very, very important." More generally, clients felt it was important for them to learn DBT skills first that would help them to effectively navigate the challenges of exposure therapy. For example, one client said "I think it's really good that they put the DBT first, because...it gives you the tools to deal with the things that come up in exposure therapy." Similarly, another client stated, "So when you start exposure you have skills from DBT to kind of combat some of those negative feelings that come up. And you have the tools to use instead of the self-injurious ones or the negative ones that you used in the past." As indicated by these comments, the use of a stage-based approach to treatment appeared to increase the perceived tolerability of the later TF-EBP.

Desire for intensive therapy.: Three clients (15.8%) reported that the increase in therapy time needed to receive the DBT PE protocol, which is typically delivered in longer (90-120 minutes) and/or more frequent (up to twice weekly) individual therapy sessions than DBT individual therapy (typically one 60-minute session per week), would be both feasible and beneficial. For example, one client reported that she found her regular DBT sessions to be too short and that she had "suggested that you have more time and stuff because...when you get down into it, it's not enough time." Similarly, another client said, "I would love to come twice a week."

Peer support and modeling.: Utilizing peers for support and modeling ($n = 3, 15.8\%$) emerged as a potential facilitator of engaging in DBT + DBT PE. One client said, "Peer support...it can be almost critical for some people to have somebody who's been through it that they can relate to and talk to on that level." Another client said that having peer support "makes you feel like you're not alone in the world. That other people do have this problem and they do understand what you're going through." In addition, clients who have successfully completed DBT + DBT PE may serve as motivating role models for other clients who are considering engaging in the treatment. For example, a client who had completed DBT and exposure therapy for PTSD provided a moving description of the immense gains she had made as a result of this treatment.

It is exactly what worked for me. It's what helped me to stop the self-injurious behaviors... I was basically a shut-in for like 3 years...Completely isolated myself. And it was through using DBT and exposure therapy that slowly each one of those fears, I slowly started to face them like one-by-one. Now you can't keep me inside!

...I was one to be in the hospital every 30 days, in for 6 months at a stretch. A lot of my injuries I was so dissociated and in such a bad state...So I've been free from that for a very long time.

Quantitative Data on Treatment Expectancies and Preference

At the end of the focus groups, participants reported very positive expectancies about DBT + DBT PE ($n = 19$; $M = 6.3$, $SD = 0.6$). Nearly all participants reported a preference for DBT + DBT PE ($n = 17$, 89.5%) over DBT alone ($n = 1$, 5.3%) or PE alone ($n = 1$, 5.3%). There were no differences between agencies in treatment expectancies ($t(17) = 0.12$, $p = .90$) or preferences ($\chi^2(2) = 2.01$, $p = .37$).

Qualitative Analysis of Reasons for Treatment Preference

Of the 19 participants, 100% provided at least one reason for their treatment preference ($M = 2.6$, $SD = 1.7$). Table 3 shows the 5 higher-order categories and 13 subcategories that were used in the qualitative data analysis, including example responses from each subcategory.

Discussion

The present study evaluated DBT consumers' perspectives on the appropriateness, acceptability, and feasibility of DBT + DBT PE as part of the Exploration phase of a larger implementation project in public mental health agencies. Participants were recruited from target agencies with the goal of using consumer feedback to inform the design of the implementation effort. Qualitative and quantitative data converged to indicate high consumer receptivity to DBT + DBT PE, and these findings were used to develop strategies to increase consumer engagement during the later Implementation phase.

An initial goal of the Exploration phase of implementation is to assess whether there are clinical problems that are not being sufficiently addressed by existing services (Aarons et al., 2011). The present findings indicate that DBT consumers perceived a high need for PTSD treatment, as this was the most frequently raised topic in the focus groups. Many consumers described histories of repeated and chronic trauma and a vast majority (78.9%) self-identified as having PTSD. Importantly, the high rate of PTSD was evident even though consumers had received an average of 18 months of DBT. Accordingly, several of the reasons provided for preferring DBT + DBT PE over DBT alone were based on concerns that DBT was not sufficiently addressing PTSD, wanting to try something new, and a desire to receive the trauma-focused components of PE. These findings are not unique to these agencies, as low rates of PTSD remission have also been found in DBT when delivered without the DBT PE protocol in research settings (Harned et al., 2008; Harned et al., 2014). More generally, PTSD is rarely assessed or treated among consumers with serious mental illness in public mental health settings (Chessen, Comtois, & Landes, 2011). Taken together, these findings highlight the need for more effective PTSD treatment in DBT in general, including within these target agencies.

A second goal of the Exploration phase is to identify appropriate treatments to address areas of unmet need (Aarons et al., 2011). The present results indicate that consumers were highly receptive to the treatment, as nearly all participants (89.5%) reported a preference for DBT +

DBT PE compared to DBT or PE alone. The primary reason provided for this preference was the perceived efficacy of the treatment, which was supported by quantitative data indicating very positive treatment expectancies for DBT + DBT PE. In addition, buy-in for the treatment rationale emerged as a significant facilitator of consumer willingness to engage in DBT + DBT PE. These findings are consistent with prior research indicating perceived treatment efficacy and belief in treatment mechanisms are the strongest predictors of consumer choice of exposure therapy for PTSD (e.g., Feeny et al., 2009; Kehle-Forbes et al., 2014).

Consumers also indicated that the stage-based approach of DBT + DBT PE increased their willingness to engage in the treatment. Clients felt it was particularly important to receive DBT first as a way to increase safety and reduce the risk of self-injurious behaviors during the DBT PE protocol. In addition, clients reported that learning DBT skills would generally make them better able to manage the challenges of trauma-focused treatment. Similarly, prior research has found that many veterans who have completed PE or CPT report that engaging in preparatory treatments helped them to feel they had the skills necessary to handle the later TF-EBPs (Hundt et al., 2015). In general, the use of a stage-based approach to PTSD treatment appeared to help address the treatment-related barriers reported by clients, including fear of trauma-focused treatment and negative prior experiences of non-stage-based PTSD treatments. Indeed, 100% of clients who reported these concerns also expressed receptivity to DBT + DBT PE.

Another important indicator of the appropriateness of a treatment is the feasibility of implementing it in the target settings (Proctor et al., 2009). Despite the greater frequency and duration of therapy sessions in DBT PE compared to DBT, few clients reported practical barriers to engaging in the treatment. Moreover, the practical concerns that were raised were about the agencies in general (e.g., infrastructure problems, travel requirements) as opposed to treatment-specific barriers. These types of generic practical barriers have also been identified as potential barriers to receiving CPT and PE in veteran samples (Lu et al., 2016; Hamblen et al., 2015). Of note, several clients reported that the greater intensity of DBT + DBT PE was a positive aspect of the treatment, though the preference for greater treatment intensity may be higher in this sample given that clients on Medicaid in residential and long-term outpatient treatment settings may have fewer outside time demands. Overall, these findings suggest that consumers perceived DBT + DBT PE to be as feasible as their existing treatment and, in some cases, preferred due to its greater intensity.

Implications for Consumer-Focused Implementation Strategies for TF-EBPs

The present findings combined with prior research suggest several potential consumer-focused implementation strategies that may improve consumer engagement in TF-EBPs and, by extension, increase the uptake and reach of these highly effective treatments. First, the present study indicated that providing consumers with psychoeducational information about the efficacy and mechanisms of these treatments is associated with positive expectancies and a preference for DBT + DBT PE, a finding consistent with prior research on TF-EBPs (e.g., Feeny et al., 2009; Kehle-Forbes et al., 2014; Lamp, Maieritch, Winer, Hessinger, & Klenk, 2014; Mott et al., 2014). In addition, the manner in which this information is provided may

be important. In the present study, this information was provided in written and verbal format and clients were able to have questions answered by a treatment expert. Given the high receptivity achieved via these methods, during the Implementation phase clinicians were taught to deliver the treatment rationale using a similar approach and written psychoeducational materials were developed for distribution to clients.

Second, providing opportunities for peer support and modeling may help to increase consumer engagement in TF-EBPs. In the present study, talking with consumers in a group context naturally led clients to offer one another encouragement about the possibility of engaging in TF-EBPs. In addition, sharing positive testimonials from clients who have successfully completed a TF-EBP may be a powerful tool for increasing consumer willingness to engage in these treatments (Pruitt, Zoellner, Feeny, Caldwell, & Hanson, 2012). This occurred spontaneously during our focus groups and appeared to positively influence other clients' perspectives of the treatment. Furthermore, consumers in our study recommended that formal peer support programs be offered as a part of DBT + DBT PE to increase engagement.

Third, using a shared decision-making approach (e.g., Mott et al., 2014) in which consumers are offered a choice between non-trauma-focused treatments and TF-EBPs (including both stand-alone and stage-based treatments) may help to increase client receptivity to TF-EBPs. In the present study, discussion of the pros and cons of DBT + DBT PE versus DBT or PE alone led nearly all clients to select DBT + DBT PE as their preferred treatment. Accordingly, in the later Implementation phase of this study, clinicians were trained to emphasize clients' ability to choose whether they wished to receive the DBT PE protocol, and to begin this collaborative decision-making process in the pre-treatment phase of DBT.

Finally, educating clinicians about consumer preferences for and receptivity to TF-EBPs may help to increase uptake. Research suggests that clinicians may be reluctant to use exposure techniques with clients who have a history of multiple traumas (van Minnen, Hendriks, & Olff, 2010) due to concerns about causing clients distress (Deville & Huther, 2007) and symptom worsening, particularly among clients with comorbid disorders (Becker, Zayfert, Anderson, 2004). Indeed, several clients in the present sample reported that their providers had expressed concern about providing trauma-focused treatment to them. To that end, the present data on consumer treatment preferences and expectancies was presented to clinicians in these agencies as part of the training provided in the Implementation phase of the project.

Limitations and Future Directions

The present study is subject to limitations inherent in qualitative research, including an inability to make causal conclusions and potential researcher bias during the focus groups and later coding. Additionally, the use of only two coders may minimize the validity of the final codes. Further, the focus group methodology may have led to more homogeneous consumer perspectives than would be obtained via other methods (e.g., individual interviews). To mitigate against this, focus groups were augmented with surveys in which participants were able to share their perspectives on the treatment anonymously. Finally, the use of a small, purposive sample limits the generalizability of the findings. Indeed, there are

several notable characteristics of the present sample that may have influenced the results, including that all participants were adult women, currently or formerly engaged in DBT, primarily Medicaid recipients, and a majority self-reported a diagnosis of PTSD. In addition, several of the categories that emerged from the focus group discussions were endorsed by only a few participants and should be interpreted with caution.

Future research would benefit from evaluating consumer perceptions of DBT + DBT PE in larger samples that include men, adolescents, and individuals with a greater variety of financial and diagnostic backgrounds. In addition, it would be useful to explore whether consumer preferences differ if these treatment options are presented to consumers who have not previously received DBT. This would help to determine to what extent participation in DBT may increase consumer receptivity to DBT PE. Finally, it is possible that participating in these focus groups may have created high expectancies and contributed to the clear preference for DBT + DBT PE among participants. Future research would benefit from assessing treatment preferences and expectancies both before and after focus groups to more directly evaluate the impact of this methodology on consumer preferences. If this type of focus group was found to increase receptivity to these treatments, it may be useful to consider as a potential strategy for increasing consumer engagement.

Conclusions

Engaging consumers in EBP implementation efforts is an important yet neglected area of implementation research, and the present study provides an example of utilizing consumer feedback to inform the design of an implementation project. This type of consumer-focused implementation approach may be particularly important when attempting to implement treatments such as TF-EBPs for which difficulties with client engagement are a primary barrier to adoption. In the present project, consumer feedback indicated high perceived appropriateness, acceptability, and feasibility of DBT + DBT PE, and this information was used to develop implementation strategies intended to increase consumer engagement and clinician buy-in.

Acknowledgements:

This work was supported by grant R34MH106598 from the National Institute of Mental Health to the first author. Portions of these data were previously presented at the 2016 conference of the International Society for the Improvement and Teaching of Dialectical Behavior Therapy. We would like to thank the clients and therapists at the agencies where this research was conducted for their contributions to this project. Drs. Harned and Schmidt provide training and consultation in DBT and DBT PE for Behavioral Tech, LLC.

Appendix A: Handout

DESCRIPTIONS

Post-Traumatic Stress Disorder (PTSD):

Post-Traumatic Stress Disorder is a mental health condition that can occur after a person has been through one or more traumatic events. A traumatic event is something highly distressing that a person witnesses or sees, hears about, or actually experiences. Symptoms of PTSD can include bad memories, nightmares, being jumpy or irritable, and having

difficulty sleeping and concentrating. People with PTSD often avoid thinking and talking about their trauma, as well as avoid situations that remind them of their trauma, because these things make them very anxious or upset.

Prolonged Exposure Therapy (PE):

Prolonged Exposure is a highly effective type of therapy that is designed to treat PTSD. As we mentioned, people with PTSD usually avoid thoughts and situations related to their trauma. This avoidance helps reduce anxiety in the short run, but makes the anxiety and PTSD worse in the long run. Prolonged Exposure Therapy works by helping individuals with PTSD decrease their avoidance and instead encourages them to approach, or face trauma-related thoughts and situations. This treatment occurs in individual therapy sessions. The person's therapist will ask them to go back and revisit the traumatic event(s) in their imagination and describe it out loud to their therapist. This part of the treatment is called 'imaginal exposure' and it is very successful in helping people process their traumatic events so that they are no longer so overwhelming. The second main part of the treatment involves having people gradually approach safe situations they are avoiding so that they can learn that they do not need to be afraid of them. This is called 'in vivo exposure' and it is very effective in reducing fear of avoided situations. About 85% of people who receive PE experience a large improvement in their PTSD symptoms.

DBT with the DBT Prolonged Exposure (DBT PE) protocol:

This treatment combines Dialectical Behavior Therapy and Prolonged Exposure therapy for PTSD. DBT PE is designed specifically for individuals with multiple, severe problems and who also are experiencing symptoms of PTSD. The treatment occurs in parts, with the first part focused on getting control over life-threatening and other severe behaviors, the second part focused on treating PTSD, and the third part focused on building a life worth living. The treatment includes all of the parts of regular DBT, including individual therapy, group skills training, and between-session phone coaching. Once the person is ready to begin treating their PTSD, then the Prolonged Exposure part of their treatment is added into the individual therapy sessions that occur 1-2 times per week for 90-120 minutes. The person continues to attend group DBT skills training and to receive individual DBT therapy at the same time as he or she is receiving PE. This treatment has been found to be safe and highly effective. About 70-80% of people who complete this treatment no longer have PTSD at the end.

References

- Aarons GA, Hurlburt M, & Horwitz SM (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, 38, 4–23. [PubMed: 21197565]
- Becker CB, Zayfert C, & Anderson E (2004). A survey of psychologists' attitudes towards and utilization of exposure therapy for PTSD. *Behaviour Research and Therapy*, 42, 277–292. [PubMed: 14975770]
- Chessen CE, Comtois KA, & Landes SJ (2011). Untreated posttraumatic stress among persons with severe mental illness despite marked trauma and symptomatology. *Psychiatric Services*, 62, 1201–1206. [PubMed: 21969647]

- de Jongh A, Resick PA, Zoellner LA, vanMinnen A, Lee CW, Monson CM, Bicanic IA (2016). Critical analysis of the current treatment guidelines for complex PTSD in adults. *Depression and Anxiety*, 33, 359–369. [PubMed: 26840244]
- Devilly GJ, & Huthers A (2008). Perceived distress and endorsement for cognitive-or exposure-based treatments following trauma. *Australian Psychologist*, 43, 7–14.
- Eftekhari A, Ruzek JL, Crowley JJ, Rosen CS, Greenbaum MA, & Karlin BE (2013). Effectiveness of national implementation of prolonged exposure therapy in Veterans Affairs care. *JAMA Psychiatry*, 70, 949–955. [PubMed: 23863892]
- Elo S, & Kyngäs H (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62, 107–115. [PubMed: 18352969]
- Foa E, Hembree E, & Rothbaum BO (2007). *Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences therapist guide (Treatments that work)*. New York: Oxford Press.
- Hamblen JL, Bernardy NC, Sherrieb K, Norris FH, Cook JM, Louis CA, & Schnurr PP (2015). VA PTSD clinic director perspectives: How perceptions of readiness influence delivery of evidence-based PTSD treatment. *Professional Psychology: Research and Practice*, 46, 90–96.
- Harned MS, Chapman AL, Dexter-Mazza ET, Murray A, Comtois KA, & Linehan MM (2008). Treating co-occurring axis I disorders in recurrently suicidal women with borderline personality disorder: A 2-year randomized trial of dialectical behavior therapy versus community treatment by experts. *Journal of Consulting and Clinical Psychology*, 76, 1068–1075. [PubMed: 19045974]
- Harned MS, Korslund KE, Foa EB, & Linehan MM (2012). Treating PTSD in suicidal and self-injuring women with borderline personality disorder: Development and preliminary evaluation of a Dialectical Behavior Therapy Prolonged Exposure Protocol. *Behaviour Research and Therapy*, 50, 381–386. [PubMed: 22503959]
- Harned MS, Korslund KE, & Linehan MM (2014). A pilot randomized controlled trial of Dialectical Behavior Therapy with and without the Dialectical Behavior Therapy Prolonged Exposure protocol for suicidal and self-injuring women with borderline personality disorder and PTSD. *Behaviour Research and Therapy*, 55, 7–17. [PubMed: 24562087]
- Harned MS, Tkachuck MA, & Youngberg KA (2013). Treatment preference among suicidal and self-injuring women with borderline personality disorder and PTSD. *Journal of Clinical Psychology*, 69, 749–761. [PubMed: 23444147]
- Hundt NE, Mott JM, Miles SR, Arney J, Culley JA, & Stanley MA (2015). Veterans' perspectives on initiating evidence-based psychotherapy for posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7, 539–546.
- Kehle-Forbes SM, Polusny MA, Erbes CR, & Gerould H (2014). Acceptability of prolonged exposure therapy among U.S. Iraq war veterans with PTSD symptomology. *Journal of Traumatic Stress*, 27, 483–487. [PubMed: 25158642]
- Lamp K, Maieritch KP, Winer ES, Hessinger JD, & Klenk M (2014). Predictors of treatment interest and treatment initiation in a VA outpatient trauma services program providing evidence-based care. *Journal of Traumatic Stress*, 27, 695–702. [PubMed: 25418632]
- Liamputtong P (2011). *Focus group methodology: Principles and practice*. London: Sage Publications.
- Linehan M (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.
- Lu MW, Plagge JM, Marsiglio MC, & Dobscha SK (2016). Clinician documentation on receipt of trauma-focused evidence-based psychotherapies in a VA PTSD clinic. *Journal of Behavioral Health Services & Research*, 43, 71–87. [PubMed: 24158464]
- Mott JM, Stanley MA, Street RL, Grady RH, & Teng EJ (2014). Increasing engagement in evidence-based PTSD treatment through shared decision-making: A pilot study. *Military Medicine*, 179, 143–149. [PubMed: 24491609]
- Osei-Bonsu PE, Bolton RE, Stirman SW, Eisen SV, Herz L, & Pellowe ME (2017). Mental health providers' decision-making around the implementation of evidence-based treatment for PTSD. *Journal of Behavioral Health Services and Research*, 44, 213–223. [PubMed: 26743770]

- Palinkas LA, Aarons GA, Horwitz S, Chamberlain P, Hurlburt M, & Landsverk J (2011). Mixed methods designs in implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 38, 44–53. [PubMed: 20967495]
- Powell BJ, Waltz TJ, Chinman MJ, Damschroder LJ, Smith JL, Matthieu MM,...Kirlmer JE (2015). A refined compilation of implementation strategies: Results from the Expert Recommendations for Implementing Change (ERIC) project. *Implementation Science*, 10:21. [PubMed: 25889199]
- Proctor EK, 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, 24–34. [PubMed: 19104929]
- Pruitt LD, Zoellner LA, Feeny NC, Caldwell D & Hanson R (2012). The effects of positive patient testimonials on PTSD treatment choice. *Behaviour Research and Therapy*, 50, 805–813. [PubMed: 23103234]
- Raza GT, & Holohan DR (2015). Clinical treatment selection for posttraumatic stress disorder: Suggestions for researchers and clinical trainers. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7, 547–554.
- Resick PA & Schnicke MK (1996). *Cognitive Processing Therapy for Rape Victims: A Treatment Manual*. Newbury Park, CA: Sage Publications.
- Rosen CS, Matthieu MM, Stirman SW, Cook JM, Landes S, Bernardy NC.....Watts BV (2016). A review of studies on the system-wide implementation of evidence-based psychotherapies for posttraumatic stress disorder in the Veterans Health Administration. *Administration and Policy in Mental Health and Mental Health Services Research*, 43, 957–977. [PubMed: 27474040]
- Rosen RC, Ruzek JI, & Karlin BE (2017). Evidence-based training in the era of evidence-based practice: Challenges and opportunities for training of PTSD providers. *Behaviour Research and Therapy*, 88, 37–48. [PubMed: 28110675]
- Shaw BF, Elkin I, Yamaguchi I, Olmsted M, Vallis TM, Dobson KS et al. (1999). Therapist competence ratings in relation to clinical outcome in cognitive therapy of depression. *Journal of Consulting and Clinical Psychology*, 67, 837–846. [PubMed: 10596506]
- Simiola V, Neilson EC, Thompson R, & Cook JM (2015). Preferences for trauma treatment: A systematic review of the empirical literature. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7, 516–524.
- Swift JK, & Callahan JL (2009). The impact of client treatment preferences on outcome: A meta-analysis. *Journal of Clinical Psychology*, 65, 368–381. [PubMed: 19226606]
- van Minnen A, Hendriks L, & Olff M (2010). When do trauma experts choose exposure therapy for PTSD patients? A controlled study of therapist and patient factors. *Behaviour Research and Therapy*, 48, 312–320. [PubMed: 20056195]
- van Minnen A, Zoellner L, Harned MS, & Mills K (2015). Changes in comorbid conditions after Prolonged Exposure for PTSD: A literature review. *Current Psychiatry Reports*, 17:11.
- Watts BV, Shiner B, Zubkoff L, Carpenter-Song E, Ronconi JM, & Coldwell CM (2014). Implementation of evidence-based psychotherapies for posttraumatic stress disorder in VA specialty clinics. *Psychiatric Services*, 65, 648–653. [PubMed: 24430622]
- Zoellner LA, Feeny NC, Cochran B, & Pruitt L (2003). Treatment choice for PTSD. *Behaviour Research and Therapy*, 41, 879–886. [PubMed: 12880643]
- Zoellner LA, Roy-Byrne PP, Mavissakalian M, & Feeny NC (2018). Doubly randomized preference trial of prolonged exposure versus sertraline for treatment of PTSD. *American Journal of Psychiatry*. doi: 10.1176/appi.ajp.2018.17090995
- Zubkoff L, Carpenter-Song E, Shiner B, Ronconi JM, & Watts BV (2016). Clinicians' perception of patient readiness for treatment: An emerging theme in implementation science? *Administration and Policy in Mental Health and Mental Health Services Research*, 43, 250–258. [PubMed: 25735617]

Table 1**Agency Descriptives**

		Agency 1	Agency 2
Program Characteristics			
Level of care	Outpatient		Residential
Inclusion criteria	Adults with borderline personality disorder		Adults with borderline personality disorder or emotion dysregulation
Exclusion criteria	Life-threatening substance use disorder requiring a higher level of care, active psychosis that poses a threat to physical safety of self or others		Psychosis, frequent aggression/violence, severe cognitive impairment
Average length of treatment	2 years		2 years
# of DBT clinicians	5		5
# of clients treated per year	24		12-20
Client Characteristics			
Medicaid recipients	75-100%		75-100%
Racial/ethnic minorities	50-75%		50-75%
Suicidal and/or self-harming	75-100%		50-75%
Borderline personality disorder	100%		25-50%
PTSD	75-100%		25-50%
Other anxiety disorders	50-75%		0-25%
Major depression	50-75%		0-25%
Substance use disorders	25-50%		25-50%
Eating disorders	25-50%		0-25%
Psychotic disorders	0-25%		0-25%
Bipolar disorders	0-25%		0-25%
Intellectual disabilities	0-25%		0-25%

Table 2

Consumer Sample Descriptives

	Agency 1 (<i>n</i> = 10)	Agency 2 (<i>n</i> = 9)	Total Sample (<i>n</i> = 19)
Gender (<i>n</i> , % female)	10 (100%)	9 (100%)	19 (100%)
Age (<i>M</i> ± <i>SD</i>)	32.8 ± 14.0	38.0 ± 12.4	35.3 ± 13.2
Racial background (<i>n</i> , %) ^{<i>a</i>}			
Caucasian	5 (55.6%)	4 (44.4%)	9 (50.0%)
African-American	4 (44.4%)	3 (33.3%)	7 (38.9%)
Multi-racial	0 (0%)	2 (22.2%)	2 (11.1%)
Hispanic ethnicity (<i>n</i> , %) ^{<i>b</i>}	1 (11.1%)	1 (14.3%)	2 (12.5%)
Education (<i>n</i> , %)			
< high school diploma/GED	1 (10.0%)	1 (11.1%)	2 (10.5%)
High school diploma/GED	8 (80.0%)	6 (66.7%)	14 (73.7%)
Associates degree (AA/AS)	0 (0.0%)	1 (11.1%)	1 (5.3%)
Bachelor's degree (BA/BS)	1 (10.0%)	1 (11.1%)	2 (10.5%)
PTSD diagnosis	8 (80.0%)	7 (77.8%)	15 (78.9%)
# months in DBT (<i>M</i> ± <i>SD</i> ; <i>range</i>) ^{<i>a</i>}	11.7 ± 15.6; (0.8 to 48.0)	27.0 ± 21.7; (6.0 to 72.0)	18.5 ± 19.6; (0.8 to 72.0)

Note. Chi-square and t-tests indicated no significant differences in client characteristics between agencies.

^{*a*}1 participant did not provide data.

^{*b*}3 participants did not provide data.

Table 3

Summary of Reasons for Treatment Preference

Categories	DBT + DBT PE (<i>n</i> = 17) ^a	Example Responses
Wants Relief From Distress	3 (17.6%)	
PTSD/trauma causes distress	2 (11.8%)	• “The devastating effects on my life from trauma.”
Comorbid problems cause distress	1 (5.9%)	• “To reduce symptoms of borderline PD.”
General distress	2 (11.8%)	• “I believe that I deserve to be free of all my pain.”
Wants Specific Treatment Components	4 (23.5%)	
Wants DBT components	2 (11.8%)	• “Learning skills to deal with everyday issues.”
Wants PE components	4 (23.5%)	• “Talking about trauma.”
Wants common components	1 (5.9%)	• “Notice different points of view.”
Concerns About Treatment	3 (17.6%)	
Concerns about DBT	2 (11.8%)	• “In DBT I can’t really express how the situation makes me feel.”
Concerns about PE	1 (5.9%)	• “PE alone not work well for me.”
Treatment Efficacy	14 (82.4%)	
Efficacy of DBT	4 (23.5%)	• “DBT has changed my life.”
Efficacy of PE	1 (5.9%)	• “PE. I want something that will test my limits and my comfort zones.”
Efficacy of DBT + DBT PE ^b	11 (64.7%)	• “I really believe that DBT and PE would be helpful to me.”
Motivation to Change	5 (29.4%)	
Wants to get better	3 (17.6%)	• “I want to recover.”
Wants to try something new ^b	2 (11.8%)	• “I want to learn something new.”

^aOnly data from clients who preferred DBT + DBT PE are included.

^bNew categories that emerged during coding. Other categories were based on Harned et al., 2013.