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Holding the Heart of Mindfulness-Based Stress Reduction: Balancing Fidelity and Imagination When Adapting MBSR

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Abstract Mindfulness-Based Stress Reduction (MBSR) courses are being taught around the world in various contexts and targeted to various populations. The program has been intentionally designed without a detailed teaching manual so as to allow instructors to respond to what is called for in each teaching moment. It also affords tailoring the program to specific circumstances such as when working with persons suffering from depression or substance abuse. But how does one remain true to core teaching intentions and program components, while undertaking such tailoring? Modifications to the format and content of MBSR have been reported but little is known if these adaptations influence outcomes and processes underlying change compared to the basic curriculum. Here we discuss what we consider to be essential aspects of the program to be carefully considered when adapting it. We describe selected adaptations of MBSR to highlight the types of changes made and report results when data are available. We conclude with suggestions pertaining to how to best remain authentic while being imaginative regarding the administration of MBSR in nonmedical settings (e.g., prison) and for special populations (e.g., women with addictions).

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Introduction

Mindfulness-Based Stress Reduction (MBSR) is a well-defined, systematic patient-centered approach to group mindfulness training (Kabat-Zinn 1996). The course is delivered in a structured yet flexible manner such that the instructor can respond to what is occurring in the class. While instructors are guided by a curriculum and intensive personal and professional training in mindfulness meditation, there is no manual per se from which the course is delivered. In fact, instructors are discouraged from copying one standard formula:

"We emphasize that there are many different ways to structure and deliver Mindfulness-Based Stress Reduction programs. The optimal form of its delivery will depend critically on local factors and on the level of experience and understanding of the people undertaking the teaching. Rather than "clone" or "franchise" one cookie cutter approach, mindfulness ultimately requires effective use of the present moment as the core indicator of the appropriateness of particular choices." (Kabat-Zinn 1996, p. 165)

While there is thus leeway in how a program is offered, some key elements are required for it to be called MBSR. These include: core meditation practices, teaching modules and training exercises included in the formal curriculum developed by Kabat-Zinn and colleagues at the University of Massachusetts Center for Mindfulness, and assignment of daily formal mindfulness practice. Underlying these central elements are a set of attitudinal stances that include: cultivation of a different relationship with the stressors in one's life, an invitation to participants to integrate the practice into

their daily lives rather than imposing it as another item on one's to do list, a lifestyle change that emphasizes self-care and compassion, and ultimately, the relief of suffering.

While MBSR is offered in a group format, it is not group therapy nor is it a support group, but rather a program intended to draw upon the group's shared experiences to facilitate the development of mindfulness in participants. Group sizes range between 12 and 40 participants and may have 1 or 2 instructors. Groups are often, but not necessarily, heterogeneous with regard to diagnoses (both medical and psychological) or other matters that bring them to the program. Many who may not suffer from any particular diagnosable condition may take the program to improve their ability to manage stress.

A particular approach to ongoing dialogue, referred to as "inquiry," about perceptions, mental, and behavioral habits and patterns that may interfere with learning and growth, is a crucial aspect of MBSR that requires highly skilled and experienced instructors. The course is typically preceded by either an individual interview or group orientation session and ends with a post-MBSR interview that examines what the person has learned and explores how s/he may continue to integrate mindfulness into her/his life. MBSR is designed to be the beginning of a life-long process of learning to live every moment of life more fully through the regular practice of mindfulness.

The MBSR Professional Training curriculum guide (Blacker et al. 2009) highlights and expounds upon the weekly themes, as well as the structure and sequencing of the formal and informal practices. The first-hand, direct experience of participants is grist for the mill for learning how to live in an awake and aware manner. Teaching is focused on how a mindful relationship to moment-tomoment experience can be cultivated through regular practice. Developing a mindful relationship to present moment experience is demonstrated whether participants share difficult or joyful reactions. Utilizing reports of interpersonal encounters, reactions to their own thoughts and feelings, or statements about themselves, the instructor exemplifies a mindful acceptance of whatever participants share. Rather than delivering lectures, instructors offer specific practices and exercises intended to inform the particular themes in each class while remaining responsive to the developmental process unique to each group. A minimum of didactic or theoretical material is provided as a framework for teaching and by way of illustrating the rationale for practices taught. More importantly, instructors listen for material that spontaneously arises out of participants' formal practices and daily lives, and then guides class members to see for themselves how perceptions and automatic reactions impact their experiences, and ultimately, their health and well-being. The instructor's choices of which items or observations are highlighted and explored is guided largely by the particular theme or focus of the class, as elaborated upon in the curriculum guide.

Formal and informal home practice experiences are also reviewed in each class. A safe space for inner exploration in an atmosphere of respect and mutual discovery is provided, largely out of the intentions and attitudes of the instructor. The process of inquiry is gentle, inquisitive, sometimes playfully curious, always kind, aiming to encourage these same qualities in participants when sharing and working with their experiences. Meditation practice and discussion may appear to be the core elements of the MBSR program; no less important, however, is the instructor's embodiment of the attitudes which have been articulated by Kabat-Zinn (1996) as the "foundations of mindfulness," i.e., trust, patience, non-striving, curiosity, non-judging, beginner's mind, acceptance, and letting be. These are fostered through meditation practice, discussion, and participants' experiences of being with an instructor who personifies these qualities.

Below we provide a formal structure for these key elements so as to aid those planning to adapt MBSR to unique context and participant groups while retaining program fidelity. Some examples of imaginative modifications are then discussed to illustrate the challenges involved in this process.

Fidelity: Four Chambers of the Heart of MBSR

MBSR is unique in terms of how and why it is offered. Those who are drawn to the program rightfully hope and expect to be greeted with more than a clear mind; they long for connection to themselves and others that engages the metaphorical and emotional heart as well. Thus, the work of MBSR is largely heart work. Similar to an anatomical heart it can be conceived of functioning through a vibrant process of coordination, cooperation, and clear purpose. The whole of MBSR can be understood as a dynamic interplay between four aspects, or chambers, that are critical to the function of the program as an effective and skillful means to relieve suffering: form, content, instructor, and intention. All need to be carefully considered and reflected upon when implementing the program. They come into play especially when the possibility for variations arises. Below, each of these four aspects will be defined and discussed in turn.

Form

The standard MBSR program is offered on a weekly basis for 8 consecutive weeks, with a silent retreat day in between classes 6 and 7. This day involves a series of guided meditations with an emphasis on transitions (such as into and out of the lunch break) also serving as opportunities for



seamless mindfulness practice. This allows for continuity in practice and a unique opportunity to work with informal meditation. In the curriculum published by the Center For Mindfulness (Blacker et al. 2009), classes are stipulated to be 2 to 3.5 h in duration depending on their location in the course and the amount of material to be covered. For example, the first and last classes are sometimes longer to allow time for introductions or debriefing, and in some cases, completion of questionnaires.

Except for the first class, each opens with a meditation practice. Mindful movement (i.e., hatha yoga and walking meditation) is taught in addition to sitting and lying down (i.e., body scan) meditation. Classes include specific in-class exercises (e.g., identifying thoughts, emotions, and body sensations associated with pleasant, unpleasant, and neutral experiences). These are then extended as homework and are discussed in the subsequent class. Poetry and teaching stories are sometimes used to connect with participants emotionally and help them access their emotional experiences in new ways. The instructor aims to embody a mindful stance in the way s/he conducts inquiry into participants' experiences. Whole or small group discussion supports this process.

Home mindfulness practice assignments are: for classes 1 and 2, the body scan (bringing awareness systematically to sensations in various parts of the body) and awareness of the breath; for classes 3 and 4, yoga and the body scan are alternated, along with sitting with the breath; for classes 5 and 6, choiceless awareness (allowing the object of meditation to be whatever physical sensations or mental phenomena happens to be most prominent and distinct in each moment), yoga, and walking meditation; while in classes 7 and 8, participants are instructed to make the practice their own by selecting the practice most appropriate on a day by day basis. Participants are also encouraged to engage in various homework exercises in the service of particular themes as the program progresses. For example, they are asked to complete a worksheet that documents an unpleasant experience in terms of thoughts, body sensations, and feelings experienced during the event as a means of noting patterns of stress reactivity.

Content

McCown et al. (2010) stated that there is a meta-structure with regard to what and when material is taught that constitutes the original MBSR program. They articulated the "four ennobling truths," based on Buddhist philosophy underlying the program as: fully understanding suffering, letting go of craving, realizing liberation, and cultivating the path. These are discovered experientially by participants through practice in the "four establishments of mindfulness": awareness of the body, feeling tones (i.e., pleasant, neutral, unpleasant), states

of mind, and experiential phenomena (Bodhi 2011). As Kabat-Zinn (2011, p. 282) stated, "from the beginning of MBSR, I bent over backward to structure it and find ways to speak about it that avoided as much as possible the risk of it being seen as Buddhist, 'New Age,' 'Eastern Mysticism' or just plain 'flakey." The curriculum themes and content are arranged week by week to reflect these principles albeit without using Buddhist terminology (McCown et al. 2010, p. 140–141).

- "There is more right with you than wrong with you."
 Participants are oriented to see themselves and their participation in the program as larger than the particular problems that are troubling them. They are introduced to the fact that problems can be worked with in new ways and that MBSR provides a supportive environment to do this.
- "Perception and creative responding." Participants learn how powerful the way they view experiences is in shaping how they respond and its effects on their minds and bodies.
- 3. "The pleasure and power of being present." When focused on the negative we miss how many positive experiences we tend to have in each day. By being encouraged to be aware of thoughts, physical sensations, and feelings from moment to moment, participants come to appreciate the variety of experiences in daily life.
- 4. "The shadow of stress." It is possible to reduce the negative physiological and psychological effects of stressful events. Participants learn that unpleasant experiences can be dealt with in a number of ways. They experience for themselves how automatic reactions often lead to increased distress, while making space for mindful responses may be more adaptive.
- 5. "Finding the space for making choices." Learning to witness as well as accepting and opening to what is occurring; this enables participants to make choices that can enhance well-being. They come to learn that the less they personally identify with thoughts and feelings, the less unnecessary suffering is evoked by them.
- 6. "Working with difficult situations." Participants discover how to maintain stability, recognizing habits and patterns that are unhelpful in relationships. All day session: "Dive in!" The opportunity to have a sense of relative solitude while being with others affords a taste of what continuity of mindfulness in day to day life may be like. Participants often find that deepening awareness of moment-to-moment experience is associated with greater self-knowledge and self-compassion.
- "Cultivating kindness towards self and others." Mindfulness
 in the interpersonal realm is discussed and practiced.
 Participants are invited to be generous towards themselves
 and others through attentive listening and generating feelings
 of compassion.



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8. "The eighth week is the rest of your life." The entire program is presented as a new beginning in participants' lives. The importance of maintaining formal and informal practice and how this may be supported is discussed. Potential issues pertaining to ending the group are addressed.

Instructor

The Oasis Institute for Mindfulness-Based Professional Education and Training (2012) outlines what is required to become an MBSR instructor. The trainee is expected to attend an 8-week MBSR program first as a participant; then to complete both Oasis Foundational Training Programs (MBSR in Mind-Body Medicine and Practicum in MBSR); be committed to on-going personal psychological development; maintain a daily meditation practice and attend silent, teacher-led mindfulness retreats; engage in yoga or other bodywork training; and have professional training and graduate degree in a related field (e.g., psychology, medicine, education).

Woods (2007) pointed to the "heart of teaching," which goes beyond method to connect with the heart, i.e., the place where intellect, emotion, and spirit will converge in the human self (Palmer 1988). This connection grows from the instructor's own *embodiment* of a mindful stance. Embodiment has been defined as the quality of instantiating into one's being, actions, and phenomenological experience the skills that are cultivated through mindfulness practice (Jha and Goldin 2012). This allows the instructor to communicate a sense of unity and integration and shows participants how to relate skillfully to others and be present in the moment.

McCown et al. (2010) explored in depth what constitutes "good-enough teaching." The person of the instructor is viewed as essential. This individual needs to demonstrate authenticity, authority, and friendship as well as "spiritual maturity." The skill set s/he brings to class is described as: stewardship of the group; homiletics, or delivery of didactic material; guidance of formal practices and informal group experiences; and inquiry into participants' direct experiences.

Intention

Kabat-Zinn (2011, p. 29) stated that, "The intention of it [MBSR] was to be: commonsensically, relevant, and accessible enough to benefit potentially anybody who might be overwhelmed by suffering and sufficiently motivated to undertake a certain degree of hard work in the form of a daily mindfulness practice in the laboratories of the MBSR programme and of life itself." Looking back at his original motivation for bringing mindfulness into the mainstream of society, Kabat-Zinn (2011) indicated that it was a means to

relieve suffering and catalyse greater compassion and wisdom individually and collectively.

To express the overarching objective to relieve suffering, McCown and colleagues (2010) suggested that a mindfulness teacher intends for participants to experience new possibilities, discover embodiment, cultivate observation, move towards acceptance, and feel compassion. The term "intention" is used self-consciously in MBSR to avoid the striving and outcome-orientation associated with more commonly used terms like "objectives" or "goals." Certainly each instructor may have particular reasons for teaching the course, as do participants with regard to taking it, but it is crucial to remain open to what may emerge; this may differ from what either the instructor or participant initially expected. We take the stance that the overarching intention of the program is to meet participants where they are and point towards living more fully with what life presents, with as little suffering as possible.

While the content presented here may appear to be an exhaustive list of necessary elements, MBSR has been designed purposely to be "spacious." Within the up to 30 h of contact time in a standard program there is room to innovate. However, it is important to avoid the temptation "to fill all the empty space in MBSR with extra stuff" (Kabat-Zinn 2010). Next, we provide a framework for a respectful approach to innovation.

Imagination in the Delivery of MBSR

As MBSR has become widely studied and disseminated, positive outcomes have stimulated interest in health care and nonmedical settings. Adaptations and modifications have been made to MBSR in response to a number of factors, including: target population characteristics (e.g., history of depression; eating disorders; trainees in various health care professions), institutional constraints and regulations, and time or setting limitations. In the following section, we provide examples of how the form and content of MBSR were altered to address local factors. In choosing these examples, we were not exhaustive. Numerous reports of the use of MBSR in various contexts or for diverse populations have been published [for reviews see: Bohlmeijer et al. (2010); Shennan et al. (2011)]. Rather, we have chosen the following programs because (a) the approach to and rationale for modification of MBSR has been fully explained in a published report; and (b) they illustrate, in our view, a successful balance between retaining core program elements while tailoring to unique needs.

Populations

While there are many possible different populations (e.g., patients with eating disorders, traumatic brain injury) for



whom modifications to MBSR have been made, we have selected a few to underscore the issues one may wish to consider or because widespread use of the modified program. For example, Vallejo and Amaro (2009) provided a thoughtful description of adapting MBSR for a specific population, namely low-income Latina and African American women in substance abuse treatment. The adapted version took many cycles of teaching and collaboration with the addiction treatment staff, in both residential and outpatient settings, to develop. Given that many of the women had experienced abuse and trauma and suffered with mental health difficulties, the content was modified significantly. For example, the body scan excluded specific regions of the body and was shortened. Based on the premise that stressors trigger relapse, weight was placed on self-regulation skills and learning to decrease stress reactivity. Other changes included the sequence of material, the duration of meditations, and a greater focus on yoga. Awareness of craving and noticing early warning signs of relapse were highlighted. Given that few, if any, of the women engaged in formal practice, informal practice between classes was emphasized. The therapists working in the clinics from which participants were drawn were themselves offered an MBSR program. This was to help with the stress of working in a highly charged environment and to give them a first-hand experience of what their clients were being taught. The program was 9 weeks long and the retreat day was reduced to 4 h. Sometimes a staff member served as a co-instructor or assistant; this seemed to make a difference with regard to the women accepting the program as relevant for their recovery. Also, clinical staff was on hand after classes should any of the women have required debriefing. This example is pertinent because it shows how the modification required multiple iterations as well as endorsement from the staff working with this population.

Another modified program, Mindfulness-Based Cognitive Therapy (MBCT; Segal et al. 2002) is the most widely used and researched (Chiesa and Serretti 2011) adaptation of MBSR. It was designed to prevent relapse in patients with multiple previous episodes of clinical depression. Over a follow-up period of 20 months, MBCT has been shown to be equally effective to maintenance antidepressant treatment in halving the rate of relapse vis-à-vis placebo (Segal et al. 2010). While theoretical differences exist between mindfulness training and cognitive therapy (e.g., an emphasis in the latter on fixing problematic thought patterns), many fundamental elements are similar (e.g., selfobservation, see Fennell and Segal 2011 for a detailed comparison of the two approaches). Development of MBCT has involved incorporating elements of Cognitive Therapy (CT) into an MBSR framework rather than adding mindfulness to CT (Segal et al. 2002). MBCT sessions are slightly shorter than MBSR (2 h) and class sizes tend to be smaller (10–12). An all-day session was not envisaged in the original design (Segal et al. 2002), but some instructors include this (Fennell and Segal 2011). The flexibility of the MBSR framework has allowed additional modules to be added in which CT principles are taught. These are ideally illustrated through dialogue and discussion, rather than delivered didactically. The cognitive theory of depression (Beck et al. 1979) and the downward spiral of cognitive reactions to normal low mood that leads to relapse in previously depressed persons (Teasdale and Cox 2001) are presented.

The originators of MBCT (Segal et al. 2002) strongly emphasize that teaching, as in MBSR, should arise from instructors' moment-to-moment practice of mindfulness. Nonetheless, they have developed a structured and detailed course manual (Segal et al. 2002, 2013) which the MBSR creators purposely avoided. While this has facilitated rigorous research in MBCT and its inclusion in influential treatment guidelines [e.g., UK National Institute of Clinical Excellence (Crane and Kuyken 2012)], efforts to manualize adaptations of MBSR arguably increase the risk of mindfulness being "seized upon as the next promising cognitive behavioral technique or exercise, decontextualized, and 'plugged' into a behaviorist paradigm with the aim of driving desirable change, or of fixing what is broken" (Kabat-Zinn 2003, p.145). MBCT shows how MBSR was thoughtfully adapted, based on theory and clinical experience, to relieve a particular form of suffering, namely depression.

Occupation

Physicians and other health care professionals need to be skilled in listening fully to and being totally present to their patients/clients to foster healing (Dobkin 2009). Even the most seasoned clinicians face ongoing challenges relative to shifting between the automaticity demanded by fast-paced environments which require multi-tasking and deliberate, focused attention necessary for monitoring and clinical decision-making (Epstein et al. 2008). In order to make mindfulness (and therefore MBSR) more relevant to these specific concerns and constraints, as well as to engage the health care professionals more fully in the process, a number of programs have evolved that involve altering and augmenting the standard program. While much research on MBSR in health care professionals has been conducted with trainees, recent studies have included physicians, nurses, and psychologists. For example, Krasner and colleagues (Krasner et al. 2009) conducted an open trial of a modified MBSR program that included aspects of appreciative inquiry (Cooperrider and Whitney 2012) and narrative medicine (Connelly 2005) with primary care physicians. One year following the 8-week program and monthly follow-up classes, mindfulness, empathy, and emotional



stability were enhanced while physician burnout was decreased. Moreover, increases in mindfulness were significantly correlated with improved mood, perspective taking, and decreased burnout. Particularly noteworthy were additional improvements not apparent at the conclusion of the program but significant at a 3-month follow-up, including: burnout, depersonalization, depression, fatigue, and personality traits of conscientiousness and emotional stability.

McGill Programs in Whole Person Care has offered an adaptation of MBSR called Mindfulness-Based Medical Practice (MBMP) since 2006. The program is closely modeled after MBSR but includes role-plays, based on Satir's communication stances (Satir 1988) and other exercises emphasizing communication skills and interpersonal mindfulness, based on Insight Dialogue (Kramer 2007) as well as self-care. It aims to help clinicians integrate mindfulness into working relationships with patients and colleagues. A pilot version of the program was offered to 15 physicians prior to finalizing the current version of MBMP. The 8-week format remained the same but the content is offered in both English and French (in the same class) as Ouebec is a predominantly French-speaking province in Canada (and all health care professionals are required to be functional in both languages); physicians were mixed with other health care professionals as most work in multidisciplinary settings. In a sample of 90 participants (half of whom were MDs), self-reported satisfaction was high, as was attendance (the mean out of 9 was 8.11). Significant decreases were observed in participants' perceived stress, depression, and burnout, as well as significant increases in mindfulness, self-compassion, and well-being following the program. Hierarchical regression analyses indicated that while stress negatively predicted well-being, mindfulness and self-compassion predicted greater well-being (Irving et al. 2012a, b). These two examples of working with physicians show how a modified program can address key issues for this group: namely communication, burnout, and selfcare.

Institutional Regulations

Samuelson et al. (2007) detailed how MBSR was administered in correctional facilities. To be feasible, the timing was changed (e.g., in some cases, there were shorter classes, twice a week). Since inmates could not listen to CDs in their cells, group practice in a room with a CD was offered to some inmates. The retreat day was not included in the program. Class size was limited to 12–20 participants. An important aspect of this work was the collaboration with the Council on Criminal Justice who agreed to allow the program to take place in the Massachusetts Department of Corrections system whereby 2,000 inmates in six institutions participated. Similar to the work with women with

addictions, collaboration with decision makers and stake holders was key to the success of this endeavor.

While admittedly less restrictive than a correctional institution, a number of settings like hospitals, clinics, corporate environments, and governmental entities may impose certain limitations on the availability of patients, employees or other prospective participants. Indeed the most common challenges voiced by individuals being asked to deliver MBSR in modified formats (Dobkin et al. 2012b) is one of time (form), either in terms of length of each class period or overall duration of program. A substantial challenge is to balance these constraints against the intention to establish what is a workable modification and what threatens the integrity and thereby the effectiveness of the program.

It remains premature to spell out "best practices" given that various modified programs have only recently been described in the literature and there is a paucity of empirical data pertaining to the key components of any MBSR program. We encourage readers to ponder these examples when considering the points below.

Points to Consider

Integrity

One reason we had for writing this paper is our concern that mindfulness may become just another fad (Hutchinson and Dobkin 2009) and that some who aspire to teach or change MBSR may fail to recognize the principles underlying the program. Boyce et al. (2011) illustrated how rapidly research and delivery of mindfulness training has grown. Should we be concerned? Yes and no. If programs are developed without a deep appreciation for the four chambers of the heart of MBSR then outcomes may fall short of its full potential. But the fact that there are scientists, clinicians, and educators around the globe who are taking a serious look and attempting to cultivate awareness, be it on the Internet, via video-conferencing, or in the classroom indicates that there is a thirst for authenticity and connection to heal those who suffer in our world today.

In order to adequately meet this level of interest and need in society, it behooves careful consideration of the various means of bringing mindfulness to people who may not be able or willing to access it in the traditional form and format of MBSR. This may include considerations of attitude and interest (some individuals may appreciate an introduction or "taste" of the program to foster interest over time); geography (telemedicine and virtual world delivery of MBSR to reach those who cannot easily attend a traditional MBSR course); clinical features and symptoms (reaching people with social anxiety in smaller groups, individually or via the Internet; or modifying practices as seen in Vallejo and



Amaro). Given the empirical foundation being established for mindfulness training in enhancing health and well-being, instructors and researchers have an ethical responsibility to devise novel and skillful means of delivering it to those who need it most, but also must attend to the effectiveness of those means and the fidelity to the original model in making modifications. By conducting outcome research on modified MBSR programs we may learn more about the issues discussed in this paper. The examples of modification reviewed in this paper have gone to great lengths to ensure integrity, when limitations in form (e.g., session duration) were necessary.

Instructors' Training and Personal Practice

No matter what modifications are made to the basic program, given the clearly stated importance of who teaches the program and how this is done, instructors need to be practicing what they teach or they will miss the mark (Kabat-Zinn 2003). They can then use their authenticity, authority, and friendship as a means of connecting with and guiding program participants (Maex 2011). Their personal practice of mindfulness will permeate their work within the classroom such that their inquiry and work with the group will show rather than tell of its significance. The instructor understands that s/he co-creates the experiences of the group, s/he is as human as the others, and this equality helps all to see that there are universal truths for humans and that transformation is possible for all. The examples reviewed reported programs being taught by instructors with extensive personal and professional background in mindfulness training.

Home Practice

There is no consensus in the literature about the ideal length of formal home meditation practices. A number of studies (Carmody and Baer 2008; Speca et al. 2000) including one with adolescents (Huppert and Johnson 2010) found a positive correlation between the amount of meditation practice and benefits of mindfulness-based interventions. Yet, others have not (Astin 1997; Carmody et al. 2008; Davidson et al. 2003). While the original program asks participants to engage in 45 min of formal practice of various kinds and other informal practices throughout the program, modifications have often shortened these assignments (e.g., Garneau et al. 2013 have a 30-min body scan and a 20-min sitting meditation CDs for medical students). Nonetheless, perhaps it would be prudent to keep the original recommendation of 45 min per day of formal practice, plus the other assignments until it is determined if shortening practice has an impact on outcomes. While making programs potentially more attractive to persons considering enrolling, we suggest that shortening home practices is not, in fact, a desirable modification.

Obviously not all participants will do all of the home assignments, but they can be asked to reassess their limits and explore their difficulties when they fail to find time to engage in self-care. One could make the argument that setting up a situation in which the expectation for practice is a bit beyond the easy grasp of the participant may allow him/her to "work the edges" of their own habits and patterns, essentially addressing in practice those conditioned ways of being, similar to how the person works with his/her physical limits in mindful movement. In this regard, the expectation of practice actually becomes a key element of the learning and teaching of MBSR itself.

Language

Communicating often paradoxical nuances of mindfulness requires skillful "languaging" by instructors (Mamberg et al. 2012; Singh 2010). For example, using the present participle "ing" form of verbs to avoid giving commands and allowing experience to unfold is emphasized during instructor training. The absence of this verb form in some languages makes it difficult to accurately translate the collaborative spirit of instruction it engenders for programs not taught in English. Subtle uses of language, such as impersonal articles ("moving the body") and omission of personal pronouns (my back pain), encourage dis-identification with sensations, emotions, or thoughts. Allowing rather than changing what is occurring in the present moment distinguishes the meditation practices in MBSR from techniques, such as relaxation training, which overtly aim to eradicate an undesirable state. We suggest that when working in a language other than English, these ideas be kept in mind.

Guidelines for Modifying MBSR

Kabat-Zinn (2011) provided some reflections on the origins of MBSR and the proficient means of teaching it; he joined Buddhist scholars to examine how the program is informed by this spiritual tradition. In-depth discussions of the definition of mindfulness, the goals for its practice and how Western scientists have come to understand and study it are pertinent to our examination of the integrity of adaptations of MBSR. As some instructors may not be familiar with the basis of the program it may be useful to read this special issue as a means of reflecting on how, why, and perhaps even more importantly, if the program is to be modified.

One lesson learned is that it is important to join with those for whom the modification is proposed such that the characteristics of the population and institution are integral to the consideration of adaptation. This may foster buy-in and enable the program to be administered in ways that



address the realities of the setting and population being served, while staying true to the program's intentions. Inherent in this approach should be a willingness to entertain the possibility that many adaptations may not, in fact, be necessary when seen through the lens of mindfulness. Given that the very foundation of mindfulness teaching is noticing our habitual patterns and stories we tell ourselves about what is and is not possible for us, the same approach should be inherent in how we work with habitual assumptions about what a particular population is able to do, or what an institution or setting will allow. This is not to suggest an inflexible adherence to the model and curriculum, but instead a willingness to engage every perceived barrier or obstacle as just that, perceived. Then mindful choices can be made that are freer of assumptions and can be based on the realities of the situation and the needs of the potential participants.

In line with this notion, it is recommended to pilot any adaptations on a subgroup of participants before offering a new program on a large scale; soliciting feedback from participants and others involved in the project before going forward. Likewise, the instructor needs to be comfortable, if not an expert, and familiar with regard to the target population, understanding the problems that are underlying the condition that brings the participants to the program (e.g., as seen with the women in drug treatment).

It is also advisable to be in consultation with other MBSR instructors and attend conferences on the topic in order to exchange ideas and experiences. For example, at the 2012 American Medical Association-British Medical Association-Canadian Medical Association International Conference on Physician Health, in a workshop that brought together 8 educators from 3 different Canadian provinces to discuss teaching mindfulness to medical/dental students and residents (Dobkin et al. 2012a), the lessons learned were highlighted. Among those lessons were:

- Make explicit the link between science (cite the evidence) and practice while maintaining a balance between the two:
- 2. Ensure that the aims of the course fit the students' level of training and needs;
- Lead from behind i.e., allow students to discover via experience how mindfulness may influence their work and lives;
- 4. While remaining structured it is important to be flexible enough to respond to students' experiences (e.g., clerkship in third year of medical school);
- 5. Teach from one's own experience and personal meditation practice;
- 6. Have resources (e.g., CDs, websites, relevant journal articles) available;
- 7. Foster open-minded, curious, accepting attitudes.

In conclusion, we trust that those who plan to modify an MBSR program will do so with consideration of the issues raised herein. The program is much richer than a manual can possibly depict; integration of the mind-body-heart is fundamental to its healing nature.

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