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Implementation of Mindfulness Training for Mental Health Staff: Organizational Context and Stakeholder Perspectives

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Abstract

Occupational stress and burnout adversely impacts mental health care staff well-being and patient outcomes. Mindfulness training reduces staff stress and may improve patient care. However, few studies explore mental health setting implementation. This qualitative study used focus groups to evaluate stakeholders' perceptions of organizational factors affecting implementation of an adapted version of Mindfulness-Based Stress Reduction (MBSR) for staff on adolescent mental health units. Common facilitators included leadership securing buy-in with staff, allocating staff time to participate, and quiet space for training and practice. Other facilitators were past staff knowledge of mindfulness, local champions, and acculturating staff with mindfulness through a non-mandatory training attendance policy. Common barriers were limited staff time to attend training sessions and insufficient training coverage for some staff. Staff also reported improved focus when interacting with adolescents and improved social cohesion on the units. We conclude that a mindfulness-based program for reducing occupational stress can be successfully implemented on adolescent mental health units. Implementation appeared to change the social context of the units, including staff and patient interactions. More broadly, our findings highlight the importance of environmental factors in shaping attitudes, diffusion of innovation, and acculturation of wellness program implementations.

Keywords

Mindfulness; Organizational social context; Mental health services; Culture; Diffusion of innovation; Mental health care staff; Implementation

Introduction

Occupational stress and burnout experienced by mental healthcare staff has been shown to adversely impact staff well-being along with negatively impacting patient care delivery, treatment outcomes, and patient satisfaction (Currid 2009; Garman et al. 2002; Tuvesson et al. 2011). Inpatient and residential units for adolescents with serious emotional disturbances

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can be particularly stressful environments for staff (Mörelius et al. 2013). Managers, nurses, mental health, and rehabilitation staff must be able to cope successfully with numerous and often conflicting demands that can affect quality of patient care and the safety of patients and staff (Potter et al. 2004). Workplace stress can adversely impact cognitive functions such as attention and memory, individual and organizational performance, inter-personal communication, job satisfaction, and staff burnout. Workplace studies have also shown that psychological stress contributes to poor morale, absenteeism, and high staff turnover (Limm et al. 2011; Michie and Williams 2003; Noblet and Lamontagne 2006). In mental health treatment settings, stress may also negatively impact the staff-patient relationship and the healing environment, interfering with staff's ability to effectively communicate with and understand the patient and thereby reduce care outcomes (Brady et al. 2012; Garman et al. 2002). Because of the evidence for the harmful effects of workplace stress, there has been increasing research on stress management interventions for improving physical and mental well-being and morale and reducing burnout and turnover in a variety of settings (Limm et al. 2011; Wolever et al. 2012).

Mindfulness-Based Stress Reduction (MBSR) was developed to help medical patients cope with stress, chronic pain, and other chronic medical conditions (Kabat-Zinn, 2003). Because of the growing evidence for the effectiveness of MBSR for stress reduction and health outcomes (Goyal et al. 2014), there has been increasing interest in implementing mindfulness-based interventions (Burke 2010; Cullen 2011; Kabat-Zinn, 2003) in the workplace for reducing stress-related occupational outcomes and even reducing healthcare costs of staff (Cohen-Katz et al. 2005; Krasner et al. 2009; Pipe et al. 2009; Shapiro et al. 2005). Randomized controlled trials of mind-body interventions for stress reduction and wellness in the workplace have reported improvements in a variety of self-reported outcomes including mood, well-being, and psychological distress (Hartfiel et al. 2011; Limm et al. 2011; McCraty et al. 2003; Limm et al. 2011; Mino et al. 2006). In the largest study involving 239 employees (Wolever et al. 2012), participants receiving mind-body interventions showed greater improvements compared to controls on perceived stress, self-reported sleep quality, and heart rhythm coherence, a measure of autonomic balance. Positive results have also been reported for mindfulness-based interventions for healthcare staff (Cohen-Katz et al. 2005; Krasner et al. 2009; Pipe et al. 2009; Shapiro et al. 2005), including decreased job burnout (Cohen-Katz et al. 2005) and decreased personal stress levels (Brady et al. 2012; Pipe et al. 2009).

To date, however, there have been no published studies of the organizational-based social context involved in implementing mindfulness training sessions in a hospital setting, and no qualitative studies to explore stakeholder perspectives on the implementation process. An understanding of organizational context variables (facilitators and barriers) is necessary for the successful diffusion of innovations in the healthcare setting (Aarons et al. 2012), including both initiating and sustaining changes. Organizational cultures function to guide interactions with peers, management, and clients (Svyantek and Brown 2002) and provide a unique set of values, norms, attitudes, and behaviors explicitly operating through formal policy or implicitly operating through informal behavior or values (Kirchner et al. 2012; Seren and Baykal 2007; Svyantek and Brown 2002). Organizational climate is the shared or collective perceptions of employees on how the work environment impacts their

psychology, including stress, burnout, and job satisfaction (Aarons et al. 2012; Hemmelgarn et al. 2006). Organizational culture has been shown to influence implementation of new patient treatments in mental health settings (Aarons et al. 2012; Hohmann and Shear 2002; Schoenwald and Hoagwood 2001), outcomes for children's mental health services (Hemmelgarn et al. 2006), and the mental health of employees (Dextras-Gauthier et al. 2012). Interest in organizational research has also been growing due to the evidence that they benefit worker satisfaction and productivity while reducing healthcare costs (O'Donnell 2001).

The aims of this study were to capture lessons learned from the planners and attendees of the mindfulness training sessions for adolescent inpatient unit staff. We asked staff and leaders to provide their perceptions on what were the procedures necessary for implementation of the mindfulness training, the barriers encountered, the perceived benefits, and the organizational culture and context that made it possible. The present study consisted of focus groups that occurred after a1-year mindfulness training program for staff had been implemented. The study reports the lessons learned from this program that utilized a modified version of MBSR for staff on adolescent inpatient and residential units of a large state hospital in Massachusetts.

Method

The study was approved by the Institutional Review Boards of the University of Massachusetts Medical School and the Massachusetts Department of Mental Health, and all participants signed informed consent. Participants were informed of the voluntary nature of the study, that the findings would be published, and that they could withdraw from participation at any time. Participants were informed of their right to confidentiality but that confidentiality was limited in so far as occupational position and gender were recorded. The focus group interviews were conducted 1 year after the training sessions had been completed. A purposive non-probability sample (Schutt 2011) was used to draw from the population of unit staff with the intent to focus on a sample of training attendees and non-attendees. Training attendees and non-attendees were chosen to provide first-hand information regarding facilitators and barriers to participating in the mindfulness training sessions delivered on the adolescent units under study.

Participants

All leadership involved in planning and delivering the intervention were invited to participate as well as the mindfulness expert. All program leaders and staff of the adolescent inpatient units where the intervention was delivered were eligible to participate and were recruited through word of mouth and a recruitment flyer. The18 focus group participants included three organizational leaders and 15 adolescent unit managers and direct care staff (psychiatrists, nurses, social workers, psychologists, and occupational therapists). Eight of the 18 focus group participants participated in the mindfulness training. We were unable to interview 13 of the 21 staff who received training. This was due to time constraints staff faced and some staff leaving employment on the units. Demographic information was not recorded in order to ensure confidentiality due to the small sample size.

Procedure

Qualitative data was collected through conducting three semi-structured focus groups and one by request one-on-one interview. Focus groups where facilitated by a psychiatrist and a research coordinator. During the focus groups, one author read focus group discussion guide questions, took notes, and ran the digital voice recorder. The second author asked probe questions while fielding questions and providing clarifications. One focus group was conducted with directors, and two were conducted with inpatient teams composed of unit managers and direct care providers. In the focus groups with clinical leaders and direct care providers, one consisted of seven participants and the other eight participants. Focus groups were separated in order to collect information specific to the perceptions of those distinct groups. Focus groups were conducted during an already designated recurring unit meeting time.

Measure

Semi-structured discussion guides were prepared for the focus groups with organizational leaders and for the combined focus groups with unit managers and direct care providers. Organizational leaders were asked to reflect on the history of the initiative and advanced planning required prior to implementation. All participants were asked about past experience with mindfulness and their attitude about the training prior to implementation; challenges and barriers to implementation including the organizational, personal, and inter-personal levels; the training itself including modifications that were needed; and perceived outcomes for staff, patients, and the organization. See Appendix for focus group questions.

Modified MBSR—The training was a modified version of MBSR based on input from leadership and staff. The primary modifications were shortening classes from 2.5 to 2 h and omitting the all-day retreat because of concern that the expectation to use personal time may reduce participation. To facilitate participation, classes were offered during the final hour of the day shift and the first hour of the evening shift in a meeting room of the hospital rather than an off-site location. Thus, 1 h of each class was included in the attendees' shifts, and for the other hour, they agreed to contribute of personal time. The mindfulness trainer provided guidance in mindfulness practices, such as sitting and walking meditation, the body scan, and gentle stretching and yoga, and led group discussions intended to enhance participants' awareness of their experience with the practices. Homework assignments included the expectation to engage in the formal meditation practices for 45 min daily 6 days per week and in informal practices during daily life. Because preliminary discussions with staff raised the possibility that some participants may be resistant to sharing their experiences in the classroom with co-workers and possibly supervisors, the mindfulness trainer made himself available for communication with participants outside of class via email or telephone.

Although MBSR had been developed and studied for many years, clinical mindfulness programs have only recently been implemented in academic psychiatry departments and affiliated public mental health treatment settings such as our own. The mindfulness training studied here was delivered to staff and adolescents on inpatient units at a local state hospital. Leadership received approval from the state to use training funds to provide mindfulness

training for direct care staff, managers, and adolescents on these units. The goal was to improve workplace satisfaction and morale and reduce burnout and turnover, which had been negatively impacted by the relocation of the units when the state hospital they were housed in was closed.

Data Analyses

The grounded theory approach was utilized for data analysis using an ongoing process of revision throughout data collection (Bradley et al. 2007). Utilizing grounded theory, we inductively approached focus group data collection. We utilized this method to "elaborate" (Suddaby 2006) on existing organizational culture theory and reconfigure existing notions of acculturation. In this way, grounded theory was "stimulated by substantive theory" (Glaser and Strauss 1967). Data was simultaneously collected and analyzed. After the first focus group was conducted, probes to questions for subsequent focus groups were refined based on emerging data to further pinpoint facilitators and barriers to implementation and outcomes following the grounded theory approach (Wuest 2012). The focus groups were recorded with a digital audio recorder and transcribed verbatim.

A single researcher coded focus group transcripts that were then reviewed by the research team to achieve inter-coder reliability and code relevancy (Moretti et al. 2011). All transcripts where read and compared in an ongoing process throughout the coding process. Codes in our analysis were assigned inductively with the aim to reflect textually the ground environment of the units through reporting participant perspectives of formal and informal organizational-based social context. Codes were assigned to emergent concepts utilizing language exhibited by focus group members and relevant literature. In coding the three focus group transcripts, thematic participant language patterns began to emerge between all three focus groups. Concepts emerging from this coding process represent the phenomena under study (Bradley et al. 2007). During the coding process when a term was utilized, or when a phenomenon was described and applied to various contexts by participants, we designated this a *concept*. Themes were identified from focus group statements that described phenomena suggesting a relationship across concepts (Bradley et al. 2007). Essentially, themes were concepts emerging throughout the various stages of the focus groups. Our focus group questions were separated into five stages: planning, past experience with mindfulness, the implementation process, training, and outcomes. We used these stages to organize the presentation of our focus group findings.

Results

Concepts

Several concepts emerged from participant language that illustrated effective steps and barriers to implementation (Table 1). These concepts are presented in the order of their appearance in the five stages of the focus group discussions (see Appendix for focus group questions). The key concepts were centered on the focus group stages of planning, past experience with mindfulness, the implementation process, training, and outcomes.

Planning

Several major concepts emerged from organizational leaders' discussion of the planning and preparation required for implementing the initiative, including buy-in from the state mental health agency, funding of mindfulness expert, and mutual mindfulness experience.

Buy-In—Key to the organizational social network of the units, state agency approval was required for implementation, thus impacting the internal formal culture of the units. Buy-in was obtained by focusing on inter-organizational values and ongoing initiatives undertaken by the state agency and the academic department. These included efforts to improve the organizational climate through culture building, wellness, decreasing medication and restraint usage, and non-coercive, strength-based, person-centered care. Culture building involved the intention to have staff and adolescents trained together to build a "common language," breaking down barriers between patients and staff, and having staff "practice self-care" to promote staff/adolescent collaboration. Additionally, it was believed that this collaboration would enable staff to serve as role models for adolescents' self-care. One participant described this to us practically, "When working with escalated adolescents, staff starts with 'I'm stressed too, let's talk' rather than let's go to the medication room." Within the academic department, mindfulness had already been implemented in other settings for staff and for adults on the adult acute inpatient unit.

Funding of Mindfulness Expert—The initiative benefitted from the growing interest in mindfulness within the organization and the mental health field more widely and the academic scholarship concerning mindfulness. This context existed among leadership in local and statewide settings prior to planning as an organizational value which made them familiar with and amenable to the approach. Directors cited this context as key to facilitating their efforts to obtain buy-in at all levels. From the perspective of the directors, it justified the allocation of resources to pay the mindfulness specialist for staff training.

Mutual Mindfulness Experience for Staff and Patients—Participants described what we will call a *mutual mindful experience* which encouraged staff receptiveness to this new approach through the common experience of going through the training sessions together and engaging in daily practice. This direct collective and individual experience created a culture of mindfulness to facilitate the implementation process and long-term sustainability of the initiative. A psychologist on one of the units mirrored this sentiment, describing mindfulness training as being "mutually important" in benefitting staff and patients to "stay in the moment." A nurse manager stated "this will meet value add at least for the youth and the staff" with others adding the focus helps deliver better care to adolescents.

Participants cited previous experience with using organizational culture change to aid in implementing changes in clinical practices as influential in planning implementation (Guydish et al. 2012). The mindfulness expert was hired prior to implementation to work directly with directors, management, and staff in order to have their own experience with mindfulness simultaneously. The expert was hired for 1 day a week to work with leadership, management, and staff on design of the training and strategy for implementation. He

provided a series of orientations on mindfulness and its benefits during staff meetings on the four units and made himself available to staff for informal discussions on and off the units. Comments from one of the leaders involved in planning reflected his experience studying and implementing organizational change in other mental health and addiction treatment settings. In implementing this new treatment approach, the director described the value of a mutual mindful experience for staff and patients:

> "I think if we are going to do a culture change of integrating new approaches into treatment then staff need to be trained…. Having the experience, I believe also helps you understand the process and potentially to increase your own awareness. So, I think it's important to train the staff cognitively but also to have some type of experiential activity to really learn this model and approach."

Past Experience

Participants were asked about previous experience with mindfulness in other contexts and how this may have influenced their amenability to the intervention. Three major concepts emerged in the discussion about staff members' past experience, including academic, personal, and professional settings.

Two of the directors responsible for planning the initiative had previous personal and professional experience with mindfulness. One had a long-standing personal practice of contemplative prayer and meditation including mindfulness. They had both attended a professional training in Mindful Leadership and were interested in incorporating mindfulness into programs for staff and patients.

Participants noted encountering mindfulness academically in undergraduate, nursing school, and graduate program curriculum. A social worker volunteered, "I was exposed to mindfulness in undergrad and it was mainly in biopsychology kind of classes," a program director stated, "My first experience with mindfulness was…in nursing school. We had a couple of classes on mindfulness as part of our curriculum." A director described "meditation as an extension of prayer" in college.

Yoga emerged as a past experience with mindfulness in the personal context for some participants, including a director who played a decision-making role in the initiative. Professionally, participants reported encountering mindfulness in the field of research, in training sessions at other mental health institutions, and in clinical practice at other locations. The following quote from a clinical social worker is an illustrative comment on past professional experience:

> "That was one of my first introductions to it (mindfulness) was being trained as a health counselor… in mindfulness training, in mindfulness exercises back in the 90s. Our milieu coordinator…would have us do weekly exercises and then extended trainings as well, slowing things down not reacting or responding, being a tree connecting your roots, so the thing, I think the key was being in the moment with a kid…"

Past experience with mindfulness was viewed as positively influencing attitudes toward the initiative and thus facilitating implementation. Conversely, one participant found that her experience practicing yoga was a barrier of the unstructured nature of mindfulness, concluding that, “So I’d like to do more [mindfulness] with clients but it would probably have to be a lot more structured.”

Implementation

To elucidate facilitators and barriers during the implementation process, we asked clinical leaders and direct care staff about events that occurred before the training sessions, how management presented the initiative, and how employees interpreted and responded to it. The major concepts arising from this discussion were staff buy-in and invitation.

Staff Buy-In—Leadership sought to achieve buy-in of unit managers and direct care providers through familiarizing them with the benefits of mindfulness. This buy-in process occurred at every level of the department’s hierarchy in a vertical and horizontal fashion. Leadership involved in the planning process pitched the value-add of mindfulness vertically, orienting leadership at all levels of the unit’s organizational hierarchy to this new formal policy initiative during pre-existing meeting times. Subsequently, leadership at various levels engaged employees, working horizontally throughout the hierarchy, in discussing the value mindfulness would add to the units.

Initially, a director in a decision-making position explained that the initiative would be funded through discretionary staff-training funds to benefit staff and improve the work environment. To encourage training attendance and buy-in, the mindfulness expert attended orientation meetings to explain the initiative. The program director describes that

> "I did try to make it very open, very welcoming. [Mindfulness expert] actually attended this meeting [the pre-existing unit meeting] to do the initial welcoming session, to talk to people and to do the initial welcoming session…. There were a couple times where I think we may have offered an orientation session during different times just to kind of give people an idea of what it was about."

Barriers in the Planning Process—Directors identified barriers to the implementation process including insufficient planning for an effective buy-in pitch to staff regarding the benefits of mindfulness and to familiarize them with the mindfulness expert. The primary barrier identified by direct care providers was lack of planning to provide coverage for them to attend training sessions. Several participants in our focus groups who wanted to participate were unable to for this reason. A member of the leadership noted these roadblocks and possible solutions to this attendance barrier:

> "So in order for that to have worked [floor staff attend trainings] many of us would have to of covered the floor, so I mean going forward a way to make that work would have just to have offered just to the Direct Care Staff and then, you know, just one or two hours a week then we could make a plan to cover the floor. You can’t have both. That’s a challenge."

Invitation—Directors, management, and the mindfulness expert each sent email invitations to promote the training sessions; this was in addition to orientations during regular meetings and informal word-of-mouth conversations. Staff described the fact that participation was optional and offered as an invitation rather than an expectation facilitated their participation. Because this approach respected the value staff place on the limited time available to complete their responsibilities, they did not feel pressure or coerced. One clinical social worker stated that, “I felt it was really elective, welcoming, please come and to join us but I did not feel that pressure [to attend].”

Training

Participants were asked to describe their attendance in and experience of the mindfulness training sessions. Some perceived attendance as a “personal responsibility” and were self-driven to attend. We interpreted these quotes as an alignment between informal personal values and organizational values. Others reported that it was really the “exposure” to mindfulness that assured attendance: “For me again it was the exposure to it and realizing what an opportunity it was to take advantage of it.” Despite this, logistical barriers of time and space prominent discussion points.

The issue of protected time available to attend the eight weekly classes emerged as the largest barrier for participants. Protected time would mean that the individual was able to attend and not have to cover their patients or make up the time later. Statements such as, “I recognize the importance, but it is always about the time,” “there was no way I could ever commit,” “it’s lack of time,” and “I was unable to attend because of the demand” were interpreted as time barriers. In order to attend training sessions, employees had to find coverage from a co-worker or take that time out of their own schedule. Several participants noted that the training added one more thing on top of an overburdened schedule. This barrier was also cited prior to start of the program during the buy-in process. The irony was not lost on participants, as this nurse manager’s comments describe as follows:

> "At first to be honest I was not sure if I was that interested. Because you know when we have this first training it was a time when the units were just so busy…. I found myself doing a lot of you know shifts and it was stressful to get to the stress management class! So there was times when it was like, ‘Oh my god how can I be so stressed out trying to get to the stress management class!’"

Training sessions were held on-site in hospital conference rooms to facilitate participation. Some participants cited this as convenient, but others cited it as a barrier because the space was too small for some of the group mindfulness and yoga practices that required participants to lie on the floor and because the location could be “noisy” and “disruptive” since adolescents in crisis could be heard outside the room. Lastly, some participants reported the transition from the high-stress context of the units to the low-stress mindfulness environment difficult to negotiate:

> "Well I think it was extremely challenging actually because the nature of the work, it is so demanding… there is no real rest. So to go from that particular setting to a fairly calm quite restful setting, I found that challenging but I made it my business to get here because I thought it was extremely important to be able to get here."

Outcomes

Overall participants reported that the training had been helpful. Specifically, they reported improvements in their own personal focus, the organizational climate, and interactions with their adolescent patients. Examples from employee statements include as follows: “I bring mindfulness practices to my work,” “it helped me tremendously,” “I try to walk around in a mindful mode,” that they are “calm as possible,” they “hear where people are coming from,” it was “not a waste” of time, and “it cleanses my mind before a session.” Additionally employees reported that their focus has benefitted from mindfulness practice and that their care delivery, productivity, and concentration improved at work and in some cases at home. The following quote from a nurse manager illustrates these benefits:

> "I find it helpful in the work environment because it helps you to be focused…and if you can focus better I think you deliver better care for sure…. As a matter of fact yesterday I practiced at home and I could see the clouds. You really focus. Your mind is completely clear. It is awesome."

In our discussion with directors they, reported that the training succeeded in “chang[ing] the environment” on the units, that employees “turned a corner,” and that “it’s a nicer place to visit…. The morale is just so much better.”Amanager noted reflecting on staff outcomes that “They notice a change in attitude. That was common. Because they learn to cope better in their job because it is a very stressful job.” Statements such as these linking mindfulness to improved focus, attitudes, and morale we interpret as benefitting organizational climate (Aarons et al. 2012), the relationship between the work environment and psychological well-being.

Direct care providers also perceived the training to have an impact on the adolescents. A staff member reported being “impressed” with the “ability” of adolescents to “talk about what they gained,” articulating their mindfulness “experience,” and trying to “work on accepting things that are happening with them in their mind and outside of themselves.” Others noted that adolescent’s became “curious” when they saw other adolescents “get into” mindfulness. Lastly, staff volunteered comments regarding staff adolescent interactions stating that “it is great…working with our kids…being more mindful” and more specifically:

> "I noticed that there are some times when we had to do some de-escalation and the staff…started to use more mindfulness grounding and are a lot more confident about using those kind of techniques."

Themes

The analysis of stakeholder’s perspectives on facilitators of implementation identified three themes, defined as statements that suggest a relationship across concepts: *local champions*, *diffusion of innovations*, and *acculturation* (Table 2).

Focus group data identified two local champions and diffusion of innovation agents due to their inter- and intra-hierarchal formal and informal advocacy of mindfulness planning and implementation. This advocacy thematically occurred throughout the planning, past experiences, training, and implementation stages. Members from each level of the

organizational hierarchy credited one of the clinical managers and the mindfulness expert as being instrumental as agents of change throughout the organizational structure, networking vertically to address leadership needs and horizontally to address staff needs to diffuse mindfulness as, “a desired organizational-based social context (Hemmelgarn et al. 2006)” addressing emergent staff stress and burnout needs.

Past experience with mindfulness and familiarity with the academic scholarship contributed to the clinical manager being seen on the units as an “early adopter” and “cutting edge” in demonstrating the value of mindfulness for staff and adolescents. Several participants’ statements describe the value in having this local champion articulate the “value-add” of the innovation by appealing to organizational cultural values. This manager was also seen as a role model: “She practices what she preaches and in part out of necessity. It was really a tough year. She is really taking care of herself and just has grabbed hold of this and I think that’s what really help[ed] [us] get through in the end.”

A key planning decision was to hire the mindfulness expert prior to implementation to spend 1 day per week getting to know the staff and familiarize them to mindfulness and its benefits. Thus, when the intervention got underway, the expert came to be seen not as an outside actor but as a local champion and part of the unit’s organizational culture. Staff perceived him as connecting with their values and valued his ability to listen, his spirituality, and his “good energy.” They also saw him as an advocate for the diffusion of the initiative through establishing staff buy-in and long-term adherence due to the expert’s thematic cooperation with staff throughout the initiative.

Finally, mindfulness acculturation emerged as a gradual “dynamic process” (Teske and Nelson 2009) on the units, first in how employees noticed and responded to the new training initiative and second in how mindfulness impacted group behavior. We use the term here to designate mindfulness as a routinely practiced and accepted aspect of the unit’s organizational culture. The process began through the leaders creating buy-in to the change process, followed by the participants gradually internalizing and implementing the learning in the work environment. Staff became more inquisitive and receptive to mindfulness as the training sessions got underway. One social worker characterized the phenomenon as a “contagion effect,” describing how people observed mindfulness in practice and then “others get into it.” For example, after training sessions were implemented on one unit, staff on other units noticed this new practice and requested implementation on their unit. A director noted that this model of “attraction versus requirement” became a more effective means of engaging the units in mindfulness practice. Participants noted that the expert’s visibility in delivering the training sessions, attending unit social events, and being “giving with his time and himself” enabled unit groups to notice this new initiative being delivered by the expert. Through the gradual acculturation process of noticing the benefits of mindfulness and noticing attendance of the mindfulness expert at meetings and social events, staff gradually became accustomed to his presence and came to accept the idea of mindfulness as part of the organizational culture. This displays the value of having a mindfulness expert who personifies the role of local champion to assist with the buy-in process, leading to the dual acculturation of specialist and therapy as part of the formal and informal organizational culture of the unit.

Organizational culture change in the acculturation process was evident in statements such as “it is a completely changed environment,” “you could see the difference,” it “really turned a corner,” “it was community building, shared self care,” and “the morale is just so much better.” A nurse manager explained that despite initial apprehension, dedicating time for mindfulness was ultimately perceived to be worthwhile as a personal and professional value.

Discussion

The present study provides the first detailed qualitative analysis of the organizational-based social context involved in implementing mindfulness training for staff in an adolescent mental health hospital setting. The primary facilitating variables identified include organizational leadership at several levels, securing initial buy-in, and attention to logistical factors including scheduling and location. Other facilitating variables were past experience with mindfulness, the identification of local champions, and an acculturative process of attraction. The primary barriers identified were insufficient time for direct care staff to attend training sessions, insufficient coverage to allow direct care providers to participate without using additional personal time, and insufficient preparation for the new initiative on some units.

An important concept that emerged from stakeholder reports was the collective group process that established mindfulness as a formal norm on the adolescent inpatient units, which we call the mutual mindfulness experience. The process began with leadership’s buy-in effort, pitching mindfulness practice to employees during pre-existing meeting times as a non-mandatory training option to improve self-care. By design, classes included direct care providers (social workers, nurses, and psychiatrists), as well as program and unit leadership. The data indicated that the mutual mindfulness experience facilitated a common identity and in-groups through mutual empathy and was derived from the shared desire to find more effective ways of dealing with workplace stress and reduce its impact on morale and patient interactions. The importance of this concept in facilitating implementation parallels the value placed on having a diverse group of participants in MBSR classes (Kabat-Zinn and Hanh 2009). Participants in MBSR classes learn that although they may have little in common with each other, they come to the program with a shared experience of struggling to manage the stress in their lives, and through the group process, they share the experience of struggling to change using the concepts and practices of mindfulness.

The mutual experience also served to acculturate practice, establishing it as a norm within a unit’s organizational culture. We believe this helps explain why our findings with respect to barriers do not fully agree with a previous workplace implementation study (van Berkel et al. 2013). Participants in that study cited fear of being judged for “wasting time” on practice by non-participating colleagues. Although concern about wasting time was mentioned several times by participants in our study, only one cited this as a barrier. This emphasizes the need for a mutual mindfulness experience serving to minimize the distance between mindfulness in-groups and non-participating out-groups, consistent with the observation that collaborative efforts serve to unify separate levels of an organizational hierarchy and create an inclusive environment (Purnell et al. 2010). Consensus building occurs through individual members and groups having a hand in implementing a new program, thus

enabling a collaborative effort through inter-hierarchal buy-in. This collaborative effort involving the commitment, buy-in, and participation of frontline staff has been described as critical for the success of implementation (Rivard et al. 2011).

Past experience with mindfulness, whether personal, academic, or professional, was identified by participants as having a positive impact by enhancing receptivity of the organizational culture toward mindfulness implementation as evidence-based practice. Previous studies of implementation of evidence-based practices have demonstrated a similar impact of organizational culture and climate of mental health services on staff attitudes, implementation, effectiveness, and outcomes of evidence-based practice implementation (Aarons et al. 2012; Hemmelgarn et al. 2006). As Aarons et al. (2012) noted, external social network experiences impact internal organizational cultures. This concept can be directly related to other facilitating variables identified by our participants, particularly local champions and diffusion of innovation agents. One of clinical leaders who had previous knowledge and personal experience with mindfulness functioned in the role of a local champion, taking personal initiative and taking an active role in planning and implementing the training sessions. Her dedication to the project motivated others to become involved. These findings are consistent with previous research on local champions who provide leadership in resolving barriers encountered during new program implementation (Kirchner et al. 2012). Through their firsthand knowledge of organizational, management, and staff needs, they are able to address concerns and directly advocate new program implementation and sustainment. They act as early adopters serving to diffuse innovations, throughout an organization via formal and informal communication and influence (Sahin 2006; Wejnert 2002).

The planning decision to have the mindfulness trainer begin working informally with clinical leaders and staff prior to implementation of the MBSR training was responsible for the unusual finding that he also served as a local champion by virtue of being seen as part of the organizational culture. In this integrated role, participants felt a personal connection and described him as a bridge between mindfulness and the organizational culture rather than an outside expert. The commitment of the mindfulness expert and nurse manager was also found to be characteristic of the diffusion of innovations. They acted as early adopters serving to diffuse mindfulness throughout the units via formal and informal communication and influence (Wejnert 2002). As local champions, their efforts meshed culturally in the organizational context to advocate for the diffusion of this new initiative in establishing staff buy-in and long-term adherence. While diffusion of innovation is a model that can be tested (Sahin 2006), we operationalized it as a theme to describe the spread of mindfulness as a new therapeutic intervention throughout the organizational hierarchy, how linkages between employee and institutional values explain the implementation and adoption of mindfulness, and how local champions expedite this process. We found that ideal candidates for the role of local champion to diffuse mindfulness as an innovation are employees that have a past experience with mindfulness, have shared values with the organization, and share personal values with other employees.

Another facilitating variable to emerge from analysis of participants' responses was the noticing of mindfulness practice and its benefits in others. We propose that noticing is a

process that encourages the acculturation of mindfulness in workplace settings. By offering the training on more than one occasion, staff had the opportunity to notice peers benefiting from mindfulness, creating an environment that encouraged participation and changing the organizational culture. We use acculturation to describe the process of mindfulness and staff fused together. Acculturation is most commonly understood as the interaction of a minority culture with a majority culture without either group giving up its identity. It entails the changes in cultural patterns that arise when two groups having different cultures come into direct contact (Redfield et al. 1936). Through this interactive process, the two groups define within their organization shared language, values, and understanding toward a common goal (Stahl and Voigt 2005). In the present study, we apply this construct in an organizational change context exploring the introduction of an innovation from another culture (mindfulness) to a different cultural group (mental health professionals) within a formal organizational setting and how this affects group behavior and attitudes.

The primary organizational barrier to implementation in our study pertained to constraints on staff time, inflexible working hours and lack of coverage for attending classes emerged as barriers. Participants reported that attempting to balance their workloads with attending mindfulness training sessions, and transitioning from their high-stress work to the mindfulness classes, was sometimes difficult and stressful. The difficulty of finding the time for classes mirrors one of the major barriers that participants within classes encounter in finding the time for 45 min to an hour for the practices assigned as homework during the program. This barrier to implementation has also been described in a previous study of MBSR delivered in a health care setting. In a randomized controlled trial with health care professionals of a veteran hospital, 44 % of participants dropped out citing lack of time (Shapiro et al. 2005).

We could find only one previous study that systematically examined organizational variables affecting implementation, a process evaluation of a mindfulness-based intervention delivered in a workplace setting (van Berkel et al. 2013). Participants cited inflexible working hours as barriers to adherence with the intervention. In planning the intervention described here, leaders anticipated this barrier and addressed it by holding the training sessions during the last hour of the day shift and the first hour of the night shift. This was only partially successful. Focus groups reported not only that it facilitated attendance by some, but also that the change of shift is a particularly busy time on the units. Future efforts could avoid this barrier by providing coverage for direct care staff to attend the training and/or dedicating more effort to the employee buy-in process toward demonstrating the value of the mindfulness training (Guydish et al. 2012). Preparation could include explaining how learning to be more present in the moment could help staff better utilize their time during the workday, in addition to reducing stress. Ultimately, however, management must acknowledge that time is a scarce commodity informally valued among employees and must be compensated for in order to successfully implement a mindfulness training program. Participants also suggested that mindfulness could be integrated into the formal organizational culture of the units by implementing mindfulness training sessions for new employees or as a continuing education option offered to staff.

Despite these obstacles, employees and leadership reported that as a result of the training, the organizational climate (Hemmelgarn et al. 2006) improved. Given the recent relocation of the inpatient units under study, this finding is interesting in light of previous research on organizational change affecting inpatient mental health units undergoing relocation or conversion from an open to a closed unit (Mörelius et al. 2013). The benefits reported by participants in the current study are consistent with the suggestion that emotional support for staff undergoing organizational change may reduce uncertainty and the impact on professional functioning (Melnikov et al. 2012), particularly since the organizational change of relocation of an inpatient mental health unit has been shown to have a negative emotional impact on staff (Melnikov et al. 2012). The evidence for a positive impact on organizational climate could also be consistent with a relationship between the work environment and psychological well-being (Aarons et al. 2012). Further study is needed to confirm this relationship and to understand individual factors that influence variability in response to similar interventions.

Although the primary aims of this study were to understand organizational factors affecting implementation, we included some questions about the impact of the training on direct care providers. We asked what impact the training had on their experience on the job and what impact it had on interactions with their adolescent patients. Regarding their experience on the job, participants reported using what they had learned in the classes and in their home practice on the job to positive effect, including greater empathy for co-workers. Leadership's observations of improvements in the work environment supported these experiences reported by staff. These findings are generally consistent with a previous qualitative study of perceived benefits reported by healthcare professionals who participated in a MBSR program, but also provide additional insight into the benefits for organizational climate. This effect on social cohesion and the work environment reported here is similar to the "relationships" theme reported by nurse professionals who participated in a MBSR program delivered in their hospital (Cohen-Katz et al. 2005). Participants in that study described increased empathy and appreciation of co-workers, and the authors point out that this appeared to improve the work environment similar to reports by the participants in the current study. Another similarity with our study is that participants in the study by Cohen-Katz et al. (2005) also reported that the training improved their ability to focus on their patients. In our study, participants reported an improvement in "focus" when interacting with adolescents on the unit. These promising findings call for further research into the effect of mindfulness programs on the work environment, how this impacts patient care, and the relationship between improvements in the organizational climate and staff well-being.

Limitations

A limitation of our study was that participants were self-selected. We were only able to interview a subsample of those who participated in the training sessions or who were employed on the units during the intervention. This was due to limitations on staff time, shift schedules, and staff turnover. The reported culture change on the units is specific only to the perception of participants. These results cannot claim that change was systemic on the units since we did not conduct a census.

We only did post-intervention interviews and therefore could not assess changes in attitudes, skills, or knowledge about mindfulness to see if these areas changed as a result of the intervention. It would have benefitted our study to compare stress level measures of employees pre- and post-mindfulness training to employees not attending the training. Additionally, scales measuring organizational climate and culture could have been compared to attending and non-attending mindfulness training employees. We also did not take into account the personality traits such as attitudes, values, or cultural backgrounds (i.e., race, class, and gender) of focus group attendees, which may have influenced attitudes toward the training and the acculturation process (Liou et al. 2012; Thomas and Hersen 2002). Understanding the personal identity of employees and how this may potentially impact the "cultural competence" (Fung et al. 2012) of training delivery, training attendance, training outcomes, and acculturation could have benefitted this study.

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Table 1

Concepts

	Concepts	Successes
Planning	Buy-in with state agency	Leadership presents rationale of how mindfulness achieves inter-organizational values and goals such as unit culture building, patient and employee wellness, decreasing medication and restraints
	Funding buy-in with state agency	Leadership presents past scholarship as evidence of effectiveness of mindfulness as justification to fund mindfulness expert
	Mutual mindfulness experience	Leadership designs simultaneous personal experience for direct care staff, managers, and expert
Past experience	Academic	Staff with undergraduate and graduate mindfulness curriculum facilitates amenability to implementation
	Personal	Staff experience with mindfulness in prayer, meditation, or yoga facilitates amenability to implementation
	Professional	Staff on-the-job training sessions at other places of employment facilitates amenability to implementation
Implementation	Staff buy-in	Employee orientation during pre-existing unit meeting time facilitates buy-in
		Collaborative leadership effort to deliver orientation facilitates buy-in
		Mindfulness expert attends orientation to facilitate explanation of mindfulness and begin acculturation process
	Invitation	Training framed as optional
		Training sign-up disseminated via email, word-of-mouth, and orientations
Training	Attendance	Identify mutual staff and organizational values in mindfulness training to encourage program completion
		Designation of time for staff to attend training that takes staff workloads into consideration
	Space	Convenient for staff to having training sessions at work
Outcomes	Benefits	Generally helpful
		Improved focus with patients and oneself
		Improved work environment

Table 2

Themes

Themes	Facilitators	Concept
Local champion	Organic emergence (nurse manager)	During buy-In
	Leadership identification of (mindfulness expert)	During planning
	Informal values connection between local champions and employees	During staff buy-in
	Formal values connection between local champions and policy initiative	During planning stage
Diffusion of innovations	Involvement of local champions	During planning, implementation, and delivery
	Vertical (leadership) and horizontal (staff) participation	Staff buy-in through common values
Acculturation	Employees notice mindfulness practice	During staff buy-in, invitation, and training sessions
	Employees notice benefits of mindfulness practice	During staff buy-in, invitation, and training sessions
	Model of attraction as opposed to requirement emerges	During staff buy-in, invitation, and training sessions
	Noticing and interacting with mindfulness expert through gradual increase of presence	During staff buy-in, invitation, and training sessions
	Group change through experiencing benefits of mindfulness	During staff buy-in, invitation, and training sessions, outcomes