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Promoting Mindfulness in African American Communities

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Abstract

African Americans report higher rates of chronic stress compared to non-Hispanic Whites. Consequently, chronic stress contributes to disproportionately higher rates of poor health outcomes among African Americans. Mindfulness meditation is a well-established and studied strategy to reduce stress and potentially improve health outcomes. However, the practice of mindfulness meditation is largely underutilized in African American communities despite its potential health benefits. In this commentary, we will discuss the relevance of mindfulness interventions, limited research available, reasons for low representation, and cultural adaptations for mindfulness meditation in African American communities. We also provide additional strategies to guide future mindfulness research that target African Americans.

Keywords

Mindfulness-based interventions; African-Americans; racial/ethnic minorities; chronic stress

Mindfulness represents the basic human ability to be fully present in the moment (Dryden & Still 2006). Being mindful is a centuries-old practice that evolved from various religions,

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including Buddhism and Hinduism (Kabat-Zinn, 2003; Selva, 2019). Today, it is frequently experienced in several forms through religious rituals, mind-body exercises such as yoga and Tai Chi, and various other purposeful secular practices (Kelley & Kelley, 2015; Posadzki & Jacques, 2009; Selva, 2019).

Mindfulness in Western culture may have arisen through the influence of immigration, Eastern travel, and increased trade with Asia in the mid nineteenth century (Wilson, 2014). Eventually, in the 1960s, immigration reforms enabled more Asians to emigrate to the United States, including prominent Tibetan and Zen missionaries who founded Buddhist centers and toured college campuses. Following this, and most importantly, Kabat-Zinn (1990) created the mindfulness-based stress reduction (MBSR) program. MBSR and similar mindfulness-based programs represent a complementary or alternative approach to reduce stress, pain, and suffering and in some cases to reduce symptoms of specific conditions such as insomnia and cancer-related fatigue (Kabat-Zinn, 2001; Mehta, et al., 2019; Ong et al., 2014; Sipe and Eisendrath, 2011). The traditional MBSR program involves a 2.5-hour class for eight consecutive weeks to develop seven foundational attitudes: “(a) nonjudgment of one’s experiences, (b) patience with allowing experiences to unfold in their own time, (c) willingness to see everything as if for the first time, (d) being oneself, (e) nonstriving, (f) acceptance of how things are, and (g) allowing one’s thoughts to come and go uncensored” (Kabat-Zinn 2013; Woods-Giscombé & Gaylord, 2014, p.3). This program was designed to be secular without adopting any specific cultural or religious ideology, although references of some isolated Buddhism concepts remain. Central to Buddhist philosophy is the notion that mindfulness can be cultivated through meditation practice by all humans, regardless of race, ethnicity, education level, or other socioeconomic factors (García-Campayo, et al., 2017). Kabat-Zinn (1994) defined the term mindfulness as “the awareness that arises from paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally” (p.4). Concepts of “awareness” or “paying attention” are, most likely, universally appreciated by most people under nearly any context. To date, mindfulness meditation has been taught almost exclusively in white, middle-and upper-class settings with minimal utilization in communities of color (Salmon et al., 2004; Woods-Giscombé & Gaylord, 2014) in the United States. In this commentary, we describe the rationale for promoting mindfulness in African American communities, examine emerging research on mindfulness practice among African Americans, and describe future efforts needed to culturally adapt and study the impact of mindfulness practice on health in this population.

Why Mindfulness Interventions Are Relevant for African Americans

African Americans report higher levels of chronic psychological stress compared to non-Hispanic Whites (Boardman and Alexander, 2011; Brewer et al., 2018; Cohen and Janicki-Deverts, 2012; Johnson et al., 2016; Sternthal et al., 2011; Williams, 2000). This includes disproportionately high exposure to stressors across various domains including discrimination (racial, nonracial, and job), financial strain, community stressors (e.g., violence and victimization), relationship stressors, and acute life events (e.g., traumatic experiences) (Sternthal et al., 2011). Moreover, African Americans are more likely to indicate multiple co-occurring stressors at a given time (Sternthal et al., 2011). Ultimately, these stressors can lead to a higher burden of chronic diseases and poor health outcomes

(Brewer et al., 2018; McEwen 2012; Steinhardt et al., 2009). Chronic stress is associated with poor health behaviors, such as smoking (Lawless et al., 2015), poor diabetes self-management (McEwen 2012; Steinhardt et al., 2009) and chronic conditions such as heart disease (Brewer et al. 2018), and stroke (Everson-Rose et al., 2014; Henderson et al., 2013). Furthermore, African Americans are at higher risk for discrimination in terms of both major life events (e.g., in terms of obtaining employment, housing or medical care) (Sims et al., 2009) and day-to-day experiences (e.g., “microaggressions” of being treated with less courtesy or respect in daily life) (Sue et al., 2007). Research suggests that stressful experiences with discrimination play a critical role in creating and maintaining health disparities for African Americans (Pascoe & Richman, 2009; Williams, 1999; Williams & Mohammed, 2009).

African Americans also tend to report worse sleep. For example, 46% of African-Americans have worse sleep quality and shorter sleep duration and compared with 33% in non-Hispanic Whites (Centers for Disease Control and Prevention[CDC], 2017; Ruiter et al., 2011) and have more sleep disturbances (Hirotsu et al., 2015; Wetter & Young, 1994). People with poor sleep quality are also more likely to engage in adverse health behaviors including insufficient physical activity, higher intake of sugary foods, smoking, and low medication adherence (Chasens & Luyster, 2016). These maladaptive activities contribute to a higher burden of chronic diseases in African American communities (Balkrishnan et al., 2003; Booth et al., 2012; CDC, 2018; Cossrow & Falkner, 2004; Shiyanbola et al., 2018). A number of studies have shown an association between poor sleep and poor cardiovascular health and obesity, partially mediated by chronic psychological stressors (Bidulescu et al., 2010; Wirtz & von Känel, 2017).

Race/ethnicity and socioeconomic status appear to interact to predict higher likelihood of exposure to chronic stress and associated behavioral (e.g., health risk behaviors, insufficient sleep) and biological stress processes (e.g., elevated cortisol, inflammatory markers, blood pressure reactivity), which then predict poor health outcomes (Covassin et al, 2018; Myers, 2009). Although African Americans have not been sufficiently represented in mindfulness research, studies of mindfulness interventions in the general adult population support mindfulness for targeting multiple pathways implicated in health disparities. For example, mindfulness interventions have been shown to improve a variety of psychological health outcomes (Goldberg et al., 2018; Goyal et al., 2014; Khoury et al., 2015; Khoury et al., 2013) (including stress reduction), improve physiological indicators of stress reactivity (Pascoe et al., 2017), reduce health risk behaviors including smoking and substance use (Li et al., 2017; Oikonomou et al., 2017), and improve sleep quality among those with insomnia (Ong et al., 2014; Ong & Smith, 2017). In addition, research suggests that mindfulness may ameliorate the association between perceived discrimination and depressive symptoms (Brown-Iannuzzi et al., 2014; Shallcross & Spruill, 2018). Mindfulness training has been conceptualized as a buffer against the health consequences of stress (Creswell & Lindsay, 2014). As mindfulness promotes self-compassion and self-acceptance, this practice could be especially useful for African Americans and other populations who experience discrimination and other chronic stress (Witkiewitz et al., 2013).

Mindfulness Meditation Studies in African Americans

Despite the strong rationale for mindfulness-based interventions in African American communities, their representation in formal study is limited. In a systematic review of mindfulness and meditation-based intervention studies, only 24 out of 12,265 citations between 1990 to 2016 were identified as “diversity-focused” (i.e., minorities included in sample, cultural adaptations of interventions, and/or planned comparisons of outcomes for different ethno-racial groups) (DeLuca et al., 2018, p. 2). In a systematic review of trials including MBSR and mindfulness-based cognitive therapy (MBCT) in the U.S., Waldron et al. (2018) found that 79% of the participants identified as non-Hispanic White. Additionally, several studies did not report on race/ethnicity, and among those that did, African Americans were underrepresented, comprising only 11% of participants (Waldron et al., 2018). A third review of mind-body therapies (including mindfulness) in cardiovascular disease showed only five out of 425 trials targeted African Americans (Johnson et al., 2018). The limited number of trials, inclusion of other lifestyle co-interventions, and high risk of bias makes meta-analysis unfeasible, and reveals a gap in evidence for mindfulness in African Americans.

Despite the few studies identified and their methodological limitations, findings from one review of mind-body therapies provided mixed but promising early evidence of improvement in hypertension and perceived stress among African American participants (Johnson et al., 2018). Two of the mindfulness studies focused on blood pressure control. For example, in a randomized pilot study, ELDERSHINE, a curriculum adapted from MBSR, was used to decrease blood pressure in 20 urban older African Americans living in a low-income senior residence. This intervention had high (>80%) attendance for eight weeks and provided preliminary evidence of reduction in blood pressure (i.e., 22 mmHg lower systolic pressure) compared with the social support control group (Palta et al., 2012). Qualitative statements made after the study suggested that patients had a positive experience (Palta et al., 2012). In a second controlled study of 15 participants, Park et al. found that 14 minutes of mindfulness meditation reduced blood pressure and muscle sympathetic nerve activity compared to a blood pressure education intervention among African American men with chronic kidney disease (Park et al., 2014). While the study was small and included a very select sample, even a single session of guided mindfulness meditation lowered blood pressure short-term in this population, where the sympathetic nervous system may be chronically overactivated.

Four other studies, including 3 small randomized controlled trials, focused on the impact of mindfulness on stress among African Americans. Woods-Giscombe et al. (2019) found that an adapted MBSR program for African Americans with prediabetes was associated with improvements in stress, body mass index, and spiritual well-being. Qualitative findings showed acceptability of the adapted MBSR, but also challenges to participation (such as time, location of sessions, and frequency of travel). Potentially, these challenges may have contributed to recruitment of individuals who were more educated with higher income and likely to have more flexible schedules compared to those with lower income (Enchautegui, 2016). These challenges highlight the need for further adaptations to expand the reach of mindfulness into low socioeconomic communities, where there may be greater competing

responsibilities (e.g., provision of temporary childcare service). In another pilot study of 65 African American women, a 4-week Mindful Motherhood program did not show a reduction in perceived stress among urban, low-income pregnant African American women. However, attending more sessions was associated with reductions in depressive symptoms, reactive cortisol response, and pregnancy-related stress (Zhang & Emory, 2015). This study noted a significant attrition rate (48% at post-intervention). There remained concerns regarding ongoing engagement, including among those who may possess the greatest need of support during pregnancy.

Dutton et al. (2013) reported that an adapted MBSR treatment for post-traumatic stress disorder was feasible and acceptable for 53 low-income, predominantly African American women with history of intimate partner violence and chronic trauma. Attention to an underserved population less likely to seek conventional mental health services was compelling. The investigators acknowledged that continuous input and feedback from participants and social service providers was critical for engagement. Also, participant integration of formal mindfulness at-home practice into daily schedules remained a challenge (e.g., addressing the needs of their children, confronting daily stressors, and lacking practice space). Lastly, while the intervention itself was generally well-received, it also triggered psychological discomfort in some participants. Two participants reported distress and needing emotional assistance for painful memories, and one reported panic attacks with home practice of mindfulness.

Finally, in a small uncontrolled pilot study, Burnett-Zeigler et al. (2016) found that African American women showed high interest in an adapted MBSR curriculum and reported reductions in depression and stress after receiving the program. It also demonstrated success in the Federally Qualified Health Center (FQHC) setting. However, similar to other studies, high levels of stress were thought to adversely influence optimal participation in the program.

Collectively, these studies support the acceptability and feasibility of mindfulness meditation interventions in at least some groups of African Americans. However, overall efficacy cannot be reliably estimated from the mixed evidence to date and there were a number of notable study limitations. First, the extent of cultural adaptations to mindfulness interventions vary, with generally limited attention to cultural values and beliefs. This is important as culturally adapted mental health interventions are more effective than standard programs that have not been adapted (Griner & Smith, 2006). Second, these studies are relatively short-term (e.g., 4–8 weeks), and the long-term psychological and physiological benefits remain uncertain. However, there is known evidence of short-term improvement in brain function and structure, with comparability to studies on traditional long-term meditation practices (Gotink, et al., 2016) as well as sympathetic nerve activity and blood pressure (Park et al., 2014). Third, there is likely variability in mindfulness instructor experience and training, how sessions are facilitated, and contextual factors. Reproducibility in other African American populations with different instructors and under-resourced settings are needed, where there may be difficulty identifying experienced, qualified leaders who share a common ethnic background with participants. Finally, concerns regarding participation, attrition, the extent to which participants practice mindfulness on their own

between sessions, ongoing or chronic stress (which may impact engagement), and selection bias have been considered. The need for more rigorously controlled trials of mindfulness interventions among African Americans is clear.

Potential Reasons for Low Representation of African Americans in Mindfulness Research

The reasons underlying insufficient inclusion of African Americans in existing mindfulness research are unclear. African Americans are underrepresented in clinical trials more generally (i.e., not just mindfulness research). Potential reasons include mistrust of healthcare providers and medical research; lower knowledge about clinical research; limited opportunities to participate in research at convenient times in places where potential participants live; and practical difficulties with transportation or childcare (Killien et al., 2000). However, there may be additional specific reasons for low representation of African Americans in mindfulness research. For example, mindfulness research programs often highlight the link between mindfulness and Eastern traditions of Buddhism, which may not appeal to many African Americans given the community's strong Christian ties (Pew Research Center, 2015). Though mindfulness does not require any particular religion or cultural belief system (Ludwig and Kabat-Zinn, 2008) some scholars suggest that Buddhist teachings may be disguised through mindfulness-based interventions (i.e., "stealth Buddhism") (Gunther Brown, 2016). These ideas have been well-described including the use of "code switching" terminology (Gunther Brown, 2016) or "universal dharma" concepts (Gleig, 2019; Helderman, 2019). These undercover Buddhist teachings of mindfulness can be perceived as foreign, especially for those with a strong Christian influence in their upbringing (Proulx et al., 2018). One African American woman described encountering Buddhist teachings for the first time as a "sense of being surrounded by strangers in a space where one needs to feel safe" to practice mindfulness (Sala, 2012, p.1). Consequently, this may suggest to African Americans that mindfulness programs are not for them, and classes where they represent the minority may be undesirable. With this in mind, African Americans may perceive mindfulness as forced integration or assimilation instead of inclusion.

Additionally, some argue that mindfulness advertisements are geared towards Caucasians (Cole, 2014; Gregoire, 2014). Homogeneity in advertisements, social media campaigns, and even clinical brochures for programs can subtly send the message that mindfulness is not a practice meant for everyone. White culture, experiences, and social references are embedded in American mindfulness programs (Proulx et al., 2018). The location of mindfulness programs may also be less available in urban areas with greater African Americans (or in suburban areas without easy transportation). Finally, there is a lack of African American mindfulness instructors. In a qualitative study about mindfulness meditation among African American adults, one participant emphasized, "African Americans need to see people who look like them" (Woods-Giscombé & Gaylord, 2014, p. 13).

Cultural Adaptation of Mindfulness Programs Targeting African Americans

Cultural adaptation may be one strategy for effective implementation of mindfulness training in African American communities (Fuchs et al., 2013; Woods-Giscombé & Gaylord, 2014).

Cultural adaptations are particularly relevant in situations where they can address ineffective clinical engagement, unique risk or resilience factors, unique symptoms of a common disorder, non-significant intervention efficacy for subcultural group, and cultural relevance (Barrera et al., 2013; Lau, 2006; Shallcross, 2016). Among African Americans, cultural adaptations might target specific factors and psychological stressors relevant to African American communities such as perceived discrimination, occupational stress, and limited access to healthcare treatment (Shallcross, 2018; Sternthal et al., 2011). Adaptations might also highlight story-telling (fostering community and connection) and emphasize interdependence (and how self-care can aid caring for others) (Watson et al., 2016; Watson-Singleton et al., 2018). Additionally, they can consider how mindfulness might complement the traditions valued in their communities, including religious faith and community cohesion. Instructors can emphasize how the potential health benefits of mindfulness can improve family and community cohesion (Watson et al., 2016; Watson-Singleton et al., 2018; Woods-Giscombé et al., 2014). Instructors might also compare the practice of mindfulness to practices such as knitting and quilting (Sanders, 2018) or connecting with self (Tenfelde et al., 2018).

Although mindfulness is often intended to be a secular practice within Western culture, some African Americans may feel encouraged to incorporate religious faith and spirituality through their own perceptions of mindfulness practices (Burnett-Ziegler et al., 2019; Woods-Giscombé et al., 2014). In the studies by Woods-Giscombé et al (2014) and Burnett-Ziegler (2019), participants expressed that the mindfulness principles and concepts enhanced their own religious and spiritual beliefs. Studies suggest some African American participants relate to mindfulness with references to “being still” in order to “hear God”(Proulx et al., 2018; Woods-Giscombé & Gaylord, 2014) and enhancing spirituality (Spears et al. 2017). These themes were also identified in a study of elderly African Americans, where participants considered prayer as a way to speak to God and stillness and meditation as a means to better hear God (Proulx et al., 2018).

Mindfulness instructors might consider how best to address religious faith and spirituality when delivering mindfulness interventions. There seems to be an important distinction between implementing a mindfulness curriculum that specifically incorporates religion versus employing a more secular approach that is open to discussion of participants’ perceptions of how mindfulness practice may or may not integrate with their own spiritual or religious experiences. The latter approach may be more relevant to wider audiences, but the decision of how to address religion/spirituality (if at all) will depend on the background and preferences of the specific target population. In any case, more African American facilitators are clearly needed (Woods-Giscombé & Gaylord, 2014), as having an instructor that resembles and can relate to the community they are serving can build trust (Proulx et al., 2018).

To promote interest and attendance, facilitators may wish to emphasize the benefits of mindfulness such as stress management and increased awareness and purposefulness (Burnett-Ziegler et al., 2019; Woods-Giscombé et al., 2014). Also, if a mindfulness intervention is facilitated at a medical institution, instructors may need to address mistrust toward medical professionals and institutions (Corbie-Smith et al., 1999). Ideally, the

mindfulness intervention can take place in a community location familiar to its participants (Tenfelde et al., 2018). Other adaptations have been considered to gain interest and attention, such as yoga and the use of audio meditation recordings (Burnett-Ziegler et al., 2019). Finally, logistical barriers should be addressed. Though not exclusive to African American communities, these considerations can include flexible class schedules due to employment obligations, providing transportation or daycare options, offering video-based instruction and synchronous video communication, and providing the home practice audio in a phone-compatible format (Burnett-Ziegler et al., 2019).

While many of these cultural and logistical adaptations are achievable, increasing the number of African American instructors may be challenging. There are less than 200 certified MSBR instructors in the United States (no data is available on race/ethnicity) (University of Massachusetts [UMass], 2019). Tuition to become a certified MBSR instructor is close to $10,000 (UMass, 2019) which can likely discourage people with low-income to obtain certification. One solution could be training healthcare staff in mindfulness without having them go through formalized training. In one non-randomized study of mindfulness in African American women comparing experienced mindfulness instructors versus novice instructors (healthcare staff), there was comparable improvement in mindfulness, depressive symptoms, and stress (Burnett-Zeigler et al., 2019). Providing healthcare staff with more accessible mindfulness training may increase capacity in healthcare institutions, particularly FQHCs serving African American populations in urban areas.

Strategic partnerships with community and meditation-oriented organizations may assist in reaching African American populations. The Institute of African American Mindfulness (IAAM), Black-Zen, Mindfulness for the People, and the Center for Transformative Change founded by Reverend angel Kyodo williams have developed cultural adaptations of mindfulness targeting African Americans. These organizations describe specific attention given to racial battle fatigue, lack of minority community engagement, racial and nonracial discrimination, social justice work, and healing divisions within race, class, faith and politics.

Given higher rates of traumatic experiences and other stressors among African Americans, facilitators should be sensitive to potentially difficult emotional reactions during meditation. That is, mindfulness meditation can exacerbate emotional reactions from trauma as a person practices being in the present moment and being aware of surroundings (Lindahl et al., 2017). Emotional discomfort and self-criticism may occur in response to self-awareness from meditation practice (Lustyk et al., 2009; Shapiro, 1992). In order to increase sensitivity when working with populations with higher rates of trauma, instructors can invite participants to keep their eyes open and/or leave the lights on during meditation if that is more comfortable, check in regularly about their experiences and offer extra support as needed, and avoid requiring participants to engage in practices that are particularly uncomfortable (Spears et al., 2017). Additionally, even if instructors are not formally certified in mindfulness- based practices, formal training should include a trauma care component to prepare instructors to respond appropriately to any distress or trauma-related issues that may arise during mindfulness sessions. Minimally, they should be able to identify

signs and symptoms of traumatic stress, and attempt to gain skill in addressing traumatic flashbacks and trauma-related dissociation.

A Call to Action for African Americans in Mindfulness Research

Currently, only 12 out of 1528 studies include African Americans in the description of a mindfulness-related study in the NIH ClinicalTrails.gov repository (active) (ClinicalTrials.gov, 2019). These studies include interventions on diabetes prevention, hypertension, substance abuse, depression, osteoarthritis, and smoking. Greater representation of African Americans is needed given the high burden of these conditions for African American communities and the detrimental impact on their overall health and well-being. If rigorous clinical trials with substantial proportions of African Americans support mindfulness interventions for improving health and well-being, increasing access to mindfulness could be one strategy for promoting health equity.

The science of mindfulness is in its infancy. Higher quality research is needed with inclusion of comparison groups, follow up assessments, and more rigorous measurements of study validity (Goldberg et al., 2017). As the science of mindfulness improves in rigor and methodology, researchers should consider ethnic and cultural variation in programmatic design and outcome targets (Davidson & Kaszniak, 2015). For example, research suggests that African Americans are more likely than whites to report engaging in prayer for health reasons (Gillum & Griffith, 2010). Prayer or other spiritual practices could be integrated into mindfulness interventions in culturally acceptable ways as mentioned above. When reporting research findings, researchers need to clearly identify the details of the mindfulness intervention, the instructor, behavioral measurements, and measures of adherence for mindfulness practice. Finally, mechanistic exploration of mindfulness meditation with fMRI or biological markers should be explored given the lack of inclusion of minority groups in these studies (Reive, 2019).

Mindfulness meditation has the potential to improve health outcomes in African American communities and other communities of color. Preliminary evidence supports mindfulness meditation as a feasible and acceptable intervention that results in positive health outcomes among African American participants. Cultural adaptation offers a means to meet the needs of African American communities while maintaining the integrity of well-studied mindfulness practice. Further research is needed to better understand the benefits and challenges of mindfulness practice and long-term health outcomes for African Americans.

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