



Evaluating a Brief Group Program for Women Victims of Intimate Partner Abuse

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Abstract

Study background

Despite the established utility of a 12-week dialectical behavior therapy (DBT) group program for women victims of intimate partner abuse (IPA), the dropout rate between initial contact and program completion has been as high as 50%, largely due to chaos in participants' lives.

Methods

To establish better treatment engagement and retention, and thus to help more women, a two-day DBT group program was developed and evaluated. In addition, psychological measures including general distress, depression, hopelessness, and post-traumatic stress disorder severity were administered to 72 abused women victims of intimate partner violence to see the effectiveness of the intervention.

Results

Results for 72 abused women showed that the 2-day intervention resulted in significantly higher attendance and completion rate than the 12-week standard group treatment program. From pre-treatment to 3 months follow-up, participants reported significant improvements across a range of outcome variables, including general distress, depression, hopelessness, post-traumatic stress disorder (PTSD) severity, and self-compassion.

Conclusions

This intervention appeared to be helpful to remove treatment barriers of intimate partner abuse victims to receive psychotherapy and beneficial for them to make their lives psychologically less distressed following abuse experiences. Suggestions for future research are discussed.

Keywords

Dialectical behavior therapy (DBT); Emotion regulation; Group treatment; Intimate partner abuse (IPA); Women victims; Brief treatment

Introduction

Intimate partner abuse is a problem of significant proportions in the United States. Not only are there psychological and medical consequences for victims, there also are large effects on children and

families, and society as a whole. According to the U. S. Department of Justice, approximately 4.8 million incidents of intimate partner abuse occur annually in the United States [1]. Thirty-five percent of American women experienced any kind of intimate partner abuse and 48.4% of women in the United States reported having experienced psychological abuse by an intimate partner in their lifetime [2].

Intimate partner abuse occurs when a partner or ex-partner attempts to harm and/or control the other person in a current or former intimate relationship with physical abuse or aggression, sexual abuse, and/or verbal and psychological abuse [3]. There are many different terms used to describe these interpersonal violence-related behaviors in a couple, including marital or domestic violence, dating violence, battering, spousal or partner abuse, and partner aggression. In this study, the term Intimate Partner Abuse (IPA) will be used and will include: 1) physical and sexual violence or aggression, 2) threats of physical and sexual violence or aggression (including physical control), and 3) psychological and emotional abuse, whether from a partner who is (or has been) also physically or sexually abusive, or from a partner who has not been physically or sexually abusive.

IPA victims experience myriad physical and sexual problems. Physically, injuries vary from pain and broken bones to disability or even death. In fact, women are much more likely than men to be killed by an intimate partner, and 33% of all murdered women are killed by an intimate partner [4]. In addition, abused women report neurological damage resulting in hearing, vision and concentration problems from assaults from intimate partners [2]. Over 50% of female victims of rape stated that the perpetrator was an intimate partner [2]. Unwanted sex has been shown to lead to gynecological problems, sexually transmitted diseases, and HIV/AIDS infections. It also increases general emotional distress in women, including negative sexual self-perceptions, anger, social isolation, low self-esteem, depression, social anxiety, and a lack of assertiveness [2].

Women who are physically or sexually abused by their intimate partners almost always are psychologically or emotionally maltreated. Often, psychological and emotional abuse occurs in the context of current or prior physical or sexual abuse from the same partner. Researchers have found that women victims experience wide-ranging negative consequences from psychological abuse from their intimate partners, including depression, anxiety, social withdrawal, and suicide attempts [5-8]. In addition, researchers have demonstrated that the rate of alcoholism is at least twice as high in battered women as in non-battered women (20% vs. 10%, respectively; McCaw, Golding, Farley, and Minkoff) [9]. The rate of suicidality (completed suicide and attempted suicide) among battered women is 18%, which is much higher rate than the rate among non-abused women, who have 0.1% to 4.3% lifetime prevalence rate of suicidality [8]. Stress-related illnesses, such as headaches and backaches, are common among abused women [10]. Even in the absence of continued violence, women who have been abused continue to demonstrate elevated rates of moderate to severe anxiety, depression, substance use disorders, and PTSD, again indicating that the effects of intimate partner abuse are often long-term [11].

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There are only a few treatment programs that focus specifically on the problems of intimate partner abuse victims. Recently, psycho-educational and some standard psychological treatments have been somewhat successfully employed with women victims of intimate partner abuse. However, only very few comprehensive treatment programs that are specific to the needs of this population have been developed and evaluated with promising results. In addition, they have low retention rates (30-68%) [12]. Thus, there is a need for effective treatments focusing on alleviating the general psychological problems that intimate partner abuse victims have.

Problems in managing emotion recently have been identified as an underlying core problem for intimate partner abuse victims [13]. Given the multiple psychological problems that result from intimate partner abuse, emotion regulation may be an important treatment target (mediator of outcome) for women victims of intimate partner abuse. Emotion dysregulation refers to deficits in a person's ability to experience, express and modulate one's emotion while still acting effectively (in the service of long term goals) in the context of intense or aversive emotional experiences [14,15]. Emotion regulation difficulties contribute to dysfunctional coping responses including substance abuse, impulsivity, poor decision-making, interpersonal problems, and psychological distress [16]. Several researchers [16,17] have proposed a *transactional* model to explain how pervasive emotion dysregulation develops. According to this model, emotion regulation difficulties result from an ongoing transaction between an individual's emotional vulnerability (to become dysregulated in a given environment) and invalidating social responses from others. A transaction can begin with either or both components. When applied to intimate partner abuse specifically, emotional vulnerability (e.g., emotion sensitivity and reactivity, sometimes described as hypervigilance, and possibly a slow return to emotional baseline) transacts with invalidating responses from an abusive partner to result in chronic emotion dysregulation and distress. Invalidating responses are a core characteristic of intimate partner abuse, which includes chronic non-acceptance, rejection, criticism, distrust, disrespect, contempt, "crazy-making" responses, and disregard for the other partner's personal worth, opinions, emotions, abilities, and so on [13]. Punishing and pathologizing the woman's valid thoughts, feelings, beliefs, and behaviors increase her emotional arousal and leads to dysregulation.

The abused partner often experiences shame, grief, fear, anxiety, and self-blame, which can become chronic and pervasive over time. In these relationships, victims become hypervigilant and sensitive not only to the abuser, but also to other people, situations, and their own experiences, in part because it functions to maintain the victim's safety. However, these behaviors are not effective in the long term, after victim's transition to a safe environment. Hypervigilant behaviors likely contribute to affective, interpersonal, and practical problems after they leave their abusive partners. For example, women feeling persistent fear, sadness or shame may experience an associated urge to isolate from others. This decreases opportunities for social support, which in turn can maintain or exacerbate depression and anxiety. Thus, living in an extreme invalidating environment such as one including any type of intimate partner abuse is one pathway to problems with emotion dysregulation [13,17]. The transactional theory model thus also provides a way to conceptualize the problems associated with intimate partner abuse without blaming victims themselves. Problems of dysregulated emotion can explain the common co-occurrence of multiple emotional and behavioral problems across various forms of intimate partner abuse for which victims frequently have been blamed.

Dialectical Behavior Therapy (DBT) was originally developed to treat chronic and pervasive emotion dysregulation in the form of borderline personality disorder, in part by helping people to use emotion regulation, mindfulness, interpersonal and distress tolerance skills [16,18]. DBT has been shown to treat not only chronic suicidality and self-injury, but also other problems associated with emotion dysregulation (e.g., depression, eating disorders, and substance abuse, relationship problems). Thus, both because the transactional model fits well and because earlier studies for problems related to emotion dysregulation have good results, it makes sense to extend DBT interventions to women victims of intimate partner abuse. However, most abused women are poor and lack both the private financial resources and relevant insurance to pay for treatment [19]. Women who are economically dependent on their partners have more difficulties seeking and engaging in psychological programs [20]. Thus, any interventions for this population need to be cost effective in order to reach those who need this kind of help. Group treatment, particularly if relatively brief, can decrease the financial burden on women victims and thus increase their access to treatment. Such an adaptation of DBT was developed by Fruzzetti and colleagues specifically to treat women victims of intimate partner abuse in an efficient, brief group format [13]. The program is intended to be free (or very low cost), lasts for 12 sessions (2 hours each), and includes all five functions of treatment that define a comprehensive DBT program: 1) enhancing client skills and capabilities via skill training; 2) generalizing those skills to daily life; 3) increasing client motivation to use skillful alternatives to previous problematic behaviors through careful treatment targeting and the use of chain and solution analysis and commitment strategies, with significant support and validation from the therapist; 4) making sure that the family and social environment do not interfere with treatment, through the use of available family and other interventions; and 5) enhancing therapist skills and motivation to treat clients effectively through weekly consultation team meetings. This program targets directly the problems women victims' experience, including staying safe, reducing depression, anxiety and PTSD-related difficulties, and addressing other related problems. Women are taught a range of psychological skills in order to manage their emotions, maintain their safety, and make effective decisions. Women may also benefit from the group indirectly because they can get support, validation and normalization of their experiences from other group members, which in turn may help them to reduce self-invalidation, self-blame and shame [13].

In an open trial, intimate partner abuse victims who completed the program reported a significant decrease in depression, hopelessness, and general psychiatric distress and a significant increase in social adjustment and emotional well-being. Consumer satisfaction with the treatment was also high [13]. Therefore, this application of DBT appears to be a promising treatment for this population.

Despite the utility of this treatment, high rates of "no-shows" for the intake session and high dropout rate between intake and completion of treatment (up to 50%) limit treatment effectiveness. Even among victims who are court-ordered to undergo treatment, only about 50% attended the first session [21]. With exceptionally high program satisfaction among participants and excellent demonstrated outcomes for completers, dropouts likely were a result of patient, as opposed to treatment, factors per se. Because women in the program reported consistently high levels of instrumental and emotional difficulties due to unexpected life problems coming up quite often,

it is important to develop a program that ameliorates the practical difficulties abused women face in getting effective treatment [21].

The purpose of this study was to develop and evaluate retention in a two-day intensive group treatment for women victims of intimate partner abuse. This two-day group treatment utilized essentially the same content as the original 12-week treatment program for women victims of intimate partner abuse. In reducing contact hours from approximately 24 (2 hours per session for 12 weeks) to approximately 14 (7 hours per day for 2 days), time was saved primarily by spending less time on weekly practice review, which was consistent with the format (that is, there was little opportunity to practice at home during the program).

The *primary hypotheses* of the current study were: 1) the two-day group treatment will increase treatment completion and reduce dropout rates compared to the 12-week standard group treatment; 2) participants in the two-day group treatment program will show significant reductions in problems common to women victims of intimate partner abuse, including depression, anxiety, hopelessness, low self-compassion, emotion regulation problems and significantly increased mindfulness, social adjustment and skills use.

Materials and Method

Participants

A total of 121 women called to seek services from an intimate partner abuse treatment program. Of these 121 women, 19 did not answer or return repeated therapist phone calls and 30 women did not show for their in-person intake after the phone screening (multiple opportunities for rescheduling were available). The final sample for the present study thus was 72 women, all of whom showed up for the in-person intake and were eligible for and invited to participate in the two-day program of 72 women, 47 women completed the 2-day program and 37 out of 47 completed 3-month follow-up assessments. The participants were referred from crisis centers, local women's shelters and agencies serving intimate partner abuse victims, protection order offices, psychological and medical clinics, and city and county courts. The selection criteria for participation in this study were: 1) women had to initiate contact and agree to participate in the intimate partner abuse program for women victims; 2) be at least 18 years of age; 3) be in or had been in an abusive relationship (determined by the participant; there was no formal assessment of this); and 4) not be currently suicidal (if suicidal, women were referred for other, more intensive services). If eligible, participants voluntarily participated in the research and participated in the two-day treatment program. Treatment was provided without any cost to participants. They also received a \$50.00 gift card if they completed the three-month in-person follow-up assessment.

Measures

Primary outcome: The utility of the intensive two-day group treatment format was evaluated by tracking overall two-day group attendance and program completion for each participant. These rates were compared with those of the standard 12-week group treatment (control group).

Secondary outcomes: Psychological variables known to be relevant to consequences of intimate partner abuse were examined using the following measures to assess improvement over time, from pre-treatment to 3-month post-treatment follow-up.

Brief Symptom Inventory (BSI) is a 53-item assessment of global levels of distress and psychological health [22]. It has strong psychometric properties, including strong internal consistency ($\alpha=.71-.85$) and good test-retest reliability ($r=.80-.90$) [22].

Beck Depression Inventory-II (BDI-II) 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 within the time frame of the past 2 weeks [23].

Beck Hopelessness Scale (BHS) is a psychometrically sound 20-item instrument intended to measure the severity of negative attitudes about the future [24].

Post-Traumatic Stress Disorder Checklist-Civilian Version (PCL-C) is a self-report rating scale for PTSD symptoms with 17 items [25].

Inventory of Interpersonal Problems-25 (IIP-25) is a measure proven to be useful in capturing clinically important aspects of an individual's interpersonal functioning [26]. The 25 items were found to exhibit a high internal consistency and strong test-retest correlations in outpatient samples.

Self-Compassion Scale is a self-report rating scale for self-compassion with 12 items, including self-kindness, self-judgments, common humanity, isolation, mindfulness, and over-identified items [27].

Difficulties in Emotion Regulation Scale (DERS) is a 36-item self-report measure of emotion regulation; the subscales include non-acceptance of emotional response, difficulties engaging in goal directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity [28].

Five Facet Mindfulness Questionnaire (FFMQ), which is a 39-item self-report measure of the ability to focus one's attention in a non-judgmental or accepting way on experiences occurring in the present moment [29].

DBT-Ways of Coping Checklist (DBT-WCCL) is a 66-item self-report measure for coping styles. Principal component, internal consistency, test-retest reliability, and content validity analyses suggested that the scale has good to excellent psychometric properties [30].

Descriptive measures: Client Information Form was designed by the experimenters and has been used in several research protocols. It assesses general demographic information, including age, gender, race/ethnicity, marital status, annual income, and specific abuse history (perpetrator, length and type of abuse).

Conflict Tactics Scale-2 (CTS-2) is a 39-item self-report measuring verbal reasoning, psychological aggression, physical assault, and sexual coercion between partners when they have a conflict. This is to see specific abuse experience women had with abusive partners [31].

Treatment Satisfaction Form was designed by the experimenters and has been used by several research protocols. It asks 10 questions regarding how informative and professional were the phone screening interview, in-person intake interview, assessments, group leaders, skills modules, and treatments overall.

Group intervention: Treatment consisted of a two-day (9am-4pm) DBT group treatment and included from four to eight

participants. Each part of the group was led by two master’s degree-level therapists with prior experience providing DBT. Overall, six different therapists provided services and their level of experience with group treatment ranges from 2 years to 6 years. The therapists also participated in a DBT consultation group, which emphasized adherence to the DBT treatment model. These consultation groups were structured, and a DBT supervisor with more than 20 years of DBT experience supervised the therapists.

Day 1 treatment included the following education and skill components: a) psycho-education about partner abuse, b) learning how to perform a chain analysis of targeted problematic behaviors and how to engage in effective problem solving, c) psycho-education about emotion, d) construction of a detailed safety plan, e) mindfulness skills, and f) distress tolerance skills. Day 2 treatment included: a) validation and self-validation skills, b) identifying invalidation from others and how to recover from being invalidated, c) interpersonal effectiveness skills (balancing assertion/focusing on goals with maintaining important relationships and maintaining self-respect, and d) emotion regulation skills (including both acceptance and change skills). In both days, participants identified targets they wanted to work on (e.g., depression, interpersonal relationships), and practiced employing the skills used in the service of their desired outcomes, essentially swapping out problem behaviors and swapping in skillful alternatives. Skills training included key aspects of all four-skill modules in Linehan’s skill-training manual and additional self-validation skills and skills for intimate partner abuse recovery developed specifically for this treatment program [14,18].

Mindfulness skills: Mindfulness is the core skill in DBT and refers to awareness, acceptance, and participating fully and deliberately in the present moment without judgments [32]. This skill is very important for women victims of intimate partner abuse because they have difficulty noticing and expressing their emotional experiences accurately. In addition, mindfulness helps to increase awareness of danger-related cues to avoid future victimization, as well as the absence of danger, and thus the ability to relax and engage in relationships meaningfully and safely.

Distress tolerance skills: These skills are to teach women victims how to manage distressing emotional experiences (e.g., memories related to abuse from the previous or current relationship, isolation, shame, anxiety, fear) without escape into impulsive and dangerous behaviors (e.g., substance use, impulsive behaviors). This module consists of cognitive and behavioral strategies such as distraction, self-soothing, and practicing radical acceptance of painful situations.

Emotion regulation skills: Emotion regulation skills help participants to understand their emotions, identify and express them

accurately, specific strategies to let go of emotional suffering, reduce emotional vulnerabilities to negative emotions and how to increase positive emotional experiences.

Interpersonal effectiveness skills: These skills teach how to act effectively in interpersonal situations: how to be assertive while maintaining both the relationship and their self-respect, and how to not be taken advantage of by others. Skills included practicing assertion, building relationships, and getting support from other people to improve relationships.

Self-validation skills: Women victims of intimate partner abuse often have a pattern of self-blame and are judgmental of themselves, which often leads them to feel shame, guilt, sadness, and other negative emotions. They often lack the skills to validate and normalize their own experiences as a result of the invalidation from their abusive partners. Thus, self-validation skills may help these women to become aware of their painful experiences accurately and without judgment, and to normalize their experiences, helping to reduce emotional arousal and dysregulation and increase self-acceptance.

Results

The 72 participants at the beginning of the study were diverse with respect to socioeconomic status and ethnicity. See Table 1 for a complete description of the demographic characteristics of participants.

Participants’ Abuse History

The types and recency of abuse are presented in Table 2.

Treatment satisfaction

Participants’ satisfaction with the treatment program was very high for each component of the program (on a ten-point scale): 1) intake process (M=8.8, SD=1.41), 2) skills learning (M=9.3, SD=0.25), 3) group overall (M=9.5, SD=1.17), 4) treatment assessment (M=9.2, SD=1.34), and 5) group leaders (M=9.8, SD=0.70).

Before conducting data analyses, all variables were examined for skewness and kurtosis and were found to be distributed normally.

Hypothesis 1: the two-day group treatment will increase treatment completion and reduce the dropout rate when compared to the 12-week standard group treatment.

Out of the 72 women who completed the intake session, 47 women (65.3%) completed the two-day program, with completion defined as attending at least 2/3 of the program hours. The dropout rate between the intake session and treatment completion was 34.7% overall. For Hypothesis 1, these numbers were compared to

Table 1: Demographic information (N=72).

Age	N(%)	Race	N (%)	Education	N (%)
≤20	3 (4.2%)	Asian	2 (2.9%)	Less than high school	4 (6.1%)
21-≤30	21 (29.2%)	Caucasian	52 (74.3%)	GED/High grad	15 (23.1%)
31-≤40	22 (30.6%)	Hispanic	10 (15.7%)	Some college	27 (41.5%)
41-≤50	15 (20.8%)	Native American	4 (5.7%)	College grad	12 (18.5%)
51-≤60	11 (15.3%)			Post grad	7 (10.8%)
Annual income	N (%)	Marital status	N (%)	Occupation	N (%)
≤ 5k	32 (46.4%)	Single	38 (53.5%)	Unemployed	28 (40%)
5-≤15k	15 (21.7%)	Married	8 (11.3%)	Professional	10 (15.3%)
15-≤ 25k	7 (10.1%)	Separated	11 (15.5%)	Student	8 (11.4%)
>25k	15 (21.7%)	Divorced	13 (18.3%)	Sales	9 (12.8%)
				Homemaker	3 (4.3%)

those of the participants of the 12-week program from an archival data set (dropout/completion rate). From the archive, we have data for 86 women from the same referral sources who participated in the standard program consecutively, and who participated in the two years just prior to the beginning of the two-day program. There were significant differences between the completion rates of the two-day intervention and the 12-week group treatment program ($\chi^2(1, N=158)=37.61, p<.001, 65.3\%$ vs. 17.4% completion, respectively). Dropout for the 12-week program also defined as attending at least 2/3 of the program hours, for consistency. In addition, there were significant differences between the two groups for “any attendance” in treatment ($\chi^2(1, N=158)=11.05, p<.001, 69.4\%$ vs. 43% , respectively).

Just over one-third (34.7%) of the participants who completed the intake process and committed to participate in the group did not attend at all (30.4%), or started but did not complete (4.3%) the program. In post hoc data analysis, there were no significant differences between those who did and did not participate in (dropped out from) the treatment program on demographic characteristics and abuse experiences on most variables of interest. However, there was one variable that was significantly different between dropouts and completers: participants’ annual income ($F(1, 67)= 8.56, p=.005$). Those who attended reported significantly higher annual income than those who dropped out (\$10,000 vs. \$25,000, respectively).

Hypothesis 2: Participants in the two-day group treatment program will show significant reductions in a variety of problems common to women victims of intimate partner abuse, including depression, anxiety, hopelessness, emotion regulation problems, and will increase, self-compassion, mindfulness, social adjustment, and skill use.

Paired sample t-tests were conducted to examine the changes in the efficacy of the intervention from pre-treatment to the three-month follow-up. See Table 3 for details. There were significant improvements in the scores on all outcomes, including for the BSI (psychological distress), BDI-II (depression), BHS (hopelessness), PTSD severity, self-compassion, emotion regulation, mindfulness, usage of DBT skills, and interpersonal effectiveness. Effect sizes were calculated using Cohen’s *d*, where one of the means from the two distributions is subtracted from the other and the result is divided by the standard deviation [33].

Post-Hoc Analyses

Post hoc analyses were conducted to determine whether earlier factors, such as the length of abuse or type of abuse influenced outcomes. There were no differences on the main outcome variables for length of abuse (categorized due to skewness into three groups: ≤ 5 years; 6-10 years; and >10 years). PTSD severity was the only dependent variable that length of abuse predicted ($F(2,34)= 3.30, p=.049$). However, post hoc analysis showed marginal significance ($p=.055$) between the groups with less than 5 years and 6 to 10 years and no differences among other comparisons. In addition, we tested whether participants who reported physical and sexual abuse (93% of the sample, all of whom also reported co-occurring psychological abuse) showed different improvements compared to the entire sample. Results showed that effect sizes were similar regardless of whether the subset of women who reported no physical or sexual abuse per se (i.e., only psychological abuse) were included.

Table 2: Abuse experiences of participants (N=72).

Abuse type	N (%)	Abuse length	N (%)	Perpetrators	
Physical & psych	24 (33.3%)	≤ 6 months	2 (2.8%)	Current husband	13 (18.1%)
Psychological only	5 (6.9%)	6- ≤ 12 months	2 (2.8%)	Ex-husband	25 (34.7%)
Sexual & psych	4 (5.6%)	1- ≤ 5 years	30 (42.3%)	Ex-boyfriend	31 (43.1%)
All of the above	39 (54.2%)	5- ≤ 10 years	13 (18.3%)		
		>10 years	24 (33.8%)		
Left, when?	N (%)	CTS-2	M (SD)	Range	
≤ 1 month	28 (39.4%)	Total	99.51 (47.62)	39-234	
1month - ≤ 1 year	24 (33.8%)	Physical	30.04 (22.77)	12-72	
1- ≤ 2 years	10 (14.1%)	Psychological	30.81 (12.30)	8-48	
2- ≤ 5 years	5 (7.1%)	Sexual	10.18(11.86)	7-42	
		Injury	11.93 (9.70)	6-36	

Table 3: Means, Standard Deviations, Paired sample t Test results, and Effect Sizes of BSI, BDI-II, BHS, PCL-C, Self-compassion, DERS, FFMQ, WCCL and IIP-25 at Pre-treatment N=72 and three-months follow-up N=37.

	BSI		BDI-II		BHS		PCL-C		Self-compassion	
	M	SD	M	SD	M	SD	M	SD	M	SD
Pre-treatment	91.75	39.17	23.88	10.40	6.59	4.83	50.82	14.87	21.58	10.75
3-months FU	54.99	44.97	13.80	13.61	4.96	4.50	38.17	16.18	39.11	10.69
t (p)	4.50 (.000)		5.15 (.000)		2.13 (.004)		6.02 (.000)		29.20 (.000)	
d	.87		.83		.34		.81		1.63	
	DERS		FFMQ		WCCL		IIP-25			
	M	SD	M	SD	M	SD	M	SD		
Pre-treatment	94.49	18.00	120.99	17.14	1.78	.41	38.40	17.38		
3-months FU	81.01	19.35	132.52	24.51	1.86	.54	28.43	16.83		
t (p)	4.83 (.001)		3.45 (.000)		1.37 (.001)		6.21 (.000)			
d	.72		.54		.16		.58			

Note: BSI=Brief Symptom Inventory, BDI-II=Beck Depression Inventory, BHS=Beck Hopelessness Scale, and PCL-C=Post Traumatic Stress Disorder Checklist-Civilian Version, Self-compassion=The Self Compassion Scale, Difficulties in Emotion Regulation Scale, FFMQ=The Five Facet Mindfulness Questionnaire, WCCL=DBT-Ways of Coping List, IIP-25=Inventory of Interpersonal Problems-25.

Discussion

This study examined the utilization, completion, and effectiveness of a two-day DBT intervention program format for women victims of IPA. To evaluate utilization and completion, the two-day program was compared to a standard 12-week program. The effectiveness of this format was evaluated as an open trial, comparing pre-treatment levels of problems with follow-up scores. The results show that women engaged in and completed this two-day format at significantly higher rates than in the standard 12-week program. Data also showed significant improvements across all variables of interest from pre-treatment to the follow-up period.

Approximately 30% of participants who were eligible for the treatment still did not complete the program in this study, and almost exclusively dropped out between the intake/pre-test and the beginning of treatment all. Interestingly, drop-out prior to treatment was lower for the two-day program than the twelve-week program. This may be due to different wait time (average 3.25 weeks vs. 5.45 weeks, respectively); 2-day program naturally happened more frequently and participants waited shorter time to enter the treatment, which could be a confounding factor. In addition, participating in the two-day program may have been perceived as less stressful, which may have influenced the increased attendance/lower drop-out rate prior to treatment starting.

Post hoc data analyses identified only one factor that may have contributed to drop out: women who dropped out had lower annual income than completers, which suggests that financial instability and its concomitant instrumental implications may interfere with commitment to and participation in the treatment program. This is consistent with the hypothesis suggested above, that negative life event and other chaotic life issues are significant factors for this population. However, future research should examine this factor in more detail, as well as other potential factors influencing dropout, in an effort both to replicate these results and to understand them. Consequently, we could improve interventions to reduce further the barriers to treatment associated with these factors.

Overall, it is clear that the two-day program is significantly better at providing treatment to women in need than the longer, twelve-session program. And, significant improvements were found on all hypothesized outcomes at the follow-up, with effect sizes in the medium to large range. In addition, participants reported very high satisfaction with all aspects of the program. Thus, the only remaining question is whether these outcomes are similar to those from the standard twelve-session program, or if outcomes might be diminished either by the intensive nature of the program or by the lack of time between learning each skill to practice it, before moving on to new skills.

Because there was no opportunity to randomize participants, we elected not to do statistical group outcome comparisons between the two programs. However, a rough evaluation comparing effect sizes between the two programs may be instructive.

Effect sizes at the three months follow-up in this two-day program among completers (N=37) were very similar to the changes in the standard 12-week treatment for completers (N=31, also at 3 months from pretest; provided in Iverson et al.) on depression ($d=.83$ vs. $d=.54$, respectively), hopelessness ($d=.34$ vs. $d=.42$, respectively), BSI ($d=.87$ vs. $d=.78$, respectively) and social adjustment ($d=.58$ vs. $d=.53$, respectively) [13]. Thus, based on a quick cost-benefit analysis of these results, this two-day program helped more participants complete the

program with outcomes very similar to the standard program. This establishes fairly convincingly the feasibility and effectiveness of the two-day intervention, and clearly warrants further study.

There are several limitations of this study that must be acknowledged. First, as noted, there was no randomized control condition. Considering the absence of any standard treatment for this population, a feasible control condition would be either a wait list, individual treatment, or the standard format of the DBT program for women victims of IPA. Because of this population's urgent needs, their high dropout rate while waiting to be treated, costs, and the present focus on feasibility and completion analysis of this new format, we ruled out a randomized wait list as well as these other potential control groups. Given the promising results of this two-day format, future research needs to compare it with a randomized control condition of some kind to rule out a variety of potentially confounding factors such as demographic variables, abuse history, and even the effects of time.

Additional studies need to be conducted to determine whether treatment effects were the result of the targeted treatment components or due to nonspecific factors including therapeutic alliance, group support, or simply the passing of time. Time per se seems unlikely to account for the effects given the long duration of difficulties women reported, plus the very short passage of time in the present intervention and evaluation. In future studies, it is necessary to compare the present program with other interventions in order to isolate the effective treatment components (such as a support group without skills).

Another important limitation is the relatively low participation rate at the follow-up assessment. Although it appears that those who did complete the follow-up assessment are representative at least of the group of treatment completers, and likely the whole sample, the number of missing subjects at that time is still problematic and limits confidence in the follow-up data, requiring replication. It is also a difficult problem to solve. Financial incentives were offered, and may have helped increase participation in that assessment, but not sufficiently. More resources to track participants down and perhaps do home visits, video conference or telephone assessments may be needed to reduce attrition. Because the follow-up is limited to three months, we do not know whether the treatment gains were maintained after three months. Therefore, longer-term follow-up is needed to see if these results hold up over time.

Even though there were statistically significant changes on all measures from the pre-test to the three-month follow up, some participants continued to report distress in the clinical range at the three-month follow up. For those women, longer treatment could be helpful, or possibly treatment with a different focus, or maybe individual or more intensive treatment. Further research needs to determine the optimum length of treatment and whether booster or follow up sessions could be useful. Future studies, with a larger sample, could begin to identify factors that might help determine in advance whether this kind of intervention is more or less likely to be helpful to women victims of IPA.

The present study also has some significant strength. First, the study has high external validity. It was conducted in the community for women with very serious IPA histories, referred from a variety of sources, previously underserved, and representing broad SES and ethnicity ranges. Therapists were at a master's degree level, working in an ordinary DBT outpatient program. Thus, other strength is that

this treatment program very likely could be disseminated relatively easily if future research replicates its effectiveness.

In summary, the results from the present study do provide robust evidence that the two-day intervention decreased dropout rates and increased completion rates overall for women victims of IPA compared to the 12-week format of the program. In addition, the treatment turned out to be very effective overall in decreasing participants' psychological distress and increasing their well-being across a range of relevant outcomes. Therefore, this intervention appears to help remove at least some of the treatment barriers that previously resulted in very low treatment completion, and showed significant benefits for women victims of IPA who need help transitioning from an abusive environment to a safer and psychologically less distressed life following their abuse experiences.

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