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Abstract

According to the Biosocial Developmental Model for Borderline Personality Disorder (BPD), individuals with a biological vulnerability (i.e., heightened emotional sensitivity and impulsive tendencies), plus an invalidating environment may develop BPD (Crowell, Beauchaine, & Linehan, 2009). Individuals with BPD are especially difficult to treat, because of their "extreme emotional, behavioral, and cognitive dysregulation" (Crowell, Beauchaine, & Linehan, 2009). Though challenging to treat, BPD can be successfully treated using Dialectical Behavior Therapy (DBT) (Linehan, 1993; Linehan 2015). Similarly, Posttraumatic Stress Disorder (PTSD) is complex and often difficult to treat, because of the intensity of the emotional content related to traumatic events and high symptom severity including flashbacks, dissociation, and nightmares (Foa, 1993). PTSD can be adequately treated using exposure-based interventions, such as prolonged exposure (Foa, Chrestman, & Gilboa-Schechtman, 2009). However, when BPD is comorbid with PTSD, symptom severity is often heightened to such a degree that neither DBT nor exposure-based therapy are sufficient treatments. This literature review discusses the problems related to treating individuals with comorbid BPD and PTSD, and the benefits of the current treatment protocol, Dialectical Behavior Therapy Prolonged Exposure.

Treating Comorbid PTSD and BPD: A Dialectical Approach

According to the *Diagnostic and Statistical Manual of Mental Disorders*, Posttraumatic Stress Disorder (PTSD) has a 12-month prevalence of 3.5% in adults and the estimated lifetime risk is around 8.7% (American Psychiatric Association, 2013). PTSD is often interpreted as a fear-based disorder and has hallmark features related to this fear such as persistent avoidance and hypervigilance (Cloitre, Garvert, Weiss, Carlson, & Bryant, 2014). In order to be diagnosed with PTSD, a person must experience at least one criterion "A" trauma. This is defined being "exposed to death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence" (American Psychiatric Association, 2013, p. 663) and is associated with a wide variety of problems including nightmares, flashbacks, dissociative reactions, poor concentration, and self-destructive behavior. Because of the intensity of symptoms related to PTSD, it can be extremely challenging to treat.

PTSD is commonly treated with exposure-based therapies including Prolonged Exposure (Foa, Hembree, & Rothbaum, 2007) or Cognitive Processing Therapy (Resick & Schnicke, 1993). Both treatment models focus on helping individuals confront and habituate to their traumatic memories and decrease the fear response (Foa et al., 2007; Foa, Chrestman, & Gilboa-Schechtman, 2009; Foa, 1993). One of the common problems in PTSD treatment is the associated comorbid diagnoses. People suffering from PTSD are 80% more likely to have at least one other mental health disorder diagnosis (American Psychiatric Association, 2013, p. 665). Many studies caution against treating individuals who meet criteria for more severe disorders including personality disorders, psychosis, and highly suicidal individuals (Foa, 1993; Foa et al., 2007; Foa et al., 2009; van Minnen, Harned, Zoellner, & Mills, 2012). This caution often results in the exclusion of many individuals from PTSD-specific treatment. This can be

detrimental because those with at least one comorbid diagnosis are also more likely to commit suicide if their PTSD is left untreated (Rizvi & Harned, 2013). Thus, individuals with Borderline Personality Disorder (BPD) and resulting suicidal behavior often are short-changed of treatment resulting in poorer overall symptom reduction.

BPD is a highly misunderstood and stigmatized disorder, perhaps, in part due to the intensity of characteristic symptoms including the following: unstable interpersonal relationships, distorted self-image, volatile affect, and extreme impulsivity (Linehan, Cochran, Mar, Levensky, & Comtois, 2000). The Biosocial Developmental Model for BPD explains that individuals with a biological vulnerability (i.e., heightened emotional sensitivity and impulsive tendencies) plus an invalidating environment tend to develop BPD (Crowell, Beauchaine, & Linehan, 2009). Individuals with BPD are notorious for severe non-suicidal self-injury as well as frequent suicide attempts (Linehan et al., 1991; Linehan et al., 2006; Linehan et al., 2015). The acuity of these symptoms makes treatment arduous and often strains the therapist leading to therapist burnout.

BPD is most commonly treated with Dialectical Behavior Therapy (DBT) (Linehan, 1993; Linehan, 2015). This treatment targets many of the common symptoms and specifically the self-injurious behavior. The DBT protocol suggests a year of rigorous treatment (Linehan, 1993; Linehan, 2015). Though time in treatment is longer, DBT has proven more effective than other manualized treatments.

DBT is a useful and successful treatment approach for individuals with BPD and many other diagnoses because it combines skills from many types of therapies including mindfulness, Acceptance Commitment Therapy, and Cognitive Behavior therapy (Federicici, Wisniewski, & Ben-Porath, 2012). It integrates these approaches using four critical skill sets: mindfulness,

emotion regulation, interpersonal effectiveness, and distress tolerance. All four skills are centered on the core goal of DBT, which is to help chronically ill individuals deal with the pains of their lives and ultimately build a life that they feel is worth living (Linehan, 1993; Linehan, 2015).

Though DBT provides efficacious treatment of BPD, individuals with BPD often also have a trauma history. Researchers estimate that between 30-50% of individuals with BPD meet full criteria for PTSD (Granato, Wilks, Miga, Korsland, & Linehan, 2015; Harned, Risvi, & Linehan, 2010). Co-occurring BPD and PTSD is complicated to treat. When therapists use traditional DBT, the symptoms of PTSD make remission from borderline symptoms far less likely and DBT treatment much longer (Linehan et al., 2006). Additionally, the use of traditional PTSD treatment can be dangerous, because it often exacerbates existing self-injurious behavior (Harned, Tkachuck, & Youngberg, 2013). Some evidence has suggested that exposure-based treatment for individuals with BPD can be harmful or even potentially fatal (Foa, 1993; Foa, Chrestman, & Gilboa-Schechtman, 2009; van Minnen et al., 2012).

Recent research suggested DBT as a precursor and subsequent structure for undergoing traditional trauma treatment, specifically Prolonged Exposure (Harned, Jackson, Comtois, & Linehan, 2010; Harned, Korslund, Foa, & Linehan, 2012; Harned, Korslund, & Linehan, 2014; Harned & Linehan 2008; Harned, Risvi, & Linehan, 2010; Harned, Ruork, Liu, & Tkachuck, 2015). Using DBT as a foundation to build from in treatment as usual for individuals with co-occurring PTSD and BPD could lead to more effective, safer, and quicker outcomes in treatment. The first section of this paper will discuss the structure of DBT and how it functions to treat individuals with BPD. The second section will discuss the problems of treating individuals with

comorbid BPD and PTSD, followed by an analysis of the suggested treatment model: Dialectical Behavior Therapy Prolonged Exposure (DBT PE).

Structure and Function of DBT

DBT is a brand of Cognitive Behavioral Therapy initially developed by Linehan for adult women with BPD and chronic suicidal behavior (Linehan, 1993). It was the first treatment of its kind to demonstrate its success in a randomized controlled trial (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991). In its early stages, Linehan encountered many problems with the treatment of BPD and chronic suicidal behavior. Clients were often non-collaborative in session, did not practice agreed upon homework assignments, and often did not return for follow-up sessions. These behaviors are termed "therapy interfering" and are thought to develop from clients believing that they are incapable of change, and thus interpreting change-focused treatment as invalidating and unimportant (Linehan 1993, Linehan et al., 1991; Linehan et al., 2006; Linehan 2015). Linehan decided to incorporate principles of Zen mindfulness, acceptance, and validation into DBT's change-based Cognitive Behavior Therapy structure in order to help clients tolerate the exceptional difficulty of change (Linehan, 1993; Swann, Stein-Serussi, & Giesler, 1992). Thus, at its core, DBT embodies the central dialectic of acceptance and change, and it uses traditional behavior therapy techniques to reduce symptom severity and orient a client toward recovery (Swales, 2009).

DBT is highly comprehensive and multi-modal. It uses many processes to deal with various symptoms related to clients with BPD. As an overall treatment, DBT structures the therapeutic process into stages and then a hierarchy within those stages. This section will first address the various modes of DBT, and then explain the stages of treatment and treatment hierarchy, followed by the current research evidence related to DBT in BPD.

Modes of Treatment

DBT combines several modes of therapy including skills training group, individual psychotherapy, telephone coaching, and DBT consultation team (Linehan, 1993; Linehan, 2015). Each mode of therapy is designed to target a specific challenge related to BPD treatment.

Skills training group. DBT uses a skills training group that teaches four critical skills: mindfulness, distress tolerance, interpersonal effectiveness, and emotional regulation (Linehan, 1993; Linehan, 2015). While Mindfulness and Distress Tolerance skills focus more on the acceptance side of the dialectic, Interpersonal Effectiveness and Emotion Regulation are more change oriented. Linehan developed these skills for individuals with BPD. According to the biosocial model of BPD, biological vulnerability and an invalidating environment results in skill deficits in self-management skills and sustaining motivation to change in client's that is commonly associated with BPD (Linehan, Heard, & Armstrong 1993; Linehan et al., 1991; Linehan et al., 2006). These skill deficits lead to difficulties in treatment, which DBT skills aim to address. These four critical skills, learned in a group therapy setting, help clients acquire the skills that they lack and strengthen their existing skills.

Individual psychotherapy. In addition to group psychotherapy, clients also have individual DBT psychotherapy. The goal of individual therapy sessions in DBT is to work on motivational problems, determine skill deficits, and assist clients in skill generalization (Linehan, 2015). Skill generalization is defined as helping clients to transition the skills they learn in therapy to non-therapeutic environments (Swales, 2009). A common tool used in both individual and group DBT psychotherapy is the DBT Diary Card (Linehan, 2015). The purpose of the Diary Card is to keep track of target thoughts, feelings, and behaviors. Clients keep track of thoughts, feelings, and behaviors that are both effective (e.g.. skill usage) and ineffective (e.g.,

suicidal and self-injury ideation and behavior) (Linehan, 2015). The Diary Card is then used to guide session content. After identifying problem behaviors, the therapist and client will work on chain analyses to identify problem behaviors and solution analyses to identify and reinforce efficacious behaviors (Linehan, 2015). The process of chain analysis and solution analysis is one example of the way in which DBT is a behavioral therapy.

Telephone coaching. Another way to strengthen skills learned in both group and individual sessions is telephone consultation or telephone coaching. Telephone coaching is a service offered to DBT clients that allows individuals to contact their therapist in between sessions to discuss problem behaviors as they are occurring. The purpose of this mode of treatment is to strengthen skills and work on skill generalization (Swales, 2009). While this can be quite taxing for the therapist, it is very valuable regarding symptom remission for the DBT clients.

DBT consultation team. Because individuals with BPD can be extremely challenging to treat, DBT uses a consultation team to lighten the burden for the therapist. Research suggests that clients with BPD often have multiple comorbidities and are at high risk for suicide and non-suicidal self-injury (Linehan et al., 2000). Between 75% and 81% of individuals with BPD have a history of at least one suicide attempt or self-injurious behavior (Dulit, Fyer, Leon, Brodsky, & Frances, 1994). Unstable patterns of behavior resulting from a diagnosis of BPD prove particularly challenging for psychotherapists and often lead to a condition called burnout or therapeutic burnout (Linehan et al., 2000). Therapeutic burnout has been defined as a condition of emotional exhaustion, depersonalization, and lack of feeling of personal accomplishment (Linehan et al., 2000). Burnout causes therapists to be less effective during treatment leading to worse outcomes for their patients (Linehan et al., 2000). DBT is a recursive therapy that requires

the therapists to apply the very skills they teach their clients to themselves (Linehan et al., 2015; Swales, 2009). One of the ways DBT does this is by using a consultation team. This allows therapists to get help, support, feedback, and encouragement about their clients. In a consultation team, therapists will talk about their own therapy interfering behavior and even do chain analysis. Research indicates that the usage of DBT consultation teams is beneficial in enhancing therapist capabilities and reducing therapist burnout, ultimately leading to better outcomes for DBT clients (Swales, 2009).

Treatment Structure and Hierarchy

DBT structures its treatment into stages. Before treatment begins, clients are in a pre-treatment stage (Linehan, 2015). In this stage, the therapist and client determine the client's goals and link them to the therapy process (Swales, 2009). In stage one, the therapist and client approach problems related to behavioral stability such as self-injury, suicidal ideation, and therapy-interfering behaviors (Linehan, 1993; Linehan, 2015). Once these behaviors are under control, clients can move into further stages that deal with emotional processing including resolution of trauma treatment (Linehan, 2015). This process facilitates symptom remission for clients by addressing the current needs of the client and encourages forward progress towards symptom remission.

An Evidence-Based Treatment

DBT is the most empirically substantiated treatment for BPD, suicidal behavior, and non-suicidal self-injury. To date, there have been at least 15 randomized controlled trials demonstrating standard DBT's efficacy (Swales, 2009). When compared with treatment as usual, evidence suggests that DBT reduces hospital admission for suicidal intent and behavior by at least half (Linehan et al., 2006). DBT is also associated with about one-third greater treatment

retention in abstaining from self-injurious behaviors (Bohus et al., 2004). DBT has proven successful in treating individuals with a variety of diagnoses outside of BPD including substance abuse and drug dependence, eating disorders and a variety of mood disorders (Courbasson, Nishikawa, & Dixon, 2012; Federeci, Wisniewski, & Ben-Porath, 2012; Safer & Jo, 2009). Despite its effectiveness in individuals with BPD, until recently, DBT has not had a well-defined or empirically supported protocol for trauma treatment nor has it included much research about individuals with comorbid PTSD and BPD. The remainder of this literature review will examine the existing protocol for DBT PE and its efficacy.

Treatment Problems and Solutions in Comorbid BPD and PTSD

Common among many individuals with BPD is the experience of an invalidating environment that may include: childhood sexual, emotional, or physical abuse (Harned, Risvi, & Linehan, 2010). Childhood abuse is considered a criterion "A" trauma. In individuals with BPD, having a childhood trauma is correlated with increased PTSD severity, higher rates of comorbid disorders, greater impairment, and lower global functioning (Cloitre et al., 2014). Researchers tend to agree that the presence of PTSD greatly decreases the likelihood of BPD remission (Cloitre et al., 2014; Harned et al., 2012; Harned & Linhean, 2008). However, a variety of borderline symptoms, including self-injurious behavior, exclude individuals with BPD from getting necessary exposure-based trauma treatment (Harned, Korslund, Foa, & Linehan, 2012). Thus, it stands to reason that if the symptoms that would cause exclusion from trauma treatment are sufficiently treated, individuals with BPD could greatly benefit.

Prolonged Exposure Exclusion Rationale

Prolonged exposure and other trauma therapies recommend that individuals suffering from BPD not undergo traditional trauma treatment, because suicidal ideation must be amply

addressed first. Therapists recommend that individuals who pose an imminent threat to themselves or others; are currently psychotic; have a high risk of being assaulted; have a lack of memory related to traumatic events; or experience severe disassociation must be excluded from PE (Foa, 1993; Foa et al., 2007; Foa et al., 2009). This creates a problem, because individuals with BPD more frequently experience symptoms that would exclude them from traditional trauma treatments including PE than those with PTSD alone. Additionally, the presence of PTSD in BPD leads to a six times greater likelihood of attempting suicide and a five times greater likelihood of endorsing suicidal ideation than individuals with BPD alone (Kessler, 2000). Furthermore, the presence of PTSD prognosticates a lower rate of symptom remission related to BPD across 10 years of naturalistic follow up (Zanarini, Frankenburg, Hennen, Reich, & Silk, 2004). In sum, while individuals with BPD are already challenging to treat, the presence of untreated PTSD complicates the situation by heightening the risk of suicide and increasing therapy-interfering behaviors, thus inhibiting treatment efficacy.

DBT as a Structure for Trauma Treatment

Because of the exclusion of individuals with BPD from PE, most studies involving DBT and PTSD have not incorporated exposure related therapies and instead focused on using DBT on its own. Furthermore, in the past, research has suggested that using DBT to treat BPD with comorbid PTSD has a remission rate of only about 35% (Harned & Linehan, 2008). Recent research suggests that if DBT is used as a precursor and subsequently in combination with PE, outcomes may be far better.

DBT as a precursor. In 2010, Harned et al. published a study in which DBT was used as a precursor to traditional trauma treatment. The goal was to determine if clients could eliminate suicidal and self-injuring behaviors that are common exclusionary factors to trauma treatment.

The results of this study were that imminent suicide risk and substance dependence were eliminated. Additionally, the study demonstrated a reduction in self-injury and dissociation. As a result, between 50 and 68% of individuals were ready to proceed with traditional exposure-based treatment after one-year of DBT (Harned 2010). Both this study and other studies suggest that the remainder of individuals seemed to persist in self-injurious behaviors regardless of DBT treatment length (Harned et al., 2010; Harned & Linehan 2008, Harned et al., 2012).

A proposed hypothesis states that individuals with severe co-occurring BPD and PTSD might not be able to resolve all their self-injurious behaviors until PTSD is adequately treated (Harned & Linehan, 2008; Harned et al., 2013). Therefore, many studies have suggested that DBT be used in conjunction with PE to treat individuals who, after substantial DBT, are continuing to experience symptoms of BPD that would serve as exclusionary criteria to trauma treatment.

Additionally, even though DBT is quite efficacious as a preparatory treatment for PTSD, it does not appear to change outcomes for overall PTSD remission. Individuals with BPD and PTSD seem to struggle more in trauma treatment even with adequate treatment of borderline symptoms (Harned et al., 2010). This is consistent with current research that suggests greater PTSD severity generally predicts worse outcomes (Taylor et al., 2003). Therefore, it is probable that if DBT, a BPD specific treatment, could be combined with PE, a trauma-related treatment, long-term remission outcomes would be much better.

DBT PE combined treatment structure. A study performed in 2014 by Harned et al. combined DBT with PE to create Dialectical Behavior Therapy Prolonged Exposure (DBT PE). Treatment of trauma using DBT PE is only used when clients have adequate control over higher priority target behavior i.e. clients have no imminent risk of suicide. However, they still may be

struggling with aspects of suicidal ideation and non-suicidal self-injury (Harned et al., 2014). Both this study and others have followed similar protocols consisting of two weekly therapy sessions (one 90-minute PE session and one 30-minute DBT session), DBT consultation team for therapists, skills training group, and telephone coaching. Additionally, DBT PE follows traditional PE protocol during weekly PE sessions and traditional DBT protocol during DBT sessions (Harned et al., 2012; Harned et al., 2014; Harned et al., 2015). Treatment is ceased temporarily if any form of intentional self-injury occurred. This structure combines the best elements from DBT along with the exposure protocol from PE to create a unified therapy that adequately treats both BPD and PTSD.

DBT PE protocol outcomes. Research suggests that DBT PE is an effective structure to treat both symptoms of BPD and PTSD. Studies have shown that individuals undergoing DBT PE experience greater treatment gains (Harned et al., 2012; Harned et al., 2015). At post-treatment, 58.3% of individuals who participated in DBT PE experienced full remission from symptoms including all self-injurious and therapy interfering behavior and 80% completed treatment (Harned et al., 2014). By comparison, only 33.3% of individuals participating in DBT alone experienced full symptom remission and 40% completed treatment. Research also indicates that the combination of DBT and PE has greater treatment retention (Harned et al., 2012). None of the participants undergoing just DBT experienced symptom remission at three-month follow-up, however, 50% of participants in the DBT PE treatment group experienced a full remission at three-month follow up (Harned et al., 2014).

One of the common problems associated with PE for individuals' PTSD is treatment dropout (Foa et al., 2007). This is worrisome in context with the high prevalence of impulsive behavior and self-injurious behavior related to BPD. Traditionally trauma treatment dropout is

greatly increased with comorbid BPD; however, the use of DBT PE is associated with greater treatment satisfaction among patients and has a 40% lower treatment dropout rate than standard trauma treatment (Harned et al., 2013; Harned et al., 2014). Additionally, researchers determined that clients were less likely to attempt suicide and self-injury than individuals undergoing DBT or PE alone (Harned et al., 2015). These preliminary results suggest that DBT PE may be a safer and more reliable treatment model for co-occurring BPD and PTSD because this protocol adequately addresses the concerns related to BPD and PTSD namely, high symptom severity and therapy interfering behaviors

Conclusion

Though BPD is frequently associated with PTSD, it is especially challenging to treat due to the symptom severity of BPD including self-injurious behavior and lack of compliance in therapy. The severity of life-threatening behaviors related to BPD makes trauma treatment particularly risky and encourages clinicians to exclude from exposure-based trauma protocol. However, recent research has suggested using DBT as a preparatory treatment to DBT PE. These treatment models provide a potential for more effectively treating individuals with BPD and a trauma history by addressing problems such as suicidal ideation, non-suicidal self-injury, therapeutic burnout, treatment dropout rate, and trauma related symptoms. Because of recent and promising research developments in this treatment model, future researchers might consider performing randomized controlled trials to solidify the efficacy of DBT PE and applying DBT PE trauma treatment to other comorbid diagnoses beyond BPD.

References

Bohus, M., Haaf, B., Simms, T., Limberger, M. F., Schmahl, C., Unckel, C., & ... Linehan, M. M. (2004). Effectiveness of inpatient dialectical behavioral therapy for borderline personality disorder: A controlled trial. *Behaviour Research And Therapy*, *42*(5), 487-499. doi:10.1016/S0005-7967(03)00174-8

Cloitre, M., Garvert, D. W., Weiss, B., Carlson, E. B., & Bryant, R. A. (2014). Distinguishing PTSD, complex PTSD, and borderline personality disorder: A latent class analysis. *European Journal of Psychotraumatology*, *5*

Courbasson, C., Nishikawa, Y., & Dixon, L. (2012). Outcome of dialectical behaviour therapy for concurrent eating and substance use disorders. *Clinical Psychology & Psychotherapy*, *19*(5), 434-449. doi:10.1002/cpp.748

Crowell, S. E., Beauchaine, T. P., & Linehan, M. M. (2009). A biosocial developmental model of borderline personality: Elaborating and extending Linehan's theory. *Psychological Bulletin*, *135*(3), 495-510. doi:10.1037/a0015616

Diagnostic and statistical manual of mental disorders: DSM-5™ (5th ed.) (2013). . Arlington, VA, US: American Psychiatric Publishing, Inc.

Dulit, R. A., Fyer, M. R., Leon, A. C., Brodsky, B. S., & Frances, A. J. (1994). Clinical correlates of self-mutilation in borderline personality disorder. *The American Journal of Psychiatry*, *151*(9), 1305-1311.

Federici, A., Wisniewski, L., & Ben-Porath, D. (2012). Description of an intensive dialectical behavior therapy program for multidiagnostic clients with eating disorders. *Journal of Counseling & Development, 90*(3), 330-338. doi:10.1002/j.1556-6676.2012.00041.x

Foa, E. (1993). Reliability and validity of a brief instrument for assessing post-traumatic stress disorder. *Journal of Traumatic Stress, 6*(4), 459-473. doi:10.1002/jts.2490060405

Foa, E. B., Chrestman, K. R., & Gilboa-Schechtman, E. (2009). *Prolonged exposure therapy for adolescents with PTSD: Emotional processing of traumatic experiences: Therapist guide*. New York, NY, US: Oxford University Press.

Foa, E. B., Hembree, E. A., & Rothbaum, B. O. (2007). *Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences: Therapist guide*. New York, NY, US: Oxford University Press.

Granato, H. F., Wilks, C. R., Miga, E. M., Korslund, K. E., & Linehan, M. M. (2015). The use of dialectical behavior therapy and prolonged exposure to treat comorbid dissociation and self-harm: The case of a client with borderline personality disorder and posttraumatic stress disorder. *Journal of Clinical Psychology, 71*(8), 805-815. doi:10.1002/jclp.22207

Harned, M. S., Jackson, S. C., Comtois, K. A., & Linehan, M. M. (2010). Dialectical behavior therapy as a precursor to PTSD treatment for suicidal and/or self-injuring women with borderline personality disorder. *Journal of Traumatic Stress, 23*(4), 421-429. doi:10.1002/jts.20553

Harned, M. S., Korslund, K. E., Foa, E. B., & Linehan, M. M. (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*(6), 381-386. doi:10.1016/j.brat.2012.02.011

Harned, M. S., Korslund, K. E., & Linehan, M. M. (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. doi:10.1016/j.brat.2014.01.008

Harned, M. S., & Linehan, M. M. (2008). Integrating dialectical behavior therapy and prolonged exposure to treat co-occurring borderline personality disorder and PTSD: Two case studies. *Cognitive and Behavioral Practice, 15*(3), 263-276. doi:10.1016/j.cbpra.2007.08.006

Harned, M. S., Rizvi, S. L., & Linehan, M. M. (2010). Impact of co-occurring posttraumatic stress disorder on suicidal women with borderline personality disorder. *The American Journal of Psychiatry, 167*(10), 1210-1217. doi:10.1176/appi.ajp.2010.09081213

Harned, M. S., Ruork, A. K., Liu, J., & Tkachuck, M. A. (2015). Emotional activation and habituation during imaginal exposure for PTSD among women with borderline personality disorder. *Journal of Traumatic Stress, 28*(3), 253-257. doi:10.1002/jts.22013

Harned, M. S., Tkachuck, M. A., & Youngberg, K. A. (2013). Treatment preference among suicidal and self-injuring women with borderline personality disorder and PTSD. *Journal of Clinical Psychology, 69*(7), 749-761. doi:10.1002/jclp.21943

Kessler, R. C. (2000). Posttraumatic stress disorder: The burden to the individual and to society. *Journal of Clinical Psychiatry, 61*, 4-14.

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

Linehan, M. M., Armstrong, H. E., Suarez, A., Allmon, D., & Heard, H. L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry, 48*(12), 1060-1064. doi:10.1001/archpsyc.1991.01810360024003

Linehan, M. M., Cochran, B. N., Mar, C. M., Levensky, E. R., & Comtois, K. A. (2000). Therapeutic burnout among borderline personality disordered clients and their therapists:

Development and evaluation of two adaptations of the maslach burnout inventory. *Cognitive and Behavioral Practice, 7*(3), 329-337. doi:10.1016/S1077-7229(00)80091-7

Linehan, M. M., Comtois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L., . . . Lindenboim, N. (2006). Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs. therapy by experts for suicidal behaviors and borderline personality disorder. *Archives of General Psychiatry, 63*(7), 757-766. doi:10.1001/archpsyc.63.7.757

Linehan, M. M. (2015). *DBT® skills training manual (2nd ed.)*. New York, NY, US: Guilford Press.

Linehan, M. M., Heard, H. L., & Armstrong, H. E. (1993). Naturalistic follow-up of a behavioral treatment for chronically parasuicidal borderline patients. *Archives of General Psychiatry, 50*(12), 971-974. doi:10.1001/archpsyc.1993.01820240055007

Linehan, M. M., Korslund, K. E., Harned, M. S., Gallop, R. J., Lungu, A., Neacsiu, A. D., . . . Murray-Gregory, A. (2015). Dialectical behavior therapy for high suicide risk in individuals with borderline personality disorder: A randomized clinical trial and component analysis. *JAMA Psychiatry, 72*(5), 475-482. doi:10.1001/jamapsychiatry.2014.3039

Resick, P. A., & Schnicke, M. K. (1993). *Cognitive processing therapy for rape victims: A treatment manual*. Thousand Oaks, CA, US: Sage Publications, Inc.

Rizvi, S. L., & Harned, M. S. (2013). Increasing treatment efficiency and effectiveness: Rethinking approaches to assessing and treating comorbid disorders. *Clinical Psychology: Science and Practice, 20*(3), 285-290.

Safer, D. L., & Jo, B. (2010). Outcome from a randomized controlled trial of group therapy for binge eating disorder: Comparing dialectical behavior therapy adapted for binge eating to an

active comparison group therapy. *Behavior Therapy, 41*(1), 106-120. doi:http://dx.doi.org/10.1016/j.beth.2009.01.006

Swales, M. A. (2009). Dialectical behaviour therapy: Description, research and future directions. *International Journal of Behavioral Consultation and Therapy, 5*(2), 164-177. doi:10.1037/h0100878

Swann, W. B., Stein-Seroussi, A., & Giesler, R. B. (1992). Why people self-verify. *Journal of Personality and Social Psychology, 62*(3), 392-401. doi:10.1037/0022-3514.62.3.392

Taylor, S., Thordarson, D. S., Maxfield, L., Fedoroff, I. C., Lovell, K., & Ogrodniczuk, J. (2003). Comparative efficacy, speed, and adverse effects of three PTSD treatments: Exposure therapy, EMDR, and relaxation training. *Journal of Consulting and Clinical Psychology, 71*(2), 330-338. doi:10.1037/0022-006X.71.2.330

van Minnen, A., Harned, M. S., Zoellner, L., & Mills, K. (2012). Examining potential contraindications for prolonged exposure therapy for PTSD. *European Journal of Psychotraumatology, 3*

Zanarini, M. C., Frankenburg, F. R., Hennen, J., Reich, D. B., & Silk, K. R. (2004). Axis I comorbidity in patients with borderline personality disorder: 6-year follow-up and prediction of time to remission. *The American Journal of Psychiatry, 161*(11), 2108-2114. doi:10.1176/appi.ajp.161.11.2108