

# AN ADAPTED, FOUR-WEEK MIND–BODY SKILLS GROUP FOR MEDICAL STUDENTS: REDUCING STRESS, INCREASING MINDFULNESS, AND ENHANCING SELF-CARE

Jeffrey M. Greeson, PhD, MS<sup>1#</sup> Michael J. Toohey, PhD<sup>2</sup> and Michelle J. Pearce, PhD<sup>3</sup>

**Objective:** Despite the well-known stress of medical school, including adverse consequences for mental and behavioral health, there is little consensus about how to best intervene in a way that accommodates students' intense training demands, interest in science, and desire to avoid being stigmatized. The objective of this study, therefore, was to evaluate the feasibility, acceptability, and initial effectiveness of an adapted, four-week stress management and self-care workshop for medical students, which was based on the science and practice of mind–body medicine.

**Methods:** The current study used a prospective, observational, and mixed methods design, with pretest and posttest evaluations. Participants ( $n = 44$ ) included medical and physician-scientist (MD/PhD) students from a large, south-eastern medical school. Feasibility was assessed by rates of workshop enrollment and completion. Acceptability was assessed using qualitative ratings and open-ended responses that queried perceived value of the workshop. Quantitative outcomes included students' ratings of stress and mindfulness using validated self-report surveys.

**Results:** Enrollment progressively increased from 6 to 15 to 23 students per workshop in 2007, 2009, and 2011,

respectively. Of the 44 enrolled students, 36 (82%) completed the workshop, indicating that the four-session extracurricular format was feasible for most students. Students reported that the workshop was acceptable, stating that it helped them cope more skillfully with the stress and emotional challenges of medical school, and helped increase self-care behaviors, such as exercise, sleep, and engaging in social support. Students also reported a 32% decrease in perceived stress ( $P < .001$ ;  $d = 1.38$ ) and a 16% increase in mindfulness ( $P < .001$ ;  $d = 0.92$ ) following the workshop. Changes in stress and mindfulness were significantly correlated ( $r = -0.42$ ;  $P = .01$ ).

**Conclusion:** Together, these findings suggest that a brief, voluntary mind–body skills workshop specifically adapted for medical students is feasible, acceptable, and effective for reducing stress, increasing mindfulness, and enhancing student self-care.

**Key words:** Medical students, mind–body medicine, mindfulness, stress, self-care

(*Explore* 2015; 11:186-192 © 2015 Elsevier Inc. All rights reserved.)

## INTRODUCTION

Although many students are resilient, medical school can be highly stressful, with consequences for academic performance, patient care, substance use, and increased rates of suicide compared to age-matched peers.<sup>1–4</sup> Beginning as early as the 1960s, over 600 articles have promulgated the need to offer extra support for medical students to protect and

enhance self-care and well-being.<sup>4–6</sup> Yet, there remain few empirically supported interventions that do so.<sup>3</sup> There are even fewer *brief* empirically supported interventions that address medical students' main concern: a lack of time for self-care activities that can help reduce stress and increase resilience.<sup>7</sup>

Mind–body medicine addresses self-care, stress, and health in the context of emotional, mental, social, spiritual, and behavioral factors.<sup>8,9</sup> Mind–body techniques, such as meditation and guided imagery, teach individuals how to self-regulate perceived stress and stress physiology through mental training that is designed to cultivate attention, self-awareness, relaxation, and equanimity (non-reactivity).<sup>8</sup> Together, these core self-regulation skills are intended to decrease sympathetically driven stress reactions and increase parasympathetically driven relaxation responses, thereby alleviating stress-related symptoms and enhancing mood, quality of life, and one's ability to function optimally under stressful circumstances.<sup>9</sup> Two widely popular mind–body medicine interventions with

1 Department of Psychiatry, Perelman School of Medicine, University of Pennsylvania, 3535 Market Street, Suite 670, Philadelphia, PA, 19104

2 Graduate Institute of Professional Psychology, University of Hartford, West Hartford, CT

3 Department of Family and Community Medicine, Center for Integrative Medicine, University of Maryland School of Medicine, Baltimore, MD

# Corresponding author.

e-mail: greeson@upenn.edu

---

formal training for instructors and standardized curricula are Mind–Body Skills Groups, developed by Dr. James Gordon, and Mindfulness-Based Stress Reduction (MBSR), developed by Dr. Jon Kabat-Zinn. Although both programs have been shown to effectively reduce subjective perceptions of stress for students,<sup>10–19</sup> most programs are quite lengthy, often ranging from eight weeks to eight to nine months (one academic year). Sample sizes reported in these studies to date have ranged widely, from 20–30 to over 300 participants.

Both, Mind–Body Skills Groups and MBSR consist of weekly meetings where didactic topics such as stress, stress management, and health are discussed, and ample time is devoted to guided practice of self-regulation skills, as well as group discussion regarding one's progress in building such skills week-to-week. Although Mind–Body Skills Groups typically include one or two formal mindfulness skills, such as mindful eating and mindful breathing, the emphasis is on learning a wide variety of mind–body techniques, including autogenic training, diaphragmatic breathing, biofeedback, self-expression through movement and drawing, and emotional disclosure.<sup>12</sup> In contrast, MBSR teaches a variety of meditation and gentle yoga practices, each of which is intended to foster mindfulness—defined as non-judgmental, present-focused attention and awareness, with the attitudinal qualities of kindness, compassion, and acceptance.<sup>13</sup> Both Mind–Body Skills Groups and MBSR have the goal of increasing self-care, decreasing stress-related physiological arousal, and increasing one's ability to concentrate and focus.<sup>8</sup> However, it remains to be determined how best to translate mind–body medicine training programs for optimal effectiveness in the context of medical school.

There is now initial evidence supporting the effectiveness of shorter mind–body training programs, which might prove more feasible and accessible for medical students, with comparable benefits. For example, one pilot randomized controlled trial (RCT) demonstrated self-reported efficacy from 42 participants for a “low-dose” mindfulness intervention where treatment lasted only six weeks, using one-hour sessions at the workplace with shorter required home practice time (20 min/day).<sup>20,21</sup> Another RCT examined self-reported changes in psychological distress, positive states of mind, distractive and ruminative thoughts and behaviors, and spiritual experiences among 83 students in the medical field who took part in a one-month mindfulness group (four 1.5-hour sessions plus a six-hour Saturday retreat), a somatic relaxation group, or a no-treatment control group.<sup>15</sup> Although both groups had significant improvements in distress levels and positive mood states, mindfulness training uniquely reduced rumination and mental distraction, which is considered to be an especially important ability for physicians.<sup>22</sup> One recent quasi-experimental study of 119 college students found that a brief, five-week MBSR program integrated into an academic course was associated with greater self-reported increases in mindfulness and self-compassion, but no differences in anxiety, compared to a parallel cohort control.<sup>23</sup> Finally, a recent RCT of 90 university students run through a campus counseling and psychological services center found significant improvements in self-reported ratings of perceived stress, mindfulness, self-compassion—the ability to treat oneself with kindness and compassion in diffi-

cult times—and sleep quality after a four-session mindfulness training program compared to a waitlist control.<sup>24</sup> Based on these findings with working adults and university students, investigations of shorter mind–body medicine programs specifically adapted to the needs of highly stressed medical students are warranted.

Given medical students' chronically demanding schedule and their commitment to training in science, many are unwilling to dedicate six or eight weeks—or a full day on the weekend—to learning mind–body or self-care skills, especially if such programs are voluntary and are perceived as unimportant, uninteresting, and/or lacking in scientific rigor.<sup>25,26</sup> Conversely, medical trainees may be more amenable to substantially shorter programs with sufficient scientific rationale and some realistic expectation for a healthy change.<sup>26</sup> In addition, combining mindfulness training with an opportunity to choose one's own self-care goals in the context of a mutually supportive environment could both normalize the common experience of stress, anxiety, and burnout, and add value to existing stress management programs.<sup>27,28</sup>

The purpose of the present study, therefore, was to evaluate a brief, extracurricular four-session workshop for medical students with an emphasis on self-care, the science of mind–body medicine, and the practice of mindfulness and other mind–body skills. We hypothesized that the adapted mind–body skills group for medical students would be associated with (1) reduced stress, (2) increased mindfulness, (3) enhanced engagement in self-care behaviors, and (4) increased understanding and utilization of stress management and relaxation skills.

## METHODS

### Participants

All students in the Duke University School of Medicine were eligible to take part in the study. A sample of 44 medical students (33 first-year, one second-year, three third-year, five fourth-year, and two MD/PhD students) volunteered to participate. Two-thirds of study participants were women ( $n = 29$ ). Six students enrolled in the Fall of 2007, 15 in the Spring of 2009, and 23 in the Fall of 2011. Of the 44 total students enrolled, 40 (91%) attended the first class and responded to the pre-workshop survey, and 36 (82%) completed the workshop as evidenced by post-survey measures.

### Study Design/Procedure

For this prospective, observational study, students were recruited through electronic flyers and email announcements distributed by the Associate Dean for Medical Education, supplemented by in-class announcements by the group facilitators (J.G. and M.P.). Email announcements were initially directed to first-year students only and then extended to students in all years of training in order to provide equal opportunity. Pre- and post-workshop surveys were distributed at the beginning and the end of the first and final group sessions, respectively. In order to allow students to practice new skills and self-care goals for four full weeks, post-workshop evaluations were collected one week after Class 4.

Download English Version:

<https://daneshyari.com/en/article/2685954>

Download Persian Version:

<https://daneshyari.com/article/2685954>

[Daneshyari.com](https://daneshyari.com)