Professional Psychology: Research and Practice
2009, Vol. 40, No. 3, 242–248

0735-7028/09/$12.00 DOI: 10.1037/a0013476

Dialectical Behavior Therapy for Women Victims of Domestic Abuse: A Pilot Study

Katherine M. Iverson
University of Nevada, Reno

Chad Shenk
Cincinnati Children's Hospital Medical Center

Alan E. Fruzzetti
University of Nevada, Reno

This article describes a brief, 12-week dialectical behavior therapy program modified for female victims of domestic abuse and provides a preliminary examination of this intervention. Dialectical behavior therapy is a comprehensive cognitive–behavioral treatment, which was originally developed to treat multiproblem clients with severe and chronic emotion dysregulation, and was adapted for this study to treat female victims of domestic abuse. From pretreatment to posttreatment, participants ($N = 31$) showed significant reductions in depressive symptoms, hopelessness, and general psychiatric distress as well as increased social adjustment. Additionally, participants reported high levels of consumer satisfaction with the treatment. Findings support the possible utility of dialectical behavior therapy for enhancing psychological and social well-being in female victims of domestic abuse.

Keywords: domestic abuse, women victims, dialectical behavior therapy, group therapy, emotion regulation

Domestic abuse against women is widespread and refers to physical, sexual, psychological, and/or verbal abuse in the context of an intimate partner relationship. Approximately 22% to 29% of American women will be assaulted by an intimate partner in their lifetime (Tjaden & Thoennes, 2000). Domestic abuse is associated with numerous mental health consequences, including heightened rates of posttraumatic stress disorder (PTSD), depression, psychiatric distress, social adjustment problems, and increased suicide risk (see Campbell, 2002).

Research has suggested the utility of interventions that enhance social support (Constantino, Kim, & Crane, 2005; Tutty, Bidgood, & Rothery, 1996), marital interventions (Stith, Rosen, McCollum, & Thomsen, 2004), and advocacy-based interventions (Bell & Goodman, 2001; Sullivan, Tan, Basta, Rumptz, & Davidson, 1992) for victims of domestic abuse. Fewer investigations have described interventions that specifically focus on enhancing emotional well-being, although some recent research has demonstrated the efficacy of cognitive–behavioral interventions in treating PTSD symptoms (Johnson & Zlotnick, 2006; Kubany et al., 2004).

Although PTSD clearly represents an important treatment target for this population, the psychological sequelae of chronic abuse needs to include an understanding that is not limited to PTSD (Becker-Blease & Freyd, 2005; Mechanic, 2004) but also includes other forms of psychological distress and interpersonal difficulties (Cloitre, Stovall-McClough, & Levitt, 2004; Ford, Courtois, van der Hart, Nijenhuis, & Steele, 2005). Similarly, although physical

Editor's Note. This is one of six accepted articles received in response to an open call for submissions on interventions for intimate partner violence/domestic violence.—MCR.

KATHERINE M. IVERSON received her PhD in clinical psychology from the University of Nevada, Reno, and is currently a postdoctoral fellow in the Women's Health Sciences Division of the National Center for Posttraumatic Stress Disorder in the Boston Veterans Affairs Healthcare System. Her interests are in the conceptual understanding and treatment of survivors of interpersonal trauma, as well as innovative approaches to the dissemination of cognitive–behavioral therapies.

CHAD SHENK received his PhD in clinical psychology from the University of Nevada, Reno. He is currently a postdoctoral fellow in the Division of Behavioral Medicine and Clinical Psychology, Cincinnati Children's Hospital Medical Center. His areas of research interest include emotion dysregulation, adolescent psychopathology, family interactions, psychotherapy outcome, and the developmental sequelae of childhood maltreatment.

ALAN E. FRUZZETTI received his PhD in clinical psychology from the University of Washington. He is associate professor of psychology and director of the Dialectical Behavior Therapy and Research Program at the University of Nevada, Reno. His research interests include understanding the relationships between emotion dysregulation and couple and family interactions, developing and evaluating effective treatments for problems such as borderline personality and related disorders, depression, and family violence, and training and dissemination of effective treatments.

THE PROGRAM DESCRIBED IN THIS ARTICLE was supported by grants from the U.S. Department of Justice and the State of Nevada Office of the Attorney General, awarded to Alan E. Fruzzetti. A special thank you is extended to the many therapists who worked in this program, often in a pro bono capacity, including Hillary LeReux, Kirsten Lowry, Brie Moore, Megan Oser, Heather Pierson, and Alethea Varra.

CORRESPONDENCE CONCERNING THIS ARTICLE should be addressed to Alan E. Fruzzetti, Department of Psychology (298), University of Nevada, Reno, NV 89557. E-mail: aef@unr.edu

and psychological abuse covary, more empirical work has focused on women victims of intimate partner physical assault. Researchers and clinicians have begun to focus on the consequences of the psychological abuse of women (Follingstad, 2007) because it is likely to precede and co-occur with physical abuse (Fritz & O'Leary, 2004) and to have detrimental emotional effects, such as anxiety, shame, and guilt, even in the absence of physical abuse (Street & Arias, 2001).

Difficulties in regulating or managing emotion have increasingly received attention as central components of a variety of psychological problems (Barlow, Allen, & Choate, 2004). Emotional regulation difficulties may lead to dysfunctional coping responses, such as substance abuse and problematic interpersonal behaviors, and may negatively affect emotional well-being (Gross, Richards, & John, 2006) and vice versa. Given the multiple emotional problems that result for many women as a result of domestic abuse, emotion regulation may be an important treatment target for this population. Moreover, because abused women are at risk for revictimization in future intimate relationships (Dutton, Kaltman, Goodman, Weinfurt, & Vankos, 2005), skills to help women discriminate between safe and unsafe partners (e.g., mindfulness) are necessary in treatment (Follette, Pistorello, Murphy, & Iverson, 2007).

Linehan (1993a) and others (e.g., Fruzzetti & Iverson, 2006; Fruzzetti, Shenk, & Hoffman, 2005) have proposed a transactional model for the development of disorders of pervasive emotion dysregulation. According to the transactional theory, emotion dysregulation problems result from an ongoing transaction between an individual's emotional vulnerability and invalidating social responses from others. A transaction can begin with either or both components, and it is possible that the pervasive invalidation received from an abusive partner initiates the cycle, creating increased vulnerability (e.g., heightened emotional sensitivity and reactivity) in the abused partner, resulting in increased emotion dysregulation and distress.

Invalidation may be a core component of the many forms of domestic abuse because it communicates nonacceptance (or rejection), criticism, disrespect, contempt, and/or disregard for a partner's personal worth and often results in increased emotional arousal and distrust of one's partner and one's own feelings (Fruzzetti & Iverson, 2004). An abusive partner may overtly and/or subtly punish (or even pathologize) the other partner's valid thoughts, wants, emotions, beliefs, values, behaviors, and goals. Thus, *crazy-making behaviors,* such as lying, blaming the victim for the aggression, degrading comments, or chastising the victim for ordinary daily events, result in shame, grief, fear, anxiety, and self-blame. All of these are forms of invalidation.

In these situations, women may logically develop increased sensitivity to their partners as a result of partners' abusive behaviors, becoming hypervigilant to his moods and behaviors as a means of trying to stay safe. Similarly, these women may develop faster and more extreme reactions, which are also normative under circumstances of dangerous and unpredictable partner behaviors. Given the stressful environment of an abusive relationship, it may also be difficult and take longer for women to relax and return to their personal emotional baseline, which may lead to chronically high levels of negative emotion (sadness, fear or anxiety, shame, etc.). These difficulties may generalize well beyond the abusive relationship and may persist even after getting out of an abusive relationship, manifesting as depression, anxiety, hopelessness, difficulties making decisions, shame and self-blame, and interpersonal difficulties. Moreover, when feeling persistent emotions, such as sadness or shame, the abused woman may experience the associated action urge to isolate from others and/or may experience irritability, either of which reduce opportunities for social support (and even increase invalidation from others), which may in turn maintain or exacerbate depression and anxiety disorders. In other words, women who have been in abusive relationships may develop significant and persistent difficulties related to regulating their emotions. Such difficulties may occur in some specific situations and not in others, which has been referred to as *apparent competence* (Becker & Zayfert, 2001; Linehan, 1993a). For example, a woman may be able to cope extremely well in her work environment where she is safe, feels less anxiety, and is more confident, but she may experience difficulties asserting her needs in interpersonal relationships where she feels more anxiety and has a history of invalidation.

Linehan's (1993a) transactional model provides a way to conceptualize the problems associated with domestic abuse as problems related to emotion dysregulation (Fruzzetti, 2006). Thus, emotional dysregulation resulting from invalidating transactions can account for the common co-occurrence of emotional and behavioral problems across various forms of domestic abuse and the heterogeneity of mental health consequences observed among abuse victims. This model suggests that domestic abuse increases emotional arousal and susceptibility to the development of distress and psychological disorders. Victims may learn to engage in escape behaviors, such as substance abuse, self-harm, or quick entry into a new (and sometimes dangerous) relationship, as a way to cope with their intense negative and dysregulated emotions. These responses work in the short run because of their negatively reinforcing qualities (immediate reduction in negative emotional arousal), but they do not resolve problems in the long run.

Dialectical behavior therapy (DBT; Linehan, 1993a) was initially developed to treat the problems of emotion dysregulation; thus, modifying DBT to treat victims of domestic abuse is a logical step. In addition, although DBT was originally developed to treat emotional dysregulation problems among chronically suicidal women with self-harm behaviors, borderline personality disorder, and a host of co-occurring problems (e.g., depression, anxiety, eating disorders), both the transactional model and the treatment have been successfully applied to other problems, such as substance abuse, binge eating, chronic depression in older adults, and couple distress (Chapman, 2006; Feigenbaum, 2007; Fruzzetti & Iverson, 2006), and with trauma populations more generally (Becker & Zayfert, 2001; Follette, Iverson, & Ford, in press; Wagner & Linehan, 2006). In the current study, we have extended and modified DBT skills and interventions to the problems that women experience as a result of domestic abuse.

DBT integrates behavior change principles and strategies with acceptance principles and strategies (Linehan, 1993a). Comprehensive DBT involves addressing five different functions in treatment: (a) enhancing client skills and capabilities (mindfulness, emotion regulation, distress tolerance, and interpersonal effectiveness skills); (b) generalizing those skills to everyday life; (c) increasing client motivation to use these skillful alternatives to reduce previous problematic behaviors and distress; (d) ensuring that the family and social environment do not impede treatment (and, ideally, facilitate it); and (e) enhancing therapist skills and

motivation to provide treatment effectively (Linehan, 1993a). The challenge in adapting and extending DBT to treat women victims of domestic abuse is how to maintain the comprehensive nature of the therapy while creating an easily accessible, and readily exportable, treatment program.

This modification of DBT is a specialized, time-limited group program in which all of the functions of DBT are accomplished as part of a 12-session group program. Specifically, as in standard DBT skills groups, *skill training* (including homework review) is provided in a group format, typically in the 2nd hr of the 2-hr group. *Targeting* (identifying primary and secondary targets), *chain and solution analysis* and other aspects of *problem solving*, along with *validation* (client motivation to use skills to solve problems) also occur within the group, typically in the 1st hr of group. *Skill generalization* and motivation are promoted through the use of diary cards, which include identifying skills that women practiced throughout the week, in-group generalization planning, as well as the option of calling one of the group therapists to receive coaching on skills (one component of generalization). Phone calls are especially encouraged during the early weeks of treatment, particularly if an individual has a tendency to engage in mood-dependent behavior that may interfere with effective decisions (e.g., contemplating missing group because she is feeling anxious or depressed). Finally, therapists meet weekly as part of an ongoing DBT *consultation team*.

For readers who are unfamiliar with skills training in DBT, the skills used in this program were largely those in the DBT skills training manual (Linehan, 1993b), along with additional skills developed for this program. Mindfulness is the core skill in DBT and refers to awareness, acceptance, and participating fully and deliberately in the present moment without judgment (Linehan, 1993b). Mindfulness and self-validation skills are particularly important for women victims of domestic abuse because they are likely to have difficulty labeling and expressing their emotional experiences accurately (and assertively) as a consequence of invalidation. Therefore, accurate expression is self-validating. Mindfulness and self-validation skills also may be useful for increasing awareness of danger-related cues, thus reducing the chance of future revictimization. Other skills include those to help regulate emotion, tolerate distress (without escape into impulsive behaviors), and improve relationships (e.g., assertion, support, self-respect). A complete list of skills used in this modification of DBT is presented in Table 1.

There is utility to the group structure of a treatment program (e.g., Heron, Twomey, Jacobs, & Kaslow, 1997; Ney & Peters, 1995). Not only may abused women benefit directly from exposure to other women with similar problems, but they may benefit from observing and participating in the solutions to those problems. In other words, women use mindfulness in every group session. For example, women victims of domestic abuse often engage in self-blame and are judgmental about themselves in a variety of other ways, which can lead to shame, guilt, sadness, and other negative emotions. When one woman goes through her chain leading to isolating herself, drinking, or passively responding to potentially beneficial situations, the group members can likely identify and can help her solve this problem with skills. In effect, her solution is virtually every participant's solution. Thus, it is possible to satisfy the comprehensive nature of DBT even in a group setting. Furthermore, the group format provides validation, normalization,

Table 1
Outline for Dialectical Behavior Therapy Modified for Women Victims of Domestic Abuse Program

Time	Topic
Pretreatment	Diary card
	Phone information sheet
	Schedule
	Guidelines for group
	Safety planning[a]
Week 1	Mindfulness[b]
	Wise mind
	"What" skills: Observe, describe, participate
	Establish treatment targets
Week 2	Mindfulness[b]
	"How" skills: Nonjudgmentally, one mindfully, effectively
	Options for attention
	Letting go of judgments
	Understanding your chain (chain analysis, problem solving)
Week 3	Distress tolerance[b]
	Self-soothing
	Pros and cons
	Practice observing breath
	Radical acceptance
	Changing your chain (included weekly throughout treatment)
Week 4	Validation and self-validation[a]
	What is validation?
	Why is it important?
	Effects on emotions and so forth
	Emotion regulation[b]
	Primary and secondary emotions
	Ways to describe emotions
Week 5	Self-validation[a]
	How to validate yourself
	Getting validation from others
	Learning to identify and affiliate with people who are validating[a]
Week 6	Invalidation recovery and validating others[a]
	What is invalidation?
	Recovering from invalidation
	How to validate others[a]
	Self-validation, continued[a]
Week 7	Validation review and practice[a]
	Reducing vulnerability (sleep, diet, exercise, etc.)[b]
	Self-care[a]
	Behavioral activation[a]
Week 8	Interpersonal effectiveness[b]
	Goals of interpersonal effectiveness
	DEARMAN (focus on objectives)
	Factors that interfere
Week 9	Interpersonal effectiveness[b]
	GIVE (more validating)
	FAST (self-respect)
Week 10	Mindfulness review: Discuss progress/problems with mindfulness[b]
	Relationship mindfulness[a]
	Using self-validation and relationship mindfulness to find healthy relationships[a]
Week 11	More emotion regulation[b]
	Mindfulness of current emotion
	Identifying emotions/cycles
	Changing negative emotion and reducing suffering
Week 12	Wrap up, review, establish new targets, postassessment

Note. DEARMAN = skills to achieve objectives (Describe, Express, Assert, Reinforce, stay Mindful, Appear confident, Negotiate); GIVE = relationship skills (be Gentle, Interested, Validate, have an Easy manner); FAST = self-respect skills (be Fair, make no Apologies [for feelings, objectives, etc.], Stick to your values, be Truthful).
[a] Skills developed specifically for this modification of dialectical behavior therapy for women victims of domestic abuse. [b] Traditional dialectical behavior therapy skills (Linehan, 1993b).

and support of client experiences, which in turn may further help them recover (Kaslow et al., 1998). Perhaps most important, excellent outcomes have been reported for DBT adapted in multifunction group format for other homogeneous populations (e.g., those with eating disorders; Telch, Agras, & Linehan, 2001). Finally, groups are resource efficient, making it more likely that resource-limited treatment facilities could offer a program for female victims of domestic abuse if the treatment has demonstrated utility.

Despite the considerable amount of data supporting the effectiveness of DBT for a variety of problems related to emotion regulation (e.g., Chapman, 2006), DBT has not been evaluated as a treatment for female victims of domestic abuse. This study provides the first such evaluation of this program. We hypothesized that women who completed the DBT group intervention would exhibit significant improvements on measures of depressive symptoms, hopelessness, general psychiatric distress, and social adjustment from pretreatment to posttreatment. We also expected that participants would report high levels of consumer satisfaction.

Method

Participants

Data reported in this study were collected sequentially as part of an ongoing treatment program. Potential participants were referred to the program through brochures, local women's shelters, crisis centers, and municipal and state-affiliated agencies assisting women victims of domestic abuse (e.g., the city attorney's office, the temporary protection order office). Intervention was provided at no cost to participants. The total number of women we intended to treat in the current study was 46, and the total sample size completing the treatment program was 31. Thus, the total number of women who started but did not complete the program was 15, reflecting an attrition rate of 33%. The average number of sessions attended for the 33% of participants who left the treatment program early was three sessions (range = 1–7 sessions).

The age range for this sample was 22–56 years, with an average age of 40.7. Of the women, 97% were Caucasian, 81% earned less than $30,000, and 72% had some high school or some college education. In addition, 54% reported being in an abusive relationship for1 to 5 years, 77% reported being abused by a current or former husband, and 26% still lived in the same home as their abuser.

Measures

Beck Depression Inventory–II. The Beck Depression Inventory–II (Beck, Steer, & Brown, 1996) is a widely used self-report instrument consisting of 21 items designed to measure the presence and severity of depressive symptoms across several domains of individual functioning.

Beck Hopelessness Scale. The Beck Hopelessness Scale (Beck, Weissman, Lester, & Trexler, 1974) is a psychometrically sound 20-item instrument intended to measure the severity of negative attitudes about the future. This scale was used to assess the extent of hopelessness and has been shown to be predictive of suicide risk (e.g., Glanz, Haas, & Sweeney, 1995).

Social Adjustment Scale–Self-Report. The Social Adjustment Scale–Self-Report (Weissman et al., 1978) measures an individual's overall social functioning across several domains, such as employment, family, social and leisure, marital, and parenting relationships. This measure has been shown to be psychometrically sound (e.g., Weissman et al., 1978).

Symptom Checklist–90–R. The Symptom Checklist–90–R (Derogatis, 1994) is an instrument widely used to assess both domain-specific (e.g., anxiety, psychosis) and broad levels of individual distress. The Global Severity Index of the Symptom Checklist–90–R was selected for analyses so that changes in general levels of distress could be assessed at pretreatment and posttreatment phases.

Procedures

Potential participants called the Women Victims of Domestic Abuse Program and completed a brief phone screening. There were only two inclusion criteria for this study: The participants had to (a) be female and (b) report that they were a victim of domestic abuse by an intimate relationship partner at any time in their life. Women who reported a history of childhood abuse but not domestic abuse from an intimate partner were excluded from the study and referred to appropriate alternative services. Women who were actively suicidal were referred to more intensive DBT services or other established treatments. During the phone screening, an intake assessment appointment was scheduled. At this appointment distress was assessed through the self-report measures listed previously, and a general clinical interview was conducted. Details about the group, such as its meeting time, content, structure, and overall length, were given to the participant at this time. After the interview, the participant was assigned to the next available open group.

For this study, we conducted seven groups, which were held at different times of the day or evening to accommodate work, child care, or other scheduling challenges participants faced. Groups included 6 to 8 women and followed a structured, 12-week, closed-group format. Each 2-hr session included the following: (a) new skills were taught and practiced, (b) the use of previously learned skills was reviewed and encouraged, (c) problems in applying skills to daily life were analyzed and practiced again (targeting, chain analysis, problem solving, commitment), (d) opportunities for engaging in more effective and skillful behaviors in the coming week were planned (generalization included regular practice focused on treatment targets relevant to daily life), and (e) support, encouragement, and validation were provided both by the therapists and by other group members.

As noted, Table 1 includes a more detailed description of the weekly topics of the group and the DBT skills used. Skills training included all four skill modules in Linehan's (1993b) skill-training manual, DBT relationship skills (Fruzzetti & Iverson, 2006), and additional self-validation skills and skills for domestic abuse recovery developed specifically for this program. Eight master's-level therapists provided treatment, with two therapists per group. Each had taken part in extensive DBT training prior to coleading groups and participated in a weekly 2-hr DBT consultation group, which emphasized adherence to the DBT treatment. These consultation groups were structured as outlined by Fruzzetti, Waltz, and Linehan (1997), and therapists were supervised by a DBT supervisor with 20 years of DBT experience (Alan E. Fruzzetti). Thus, the ordinary procedures that are central to DBT were woven throughout the program, including the following: (a) clear treatment targets in a hierarchy, with safety at the top, (b) detailed chain analyses of targets, (c) the use of daily

diary/self-monitoring cards, (d) validation, (e) skill building and generalization, (f) balancing acceptance and change, (g) an emphasis on practicing new skills and activities in daily life, and (h) ongoing therapist consultation.

Following the final group meeting, we asked participants to complete the same battery of questionnaires they completed during the initial assessment. In addition, we asked participants to complete a satisfaction survey to provide us with client satisfaction data concerning the group format, components, and overall program.

Results

Our main hypothesis was that women who completed the treatment group would demonstrate statistically significant differences on outcome measures at postintervention when compared with their own preintervention scores. A within-subjects repeated measures analysis of variance (ANOVA) was conducted on all self-report measures to assess treatment effects for the women who successfully completed the group ($n = 31$). There were significant main effects for time on all within-subjects comparisons of self-report measures. Specifically, preintervention and postintervention effects were as follows: Beck Depression Inventory–II, $F(1, 30) = 12.97$, $p < .001$, $d = .54$; Beck Hopelessness Scale, $F(1, 30) = 5.88$, $p < .05$, $d = .42$; Symptom Checklist–90–R, $F(1, 30) = 14.82$, $p < .001$, $d = .78$; and Social Adjustment Scale–Self-Report, $F(1, 30) = 7.67$, $p < .01$, $d = .53$. See Table 2 for descriptive statistics related to these results.

In addition, 93% of our participants (completers) reported being very satisfied with our program (the highest rating), and 7% reported being satisfied (the second highest rating). Thus, no participant reported less than adequate levels of satisfaction.

To rule out possible selection bias due to dropout in our sample, as well as to identify specific factors contributing to attrition, preintervention data were compared for women who did and did not complete the group. First, a two-tailed, independent sample *t* test showed that there were no significant differences between groups at pretest on any of the clinical outcome measures of interest (all ps $> .05$). These results suggest that level of individual distress was evenly distributed across all participants and that severity of distress (either high or low severity) did not appear to be a significant factor responsible for attrition. Additionally, there were no significant differences between those who did not complete the group and those who did complete on length of the abusive relationship or severity of presenting symptoms at pretreatment, ps $= ns$. Finally, women who were living with their abuser during the program (26%) were no more likely to drop out of treatment, nor did they report greater distress on the Beck Depression Inventory–II, Beck Hopelessness Scale, Symptom Checklist–90–R, or the Social Adjustment Scale–Self-Report at posttreatment, ps $= ns$.

A comparison of demographic variables showed that there were differences only on levels of education between completers and noncompleters. An independent-sample *t* test revealed that women who ended their participation early had fewer years of education, $t(40) = -2.94$, $p < .01$, than women who completed the group. Level of income and whether there were children in the home did not significantly differ between women who did and did not complete the program, ps $= ns$. Women who left early ($n = 15$) were asked what factors were for responsible for their dropout, with the most frequent response being that they were unable to consistently attend sessions during the arranged time/day of the group.

Finally, we were able to collect some posttest data on the overall functioning of women who left the program prior to completion. Given the small size of this subsample ($n = 5$), extreme caution should be taken when making inferences about these data. Posttest means and standard deviations for this subsample are as follows: Beck Depression Inventory–II: $M = 11.00$, $SD = 14.93$; Beck Hopelessness Scale: $M = 3.33$, $SD = 3.21$; Symptom Checklist–90–R: $M = 34.67$, $SD = 14.29$; Social Adjustment Scale–Self-Report: $M = 2.01$, $SD = 0.66$ (the reader may compare these scores to those of completers, found in Table 2).

Table 2
Pretreatment and Posttreatment Means and Standard Deviations for Treatment Outcome Measures

Measure	*M*	*SD*	*F*	*d*
Beck Depression Inventory–II				
Pretest	18.3	15.0		
Posttest	10.2	11.4	12.97***	.54
Beck Hopelessness Scale				
Pretest	5.1	6.0		
Posttest	2.6	3.0	5.88*	.42
Symptom Checklist–90–R (Global Severity Index Scale)				
Pretest	44.7	11.8		
Posttest	35.5	13.3	14.82***	.78
Social Adjustment Scale–Self-Report				
Pretest	2.2	0.57		
Posttest	1.9	0.50	7.67**	.53

* $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

This study examined the feasibility and effectiveness of DBT adapted for female victims of domestic abuse in a relatively brief (12-session) group format. Results support the feasibility and possible effectiveness of this approach. The group that completed treatment showed significant improvements on all of the outcome measures; participants reported reduced depressive symptoms, hopelessness, and psychiatric distress and reported increased social adjustment from pretreatment to posttreatment.

Not only were changes from pretreatment to posttreatment statistically significant, the magnitude of changes was generally in the moderate-to-large range of effect sizes. In fact, participants' scores on standardized outcome measures generally reached the normal range at posttest. For example, depressive symptoms decreased significantly, with the average score of participants in the moderate range of depression at pretreatment and with the majority of participants reporting no elevations or only mild mood disturbances at posttreatment (Beck et al., 1996). At the pretreatment assessment, nearly 25% of the sample met criteria for high suicidal risk, according to established cutoffs (Glanz et al., 1995). However, at posttreatment, only 7% met criteria for high suicidal risk. Similarly, at pretreatment, the participants' average social adjustment score was nearly 2 *SD*s above the community sample mean (lower scores indicate better adjustment), whereas at posttreat-

ment, the group was nearly 2 *SD*s below this community mean (Weissman et al., 1978).

Despite the stress that is characteristic of an abusive environment and the demands of participating in treatment, participants' satisfaction with the treatment program was consistently very high. These high levels of satisfaction suggest that the program was meeting many of the needs of its participants, and this high satisfaction complements the formal assessment data.

This modification of DBT has a number of advantages that make further development and evaluation important. First, given that participants reported improvements across all of the domains evaluated, it appears that the group format is a practical mode for treatment delivery. Many existing treatments for emotional well-being among this population are individual focused. Although these treatments are often effective (Johnson & Zlotnick, 2006; Kubany et al., 2004), they carry significant limitations in availability and access. For example, individual treatments are time consuming for therapists and expensive for clients or mental health systems and likely result in lower access for middle and lower income women (such as those in this study). Of importance, this intervention is quite cost-effective; as many as 8 women attended the group treatment together. Furthermore, at just 12 weeks, treatment was efficient.

Limitations of this pilot study must be acknowledged. For two reasons, we did not include a control condition in this study. First, in keeping with treatment development considerations, we decided to start with a basic pre- and posttest design to establish the treatment's initial effectiveness. Second, given the absence of any treatment standards, the only viable control condition would have been either a wait list or individual treatment. In light of the substantial needs of this population, we ruled out a randomized wait list. Given the costs and multiple confounds, we ruled out comparisons with individual treatment. Nevertheless, the lack of a control group in this study means we could not determine whether treatment gains were truly a reflection of specific treatment components, whether they were due to nonspecific factors, such as group cohesion and/or a positive therapeutic alliance, or whether they were simply due to the passing of time. Future studies should compare the current intervention to other interventions for this population to isolate the effective treatment components (e.g., a support group). Similarly, we do not know if the gains at posttest were maintained; therefore, future research should include the collection of follow-up data. Additionally, the current findings are limited primarily to Caucasian, low-income women. A more rigorous treatment study should include a more diverse and representative sample.

Although there were statistically significant changes on all of the measures from pretest to posttest, some of the women were still experiencing clinical rates of distress posttreatment. Some women may have benefited from additional treatment. Although a longer program may be beneficial for some, it would use greater resources and may make it harder for other women to commit to the program. Future research should evaluate shorter versus longer programs to determine optimum duration as well as the utility of booster or follow-up sessions. Future research may also focus on identifying factors that predict which women might benefit from this treatment. For example, to enhance researchers' understanding of who might benefit from this approach, future research should include a more thorough assessment of the types and severity of domestic abuse experienced. In addition, the outcome variables examined in this study are not exhaustive. Future investigations should include a broader range of mental health measures, such as measures of PTSD, self-esteem, and safety in future relationships (and quality of those relationships), to capture more fully the range of difficulties that women victims of domestic abuse experience.

Approximately 33% of women who were appropriate for the program and agreed to participate did not complete the entire treatment. Post hoc data analyses showed similarities in pretreatment measures between those who completed the study and those who dropped out, although women who dropped out had somewhat less education than did women who completed the program. This may reflect greater difficulties in the format for less educated women (e.g., materials designed to help learn skills may have been, in fact, too difficult) or a variety of other possibilities. Future research should examine whether DBT commitment strategies (Linehan, 1993a) or other interventions, such as motivational interviewing techniques (Miller & Rollnick, 2002), may enhance program engagement and reduce attrition.

In conclusion, results from the present study justify a more rigorous examination of the efficacy and effectiveness of DBT as a treatment for women victims of domestic abuse. Although this study is preliminary, findings suggest that the current intervention may be helpful in alleviating at least some forms of emotional distress. In addition, it is both efficient and accessible, both essential qualities if such a program is to be useful to women victims of domestic abuse who have few resources. Thus, this adapted DBT program appears to help break down treatment barriers and holds potential for women who need assistance making the transition to a safer and healthier well-adjusted postabuse life.

References

Barlow, D. A., Allen, L. B., & Choate, M. L. (2004). Toward a unified treatment for emotional disorders. *Behavior Therapy, 35,* 205–230.

Beck, A. T., Steer, R. A., & Brown, K. G. (1996). *Manual for the Beck Depression Inventory–II.* San Antonio, TX: Psychological Corporation.

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The Hopelessness Scale. *Journal of Consulting and Clinical Psychology, 42,* 861–865.

Becker, C. B., & Zayfert, C. (2001). Integrating DBT-based techniques and concepts to facilitate exposure treatment for PTSD. *Cognitive and Behavioral Practice, 8,* 107–122.

Becker-Blease, K. A., & Freyd, J. J. (2005). Beyond PTSD: An evolving relationship between trauma theory and family violence research. *Journal of Interpersonal Violence, 20,* 403–411.

Bell, L. E., & Goodman, L. A. (2001). Supporting battered women involved in the court system: An evaluation of a law-based advocacy intervention. *Violence Against Women, 7,* 1377–1404.

Campbell, J. C. (2002). Health consequences of intimate partner violence. *Lancet, 359,* 1331–1336.

Chapman, A. L. (2006). Dialectical behavior therapy: Current indications and unique elements. *Psychiatry, 3,* 62–68.

Cloitre, M., Stovall-McClough, K. C., & Levitt, J. T. (2004). Treating life impairment problems beyond PTSD: Reply to Cahill, Zoellner, Feeny, and Riggs (2004). *Journal of Consulting Psychology, 72,* 549–551.

Constantino, R., Kim, Y., & Crane, P. A. (2005). Effect of a social support intervention on health outcomes in residents of a domestic violence shelter: A pilot study. *Issues in Mental Health Nursing, 26,* 575–590.

Derogatis, L. R. (1994). *Symptom Checklist–90–R (SCL-90-R): Administration, scoring, and procedures manual* (3rd ed.). Minneapolis, MN: National Computer Systems.

Dutton, M. A., Kaltman, S., Goodman, L. A., Weinfurt, K., & Vankos, N. (2005). Patterns of intimate partner violence: Correlates and outcomes. *Violence and Victims, 20,* 483–497.

Feigenbaum, J. (2007). Dialectical behaviour therapy: An increasing evidence base. *Journal of Mental Health, 16,* 51–68.

Follette, V. M., Iverson, K. M., & Ford, J. (in press). Contextual behavioral treatment for complex PTSD. In C. Courtois & J. D. Ford (Eds.), *Complex traumatic stress disorders: An evidence-based clinician's guide.* New York: Guilford.

Follette, V. M., Pistorello, J., Murphy, K., & Iverson, K. M. (2007). Skills in relationships: Staying safe and being true to yourself. In V. M. Follette & J. Pistorello (Eds.), *Finding life beyond trauma: Using acceptance and commitment therapy to heal from post-traumatic stress and trauma related problems* (pp. 223–254). Oakland, CA: New Harbinger Press.

Follingstad, D. R. (2007). Rethinking current approaches to psychological abuse: Conceptual and methodological issues. *Aggression and Violent Behavior, 12,* 439–458.

Ford, J. D., Courtois, C., van der Hart, O., Nijenhuis, E., & Steele, K. (2005). Treatment of complex post-traumatic self-dysregulation. *Journal of Traumatic Stress, 18,* 437–447.

Fritz, P. T., & O'Leary, K. D. (2004). Physical and psychological partner aggression across a decade: A growth curve analysis. *Violence and Victims, 19,* 3–16.

Fruzzetti, A. E. (2006). *The high conflict couple: A dialectical behavior therapy guide to finding peace, intimacy, and validation.* Oakland, CA: New Harbinger Press.

Fruzzetti, A. E., & Iverson, K. M. (2004). Mindfulness, acceptance, validation, and "individual" psychotherapy in couples. In S. C. Hayes, V. M. Follette, & M. M. Linehan (Eds.), *Mindfulness and acceptance: Expanding the cognitive–behavioral tradition* (pp. 168–191). New York: Guilford Press.

Fruzzetti, A. E., & Iverson, K. M. (2006). Intervening with couples and families to treat emotion dysregulation and psychopathology. In D. K. Snyder, J. A. Simpson, & J. N. Hughes (Eds.), *Emotion regulation in families: Pathways to dysfunction and health* (pp. 249–267). Washington, DC: American Psychological Association.

Fruzzetti, A. E., Shenk, C., & Hoffman, P. D. (2005). Family interaction and the development of borderline personality disorder: A transactional model. *Development and Psychopathology, 17,* 1007–1030.

Fruzzetti, A. E., Waltz, J. A., & Linehan, M. M. (1997). Supervision in dialectical behavior therapy. In C. E. Watkins (Ed.), *Handbook of psychotherapy supervision* (pp. 84–100). Hoboken, NJ: Wiley.

Glanz, L. M., Haas, G. L., & Sweeney, J. A. (1995). Assessment of hopelessness in suicidal patients. *Clinical Psychology Review, 15,* 49–64.

Gross, J. J., Richards, J. E., & John, O. P. (2006). Emotion regulation in everyday life. In D. K. Snyder, J. A. Simpson, & J. N. Hughes (Eds.), *Emotion regulation in couples and families: Pathways to dysfunction and health* (pp. 13–35). Washington, DC: American Psychological Association.

Heron, R. L., Twomey, H. B., Jacobs, D. P., & Kaslow, N. J. (1997). Culturally competent interventions for abused and suicidal African American women. *Psychotherapy: Theory, Research, and Practice, 34,* 410–424.

Johnson, D. M., & Zlotnick, C. (2006). A cognitive–behavior treatment for battered women with PTSD in shelters: Findings from a pilot study. *Journal of Traumatic Stress, 19,* 559–564.

Kaslow, N. J., Thompson, M. P., Meadows, L. A., Jacobs, D., Chance, S., Gibb, B., et al. (1998). Factors that mediate and moderate the link between partner abuse and suicidal behavior in African American women. *Journal of Consulting and Clinical Psychology, 66,* 533–540.

Kubany, E. S., Hill, E. E., Owens, J. A., Iannce-Spencer, C., McCaig, M. A., Tremayne, K. J., et al. (2004). Cognitive trauma therapy for battered women with PTSD (CTT-BW). *Journal of Consulting and Clinical Psychology, 72,* 3–18.

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

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

Mechanic, M. B. (2004). Beyond PTSD: Mental health consequences of violence against women. A response to Briere and Jordan. *Journal of Interpersonal Violence, 19,* 1283–1289.

Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people to change.* New York: Guilford Press.

Ney, P. G., & Peters, A. (1995). *Ending the cycle of abuse: The stories of women abused as children and the group therapy techniques that helped them heal.* New York: Brunner/Mazel.

Stith, S. M., Rosen, K. H., McCollum, E. E., & Thomsen, C. (2004). Treating intimate partner violence within intact couple relationships: Outcomes of multi-couple versus individual couple therapy. *Journal of Marital and Family Therapy, 30,* 305–318.

Street, A. E., & Arias, I. (2001). Psychological abuse and posttraumatic stress disorder in battered women: Examining the roles of shame and guilt. *Violence and Victims, 16,* 65–78.

Sullivan, C. M., Tan, C., Basta, J., Rumptz, M., & Davidson, W. S. (1992). An advocacy intervention program for women with abusive partners: Initial evaluation. *American Journal of Community Psychology, 20,* 309–322.

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

Tjaden, P., & Thoennes, N. (2000). Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence Against Women, 6,* 142–161.

Tutty, L. M., Bidgood, B. A., & Rothery, M. A. (1996). Evaluating the effect of group process and client variables in support groups for battered women. *Research on Social Work Practice, 6,* 308–324.

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

Weissman, M., Prusoff, B., Thompson, W., Harding, P. S., & Myers, J. K. (1978). Social adjustment by self-report in a community sample and in psychiatric outpatients. *Journal of Nervous and Mental Disease, 166,* 317–326.

Received November 2, 2007
Revision received June 9, 2008
Accepted June 16, 2008 ■