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## Meditation and Treatment of Female Trauma Survivors

### INTRODUCTION

Posttraumatic stress disorder (PTSD) became a formal diagnosis included in *DSM-III* only in 1980 on account of the organized efforts of Charles Figley, Chaim Shatan, and other advocate groups for veterans and trauma survivors. Trauma has pervasive and devastating impacts on individuals. Trauma survivors, especially those with prolonged histories of interpersonal abuse, typically suffer from other “co-morbid conditions.” These include, but are not limited to, diagnoses related to substance abuse problems, mood disorders (e.g., depression and manic-depressive disorders), and dissociative identity disorder (Mueser et al., 1998). According to the “self-medication” hypothesis (Khantzian, 1990), people drink to cope with negative emotions and stressors. PTSD clients also have unusually high utilization rates of psychiatric services. Macy (2002) examined records of 384,000 Medicaid recipients in Massachusetts between 1997 and 1998 and reported that PTSD and depression were the most common psychiatric diagnoses among this population. Patients with a PTSD diagnosis spent 10 times as much time in the hospital as patients with a diagnosis of depression only.

While PTSD is being fully recognized now as a mental health condition, helping professionals are still struggling to find viable and evidence-based

treatments for PTSD (Foa, Keane, & Friedman, 2000). Conventional treatment efforts involve mostly cognitive-behavioral therapy, which has received the greatest research attention and support for its efficacy (For detailed reviews please refer to Foa & Meadows, 1997; Rothbaum, Meadows, Resick, & Foy, 2000). Cognitive-behavioral therapeutic interventions include prolonged exposure treatment (Cooper & Clum, 1989; Foa & Rothbaum, 1998; Foa, Rothbaum, Riggs, & Murdock, 1991; Lombardo & Gray, 2005), stress inoculation training (Veronen & Kilpatrick, 1983), cognitive processing therapy (Resick & Schnicke, 1992, 1993), and cognitive therapy (Ehlers & Clark, 2000). While cognitive-behavioral approaches have made significant contributions to treatment with this client population, some evidence suggests that these approaches may not be helpful for PTSD clients with prolonged histories of interpersonal abuse. McDonagh-Coyle et al. (1999) conducted a randomized controlled trial of combined prolonged exposure and cognitive restructuring versus "present-centered therapy" with clients who had PTSD diagnoses. Findings revealed that PTSD subjects with prolonged histories of interpersonal abuse responded adversely to prolonged exposure and cognitive restructuring treatments. Treatment was related to increased severity in PTSD symptoms primarily because of psychophysiological reactivity of clients to trauma memories (McDonagh-Coyle et al., 2001).

Bessel van der Kolk, the Medical Director and Founder of the Trauma Center in Massachusetts, has identified important evidence in neurobiology research that questions the utility of cognitive-behavioral approaches with PTSD clients who have experienced prolonged interpersonal abuse (van der Kolk, 1994; van der Kolk, McFarlane, & Weisaeth., 1996). Research regarding the neurobiology of trauma shows that trauma disrupts the stress-hormone system, influences the entire nervous system, and prevents people from processing and integrating trauma memories into conscious mental frameworks. Because of these complex physiological processes, traumatic memories stay in the brain's "nether regions," the nonverbal, nonconscious, subcortical regions (amygdala, thalamus, hippocampus, hypothalamus, and brain stem) where they are not accessible to the frontal lobes, the understanding, thinking, and reasoning parts of the brain (van der Kolk, 1994). Thus, prolonged exposure and cognitive restructuring approaches may not be helpful and can even be harmful to some trauma survivors because when encouraged to reexperience the trauma (a routine procedure in prolonged exposure), they could be so overwhelmed by intense negative emotions they can no longer consciously process the trauma (Ford & Kidd, 1998; van der Kolk, 2002; van der Kolk & van der Hart, 1991).

Traumas fundamentally disrupt the affect modulation ability of an individual. Severe or extreme distress elicits intense emotions such as fear, anger, and/or pain. PTSD describes the development of a cluster of symptoms

following a psychologically distressing event that is outside the range of usual human experience and is most often experienced with intense fear, terror, and helplessness. The characteristic symptoms as described in *DSM-IV-TR* include: (a) distressing and intrusive thoughts, feelings, and images that recapitulate the traumatic event, (b) psychological and/or physiological reactivity to internal or external cues that symbolize an aspect of the traumatic event, (c) persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness, and (d) persistent symptoms of increased arousal and vigilance (American Psychiatric Association, 2000). These symptoms describe a situation in which the trauma survivor is still living in the past trauma. Psychologically and physiologically, trauma survivors react to present-time experiences with diminished emotion regulating ability—they react as if they are presently experiencing the original trauma/s.

PTSD symptoms can be partly perceived as the consequences of clients being trapped in the past traumas and not able to live in the present. A clinical challenge in treatment is how to enhance clients' capacity to recognize and attend to current experiences as well as to differentiate them from trauma-based emotional and behavioral responses so they can make choices that are responsive and beneficial to their current needs and situations.

#### MEDITATION AND TREATMENT OF TRAUMA SURVIVORS

Meditation is an integral intervention used in Integrative Body–Mind–Spirit Social Work. Through meditation, clients learn to discipline and calm their minds, develop the ability to observe, be openly aware, and attend to emotions, even distressing ones, and accept them for what they are. In doing so, meditation should enhance clients' capacity to develop psychological resources that allow them to increase self-regulation of their emotions in a beneficial way (Linehan, 1993; Martin, 1997). Meditation practice should be helpful for trauma survivors to accomplish the following tasks and goals in treatment:

1. Foster clients' capacity to recognize and attend to current experiences as well as to differentiate them from past traumatic experiences so that clients have increased ability to uncouple current physical/psychological sensations from trauma-based emotional and behavioral responses.
2. Enhance clients' ability to stay physiologically calm, which constitutes a necessary condition for clients to engage beneficially in treatment and assists them in processing and integrating their trauma experiences.
3. Enhance clients' self-regulating abilities so they make choices that are responsive and beneficial to their current needs and situations.

## METHODS

This study used an experimental design to examine the feasibility of using meditation as an intervention for treating trauma survivors. The study tested the following hypotheses: (1) A 6-week meditation curriculum will be effective in reducing PTSD symptoms of research participants, (2) A 6-week meditation curriculum will be effective in increasing positive emotions in research participants, (3) A 6-week meditation curriculum will be effective in improving emotion regulation abilities of research participants, and (4) A 6-week meditation curriculum will be effective in increasing a mindful state in research participants.

The development of the study framework is guided by the existing literature on the physiological impact of meditation (Lazar et al., 2000); self-determination theory, postulated by Deci and Ryan, that examines the importance of self-awareness to facilitate positive self-regulative behaviors for individual well-being (Deci & Ryan, 1980; Ryan & Deci, 2000); and a systems perspective that describes how the self-regulation process occurs through the operation of feedback mechanisms (Bateson, 1972, 1979; Becvar & Becvar, 2003). Figure 14.1 illustrates the framework of the study.

## Treatment Conditions

Treatment conditions consisted of a 6-week meditation curriculum with the first 2 weeks devoted to Breathing Meditation, the second 2 weeks to Nying-je (Loving kindness meditation), and the final 2 weeks to Tonglen (Compassion meditation). Breathing meditation focuses on training for mindfulness and calmness, while Loving kindness meditation and Compassion meditation teach empathy skills in terms of sensitivity to one's own affect and sensitivity

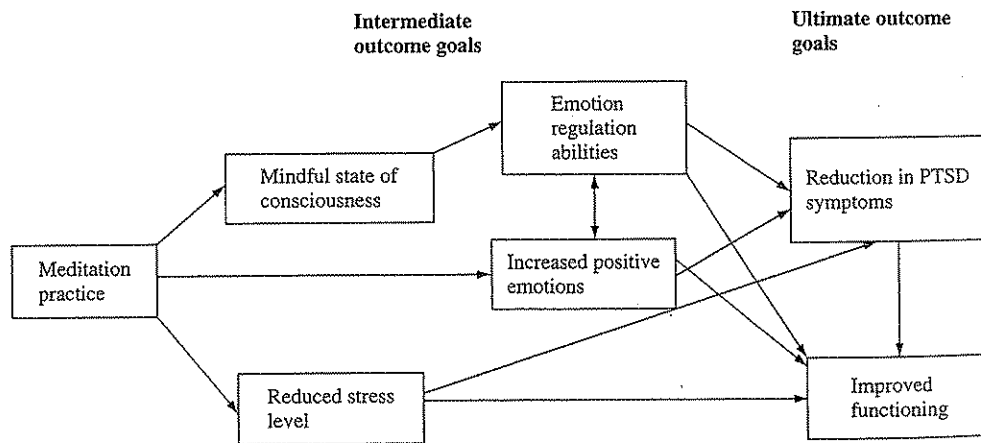


FIGURE 14.1. Framework of the study.

to another's affect and teach development of compassion for oneself and others (please refer to Chapter 5 for a detailed description of the meditation practice). The meditation class met twice every day for 1 hr, 5 days a week, consecutively for 6 weeks for a total of 60 hr. Geshe Kalsang Damdul, Assistant Director of the Institute of Buddhist Dialectics in Dharamsala, India (which is under the direct administration of His Holiness the Dalai Lama), assisted in developing the meditation curriculum and provided the meditation instruction.

### Research Participants

The meditation class was conducted between October 8 and November 16, 2007. Seventeen clients participated in the meditation group and 15 clients in the comparison group. Research participants were clients at a substance abuse treatment and housing program for homeless women and their children in a Midwestern cosmopolitan city. All clients have experienced different types of traumas and interpersonal abuses in addition to their alcohol use disorders. Participation in the study was voluntary and formal consent was obtained from all participants. Clients who consented to participate in the study were randomly assigned to the meditation or the comparison group. Researchers consulted with agency staff regarding the appropriateness of the assignment. The assignment of four clients was changed from the meditation group to control group because of scheduling problems, and another four clients were changed from the control group to the meditation group because agency staff expressed concerns regarding therapeutic benefits. Residents with comorbid conditions of schizophrenia and severe depression or who were actively suicidal were excluded from participation. This exclusion is based on literature that shows meditation can be counter-therapeutic for these clients. The Institutional Review Board at The Ohio State University reviewed and approved the study.

Data analyses were based on 17 participants in the meditation group and 15 participants in the comparison group. All participants were female. The age of the program participants ranged from 22 to 56 years (mean = 40.5, SD = 7.9). Program participants were predominantly Caucasian (59.4 percent) with 40.6 percent African Americans. Participants had attained an average of 12.6 years of education (SD = 1.5; range = 9–19). Regarding the marital status of program participants, 50 percent were never married, 3.1 percent married, 12.5 percent separated, 31.3 percent divorced, and 3.1 percent widowed. The majority of participants were unemployed (78.1 percent), only 3.1 percent were employed on a part-time basis, 12.5 percent were students and 6.3 percent identified themselves as disabled. There were no significant differences between the two groups on demographic characteristics including age, educational attainment, employment, and marital status.

TABLE 14-1. Participants' Demographic Information

	Mediation Group (N = 17)		%	Comparison Group (N = 15)		%	t	$\chi^2$
	N	MEAN (SD)		N	MEAN (SD)			
Age (years)	17	39.4 (8.5)	-	15	41.3 (7.3)	-	.69	-
Employment								1.2
Employed Part-time	0		0	1		6.7	-	-
Unemployed	14		82.4	11		73.3	-	-
Student	2		11.8	2		13.3	-	-
Disabled	1		5.9	1		6.7	-	-
Education								8.0
Some High School	0	-	0	3	-	20	-	-
High School Grad.	2	-	11.8	4	-	26.7	-	-
Some College	11	-	64.7	8	-	53.3	-	-
College Graduate	2	-	11.8	0	-	0	-	-
Graduate work	2	-	11.8	0	-	0	-	-
Ethnicity								7.9**
White American	14	-	82.4	5	-	33.3	-	-
African American	3	-	17.6	10	-	66.6	-	-
Marital status								3.5
Never married	9	-	52.9	7	-	46.7	-	-
Married	0	-	0	1	-	6.7	-	-
Separated	1	-	5.9	3	-	20.0	-	-
Divorced	6	-	35.3	4	-	26.7	-	-
Widowed	1	-	5.9	0	-	0	-	-

Note: \*  $p \leq .05$ , \*\*  $p \leq .01$ .

However, there was significant difference between the two groups in terms of their ethnicity. In the meditation group, 82.4 percent were white and 17.6 percent African Americans; in the control group, 66.3 percent of participants were African American. (Table 14-1).

The study also collected information regarding participants' childhood and trauma-related experiences. Of the participants, 40.6 percent experienced parental divorce or separation, 71.9 percent were children of alcoholics, and 50 percent had witnessed domestic violence between parents. Regarding their trauma-related experiences, 87.5 percent had experienced physical abuse (56.5 percent happened in childhood, 13.0 percent in teenage, and 30.4 percent adulthood), 78.1 percent had experienced sexual abuse (72.0 percent happened in childhood, 8.0 percent in teenage, and 20.0 percent adulthood), and 87.5 percent had experienced emotional abuse (67.9 percent happened in childhood, 17.9 percent in teenage, and 14.3 percent adulthood). There were no significant differences between the two groups on their childhood

and trauma-related experiences, including parental divorce; parental violence; family alcoholism; and physical, sexual, and/or emotional abuses.

#### Method of Data Collection

Assessment of participants' PTSD symptoms, state of mindfulness, positive emotions, and emotion regulation abilities were made at pre-treatment and post-treatment. The following instruments were used for data collection.

**Modified PTSD Symptom Scale (MPSS).** MPSS is a 17-item instrument developed by Falsetti and her associates (Falsetti, Resnick, Resick & Kilpatrick, 1993) to measure the frequency and severity of current PTSD symptoms occurring during the past 2 weeks in respondents. MPSS has three subscales: Reexperiencing Subscale (items 1,2,3,4,17), Avoidance/numbing Subscale (items 5–11), and Arousal Subscale (items 12–16). Because the items correspond directly to DSM-IV PTSD symptoms, MPSS can be scored dichotomously to determine if diagnostic criteria for PTSD are met (Falsetti, 1997). MPSS has demonstrated excellent reliability and validity (Falsetti, 1997; Falsetti, Resnick, Resick & Kilpatrick, 1992; Wilson & Keane, 1997).

**Structured Interview for Disorders of Extreme Distress (SIDES).** SIDES is a 45-item instrument developed by Pelcovitz et al. (1997) to assess respondents' past and current functioning in six domains of (1) disorders of affect regulation, (2) amnesia and dissociation, (3) somatization, (4) disruptions in self-perception, (5) disorders in relationships with others, and (6) disrupted systems of meaning. These six domains are represented in the DSM-IV under Associated Features of PTSD and describe the areas of impairment of the Disorders of Extreme Stress construct (Luxenberg, Spinazzola, & van der Kolk, 2001). SIDES has demonstrated good reliability and validity (Pelcovitz et al., 1997). Research supports the construct validity of SIDES; the instrument discriminated individuals with histories of PTSD from individuals with no history of PTSD (van der Kolk et al., 1996), and rape victims with chronic PTSD from anxiety disorders or depressed controls (Spinazzola et al., 1994). This study used the self-report version of SIDES that has excellent full-scale internal consistency (Cronbach's  $\alpha = .93$ ).

**The Intensity and Time Affect Survey (ITAS).** ITAS is a 24-item survey developed by Lucas, Diener, and Larsen (2003) to measure the frequency of 24 emotional experiences based on respondents' self-reports. Respondents are asked to rate the intensity and frequency of the measured emotions on a seven-point Likert-type scale from 1-(Never); 4-(About half of the time); to 7-(Always). The Overall Positive Emotions Scale is comprised of the Love Subscale and the Joy Subscale. The scores of Overall Positive Emotions Scale range from 8 to 56 with a higher score indicating increased positive emotions experienced by respondents.

**Mindfulness Attention Awareness Scale (MAAS).** MAAS is a 15-item questionnaire developed by Brown and Ryan (2003) to measure the level of mindfulness of respondents. The items are distributed across cognitive, emotional, physical, interpersonal, and general domains. Respondents rate how frequently they have the experience described in each statement using a 6-point Likert scale where higher scores reflect higher levels of mindfulness. Brown and Ryan (2003) reported evidence for the psychometric adequacy and validity of MAAS through exploratory factor analysis and confirmatory factor analysis. Cronbach's alpha of MAAS with seven populations ranged from 0.80 to 0.87. The test-retest reliability coefficients for the stability of the MAAS over a 4-week period was .81.

## DATA ANALYSES

The study used a series of paired-sample *t*-tests to compare the pre-treatment and post-treatment measures of the assessment instruments regarding research participants' PTSD symptom severity, emotional experiences, and mindful states of consciousness. The study used repeated measures of analysis of variance to assess the "within subjects" changes during the two assessments.

### Results

Findings of this study provided initial empirical evidence of the positive impact of the meditation curriculum on clients' mental health outcomes. Findings based on paired sample *t*-test showed significant reduction in overall PTSD symptoms from pre-treatment to post-treatment [ $t = 3.17$ ,  $df = 14$ ,  $p < .01$ ], in particular in avoidance symptoms [ $t = 3.31$ ,  $df = 14$ ,  $p < .01$ ] and hyperarousal symptoms [ $t = 2.82$ ,  $df =$ ,  $p < .05$ ] in clients who had attended the meditation curriculum. In addition, there were significant increases in positive emotions including love [ $t = - 2.61$ ,  $df = 16$ ,  $p < .01$ ] and joy [ $t = - 4.55$ ,  $df = 16$ ,  $p < .05$ ]; significant reduction in negative emotions of fear [ $t = 2.38$ ,  $df = 16$ ,  $p < .05$ ], shame [ $t = 2.33$ ,  $df = 16$ ,  $p < .05$ ], and sadness [ $t = 2.61$ ,  $df = 16$ ,  $p < .05$ ]; significant increase in mindfulness [ $t = - 2.04$ ,  $df = 16$ ,  $p < .05$ ]; and significant decrease in affect dysregulation [ $t = 2.46$ ,  $df = 16$ ,  $p < .05$ ] among clients in the meditation group from pre-treatment to post-treatment (Table 14-2). Nonsignificant changes in all evaluated dimensions were observed among clients in the control group (Table 14-3).

TABLE 14-2. Paired-Sample *t*-tests at Pre-Treatment and Post-Treatment: Meditation Group (*N* = 17)

	PRE-TREATMENT	POST-TREATMENT	<i>t</i>	<i>df</i>	<i>p</i>
<i>PTSD Symptoms: MPSS</i>					
Total Score	50.58 (SD = 29.61)	25.67 (SD = 22.48)	3.17	14	.007
Intrusion subscale	13.08 (SD = 9.12)	8.07 (SD = 6.69)	1.90	14	.079
Avoidance/Numbing subscale	22.79 (SD = 13.39)	10.73 (SD = 10.63)	3.31	14	.005
Hyperarousal subscale	13.90 (SD = 9.33)	6.87 (SD = 7.07)	2.82	14	.014
<i>Positive Emotion: ITAS</i>					
Total	65.55 (SD = 17.19)	78.12 (SD = 16.27)	-3.75	16	.002
Love subscale	34.24 (SD = 8.25)	39.18 (SD = 8.59)	-2.61	16	.019
Joy subscale	30.29 (SD = 9.57)	38.94 (SD = 8.37)	-4.55	16	.000
Fear subscale	33.82 (SD = 10.90)	27.41 (SD = 9.22)	2.38	16	.030
Anger subscale	28.18 (SD = 11.06)	25.94 (SD = 9.88)	.82	16	.423
Shame subscale	34.24 (SD = 9.31)	27.37 (SD = 11.97)	2.33	16	.033
Sad subscale	34.53 (SD = 11.21)	26.41 (SD = 8.97)	2.61	16	.019
<i>Mindfulness: MAAS</i>					
MAAS	57.29 (SD = 10.23)	62.53 (SD = 8.22)	-2.04	16	.050
<i>Emotional Regulation: SIDES</i>					
Disorders of Affect Regulation subscale	.83 (SD = .58)	.36 (SD = .57)	2.46	16	.026

The study used repeated measures of analysis of variance to assess the "within subjects" changes during the two assessments. Figures 14.2 to 14.5 show the comparisons between the pre-treatment and post-treatment scores of the outcome measures of MPSS, ITAS, MAAC, and SIDES between the meditation and the control groups. Findings indicate there are significant Time  $\times$  Group interaction effects in MPSS Total Score [ $F_{(1, 25)} = 4.73$ ,  $p = .039$ ], MPSS Avoidance Subscale [ $F_{(1, 25)} = 4.12$ ,  $p = .05$ ],

TABLE 14-3. Paired-Sample *t*-Tests at Pre-Treatment and Post-Treatment: Comparison Group (*N* = 15)

	PRE-TREATMENT	POST-TREATMENT	<i>t</i>	<i>df</i>	<i>p</i>
<i>PTSD Symptoms: MPSS</i>					
Total score	35.51 (SD = 22.74)	32.96 (SD = 20.21)	.43	11	.675
Intrusion subscale	12.33 (SD = 8.50)	11.81 (SD = 6.01)	.18	11	.861
Avoidance/Numbing subscale	14.00 (SD = 11.50)	11.08 (SD = 9.11)	1.38	11	.195
Hyperarousal subscale	8.90 (SD = 6.13)	10.03 (SD = 7.07)	-.51	11	.618
<i>Positive Emotion: ITAS</i>					
Total	80.62 (SD = 16.02)	82.00 (SD = 13.45)	-.43	13	.672
Love subscale	41.14 (SD = 8.76)	42.29 (SD = 6.91)	-.72	13	.484
Joy subscale	39.52 (SD = 8.00)	39.71 (SD = 7.47)	-.11	13	.917
Fear subscale	29.71 (SD = 12.00)	31.21 (SD = 12.77)	-.49	13	.634
And subscale	25.88 (SD = 12.36)	27.71 (SD = 12.60)	-.78	13	.450
Shame subscale	29.57 (SD = 11.89)	29.14 (SD = 11.97)	-.22	13	.832
Sad subscale	30.29 (SD = 14.75)	28.07 (SD = 12.76)	-.66	13	.518
<i>Mindfulness: MAAS</i>					
MAAS	51.57 (SD = 16.89)	51.86 (SD = 12.85)	-.093	13	.927
<i>Emotional Regulation: SIDES</i>					
Disorders of Affect Regulation subscale	.24 (SD = .31)	.52 (SD = .80)	-1.20	14	.249

and MPSS Hyperarousal Subscale [ $F_{(1, 25)} = 5.68, p = .025$ ]; ITAS Positive Emotion Score [ $F_{(1, 29)} = 6.11, p = .020$ ], ITAS Joy Subscale [ $F_{(1, 29)} = 10.12, p = .003$ ]; and SIDES Disorders of affect regulation Subscale [ $F_{(1, 30)} = 6.29, p = .018$ ]. Positive changes in the meditation group from pre-treatment to post-treatment were significantly greater than the changes observed in the comparison group.

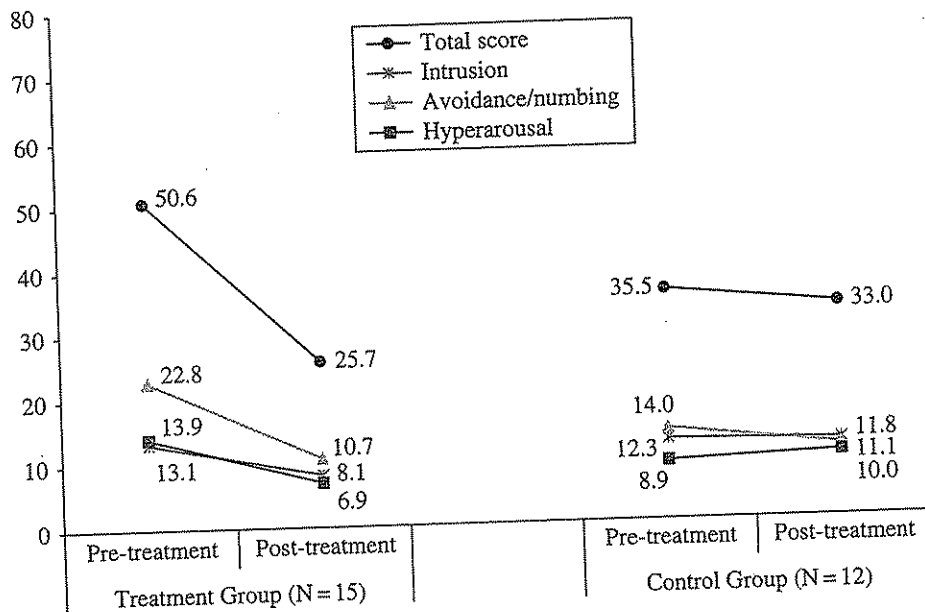


FIGURE 14.2. Paired-sample *t*-tests at pre-treatment and post-treatment: MPSS.

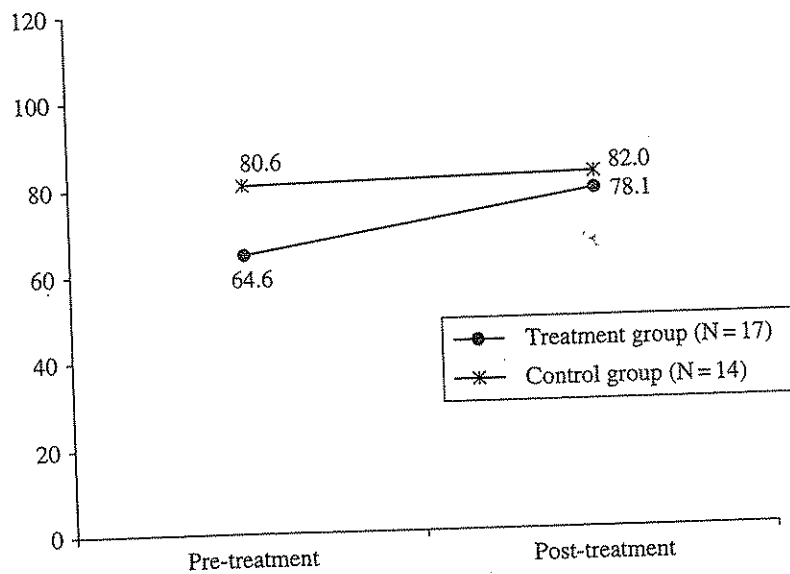


FIGURE 14.3. Paired-sample *t*-tests at pre-treatment and post-treatment: positive emotions ITAS.

DISCUSSION

Findings of this study provided initial empirical evidence of the positive impact of meditation on clients' mental health outcomes. Findings showed a significant reduction in overall PTSD symptoms, in particular in avoidance and hyperarousal symptoms from pre-treatment to post-treatment in clients who had attended the meditation classes. In addition, there were significant

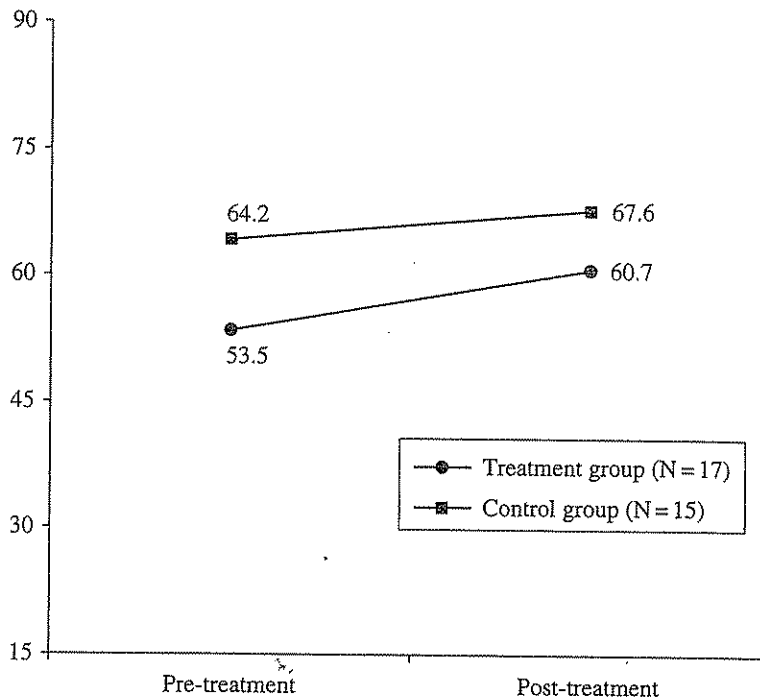


FIGURE 14.4. Paired-sample *t*-tests at pre-treatment and post-treatment: mindfulness MAAS.

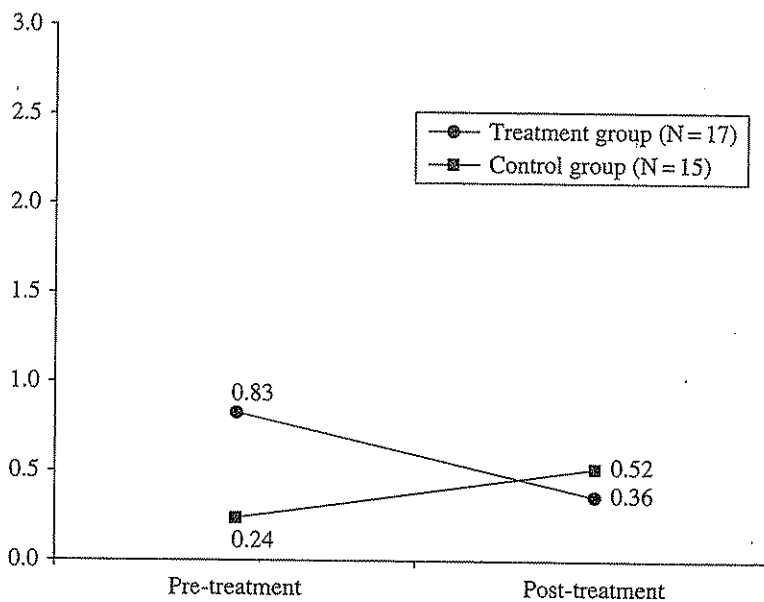


FIGURE 14.5. Paired-sample *t*-tests at pre-treatment and post-treatment: disorder of affect regulation, SIDES.

increases in positive emotions including love and joy; significant reduction in negative emotions of fear, shame, and sadness; significant increase in mindfulness; and significant decrease in affect dysregulation among clients in the meditation group from pre-treatment to post-treatment. Findings also indicated that there were significant Time  $\times$  Group interaction effects in PTSD symptoms, positive emotions, and emotion regulation abilities with positive changes in the meditation group from pre-treatment to post-treatment were significantly greater than the changes observed in the control group.

Limitations of the study need to be acknowledged. First, the sample size was relatively small. Second, there were no significant differences between the meditation and the comparison group on demographic characteristics including age, educational attainment, employment, and marital status, as well as childhood and trauma-related experiences including parental divorce, parental violence, family alcoholism, physical, sexual, and/or emotional abuses. However, there were significantly more African American clients in the comparison group than the meditation group. Regarding the studied variables, there were no significant differences in the two groups on PTSD symptoms at *pre-treatment*, but there were significant differences between the two groups regarding their emotional states, emotional dysregulation, and state of mindfulness. Clients in the meditation group were significantly less mindful [53.53 vs. 64.20,  $t = -2.29$ ,  $df = 30$ ,  $p < .05$ ], had less positive emotion [64.55 vs. 80.85,  $t = -2.80$ ,  $df = 30$ ,  $p < .01$ ], and more severe emotional dysregulation [1.31 vs. .33,  $t = 4.14$ ,  $df = 30$ ,  $p < .001$ ] than clients in the comparison group. In other words, clients in the meditation group were worse off than clients in the comparison group at pre-treatment. Findings of the study showed significant improvement of the meditation group on all studied variables at *post-treatment*. However, there was no significant difference in the post-treatment scores between the two groups, due to the different levels of pre-treatment scores. Finally, while there were no drop-outs from the meditation and control group from pre-treatment to post-treatment, findings might still be influenced by the problem of measurement attrition as we did not have complete data from clients on all measurements at pre-treatment and post-treatment (Fraser, 2004).

Findings of the study provided initial empirical evidence of the feasibility of meditation as an intervention. Future research using a more rigorous and robust research design is needed to establish the effectiveness of meditation as an intervention. Specific recommendations for the future large scale effectiveness study include: (1) the use a larger sample size; (2) the use of more rigorous, randomized assignment procedures; (3) the use of observation-based rating systems for data collection where appropriate, (4) the development of a treatment manual for training purposes and fidelity analyses, and (5) the inclusion of research sites that serve diverse PTSD client populations.

## CONCLUSION

Trauma has pervasive and devastating impacts on individuals. Many trauma survivors use mind-altering substances to numb their feelings, calm their anxiety, and cope with their depression. The biggest challenge for trauma survivors is learning how to live beneficially in the present and not under the shadow of trauma. While cognitive-behavioral approaches have made significant contributions to advancing treatment with trauma survivors (Rothbaum et al., 2000), there are particular concerns for trauma survivors with prolonged histories of interpersonal abuse who respond negatively to prolonged exposure and cognitive restructuring treatments. When clients cannot stay psychologically and physiologically calm to beneficially process and integrate their trauma experiences in treatment, exposure or cognitive structure techniques might bring harm instead of help. Clinical challenges encountered by trauma survivors revolve primarily around recognizing and differentiating current emotional experiences and physical cues from trauma-based responses as well as learning how to regulate emotions and behaviors that allow beneficial fulfillment of needs and goals as defined by *current* life context and not past trauma.

From an Integrative Body–Mind–Spirit Social Work perspective, meditation utilizes the power of mind in a nonconventional manner and provides a different and complementary “technology” in conceptualizing and providing treatment to trauma survivors. Meditation initiates cognitive change at the meta-cognitive level. Instead of focusing on the rational and conscious mind and directly addressing and focusing on the “content” of trauma, meditation trains individuals to “discipline” their mind, that is, changing one’s relationship to thoughts, without directly focusing on the problems (Marlatt et al., 2004). By training clients to attend to the present, by enhancing clients’ ability to stay physiologically calm, and by increasing positive emotions, meditation practice allows clients to unfold their internal and personal resources and strengths to address the problems of trauma. If meditation practice proves effective in enhancing clients’ capacity to attend to the present, to stay calm, and to better regulate their emotions and behaviors based on current life demands and needs, clients will have a better chance to benefit from treatment and integrate their trauma experience. Effective treatment of PTSD clients with prolonged history of interpersonal abuse should also reduce their need for psychiatric services.

One major significant, potential contribution of meditation is the way meditation practice empowers trauma clients in the process of recovery. Meditation is, in itself, a low-cost, nonintrusive, and empowering intervention. Clients can practice meditation on a regular basis individually once they learn how to do it and if they find it beneficial. Meditation can be practiced any time,

anywhere, and is not dependent on costly medication, equipment, facilities, or professional assistance. Meditation does not even require the client to share their trauma experiences as it is a private, internal practice. The focus is on facilitating clients' ability to unfold their internal and personal resources and strengths in addressing the problems of trauma. Meditation could be a complementary and empowering treatment approach for helping trauma survivors in their recovery process.