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Intensive Mindfulness Training and the Reduction of Psychological Distress: A Preliminary Study

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There is increasing evidence for the utility of mindfulness training as a clinical intervention. Most of this research has examined secular-based mindfulness instruction. The current study examined the effects of a 10-day Buddhist mindfulness meditation course on the psychological symptoms of 53 participants. A repeated-measures analysis of variance indicated reductions in overall psychological distress from the pre-course baseline to a 3-month follow-up. Correlation analyses indicated that the reported reduction in psychological distress was not influenced by social desirability bias and that the effect was not dependent on daily meditation between course completion and follow-up. Issues regarding modality of mindfulness training (secular versus Buddhist) are discussed.

Clinical researchers have shown increasing interest in mindfulness meditation as an intervention (Marlatt, 2002; Robins, 2002; Salmon et al., 2004; Toneatto, 2002). Mindfulness (also known as insight or *vipassana* meditation; Rosenberg, 1998) has been most developed in Buddhism (Hahn, 1999) and can be defined as a state of "awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003, p. 145). Thus, the goal of mindfulness is not to change the content of thoughts, as in cognitive therapy, but to develop a different attitude or relationship to thoughts as they occur (Bishop et al., 2004). Kabat-Zinn (2003) notes that all humans have access to this state and that it can be cultivated through practice. A growing number of studies indicate that the cultivation of mindfulness may have beneficial effects on psychological and physical well-being (Baer, 2003; Grossman, Niemann, Schmidt, & Walach, 2004).

The increasing interest in mindfulness has raised the issue of how to best teach it (Hayes & Shenk, 2004). One way that training modalities can be differentiated is by whether they are presented in a Buddhist or secularized context (Dimidjian & Linehan, 2003).[1] One fundamental way in which Buddhist and secular contexts differ regards the ultimate goal of training. When asked to summarize his teachings in one sentence, the Buddha stated that "Nothing is to be clung to as I, me, or mine" (cited in Kabat-Zinn, 2005, p. 53). This goal of realizing the impermanence of self in the Buddhist context contrasts with the goal of realizing the impermanence of thoughts and emotions related to the self (e.g., "I am worthless") in the secular context. A second way that the contexts differ is that Buddhist mindfulness training typically involves intensive retreats (for a history of this practice, see Armstrong, 2001). Though secular and Buddhist contexts may differ on these and other dimensions, there is evidence that both types of training may reduce psychological symptoms.

The majority of mindfulness research has been conducted with secular programs. Most of this research has utilized a variant of Kabat-Zinn's (1990) Mindfulness-Based Stress Reduction (MBSR) program, which typically consists of an 8-week course meeting once per week for 2 to 3 hours, daily mindfulness homework, and a 6-to-8-hour meditation retreat toward the end of the course. Two recent meta-analyses of over 20 primarily MBSR-influenced treatment studies found that interventions led to reductions in anxiety, depression relapse, and ratings of chronic pain (Baer, 2003; Grossman et al., 2004).

Although sparse, a few studies have examined the relation between Buddhist mindfulness training and

[1] When the term "Buddhist context" is used in this paper, it will refer primarily to the Theravadan tradition of Buddhism as the courses were taught from this perspective. Theravadan Buddhism can be distinguished from other Buddhist traditions in the emphasis it places on the practice of *vipassana* (mindfulness) meditation and in its lack of metaphysical theories and magical practices that can be found in other forms of Buddhism (Basham, 1972).

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psychological outcomes. Cross-sectional research has found that experienced *vipassana* meditators (3 or more years of experience) reported more positive relative to negative affect than beginning meditators (Easterlin & Cardeña, 1998). Similar effects have been found in experimental research. One study found that immediately after a 10-day *vipassana* retreat, meditators reported less anxiety and depression than did those in a nonmatched control group (Al-Hussaini et al., 2001). Two unpublished studies examining the effect of a 10-day *vipassana* retreat on prisoners in India also found beneficial effects on psychological symptoms (Chandiramani, Verma, & Dhar, 1995). Bowen et al. (in press) recently examined the effects of a 10-day *vipassana* retreat on the substance use of an incarcerated sample. The results indicated that at a 3-month (after jail release) follow-up, meditators demonstrated reductions in psychological symptoms and alcohol and drug use.

In sum, there is a growing literature on the effects of mindfulness interventions on psychological distress. Because the majority of this research has been conducted with secular mindfulness training programs, it is unclear whether other modalities for teaching mindfulness may be useful. Findings from a small number of studies suggest that Buddhist mindfulness training may have beneficial effects on psychological symptoms, but the paucity of this research and the general lack of follow-up assessment indicate a need for more such studies.

Overview of the Current Study

The current study was designed to assess changes in psychological distress following participation in an intensive 10-day *vipassana* meditation course. Positive findings in this study would suggest both the utility of teaching mindfulness in a Buddhist context and avenues for future research. To accomplish this aim, a sample of meditation participants completed assessment packets before a course and at a 3-month follow-up. The primary hypothesis was that participants would report reductions in psychological distress at follow-up; the secondary hypothesis was that frequency of meditation between the course and follow-up would be correlated with greater reductions in psychological distress.

Method

Participants

Participants were recruited from four *vipassana* centers associated with S. N. Goenka's *vipassana* training program (see Hart, 1987). Of the 128 participants who completed the baseline measures, 98 provided locator information for the follow-up assessment and 53 completed the measures at the follow-up. Of the 53 (26 females) completers, mean participant age was 40.40 years old (SD = 11.46). Four participants did not report age. The majority self-identified as European American (n = 40), with the rest self-identifying as Asian American (n = 6), Multi-ethnic (n = 3), Asian Indian–American (n = 1), and African American (n = 1). Two participants did not report race.

Measures

Psychological distress. The Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983), a 53-item measure of symptoms over the past 2 weeks, uses a Likert scale ranging from 0 (*not at all*) to 4 (*extremely*). The BSI can be scored both as an overall index of psychological distress and as nine scales that assess specific areas of distress. The BSI has demonstrated adequate psychometric properties (Boulet & Boss, 1991; Derogatis & Melisaratos, 1983).

The General Severity Index reflects overall distress and demonstrated adequate internal reliability in this sample (coefficient alpha = .95). The nine individual scales and their internal reliability follow: (a) the Somatization Scale reflects distressful reactions to perceived bodily dysfunction (coefficient alpha = .69); (b) the Obsessive-Compulsive Scale reflects distressful reactions to unwanted thoughts and actions (coefficient alpha = .78); (c) the Interpersonal Sensitivity Scale reflects feelings of self-inadequacy (coefficient alpha = .86); (d) the Depression Scale reflects depressive affect (coefficient alpha = .85); (e) the Anxiety Scale reflects anxious affect (coefficient alpha = .69); (f) the Hostility Scale reflects hostile thoughts, feelings, and behaviors (coefficient alpha = .62); (g) the Phobic Anxiety Scale reflects fear responses to particular stimuli (coefficient alpha = .60); (h) the Paranoid Ideation Scale reflects symptoms of projection, hostility, suspiciousness, and fear of loss of autonomy (coefficient alpha = .76); and (i) the Psychoticism Scale reflects symptoms ranging from feeling alienated to experiencing delusions (coefficient alpha = .68).

Social desirability. Reynolds (1982) developed a short form of the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) consisting of 13 true–false items to assess individual differences in response biases to obtain social approval. The short form (Form C) has demonstrated good psychometric properties (Reynolds, 1982) and adequate internal reliability (coefficient alpha = .74) in our sample.

Meditation frequency. Frequency of meditation between the retreat and the 3-month follow-up was assessed with the item "I meditate on a daily basis." This question was presented via a Likert scale (1 = *strongly disagree* to 5 = *strongly agree*).

Mindfulness retreat experience. Past experience with *vipassana* meditation was assessed with an open-ended question regarding the number of previous retreats attended.

Procedure. We contacted four *vipassana* centers so that the retreat structure could be standardize (e.g., time of waking, meditation practice, videotaped lectures). Each