



The Ethical Dimensions of Mindfulness in Public Health

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Abstract

This commentary on “Mindfulness for global public health: Critical analysis and agenda” seeks to add to the discussion by considering, what are the moral or ethical implications of introducing mindfulness-based interventions (MBIs) into public health? An open question should be asked: Do MBIs promote “moral health,” a type of mental well-being based on moral integrity? Currently, there is a lack of comprehensive understanding regarding the moral influences of MBIs on individuals, but more concerning is the complete absence of population or collective-based data. Moreover, the data on the moral influences of MBIs originate from neurotypical, socially advantaged, and homogeneous demographics, so caution is warranted regarding the potential impact on general public’s moral functioning before proceeding. This commentary briefly reviews the existing literature on the relationship between moral functioning and MBIs, then addresses why the unknown effects of moral functioning from mindfulness on a social level are a concern for public health. Following many of Oman’s proposed axes, it then raises questions about what MBIs could do to the moral functioning of certain populations with mental health issues, diverse and disadvantaged populations, and various multi-sector levels throughout society. In some cases, MBIs might need to include ethical adaptations, which add components that explicitly encourage moral development. These adaptations could support protective measures or mitigate moral risk factors. The commentary concludes by suggesting that ethical motivation could be an added axis to Oman’s scheme, as there is an alignment between mindfulness and public health. Nonetheless, it cautions that more research is needed at the population level on the moral influences from MBIs before their widespread implementation in public health.

Keywords Ethics · Mindfulness · Meditation · Moral · Prosocial · Public health

A common motivation of humans who are well adjusted is that they wish for the well-being of others, and Oman’s (2023) incredibly nuanced paper highlighting mindfulness’ potential to become integrated into public health resounds with this motivation. Oman’s motivation is not just altruistic though; it is careful, considered, empirically supported, and offers a well-thought-out agenda if we attempt to improve the public’s health using mindfulness. Through an immense review, Oman identifies 14 dimensions of either alignment or tension between mindfulness-based interventions (MBIs) and public health. Therefore, it is a pleasure to be asked to offer commentary on this important issue.

Oman asked a huge question: Can mindfulness contribute to building the needed planetary, societal, and individual resilience? The aim of this commentary is merely to offer one consideration when trying to answer that question. Rather than critiquing Oman’s already comprehensive article, the hope is to expand the conversation by emphasizing a social imperative when considering the roll-out of MBIs into the public health domain—what the moral and ethical impacts of widespread MBIs could produce.

This commentary expands on Sedlmeier’s (2023) suggestion that the theoretical and empirical foundation for MBIs influence over our moral functioning is still not very strong and should be improved before integrating MBIs into public health. One concern when scaling up MBIs into the broader population through the public health system is that they seem to have varied effects on different factors of our moral cognitions and behaviors, where they might improve some factors while simultaneously hindering others (Berryman et al., 2023).

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The main concern here is that the existing empirical literature on the moral influences of MBIs stems entirely from studies aimed at individuals, with none aimed at the social or collective level. Population-based evidence is crucial before implementing public health programs. While public health policy involves complex considerations beyond ethics, it is still essential to question, from an ethics perspective, whether a program should go forward. Although a program's implementation or removal is not solely dependent on ethical implications, we have a responsibility to advocate ethical concerns where there is insufficient data, or potentially unknown social effects (Kass, 2001).

The commentary starts by summarizing the empirical literature regarding the relationship between mindfulness and morality. It then outlines why the unknown effects of moral functioning from mindfulness on a social level are a concern for public health. Next, it considers how MBIs could influence moral functioning in relation to different mental health disorders (Oman's Axis A2), diverse and disadvantaged populations, and various multi-sector levels throughout society (Oman's Axes A4, A6, A7, A9). Finally, the commentary proposes that ethical adaptations to MBIs might be needed in certain circumstances, before concluding that ethical motivation could be an added axis to Oman's (2023) scheme.

How Mindfulness Affects Individual-Level Moral Functioning

There is no need here to get bogged down attempting to define mindfulness or its associated practices, as this commentary sticks with how Oman (2023, p. 5) conceptualizes contemporary MBIs or mindfulness-based programs (MBPs), as these are the types of interventions under discussion.

The only relevant point that needs discussion is that MBIs have largely removed the ethical frameworks that historically underpinned them. Traditional Buddhist mindfulness practices included a moral training component (Bodhi, 1978, 2011). This component involved adhering to explicit ethical instructions, continuously reflecting on them, observing successes or shortcomings, and making constant readjustments in speech and behavior to align with these ethical guidelines. The moral and mindfulness components were believed to be mutually supportive, with improvement in one contributing to the enhancement of the other.

Current secularized MBIs, on the other hand, primarily emphasize meditation and omit ethical training to be more acceptable in contemporary society without pre-existing religious or cultural overtones (Kucinskis, 2018; Monteiro et al., 2015). However, it remains an open question as to how secularized MBIs influence people's morality, given their predominate focus on attentional exercises and present

moment awareness to promote mental or physical health (Purser, 2019; Zhang et al., 2021). Either way, despite millennia-long traditions and modern mindfulness advocates asserting that morality and meditation are innately linked or automatically supportive (Bodhi, 2011; Greenberg & Mitra, 2015; Kabat-Zinn, 2005; Shapiro et al., 2002), there is surprisingly limited empirical literature to date on how meditation influences moral output.

Although available evidence is encouraging that MBIs can produce increases in prosociality, it is far from conclusive due to the limited number of high-quality and well-powered studies. More evidence is needed to cover a broader range of prosocial behaviors sustained over extended periods of time (Schindler & Friese, 2022). Berryman et al. (2023) argue that there is insufficient empirical data to unequivocally answer whether contemporary secularized MBIs make us more or less moral, or if these practices might be improving or hindering different areas of our moral cognition or behaviors. Despite this, the assumption holds strong and may be a byproduct of traditional claims coupled with a new wave of literature proclaiming mindfulness produces positive effects in factors such as prosociality, compassion, altruism, or well-being (Berry et al., 2020; Donald et al., 2019; Kreplin et al., 2018; Luberto et al., 2018; Orazi et al., 2019). But recent meta-analyses examining the relationship between mindfulness and prosocial action have produced mixed findings (Schindler & Friese, 2022). Before concluding a uniform effect, a few considerations about the existing literature should be taken into account.

A multi-factor framework proposed by Berryman et al. (2023) shows that MBIs seem to produce a variety effects, either strengthening or weakening, on different factors of an individual's moral functioning. Firstly, MBIs can enhance certain aspects of moral cognition. For instance, MBIs seem to positively influence moral reasoning (Pandey et al., 2018; Shapiro et al., 2012), decision-making (Du et al., 2023; Kirk et al., 2016), moral judgements (Du et al., 2023; Long & Christian, 2015), and certain kinds of attributions of moral responsibility (Arahuete & Pinazo, 2022).

When considering overt behavior, MBIs can improve certain helping (approach) behaviors (Chen & Jordan, 2018; Condon et al., 2013; Lim et al., 2015; Orazi et al., 2019) and also regulate the ability to avoid certain kinds of avoidance-related behaviors like cheating or being aggressive (DeSteno et al., 2017; Götman et al., 2021). However, this is not a uniform result, as some studies suggest that avoidance-related behaviors still occur after MBIs (Rahrig et al., 2021; Ruedy & Schweitzer, 2010).

Nevertheless, there are aspects of our moral psychology over which MBIs seem to have no influence, and even be seen as negatively influencing in some cases. MBIs seem to have no influence over moral identity (Xiao et al., 2020). When examining moral emotions like anger, empathy, or

guilt, a complex story emerges. Some emotions remain unchanged, such as anger remaining when provoked (DeSteno et al., 2017; Rahrig et al., 2021), or no empathy emerging when someone needs assistance (Koopmann-Holm et al., 2020; Xie et al., 2023). A less encouraging pattern emerges with moral intentions, which seem to decrease in a manner that is arguably not optimal. For example, the intention to help someone in distress is absent, or the intention to make amends after wronging someone because feelings of guilt are overridden (Hafenbrack et al., 2022; Schindler et al., 2019; Xiao et al., 2020; Xie et al., 2023).

As MBIs have the potential to produce adverse moral effects, some argue that ethical instructions or frameworks need to be implemented alongside the intervention (Chen & Jordan, 2018; Matko et al., 2021). So, while preliminary understandings are emerging, a comprehensive account of the ways in which MBIs might affect different populations morality is still incomplete.

The above findings can be interpreted in various ways and should be taken as suggestive, not absolute. Given many health professionals have a limited understanding of mindfulness (Kostanski & Hassed, 2008), it is crucial to differentiate between the potential unhelpfulness or harm of mindfulness itself, and the lack of benefit or even harm that may result from poor or uninformed delivery. Like many things, MBIs may be beneficial when executed correctly, but unhelpful or even harmful when done incorrectly. More high-quality research is needed before casting absolute aspersions about either the positive or negative moral influences that arise from MBIs. The above findings are offered here to provide context and highlight areas that need consideration when contemplating rolling-out MBIs into the broader population through public health.

Why the Unknown Effects of Moral Functioning from Mindfulness on a Social Level Is a Concern for Public Health

Given the ambiguity around the moral influences from MBIs on individuals, the larger question arises: What of the broader moral influences on a societal level? Public health programs target entire populations, raising the important concern about how MBIs will affect the morality of entire populations. As shown above, the empirical relation to MBIs and their positive effects on morality is inconclusive, and it should be noted, this is only at the level of the individual. There is no data on how MBIs morally affect the collective, or how multicultural uptake will affect the moral functioning of different cultures. While positive social and collective possibilities are often acknowledged in existing mindfulness literature, they are seldom the focus of actual research (Choudhury & Moses, 2016; Purser & Milillo, 2015).

The WHO defines health in terms of “complete physical, mental and social well-being” (World Health Organization, 2014). While there is ample evidence outlined by Oman (2023) that MBIs generally have a positive influence on physical and mental health, an open question remains: What about its relation to “social well-being”? The field lacks any empirical data whatsoever on how mindfulness translates to a kind of “social health.” What would “social health or well-being” look like in relation to mindfulness? How should we develop social well-being from MBIs if we do not even conceptually understand what that would be? This now becomes an extremely large and unwieldy question that is far beyond the scope of this commentary.

One crucial component that “social well-being or health” includes though is our “moral health,” which is a form of mental well-being based on moral integrity relating to one’s values and sense of right and wrong (Martin, 2006). Martin emphasizes that sound morality is, in fact, healthy, as mental health and morality are interdependently related. Therefore, moral health aligns well with the WHO definition of health, and prioritizing people’s moral health helps ensure many important social determinants of health are met.

Moral elements are innately a part of the social determinants for public health (Galea, 2019; Marmot, 2015). Berwick (2020) argues that achieving social determinants of health requires motivation through the moral determinants of health. Oman (2023, p. 3) recognizes the importance of understanding interactive risk and protection causal pathways on both individual and collective levels of public health. He echoes the US Institute of Medicine 2000 proposal that social and behavioral factors have multiple strands of influence, and effective interventions need to embrace a social-ecological approach (Glanz & Bishop, 2010). Building on this, moral components (like harmful behavior towards others or reactions to harm) play an important role in these causal pathways for individual and collective social health and are therefore an essential component of the social-ecological approach. It is well established that social well-being includes a moral dimension (Buchanan, 2000; James, 2011; Staub, 2013), and therefore should be an important factor when considering a public health initiative like the introduction of MBIs.

Clarity on moral values is integral in global health, shaping the direction and execution of health initiatives. Adopting a moral approach influences health programs in deeply important ways (Alkire & Chen, 2004), and Berwick (2020) points out that prioritizing moral considerations simplifies the challenges in public health. If we are contemplating integrating MBIs into public health, then clarity regarding their moral influences is crucial, encompassing both individual moral functioning and the collective impact they might exert.

In summary, more research is needed to understand the moral implications of mindfulness on the collective level for

successful integration into public health. Further, more conceptual clarity is needed on what “social well-being” entails from a mindfulness-based perspective. The moral influences on social well-being are already well established (Buchanan, 2000; James, 2011; Staub, 2013), and how MBIs fit into this relationship requires much more clarity.

What Could Mindfulness Do to the Morality of Populations of People with Mental Health Challenges?

While Oman argues that public health and MBIs are aligned on their aim to improve mental health (Axis 2), a few caveats should be considered. Although the range of either the positive (Goldberg et al., 2022a, 2022b; Strohmaier, 2020) or adverse (Goldberg et al., 2022a, 2022b) effects of MBIs on mental health is beyond the scope of this commentary, a noteworthy concern lies in the moral domain of MBIs on mental health. Oman (2023, p. 3) notes the US Surgeon General, the WHO Action Plan, and Movement for Global Mental Health (MGMH) emphasize that mental health includes social determinants, encompassing factors like exposure to violence, poverty, and fairness of resources (Patel et al., 2018; Satcher, 2011; World Health Organization, 2013). As described above, social determinants contain a moral dimension. Mental health determinants, therefore, by extension, include an (often unspecified) moral dimension.

The main concern is that while some argue for the evidence in favor of MBIs increasing prosociality, the majority of this research has been conducted on neurotypical populations without reported mental health issues. We are therefore in the dark and have no clear indication of what MBIs could be doing to the moral functioning of populations with differing mental health issues or neuro-atypical conditions.

Could there be mental health conditions that, when combined with MBIs have either a more positive, or even negative, influence over our moral functioning? Here, we must speculate due to the lack of empirical data. Some potentially concerning findings show that those low in empathy after completing MBI exhibited reduced ethical behavior (Chen & Jordan, 2018), or that MBIs could produce reductions in feelings of guilt (Hafenbrack et al., 2022; Schindler et al., 2019; Xiao et al., 2020; Xie et al., 2023). These influences might have implications for those suffering psychopathologies such as antisociality, psychopathy, or sociopathy (Black, 2015; Brazil et al., 2018), narcissism, or Machiavellianism (Furnham et al., 2013; Paulhus & Williams, 2002). Or, as MBIs can decrease prosocial acts among those with independent self-construals (Poulin et al., 2021), what might this do to the moral functioning of those already with isolationist tendencies, such as those with avoidant personality disorders (Weinbrecht et al., 2016), social anxiety disorders (Aderka et al., 2012; Morrison & Heimberg, 2013; Stein & Stein,

2008), or agoraphobia (Asmundson et al., 2014; Wittchen et al., 2010)? Caution must be exercised if introducing MBIs into large-scale populations with specific psychopathologies, as there is the possibility that it could have unintended downsides to their moral functioning.

There might also be upsides, as MBIs have been found to reduce retaliatory, aggressive behaviors or impulses to deceive or cheat (DeSteno et al., 2017; Göttsmann et al., 2021). This might be of great benefit to issues such as disruptive impulse control or conduct disorders like intermittent explosive (Coccaro, 2012), kleptomania (Grant & Kim, 2002), or may even potentially improve behaviors in antisociality. Regardless of these speculations, either way, the positive or negative moral influences MBIs could have over different mental health disorders are unknown, heeding an urgent need for future research before widespread roll-out in public health is undertaken.

If the stereotype that MBIs automatically make us more moral continues to perpetuate, social harms may result. Kass (2001) warns of the actual public health harms when individuals, uninformed or not targeted in education campaigns, believe that they are not at risk of adverse effects. This harm could also occur if medical professionals do not screen someone due to them not fitting a popular risk profile. As yet, there are not adequate screening processes for potential adverse effects from MBIs (Britton et al., 2021; Goldberg et al., 2022a, 2022b). There is a potential risk that MBI-related adverse events might also produce aberrances in moral functioning. Alternatively, MBIs might induce alterations in moral responding for neuroatypical individuals, such as increasing the “flattening” effect of major depressive disorder. As such, along with the duty of care of informing people of the risk of adverse psychological events associated with MBIs, there is an equal obligation to be vigilant and consider the potential risk of adverse moral effects for populations with mental health challenges.

Some Ethical Considerations Across Domains of Mindfulness in Public Health

In this section, general comments are raised regarding moral impact of MBIs on Oman’s (2023) proposed dimensions: multi-sector interventions (A4), epidemiology (A6), multi-level interventions (A7), and concern for equity (A9). Specific concerns exist for each, but a common thread persists: We do not have a sufficient empirical grasp of the moral influence from MBIs relating to that dimension.

How Does Mindfulness Affect the Morality of Multi-Strata Collectives?

Multi-Sectorial Intervention (A4): Oman notes that MBIs and public health are largely aligned in their orientation

towards intervening across multiple sectors, like education, healthcare, or business. This is a valid observation, but a concern arises due to the absence of research on how MBIs moral influence might vary across populations in different sectors. It is plausible to speculate that delivering an MBI might have a significantly different impact on moral functioning when compared to delivering it in another sector. For example, implementing an MBI to prisoners in the correctional sector would likely yield different moral responses than to school students in the education sector.

Research is needed to explore how MBIs might have different moral impacts on specific populations within these sectors, and then consider how maybe, adaptations could be implemented in response to any moral differences found. While mindfulness and public health might align in accommodating multi-sector level interventions (A4), empirical data is lacking regarding how MBIs might differently influence the moral functioning of people across various sectors.

Multi-Level Interventions (A7): This limited understanding at the multi-sector level also extends to Oman's multi-level interventions, like workplaces or schools, where mindfulness research lags. He rightly recognizes that systematically intervening at multiple socio-ecological levels is largely absent from MBI research. This echoes the broader recurring issue of neglecting collective impacts in favor of individual outcomes.

Oman describes how MBIs practiced by a large majority in a specific setting (e.g., most of a workplace) influence that social environment and its ongoing effects. But are those changes facilitating increases in positive moral outcomes towards others in that setting? The hope is yes, but the evidence to answer that question is encouraging but limited. Further, human relations—a key factor in the organizational environment—have barely been explored in moral MBI research. However, Götman et al. (2021) offered promising evidence showing that a brief MBI reduced real-world cheating behaviors and enhanced justice sensitivity in a group setting, highlighting how brief MBIs influence both an individual's moral decisions or behavior, and how it may affect the social environment of a particular institution. Nevertheless, much more research is needed to suggest a uniform positive effect on certain levels of a social organization.

What Are the Moral Impacts of Mindfulness on Diverse or Disadvantaged Populations?

Epidemiologic Foundations (A6): Oman (2023) rightly identifies major limitations in the mindfulness field when considering epidemiological factors. If mindfulness research considerably lacks an understanding of epidemiological-related factors, like its effect on or prevalence in certain demographics, this becomes a concern when adding a moral ingredient. Epidemiological concerns themselves may not directly relate

to sub-sets of the population's moral functioning, but the lack of understanding regarding the "patterning" and distributions of mindfulness in different demographics or groups is.

As mentioned earlier concerning multiple sectors, it is imperative to understand how MBIs might differentially influence the moral functioning of diverse demographics, groups, or cultures before implementing a program publicly. MBIs need to be properly contextualized to be safely and effectively delivered in complex health-related situations, where familiarity with the context and target population is essential (Kostanski & Hassed, 2008). If we tie limited understanding of epidemiological factors together with concern for equity (A9), the issue becomes more salient.

Concern for Equity (A9): Our understanding of the moral impacts from MBIs on individuals is limited, but importantly, this limited understanding stems almost solely from the WEIRD (Western, Educated, Industrialized, Rich, Democratic) population. Even though there is encouraging evidence that MBIs produce increases in prosociality (Schindler & Friese, 2022), this evidence is derived from a homogeneous population with many social advantages. Most MBI research is conducted on advantaged populations (Eichel et al., 2021), raising uncertainty about how diverse sociodemographic factors might moderate the effects of MBIs (Waldron et al., 2018).

Oman rightly recognizes the underrepresentation in the MBI field of disadvantaged populations like low socio-economic status, less education, or racial minorities, and this trend extends to its moral-based research. Can we generalize these findings to populations outside the WEIRD world? How would MBIs impact the ethical lives of individuals with low socioeconomic status? The hope is that there are improvements. Might the increases found in moral reasoning (e.g., Kirk et al., 2016; Shapiro et al., 2012) assist people in those populations in making more morally appropriate decisions in complex real-world moral situations commonly faced by those in challenging backgrounds? Unfortunately, the lack of research into these populations hinders the ability to answer such questions with certainty. Hence, while there might be an implicit drive for equity in some mindfulness practitioners who poses socio-economic security, are well-educated, and racially homogeneous, its extension across the diversity of demographics remains uncertain.

Moral Adaptations to Mindfulness Interventions as a Solution

Finally, Oman (p. 16) suggests that certain adaptations could be made to optimize MBIs regarding cultural (A10), local community and administrative (A11), or religious (A12) impacting factors. He highlights some of the adaptations made already (see also Knabb and Vazquez (2023)

and Wang (2024) for potential Christian adaptations in this issue). Oman (2023, p. 27) notes that there is scattered evidence for the MBI field to make the necessary individual adaptations, and that the field is only in its infancy in its attempts to make collective adaptations.

These cultural, administrative, and religious adaptations seem warranted both at the individual and collective levels to most effectively deliver MBIs. Now, based on the understanding presented in this commentary about the diverse moral impacts that MBIs seem to exhibit, moral adaptations to MBIs might be also warranted.

These moral adaptations could follow Oman's own reflection on the "surface-to-depth-spectrum" (p. 23). On the surface level, small adaptations can be made to accommodate a particular population, like adding self-kindness practices or reflective journaling about one's current behaviors or habits. Likewise, "mindful attitudes" such as gentleness or kindness can be explicitly emphasized to successfully teach secular mindfulness without a moral dimension (McKenzie & Hassed, 2015). Deeper spectrum adaptations might involve explicit ethical instructions alongside the MBIs, like secular humanistic ethics emphasizing a "common humanity" or culturally or religiously motivated ethical instructions tailored to a target group.

Although relatively scarce, some ethical adaptations for MBIs have already been successfully developed, operationalized, and empirically examined. In the empirical domain, Chen and Jordan (2018) incorporated reflections on non-harm and interdependence into the meditation instructions, leading to improved moral behavior compared to controls. Matko et al. (2021) also implemented a weekly structured lesson plan focusing on different moral values alongside the MBI, resulting in enhanced well-being in the ethics-based group compared to controls. In the psychotherapeutic field, Cayoun (2014) and Monteiro and Musten (2013) modified Mindfulness-Based Cognitive Therapy to include sessions dedicated reflecting on one's ethical principles, which appears beneficial for patients with addictive behaviors. Finally, an operationalized deep-spectrum adaptation is the multi-week Meditation-Based Ethics of Responsibility (MBER) program (Hagège, 2023). In MBER, participants engage in explicitly identifying their values, setting intentions, and participating in real-world exercises to enhance moral engagement. Hence, while ethical adaptations for MBIs are only just emerging, those that are available show promising potential.

There are many areas where ethical adaptations could prove effective. For instance, if an MBI was introduced into Thailand's healthcare system (a predominantly Buddhist culture), it might be culturally and religiously applicable to include adherence to the five Buddhist precepts. Or, considering the tendency of MBIs in WEIRD populations to reduce moral motivations or override appropriate guilt (Hafenbrack

et al., 2022; Schindler et al., 2019), programs can be adapted to include explicit ethical elements to enhance moral functioning in these populations.

Alternatively, as Oman (2023, p. 27) suggests, MBIs could include standard "toolkits" that could be specifically tailored to different settings. One tool could be included with the aim of building moral values. Recognizing the distinct moral needs, strengths, and limitations of diverse populations (e.g., prisoners, policy makers, clergy, early school students), integrating a moral tool in the MBI adaptation toolkit is not an unwarranted addition.

Just as Buddhist mindfulness practices were ethically adapted to suit modern western populations (Purser & Milillo, 2015), and cultural, religious, administrative, institutional, or community adaptations to current MBIs are crucial for effectiveness and uptake, it is not an overreach to suggest moral adaptations to MBIs can be included where moral limitations are identified.

Ethical Motivations: Another Potential Axis

Oman (2023, p. 26) wraps up the proposed axes by suggesting there could be others, and a tentative suggestion is that another dimension can be added—an ethical axis. When the then Director-General of the WHO, Lee Jong-Wook, took office in 2003, he emphasized that "global health work must be guided by an ethical vision" and further wrote that, "both technical excellence and political commitment have no value... unless they have an ethically sound purpose" (Lee, 2003). Similarly, mindfulness-based practices have had an ethical motivation for millennia (Bodhi, 2011; Greenberg & Mitra, 2015), and modern mindfulness advocates emphasize the ethical motivation that arises from the practices (Kabat-Zinn, 2005; Kostanski & Hassed, 2008; Shapiro et al., 2002). Thus, both public health and mindfulness seem to be aligned in having a moral motivation.

Although some argue that modern MBIs might be promoting the training of mental operations that are not morally innocent (Monteiro et al., 2015), others argue that secularized forms of meditation still produce the same ethical improvements. They suggest that the mechanisms of meditation promote prosocial modes of being (Baer, 2015; Berry et al., 2023), mindful attitudes are emphasized in training (McKenzie & Hassed, 2015), or that instructors ethical qualities are conveyed to students without being mandated (Brewer et al., 2017). Either way, traditional or modern mindfulness has some form of ethical motivation. However, as argued above, mindfulness lacks both individual and social level empirical understanding of their relationship, or how MBIs conceptualize or produce "social well-being."

Ethics and public health have a long relationship (Kass, 2001). As many have noted, achieving global or public

health is far easier if we first pause and take stock of the moral implications of an intervention, thereby gaining clarity on what, which and how global health initiatives can best proceed (e.g., Alkire & Chen, 2004; Berwick, 2020; Galea, 2019; Lee, 2003; Marmot, 2015). Alkire and Chen (2004) argue that clarity regarding morality underlying any global health initiative is imperative, both for why and how a project should be undertaken, and that an initiative is only partly justified by its moral expediency. Ethical motivation and the moral outcomes that may result from an intervention, therefore, are also a crucial aspect of public and global health.

Therefore, it might be appropriate to include ethical motivation as a domain that both public health and mindfulness are aligned on. However, as mindfulness-based research still lags in its understanding of the moral domain, it is pertinent to encourage the practice of first pausing to gain moral clarity if we are to proceed with moving MBIs into the public health sector.

Conclusion

Public health policy and implementation are based on multiple factors beyond ethical reasoning. However, this is no excuse to abandon ethical considerations when discussing public or global health proposals. Ethical analysis must always be conducted because bringing truth, fairness, and respect to public health is a right in itself and enhances its effectiveness (Kass, 2001).

Although introducing MBIs into public health may offer numerous benefits, progress needs to be cautious and thoroughly evaluated. This is crucial to prevent the wastage of precious healthcare resources or, even worse, causing unintentional harms. Maintaining epistemic humility regarding our limited knowledge of MBIs impact on morality requires us to advocate interventions not based on personal belief or assumptions about their moral efficacy, but on evidence. Taking stock of the ethical implications of an intervention makes us better moral reasoners and forces us to uphold higher standards in both the science and implementation for the benefit of those we wish to help.

Despite shared ethical motivations between mindfulness and public health, these motivations need to be followed by actionable steps. Before implementing MBIs into public health, researchers should address the lack of population-based evidence on MBIs moral influence and lack of conceptual clarity on what “social well-being” entails from a mindfulness perspective, at both the individual and collective levels. Additionally, there is a need for further research exploring MBIs influence on moral functioning in those with psychopathologies or complex mental health challenges, diverse or disadvantaged populations, and across various

sectors or cultures. This research should be coupled with the development of targeted ethical adaptations to address potential unintended moral shortcomings that MBIs might produce.

Further, as the mindfulness field is inundated with unqualified teachers, lacks ethical guidelines for delivery, and is limited in its capacity to screen for adverse events, public health practitioners must establish various regulatory bodies to ensure safe delivery of MBIs in public health. This necessitates implementing adequate education and training programs, along with accreditation and licensing procedures for public health practitioners, to prevent poor, uninformed, or even harmful delivery of MBIs. Moreover, standardized ethical guidelines for safe delivery must be developed, and appropriate screening procedures for potential adverse effects should be put in place.

While Kabat-Zinn (2019) expressed hopes that the movement launched by his work might deliver “mindfulness for all” through a “global renaissance,” the hope expressed here is that more evidence is accumulated on its moral implications before this renaissance. Public health professionals must go through the steps of an ethical analysis to assure the public of their integrity and also ensure the programs benefits override any potentially conflicting moral claim (Kass, 2001). Careful, reasoned, and nuanced analysis of empirical data and sober accounts of protective or risk factors are key to public health optimization, so it is important to extend this same sobriety to the different kinds of ambiguities of moral functioning that MBIs might produce. Obviously, waiting for this evidence will take time, so proceeding with MBIs introduction into public health may move forward without it. Nonetheless, delivery should proceed with moral concerns at heart, and further nuanced as the literature on its moral influences accumulates.

Oman (2023) asked the enormous question of whether mindfulness can contribute to building the needed planetary, societal, and individual resilience. This commentary highlighted some of the ethical considerations when asking this worthwhile question. While temperance is recommended, Oman’s exceptional article has stimulated an important and long-overdue discussion on mindfulness and public health. In the process, important steps have been made towards answering the question of how mindfulness can contribute to building planetary, social, and individual resilience.

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