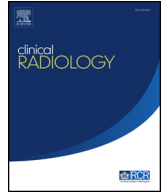


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Mindful leadership for personal and organisational resilience

J. Levey*, M. Levey*

Wisdom at Work, University of Minnesota Medical School, 5536 Woodlawn Avenue, North, Seattle, WA 98103, USA

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Given that the volatility, uncertainty, complexity, and ambiguity (i.e., “VUCA” nature) of our world will likely continue to increase over time, it is clear that learning how to develop our inner capabilities of mindfulness and resiliency is of the utmost priority for us as individuals, organisations, communities, and nations. In today’s world — and tomorrow’s — such capacity development for ourselves, our leaders, and our organisations is vital to bringing a deeper wisdom and care to our lives and work, and to our human flourishing. In our increasingly VUCA world of ever-increasing complexity, old norms, skillsets, and “business and usual” norms are simply insufficient to assure sustainable success. The kind of high-performance protocols that were once reserved for world-class athletes, martial artists, elite military troops, and sports teams, or monastic adepts, have now become essential training for any leader, professional, or organisation intent on assuring high standards for safety, quality care, sustained success, well-being, and meaningful beneficial influence in their medical centres and communities. Could it be that the global surge of interest in mindfulness and resiliency reflects a wise and evolutionary impulse perfectly adapted and responsive to meeting the challenges and realising the opportunities of the VUCA world in which we live and serve as dedicated health caring providers and practitioners?

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Introduction

There’s a telling line in a short story titled “A Painful Case” in James Joyce’s book, *Dubliners*, where he writes, “Mr. Duffy lived a short distance from his body.”¹ Unfortunately, such norms and habits of mindless inattention, and “ignorance” are quite prevalent in our society as attentional and behavioural norms in our society. Such mindless habits allow the “whispers” of accumulating stress and tension to

escalate below the threshold of our conscious awareness, unnoticed over time, to become “screams” of a myriad of overwhelming and debilitating stress related conditions that undermine the quality of our lives, work, and well-being.

If mindlessness persists, our stress accumulates, and we feel ever more overwhelmed and out of balance. If we attempt to shield ourselves from our discomfort through even more mindless distraction, we become even more out of touch with the reality of our experience, and our capacity for discernment, wellness, and wise choices in determining the course of our lives deteriorate.

Among the most accessible and potent remedies to our mindless distress, overwhelm, and impending burnout is mindfulness, an essential skill required to monitor and

* Guarantors and correspondents: J. Levey and M. Levey, Wisdom at Work, 5536 Woodlawn Avenue, North, Seattle, WA 98103 USA.

E-mail address: alohalevey@gmail.com (J. Levey).

URL: <http://www.wisdomatwork.com/contact/>

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manage the flow of moment to moment experiences with a sense of curiosity, openness, acceptance, and caring awareness. As we learn to mindfully *monitor* the flow of energy and information within our body, mind, and field of experience, we increase our capacity to *manage* that flow with greater skilfulness, mastery, and purposefulness in order to optimise both the inner and outer circumstances of our life. Understanding that we can only manage what we monitor, it is clear that mindfulness is our most vital skill for developing resilience, the ability to bounce back toward a more optimal state of being after the challenging experiences that we will inevitably encounter in the course of our lives and work.^{2,3}

Just as radiology relies on sophisticated technology to look deeply into the structure and function of our physical body, the many methods of mindfulness are sophisticated inner technologies for gaining penetrating insight into the subtle workings and dynamics of the ever-changing flow of energy and information that weave the fabric of our psychophysical embodied and relational matrix.

What will it take to shift from burnout to resilience?

For many years, we have been invited to offer workshops titled “Preventing Burnout, Mastering Stress, and Increasing Resilience” at large international medical conferences for physicians around the globe.⁴ Before these workshops, we make a point of going around, introducing ourselves to as many attendees as we can, asking what brings them to attend this workshop. It has been sobering to hear between 60 and 80% of the physicians respond by saying something in the order of, “My current way of living and working is unsustainable. If I continue working as I have been, I will die an early death. I’m burned out and came here to see if I might learn skills that could save my life, and perhaps the lives of those I care for as well.”

In the UK, recently published reports on physician burnout tell us that, “Burnout continues to be a pervasive issue among doctors. In October, the Society of Occupational Medicine estimated that between 30% and 40% of UK doctors, including trainee and junior doctors, are experiencing burnout and work-related stress, with GPs reported to be most at risk.”⁵

A recent survey by of 2,230 UK GPs shows 50% are at high risk of burnout, up four percentage points from the same survey 2 years ago. This survey, the largest ever conducted in the profession, reveals that, “Rising numbers of GPs in the UK are so stressed during their working day that they are at a high risk of burning out completely,” and that “three-quarters of GPs feel emotionally exhausted while 25% report a low sense of personal accomplishment.”⁶

In response to such findings, the British NHS has established the World’s First Government “Burnout Service” with an annual budget of £19.5 million (\$24M USD in 2017) to treat burnout in GPs nationwide, yet surprisingly this programme is a mere treatment programme structured to diagnose and treat the psychiatric complications of burnout,

but not to actually teach physicians how to prevent it. With the understanding that burnout is a natural response to overwhelming stress in the workplace, and the consequence of mental, emotional, and physical overload over time, many medical professionals are calling for a robust preventative response that actually equips physicians with the knowledge, skills, training, resources, and systemic support necessary to develop resiliency and reduce the incidence of burnout.⁷

Encouraging trends

The recent *Mindful Nation UK* report from British Parliament speaks to the value of developing “mental capital,” by which is meant “the cognitive and emotional resources that ensure resilience in the face of stress, and the flexibility of mind and learning skills to adapt to a fast-changing employment market and longer working lives.” According to this historic report “developing the mental capital of the nation will be crucial to our future prosperity and well-being.... Qualitative research shows that mindfulness develops exactly these aspects of mental capital, encouraging a curious, responsive, and creative engagement to experience.” The report goes on to recommend the wide-spread embrace of mindfulness by leaders and organisations in four domains of British society: healthcare, workplace, education, and criminal justice.⁸ Since the report was issued in 2015, these recommendations have been expanded to encourage mindfulness training for people involved with: policing and emergency “blue light” services, military, cancer, parenting, pain, addiction treatment, dementia, and social change.⁹

Citing the UK Government Office of Science’s Final Project Report on the Foresight Mental Capital and Well Being Project, Jamie Bristow, CEO of the Mindfulness Initiative, states that, “Since its appearance in a 2008 Government report, the concept of ‘mental capital’ has helped leaders and policymakers to see that the cognitive and emotional capacities of individuals determine the health, resilience and future performance of businesses, institutions and knowledge-based economies⁸ Mindfulness training could develop exactly these resources.”^{10–12}

In this speed of light digital age where the impacts of the unchecked mindlessness of distressed leaders ripples around the globe in tsunamis of reactive Tweets and torrents of information/disinformation, Welsh MP Chris Ruane, and co-chair of the Mindfulness All-Party Parliamentary Group (MAPPG), who has practised mindfulness for a decade wisely observes, “If you are aware of what is happening in your mind and body you can see it is an immediate reaction and think: I have to slow down, contain it, and give a more considered response... Mindfulness has helped me make better decisions...If you make decisions from a position of balance and equilibrium, it is far better, not just for personal but political decisions that affect a whole nation....In times when you have political leaders who may not be making political decisions from a position of balance, it doesn’t do them, their country or the world

much good.” Ruane has become a strong, internationally respected leader in the Mindfulness Parliament and he encourages leaders in the UK and around the globe to take the next step beyond their personal mindful leadership practice and bring mindfulness to their constituents, “in policy — health, educations, prisons, the workplace — because there is a massive need for it.”¹³

In recent years, the UK has emerged as a respected global leader in measuring and encouraging mindfulness for wellness, leadership, and organisations. The work and research of Britain’s Mindfulness Initiative, a collaboration between Parliament; Bangor, Exeter, Oxford and Sussex universities; The Mental Health Foundation; and mindful leaders in the private sector, has inspired senior leaders around the globe to engage and invest in developing mindfulness and human capital within their organisations and nations. In late 2017, Ruane and his colleagues at Parliament hosted the first global summit on Mindful Politics with politicians from 15 nations coming together to meet-up and meditate at The House of Commons.¹³ Over time, the wisdom of a mindfulness approach to leadership has garnered the serious attention of senior government leaders in more than 40 nations around the globe.

Perspectives on mindfulness

Global interest in mindfulness has been expanding at an exponential rate since the 1960s when the first Western researchers carried treasured teachings from different mindfulness traditions of SE Asia back into a myriad of universities and medical centres around the world. Over time, these potent teachings have taken root and have been creatively culturally adapted and scientifically validated in ways that have made them more accessible and responsive to the needs and interests of people in the modern world,

and the radius of mindfulness influence has continued to expand into medical centres, organisations, governments, schools, higher education, military, and sports arenas bringing a wealth of benefits and a growing archive of confirming evidence (Fig 1).^{11,14,39,40}

Today, mindfulness generates a billion dollar per year industry around the globe. An estimated 18 million Americans now regularly practise mindfulness.¹⁵ By the beginning of 2018, 44% of all US companies had offered mindfulness training to employees.¹⁶ With large companies, such as insurance giant Aetna sharing data confirming that since rolling out their mindfulness programme, it has saved \$2,000 per employee in healthcare costs, and gained \$3,000 per employee in productivity,¹⁷ there is a growing recognition that the quantifiable return on investment helps explain why the mindfulness industry grew to nearly \$1 billion in 2015.¹⁸

Leadership preparedness in VUCA times

We live in what many global leaders refer to as “VUCA times”— i.e., times of unprecedented change, upheaval, and transformation characterised by ever-increasing Volatility, Uncertainty, Complexity, and Ambiguity in every dimension of our lives — personal, organisational, social, and environmental.¹⁹

These VUCA times bring both great chaos and uncertainty in our lives and world, as well as a myriad of emergent opportunities and vital new expressions of creativity, altruistic and entrepreneurial spirit, and innovative life-affirming, community, corporate, and global initiatives that encourage more wise and sustainable ways of living in our world. Depending upon the capacities developed by individuals, organisations, and communities, VUCA times are likely to bring out the best and the worst of people

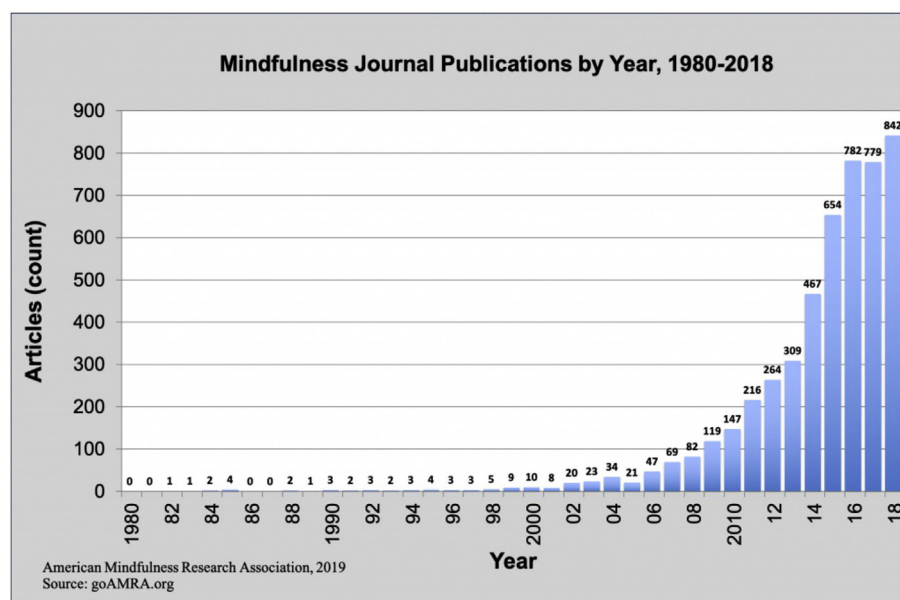


Figure 1 Graphic illustrating increasing research on Mindfulness 1980 to 2018. Source: AMRA (American Mindfulness Research Association) 2019.

resulting in stresses, strains, and emerging opportunities that compel us to develop our extraordinary capacities for living in wiser, kinder, and more sustainable ways—and helping others to do the same.

Insight regarding relevance and vital need for mindful leadership in bringing greater resilience and a deeper wisdom to work is found as we assess the VUCA capability or preparedness of leaders. As you consider the challenges and opportunities present in your life—work in these VUCA times, pause to reflect how prepared and capable are you, or others whom you regard as leaders, with regards to the following four domains of the VUCA index of leadership preparedness. (If you like, you can use a five-point Likert scale, with 5 being top marks, and 1 being low.)

- VOLATILITY: how well do you anticipate and wisely respond to the volatile nature and speed of change?
- UNCERTAINTY: how wisely and decisively do you act when you lack certainty or a clear sense of direction?
- COMPLEXITY: how wisely do you respond to complexity and confusion, and navigate the chaos present in the world around you?
- AMBIGUITY: how well do you maintain your effectiveness when faced with a lack of dependable reference points or predictability?

A recent global study on VUCA Leadership Preparedness by the Conference Board assessed leaders' readiness in these four key areas and found that:

- Less than two-thirds of leaders rated themselves as “highly confident” or “very confident” in their ability to meet the four VUCA challenges.
- Soberingly, when human resources professionals were asked to assess the VUCA preparedness levels of the leaders in their organisations, about one-third viewed their organisational leaders as being incapable of meeting the challenges of VUCA times, and a mere 18% ranked their leaders as “very capable” or “highly agile.”
- The study showed that the VUCA preparedness of leaders is directly linked to Organisational effectiveness as reflected in bottom-line financial performance as the top 20% of organisations performing well financially are three times more likely to have VUCA-capable leaders than the bottom 20%.²⁰

These findings confirm the imperative to develop the capacity of leaders to work more mindfully, be more resilient, and lead more wisely in these perilous VUCA times.

Looking at the world around us, it is painfully clear that there are many leaders at every level in our organisations and society who are woefully unprepared, overwhelmed, in denial of good sense and good science, and are thus incapable of responding wisely or responsibly in wielding their power and influence. While an estimated \$50 billion is invested in developing leaders around the globe each year, only a mere 37% of leaders rate their organisation's leadership development programmes as effective.²⁰ Add to this a finding from a McKinsey study that indicated 70% of major

organisational change initiatives do not succeed in meeting their goals.²¹ The value gap is often attributed to not investing enough attention on developing the rare and precious human resources related to mindfulness, resiliency, wellness, empathy, compassion, creativity, and wisdom. As Parker Palmer, a pioneer in leadership education once observed, “The problem is that people rise to leadership in our society by a tendency towards extroversion, which means a tendency to ignore what is going on inside themselves. Leaders rise to power in our society by operating very competently and effectively in the external world, sometimes at the cost of internal awareness. I've looked at some training programmes for leaders. I'm discouraged by how often they focus on the development of skills to manipulate the external world rather than the skills necessary to go inward and make the inner journey.”²²

Further insight and evidence supporting the value of mindful leadership is found in a recently published study based on assessments of more than 35,000 leaders and interviews with 250 senior executives that showed that 77% of leaders think they do a good job of engaging their people, yet 88% of employees say their leaders do not engage enough. The conclusion of this robust study was that organisational leaders would be wise to invest more in developing managers and executives “who are capable of leading with three core mental qualities: mindfulness, selflessness, and compassion.”²³

Beyond business as usual

“The world we have made as a result of the level of the thinking we have done thus far creates problems that we cannot solve at the same level of thinking (i.e. consciousness) at which we have created them... *We shall require a substantially new manner of thinking if humankind is to survive.*”

— Albert Einstein

It is becoming increasingly clear that the prevailing norms and mindless habits associated with “business as usual” are woefully insufficient to safeguard us from stress, overwhelm, and burnout or to provide us with the wisdom and resiliency necessary to actually thrive in these VUCA times. As more and more leaders are encountering crises in their personal lives, families, and organisations, it has become more difficult for them to ignore how distressed, exhausted, frustrated, overwhelmed, vulnerable, unhappy, and unsustainable their default life—work styles are.

The good news is that as these humbling realisations arise, many leaders are motivated to deepen their reflection, build their relationships, and increase their resilience by seeking out the mentors, resources, and new learnings and skillsets necessary to live a more mindful, resilient, mentally fit, effective, and wisdom-guided way of life in order to carry out their responsibilities successfully and sustainably. Having suffered deeply, burned out, or witnessed those they work with or care for falter, many leaders returned to their work more dedicated than ever to creating new ways of life—work that would extend in beneficial ways

to others in widening circles of influence, and legacies of benefit that will endure throughout and beyond their personal lives. As these leaders affirm or reclaim their lives and health, they are often the ones with the vision, compassion, courage, and dedication necessary to champion the organisational and systems changes necessary for people to flourish at work and launch organisational initiatives that support others in developing greater capacity for resilience, mindfulness, and wellness.²⁴

Two approaches to mindfulness in the workplace

As mindfulness is rolling out into organisations there are two primary approaches. The most common approach is to offer “mindfulness training programmes” where people are trained in weekly sessions to develop and integrate mindfulness skills into their daily life and work. These skills based programmes generally span 4–10 weeks, and are usually optional for employees, though sometimes required.

Although these mindfulness programmes certainly deliver many significant benefits, they are often regarded more as an “app” than an “operating system.”^{12,25} Such programmes often result in mindfulness being regarded as an optional, peripheral, personal practice that one might bring to their work-life rather than as an essential, pervasive, inclusive and integral element of a personal and organisational “operating system” and success strategy.

The second approach to increasing mindfulness and resilience in our workplaces and medical centres involves a more robust, all encompassing, systems approach that is generally more organisationally inclusive and sustainable. This approach involves introducing mindfulness as an essential life skill for developing the organisational operating system necessary to sustain a thriving healthy organisational culture populated by well, caring, and wise people. In such organisations, virtually every moment, activity, interaction, procedure, and encounter is encouraged to be imbued with the mindful, caring presence of all of the employees involved. Once established, such a mindful-organisation operating system approach has proven to be more far reaching in its beneficial impacts and more enduring and sustainable over time.^{25,26}

This more systemic or integrative approach also has the power to leverage the profound potentials found in the presence and practice of “shared mindfulness,” which gives rise to a wider array of benefits for all stakeholders involved, including the communities and families impacted by the organisation. Shared mindfulness is regarded as an embodied and relational practice that encourages Presence, Attunement, Resonance, and Trust (P.A.R.T.) in people’s work together.²⁷

Imagine the impact in your organisation if you could bring the clear, intentional focus, and caring presence glimpsed at times in the application of Universal Protocols, or Operating Room Checklists into every encounter, meeting, and interaction throughout the day. Imagine the

value if you were to become so familiar with this way of living and working that you would embody and carry mindful, caring, continuous presence with you when you leave the workplace to be with family, friends, and community at large.

Here: an inspiring example in the UK medical community

An inspiring example of a UK-based medical organisation that took this systemic approach to mindful leadership and organisational resilience to heart is Here, a progressive social enterprise delivering and designing healthcare services, based in Brighton, UK, where mindful leadership, life balance, and resilience has become a way of life—work throughout the organisation. Here was the winner of the UK Social Enterprise Award for 2017, which recognises excellence and outstanding achievements by social enterprises, businesses set up for a social purpose that reinvest or donate the majority of their profits to meet their mission. Given that there are now nearly 80,000 social enterprises in the UK, contributing £24 billion to the economy each year, this award is a great honouring of Here and its mindful approach to fulfilling its mission of providing “Care Unbound” to the community it serves.^{25,26}

As Pete Devlin, MD, family physician, co-founder and CEO of Here observes, “We are indeed blessed to be asked to do purposeful work in a world of complexity and uncertainty, a world which requires every single person in our team to bring their creative selves into the workplace. The hard wiring of mindfulness practices into our meetings and daily routines enables people to have the presence to listen to each other in a spirit of compassionate and joyful curiosity.” Zoe Nicholson, co-founder, board member, and former chief executive of Here, observes that, “It feels so critical in these turbulent and VUCA times to know what and whom you stand for and with. We try to make mindfulness part of our operating systems, part of how we work together, think together and act together. It’s a daily practice not an easy path, at its simplest we see it as a way of creating a foundation to see clearly and act wisely. The people we serve deserve that!”²⁶

The work of Here touches the lives of over 1 million citizens in Sussex and southeast England who might need support with mental health problems, conditions relating to their bones, joints, or eyes, or help with the management of long-term conditions such as arthritis. Here’s integrated services put people at the centre of their care, and remove the barriers and fragmentation that can occur in existing services. The practical solutions that Here offers to primary care providers help over 5 million people nationwide by assisting GPs to manage their workflow, ensuring citizen records are up to date, and creating a more seamless journey for the people who use their services.

A glimpse of the data collected from our programmes at HERE offers further insight and inspiration for leaders in other organisations curious about the potential value and benefits of taking a more mindful approach to developing

themselves, their people, and their organisations: 100% agree that they have seen an improvement in the quality of relationships at work; 100% agree that their participation in Here's Mindfulness and Mind-Fitness Initiatives has helped them to connect to the organisational purpose of Care Unbound: "to create more possibilities for care in every moment"; and 92% have seen improvement in their capacity to care more deeply for themselves and for others.

In addition, data indicate: 91% are more mindful of what is true for them in different situations; 83% are a better listener; 83% are more aware of the choices they make; 67% have greater ability to manage their emotions; and 66% are clearer in their communications with others.²⁵

The results of this mindful and resilient approach at Here are consistent with what we have seen in our work over the past 40 years with leaders and staff in hundreds of medical organisations around the globe including NHS, NIH, MD Anderson Cancer Research Centre, Fred Hutchinson Cancer Care Alliance, and Kaiser Permanente.²⁸

Mindfulness in radiology

Although mindfulness research has rapidly increased in recent years²⁹ and a quick Google Scholar search for "mindfulness physicians" brings up over 34,000 references, there are currently few studies specifically focused on mindfulness in radiology. Although radiologists have invested considerable time and attention in training methods necessary to develop the knowledge and skills required to skilfully utilise the sophisticated technology involved in their medical practice, relatively few have taken the initiative to develop a similarly robust set of "inner technology skills" for mindfully monitoring and optimally managing the complex, and at times overwhelming, flow of their own ever-changing mental, emotion, and physical experiences.

One of the most frequently cited publications regarding medical professionalism is the Physician Charter, which was written by the American Board of Internal Medicine, American College of Physicians, American Society of Internal Medicine, and European Federation of Internal Medicine. Since its publication in 2002, the Charter has been adopted by most medical specialties, including the RSNA Professionalism Committee,³⁰ and was presented at the Opening Session of the 2006 annual meeting of the RSNA.³¹ Noting that the Charter has not specifically addressed a vital element of medical professionalism, the quality of mindful self-awareness, Halpern and Spandorfer write:

"If the practice of medicine is to be viewed as more than simply the task of treating disease, the physician should have a self-awareness of both the profound obligations and rewards inherent in the practice of medicine. Mindful practice refers to a self-reflective process, fostering self-awareness, whereby the physician identifies aspects of medical practice that are valuable and meaningful. Mindfulness allows the physician to develop a professional self-identity and has been described as the 'sine qua non' of the successful professional and essential to the expression

of core values in medicine such as empathy, compassion and altruism"³²...Although radiologists have traditionally experienced better job satisfaction than many other medical specialties, work-related stress can result in impaired professional function among radiologists.³³ In the current era of increasing clinical demands and reduced reimbursements, mindfulness may be an important technique to enhance professionalism by decreasing physician burnout and allowing a greater satisfaction in the practice of radiology."³⁴

In an article titled, *Gathering Storm Clouds Suggest the Need for a Culture Change in Radiology: Radiologist-centred Imaging*, Moskowitz cites the growing evidence of burnout and career dissatisfaction among radiologists as indicated by the number seeking career coaching services or making transitions into non-clinical careers as they do not see an improved future for themselves in diagnostic imaging. He also affirms the success of mindfulness for reducing stress and burnout.³⁵ In another article, *Understanding and Confronting Our Mistakes: The Epidemiology of Error in Radiology and Strategies for Error Reduction*, Bruno *et al.* speak to the promise of mindfulness and other "metacognitive" skills for reducing errors in image analysis.³⁶

With increasing numbers of physicians whose well-being and effectiveness is compromised by job dissatisfaction, burnout, and the safety risks associated with misdiagnosis, the value — personally and organisationally — of investing in developing personal mastery and mindfulness skills in radiology practice is very high. From our direct experience over nearly four decades of working with thousands of clinical professionals, and our familiarity with the research available, the likely benefits of encouraging greater mindfulness in radiology practice include: reducing risks of burnout, anxiety, stress, depression, and addiction; increased well-being and resilience; enhanced focus, attention to detail, discernment, objectivity and intuition in the interpretation of diagnostic images; increased empathy and compassion toward oneself, colleagues, and patients; and improved communications, working conditions, and clinical outcomes through the power of collective mindfulness.

For more insight regarding the efficacy, implications, and applications of mindfulness in the practice of medicine, the reader is referred to the article on mindful practice by Epstein³² and to these articles on mindfulness in medicine.^{37,38}

Conflict of interest

The authors declare no conflict of interest.

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