

## Combining Mindfulness Meditation with Cognitive-Behavior Therapy for Insomnia: A Treatment-Development Study

Jason C. Ong, Stanford University Medical Center

Shauna L. Shapiro, Santa Clara University

Rachel Manber, Stanford University Medical Center

This treatment-development study is a Stage I evaluation of an intervention that combines mindfulness meditation with cognitive-behavior therapy for insomnia (CBT-I). Thirty adults who met research diagnostic criteria for Psychophysiological Insomnia (Edinger et al., 2004) participated in a 6-week, multi-component group intervention using mindfulness meditation, sleep restriction, stimulus control, sleep education, and sleep hygiene. Sleep diaries and self-reported pre-sleep arousal were assessed weekly while secondary measures of insomnia severity, arousal, mindfulness skills, and daytime functioning were assessed at pre-treatment and post-treatment. Data collected on recruitment, retention, compliance, and satisfaction indicate that the treatment protocol is feasible to deliver and is acceptable for individuals seeking treatment for insomnia. The overall patterns of change with treatment demonstrated statistically and clinically significant improvements in several nighttime

symptoms of insomnia as well as statistically significant reductions in pre-sleep arousal, sleep effort, and dysfunctional sleep-related cognitions. In addition, a significant correlation was found between the number of meditation sessions and changes on a trait measure of arousal. Together, the findings indicate that mindfulness meditation can be combined with CBT-I and this integrated intervention is associated with reductions in both sleep and sleep-related arousal. Further testing of this intervention using randomized controlled trials is warranted to evaluate the efficacy of the intervention for this population and the specific effects of each component on sleep and both psychological and physiological arousal.

Jason C. Ong, Department of Psychiatry and Behavioral Sciences, Stanford University Medical Center; Shauna L. Shapiro, Department of Counseling Psychology, Santa Clara University; Rachel Manber, Department of Psychiatry and Behavioral Sciences, Stanford University Medical Center.

This project was supported in part by a National Institutes of Health, National Research Service Award (MH19938) awarded to the first author. Portions of the data from this study were presented at the 2006 meeting for the Associated Professional Sleep Societies in Salt Lake City, UT. The authors would like to thank Dr. Allison Harvey for providing consultation on this project and to Dr. Richard Bootzin for allowing us to review a treatment manual that served as a model for this intervention. The authors are also grateful to Jennalee Cord for providing assistance with data management during this study.

Address correspondence to Jason C. Ong, Department of Psychiatry and Behavioral Sciences, 401 Quarry Road, Suite 3301, Stanford, CA, 94305–5730, USA; e-mail: [jcong@stanford.edu](mailto:jcong@stanford.edu).

0005-7894/07/171–182\$1.00/0

© 2007 Association for Behavioral and Cognitive Therapies. Published by Elsevier Ltd. All rights reserved.

INSOMNIA IS A HIGHLY prevalent problem with an estimated 10 percent of the general population experiencing both nighttime and daytime symptoms that would qualify for a diagnosis of insomnia (National Institutes of Health State of the Science Conference Statement, 2005). The current standard for non-pharmacological treatments of insomnia is a multi-component cognitive-behavior therapy for insomnia (CBT-I) which typically consists of one or more behavioral components such as sleep restriction, stimulus control, or relaxation training along with a cognitive component such as sleep education or cognitive restructuring (Morin, Bastien, & Savard, 2003). Treatment outcome studies have found that CBT-I is efficacious in reducing sleep onset latency (SOL) and wake time after sleep onset (WASO) and improving sleep efficiency (Edinger, Wohlgemuth, Radtke, Marsh, & Quillian, 2001a; Jacobs, Pace-Schott, Stickgold, & Otto, 2004; Morin, Colecchi, Stone, Sood, & Brink, 1999; Sivertsen et al., 2006). While these findings indicate the benefits of CBT-I on

sleep parameters, the impact of CBT-I on other domains related to sleep, such as quality of life, daytime functioning, and sleep-related arousal are less clear.

One domain that merits further attention in insomnia treatment studies is sleep-related arousal. Although elevations in arousal have been identified as a contributing factor in the development and maintenance of insomnia, there is no consensus definition on this construct. Studies investigating psychological aspects of sleep-related arousal have found that people with insomnia report higher levels of pre-sleep rumination (Nicassio, Mendlowitz, Fussell, & Petras, 1985) and a more negative tone of sleep-related cognitions (Kuisk, Bertelson, & Walsh, 1989) relative to good sleepers. It has also been hypothesized that CBT-I reduces sleep-related arousal by changing maladaptive beliefs and attitudes that are believed to maintain the arousal (Morin, 1993). Collectively, the level of pre-sleep cognitive activity, the tone of these cognitions, and the content of these thoughts (e.g., beliefs and attitudes) might all represent aspects of sleep-related arousal. Therefore, there is a need for studies to include different measures to assess changes in arousal associated with treatment.

An intriguing mind-body intervention that appears to be particularly relevant for reducing cognitive and somatic arousal is a short-term group treatment program known as mindfulness-based stress reduction (MBSR). Originally developed by Jon Kabat-Zinn (1990), the MBSR program teaches participants the principles of mindfulness (non-judging, patience, beginner's mind, trust, non-striving, acceptance, and letting go) and its practice. In this context, mindfulness is defined as non-judgmental present focused awareness (Kabat-Zinn, 1990). It is cultivated through formal meditation practice (e.g., body scan, sitting meditation) and informal applications of the principles of mindfulness to daily life. Unlike cognitive therapy (Beck, Rush, Shaw, & Emery, 1979) which challenges dysfunctional thoughts that lead to maladaptive behaviors, MBSR teaches patients to change their relationship with thoughts and feelings by developing an objective, compassionate, and inquisitive approach to thoughts and feelings. This shift in perspective can lead to enhancement of self-regulation, cognitive and emotional flexibility, and decreased experiential avoidance (see Shapiro, Carlson, Astin, & Freedman, 2006 for further discussion). In addition, mindfulness meditation is often associated with relaxation but it is contrasted from behavioral relaxation techniques in that the goal of mindfulness meditation is not to induce relaxation of the body but rather to cultivate awareness and stay present with whatever thoughts

or body sensations arise in the moment (Kabat-Zinn, 1990). For example, progressive muscle relaxation consists of tensing and relaxing different muscle groups in a sequence throughout the body whereas the body scan meditation consists of a sequence of observing sensations across the body without moving the body or actively attempting to change tension levels (Kabat-Zinn, 1990).

Since its inception, MBSR has been used in the treatment of a variety of disorders including chronic pain, generalized anxiety disorder, fibromyalgia, psoriasis, cancer, and depression (Grossman, Niemann, Schmidt, & Walach, 2004; Kabat-Zinn, 2003; Majumdar, Grossman, Dietz-Waschkowski, Kersig, & Walach, 2002). Significant reductions in self-reported cognitive and somatic anxiety following MBSR have been reported for outpatients referred for a variety of medical conditions including chronic pain, hypertension, and gastrointestinal disorders (Kabat-Zinn, Chapman, & Salmon, 1997) with durable effects lasting up to three years (Miller, Fletcher, & Kabat-Zinn, 1995). A recent meta-analysis on MBSR (Grossman et al., 2004) reported a medium effect size ( $d = .50$ ) for pre-to-post treatment effects on mental health variables (e.g., anxiety, depression) while a separate review (Baer, 2003) concluded that MBSR meets criteria as a "probably efficacious" treatment for improving psychological functioning based on definitions for empirically supported treatments.

There are several theoretical and practical reasons for considering mindfulness meditation as a treatment for insomnia. First, the principles of mindfulness, such as letting go, acceptance, and non-striving, are theoretically congruent with the goal of reducing sleep-related arousal. For example, one of the instructions for stimulus control involves getting out of bed to do a self-soothing activity if not sleeping within 15–20 minutes. Implicit in these instructions are the principles of letting go of the need to stay in bed in order to fall asleep, accepting that sleep may not come immediately, and finding an activity that is non-striving for sleep. In fact, insomnia patients who completed CBT-I reported that learning to accept their current sleep state and accepting that sleep cannot be forced were among the most helpful components of treatment (Manber, Hydes, & Kuo, 2004). Thus, a mindfulness-based approach provides a conceptual framework for targeting sleep-related arousal that could compliment the behavioral components of CBT-I that target the nighttime symptoms of insomnia. Second, mindfulness meditation encourages a shifting of one's relationship to cognitions rather than challenging and changing the content of one's thoughts, as would be the case in

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات