

## Mindfulness and organizational productivity: The mediating role of positive mental health

**Jeffrey Overall**

Ontario Tech University

### **Abstract**

Prior to the COVID-19 pandemic, the costs of mental health to the global economy were calculated at \$2.5 trillion annually (The Lancet Global Health, 2020) with approximately \$300 billion of this directly affecting organizations through productivity losses (Mental Health Commission of Canada, 2020). Since the pandemic, there have been reported increases in anxiety, depression, and addiction among the population. However, research has shown that regular mindfulness practices, like meditation and yoga, have a profound effect on mental health and, by integrating mindfulness within the workplace, it can also help to enhance organizational productivity. In this research, I propose two mediating conceptual frameworks that can help explain the relationship between mindfulness, positive mental health, and organizational performance. The main contribution to knowledge of this research is demonstrating how the relationship between mindfulness practices and organizational performance is mediated by: (1) a reduction in workplace stress and (2) positive mental health and dependent on organizational contextual factors. This research is important as the topic of mindfulness and business is an emerging field of study and nuanced discussion on productivity is essential. Future research directions are suggested.

**Key words:** Consciousness; conscious business; conscious economics; conscious expansion; indigenous medicine; mental health; mindfulness; organizational context; organizational productivity

## INTRODUCTION

To meet the need for constant growth, employees are expected to take on more responsibilities and work longer hours. On top of this, they are required to complete tasks in increasingly aggressive time constraints (Bickford, 2005). As a result of these demands, employees experience heightened levels of workplace stress (Colligan and Higgins, 2005; Overall, 2016). In the United States and Europe, workplace stress leads to a loss of nearly 200 million work days per year (Mark and Smith, 2008; O'Driscoll and Cooper, 2002; Overall, 2016). This has been shown to contribute to productivity losses, work-life imbalances, and, subsequently, health problems (Wolever et al., 2012). In total, workplace stress costs \$125 billion across the United States, Europe, and Britain (Johnson et al., 2005; Mark and Smith, 2008; O'Driscoll and Cooper, 2002; Overall, 2016).

---

*Correspondence concerning this article should be addressed to Dr. Jeffrey Overall, associate professor, Ontario Tech University, Business and Information Technology Building, North Oshawa, 2000 Simcoe Street North, Oshawa, ON L1G 0C5. email: [Jeffrey.Overall@ontariotechu.ca](mailto:Jeffrey.Overall@ontariotechu.ca)*

Beyond workplace stress, mental health issues in the workplace, in general, are on the rise, which has been shown to have a negative effect on the ability of the average worker to do their job. Prior to the COVID-19 pandemic, the costs of mental health to the global economy were calculated at \$2.5 trillion annually (The Lancet Global Health, 2020) with approximately \$300 billion of this directly affecting organizations through productivity losses (Mental Health Commission of Canada, 2020). At the dawn of the COVID-19 pandemic, the WHO (2020) reported that nearly 50% of Canadian frontline workers, inclusive of nurses, had reported a need for psychological support. And over the course of the pandemic, the Centre for Addiction and Mental Health (CAMH) (2020) has reported increases in anxiety, depression, and addiction among the population.

Research has shown that those who engage in mindfulness practices, defined as maintaining awareness and being fully present in the moment with an orientation toward curiosity, openness, and acceptance (Bishop et al., 2004), experience slower heart rates, are relaxed, and experience calmer breathing. When in this state, people can achieve a greater sense of balance and harmony (Robb, 2019). Medical practitioners have observed that, through maintaining a regular mindfulness regime, patients can broaden their state of awareness (Garland et al., 2011), which is shown to have a profound improvement on the mind-body connection (Overall, 2020; Pollan, 2018) by alleviating deep-rooted stresses, trauma, and anxiety. Given that stress is one of the leading causes of health deterioration, Lim (2018) has shown that mindfulness practices, such as yoga and meditation, can improve serious conditions, like diabetes, heart disease, and cancer. Researchers have demonstrated that regular mindfulness practices profoundly improve mental health (Brown and Ryan, 2003; Overall, 2020) by combatting depression (Carr & Hancock, 2017; Overall, 2020), increasing resilience (Kemper et al., 2015), increasing well-being (Aliche and Onyishi, 2020), and improving one's concentration leading to mental rejuvenation (Prommayon et al., 2015). In general, there has been a positive link established between mindfulness and a healthy mind-body connection in the extant literature (e.g., Proctor, 2018; Vlastic, 2013).

Given the positive impact on well-being, if used in the workplace and embedded in the organizational culture, mindfulness appears to have the potential to improve morale, job satisfaction, and performance (Overall and Rosalind, forthcoming). However, the topic of mindfulness and business is an emerging field of inquiry with limited empirical studies that investigate the impact of mindfulness on organizational productivity (Overall and Rosalind, forthcoming). The existing empirical studies, such as Ostafin and Kassman (2012) and Colzato et al. (2012) determined that mindfulness practices have a positive impact on performance through the enhancement of creativity and innovation. Yet, these controlled studies do not investigate or control for the importance of organizational contextual factors, like culture, management style, and product offering, which have all been shown to have an impact on productivity (e.g., Bakas et al., 2020; Likhitkar & Verma, 2017; Rusu et al., 2016).

In this research, I first discuss mindfulness practices broadly. I then discuss mindfulness, mental health, organizational productivity, and the importance of organizational contextual factors. The main contribution to knowledge of this research is demonstrating how positive mental health, in general, and reductions in workplace stress, in particular, act as mediators in the relationship between mindfulness and productivity while considering organizational contextual factors. This research is important, as nuanced discussion on mindfulness and productivity is essential. Future research directions are suggested in the conclusion.

## THEORETICAL FOUNDATION

### Mindfulness

Mindfulness has been foundational to most religions, philosophical questions, and indigenous practices for millennia. When looking broadly at all major spiritual traditions from both eastern and western contexts, namely: Judeo-Christianity, Islam, Confucianism, Buddhism, and Taoism, mindfulness is a consistent theme across all of them. The act of being mindful dates back to, at least, the Buddhist tradition nearly 2,500 years ago involving contemplative practices. Mindfulness practices can be placed into three broad categories: (1) mind-body therapies, (2) body work and movement therapies, and; (3) indigenous medicine (Young, 2002). Mind-body therapies include: meditation, sound therapy, and holotropic breathing. The movement therapies include yoga and walking meditation. The indigenous medicine include not only ancient indigenous plant medicine, but also homeopathic medicines, Chinese traditional medicine, and Indian medicine (Young, 2002). As will be presented in the ensuing paragraphs, each of these mindfulness practices has been shown to be a useful aid in the treatment of mental health.

#### *Mind-body therapies*

*Meditation.* Meditation involves focusing attention on one's breathing patterns and increasing concentration on one's stream of thoughts. The science behind meditation suggests that when people meditate, they enter a physiological state of reduced metabolic activity. In this state, through calmer breathing and a clearer mind, people become increasingly relaxed, emotionally-balanced, and stable. At the completion of their meditation, people feel more content. Although meditation has many short-term benefits, like improving mental concentration, the main benefits of meditation actually occur in the long-term. Long-term benefits of meditation involve helping to not only heal one's emotional traumas, but there has also been empirical evidence suggesting that a healthy mind can help heal serious physical ailments (Lim, 2018; Proctor, 2018; Vlastic, 2013).

*Sound therapy.* In the Buddhist tradition, monks have used the sounds that derive from Tibetan singing bowls to aid their meditative practices for centuries. During a sound therapy session, practitioners sit in a meditative posture or they lie down. Similar to meditation, through sound therapy, one can enter a "state of consciousness that allows us to witness our lives from a calmer, more meditative perspective" (Gaynor, 2013, p. 3). When in a sound therapy meditation, practitioners are better able to control their breathing, clear their mind, and enter a state of relaxation. They display increased compassion, empathy, and, in general, improved mental health (Kaiser, 2008). This allows people to activate the healing properties within them, which has been shown to enhance the immune system while also regenerating injured tissues. To this end, Gaynor (2013) used singing bowls to help heal his patients.

*Holotropic breathing.* Using the breath as part of one's meditative practice is rooted in Buddhism and also central to various indigenous traditions. Traditional groups have been using the breath to aid in expanding self-awareness and reaching higher states of mindfulness for centuries. Holotropic breathing (also known as breath work) has been used to help individuals uncover subconscious traumas, rooted in childhood (Collinge and Yarnold, 2001). To this end, medical practitioners have used holotropic breathing as part of psychotherapeutic treatments designed to help individuals better manage, cope with, and overcome post-traumatic stress disorder (PTSD) (Godwin, 2018). In addition to stress, holotropic breathing is used to treat anxiety, depression, and to assist those with overcoming addictions (Sultanoff, 2002). It has also been used to treat people with respiratory illnesses, such as asthma and sinusitis (Sultanoff, 2002). Holotropic breathing has been used in treatment programs for those who experience chronic migraines and irritable bowel syndrome. Due

to the myriad of potential benefits, holotropic breathing has become popular among entrepreneurial communities, like Silicon Valley. Some entrepreneurs are claiming that holotropic breathings helps them increase their: imagination, visualization, sensing, feeling, and focusing (Sultanoff, 2002).

### *Body work and movement therapies*

*Yoga.* The ancient practice of yoga is a physical meditation that has been practiced, starting in India, for millennia. Traditionally, one of the many purposes of yoga was to help practitioners stretch their body to improve flexibility, which would allow them to sit in a meditation pose for longer periods without experiencing discomfort. Carl Jung, the renowned 20th century psychologist and foundational theorist to the mindfulness literature (e.g., Judith, 2016; Taylor, 2017), argued that all physical health issues, pain, discomfort, and trauma are related to unexpressed emotions that are logged in the subconscious and stored in the body (Seaward, 1995). Emotions can also be stored in the internal organs and, if left unresolved, can lead to the manifestation of more serious health issues. Feelings of disappointment, sadness, and unworthiness are all emotions that carry energy downwards away from the brain. This flow of energy will impact one's posture causing one to slouch. This can lead to physical ailments, such as: back, leg, or neck pain. On the other hand, emotions like happiness or enthusiasm all cause an upward flow of energy toward the brain. This makes people stand up tall and straight. When the aforementioned trapped emotions related to trauma are released through the practice of yoga, it is not uncommon for practitioners to weep, not out of pain, but out of gratitude for their release. The physical practice of yoga can, therefore, have a profound impact on one's emotional, physical, and mental health (Köksoy et al., 2018).

Yoga can enhance the mind-body connection, help people improve their mindfulness awareness, and, ultimately, help people reach their optimal potential (Seaward, 1995). Given the physical nature of yoga and its ability to aid in improving and maintaining physical wellbeing, yoga has been embraced in cosmopolitan western society (Borden, 2017; Lavretsky, 2010).

*Walking meditation.* Walking meditation can help stimulate mental and physical health benefits. In the case of mental, walking meditation can reduce levels of stress and depression while improving one's concentration. It has been shown to aid in memory retrieval and learning by causing acetylcholine to be generated in the parietal lobe of the cerebrum that is associated with peacefulness, enhanced concentration, improved attention, improved calmness, and mental rejuvenation (Prakhinkit et al. 2014). On the physical side, walking meditation can improve fitness levels and help people maintain a healthy weight. It has been shown to reduce blood glucose levels, arterial stiffness, and cortisol levels. Walking meditation has also been shown to help people that suffer from type 2 diabetes (Prakhinkit et al. 2014).

### *Indigenous medicine*

Indigenous groups across the globe have been perfecting their knowledge of various mindfulness practices for millennia. Practices, often referred to as medicine, include but are not limited to, breathing exercises, fasting, sweating, and dancing. Indigenous people also possess vast knowledge of plants and animals. Indigenous people have used these medicines to not only address physical ailments, but to also help with resolving psychological, physiological, emotional, and spiritual disruptions. Over the past decades, western researchers have started to investigate the healing properties of various indigenous medicines. In particular, researchers at New York University (NYU) and John Hopkins found that in comparing indigenous medicine, such as psilocybin – the psychoactive properties found in certain mushrooms - with pharmaceutical medication, psilocybin was found to be far more effective in: treating anxiety, PTSD, addiction, headaches, and depression. Psilocybin was shown to be effective at addressing the root of these mental health disorders as opposed to treating symptoms (Dunne, 2018), which is primarily the function of pharmaceutical medications. In

depressed patients, psilocybin works by 'rebooting' the brain in a way that resets key brain circuits that play a significant role in depression (Siddique, 2017).

## **Mindfulness and psychology**

After investigating the mindfulness practices of the eastern (e.g., Buddhism) and indigenous traditions, several prominent 20<sup>th</sup> century psychologists from the western tradition (e.g., Carl Jung, Lawrence Kohlberg, and Abraham Maslow) acknowledged the importance of mindfulness to psychology (Alexander et al., 1991). In particular, William James investigated the transformative powers and wisdom that can be gained from the mindfulness practices of the Buddhist philosophy. From his research, he concluded well over a century ago that, through the healing effect that it can have on the mind-body connection, Buddhism would make a significant contribution to modern psychology (Vlasic, 2013).

Lawrence Kohlberg, who developed a theory of how individuals make moral decisions (i.e., cognitive moral development), argued that people progress through various stages on their way to behaving morally. When individuals enter the seventh stage, Kohlberg believed that they are in a state similar to that of Buddhist enlightenment, defined as seeing things as they actually are (Wankhede, 2007), understanding the interconnectivity of all things, and maintaining unwavering compassion for oneself and others. In this state, Kohlberg believed that individuals are more apt to make morally sustainable decisions. As part of this tradition, Carl Jung travelled east to explore the various spiritual traditions native to these lands and observed how mindfulness practices can aid in unearthing and processing trapped emotions in the subconscious (Borden, 2017).

However, in conflict with Jung and his colleagues, Sigmund Freud believed that the concepts of mindfulness were illusionary (Freeman, 1998). Freud was most concerned with understanding human psychology from purely a biological perspective. As a result of the foundational impact that Freud's work had on modern psychology, many of the mindfulness theories were trivialized and overlooked, in general, until recently. Over the past decades, there has been an emerging group of scholars (e.g., Taylor, 2017) who are picking up where their 20<sup>th</sup> century counterparts left-off. Although a significant amount of research time has been lost, recent discoveries have shown that, through mindfulness practices, neuropathways in the brain can be reprogramed (Alexander et al., 1991). In particular, neuropathways help humans to process information, emotions, and sensations. They also provide responses to trauma. When trauma is experienced, a neuropathway is established and when this trauma becomes activated, typically through a triggering event that is connected to the original trauma, one's emotional state can be negatively affected. Yet, through mindfulness and the greater awareness that can be gained of one's trauma, these deep-seeded neuropathways that have been lodged in the subconscious can be reprogramed (Yasuno, 2008). By doing this, trauma will not have the same effect on one's emotional state. By reprograming the neuropathways and changing the way the brain functions, people are able to overcome significant challenges and, through this, they are able to optimize their potential in ways that scientists have previously never thought possible (Danzico, 2011).

## **Mindfulness and stress reduction**

In their meta-analysis, Kuyken et al. (2016) concluded that mindfulness-based cognitive therapy is an effective treatment for relapse prevention for patients that experience recurrent depression. Brown and Ryan (2003) found that mindfulness interventions have been shown to decrease mood disturbances and stress in patients. In addition to stress, mindfulness is used to treat anxiety, depression, and to assist those with overcoming addictions (Sultanoff, 2002). In their meta-analyses, Bartlett et al. (2019) and Lomas et al. (2019) determined that increased mindfulness in the workplace

led to reduced depression, stress, anxiety, and job burnout. From this, it has been well-established in the extant literature that mindfulness has a positive impact on a reduction in stress. As a result of these findings, medical practitioners are increasingly prescribing mindfulness practices in their treatment plans (Lavretsky, 2010).

### **Mindfulness and organizational productivity**

The pressure that employees experience in the workplace, among other factors, such as being: tired, overworked, or, in other words, cognitively busy (Kahneman, 2011), can perturb their ability to make decisions (Overall, 2016). Time pressures cause employees to become rushed to make decisions, which reduces their cognitive resources that are needed to make optimal choices (Bazerman & Tenbrunsel, 2011). When they experience emotional distress, employees can fail to think through problems clearly. As a result of this, they can make suboptimal decisions leading to poor outcomes (Brocas and Carrillo, 2008).

Within the field of neuroscience and psychology, neuroscientists are beginning to understand the effect that mindfulness practices can have on improving the neurophysiological health of the brain. Prolonged mindfulness practice has been shown to lead to changes in one's brain activity whereby people begin to access areas of the brain that they normally do not use. According to the mindfulness literature (e.g., Bondolfi et al. 2010; Johnson et al., 2019), it has been suggested that those who practice mindfulness three times per week for 20 minutes per day (Antoine et al., 2018) for at least six months yielded the most mind-body connection benefits (Bondolfi et al. 2010). Meditators at this level of practice have demonstrated significant improvements in attentional performance, cognitive flexibility, and cognitive functions on all levels of attention (Moore and Malinowski, 2009). They develop a thicker prefrontal cortex, which improves interoception and sensory processing (Lazar et al., 2006), ultimately leading to better decision-making. Improved decision-making can lead to better organizational outcomes (McMillan and Overall, 2017), such as productivity.

In their meta-analysis reviews, Bartlett et al. (2019) and Lomas et al. (2019) determined that mindfulness practices led to positive impacts on job performance, wellbeing, compassion, and empathy. Colzato et al. (2012) determined that mindfulness has a positive impact on creativity. Within a leadership context, leaders who engage in mindfulness become more vulnerable, genuine, congruent, balanced, and authentic in their interactions (Purnell-Webb et al., 2002). When this enhanced authenticity is integrated throughout an organizational hierarchy, managers are better able to lead, motivate, and engage with their subordinates by developing deeper interpersonal relationships, which translates into improved leadership capabilities (Young, 2002), better decision-making, and better attainment of organizational goals (Amar et al., 2015). In general, the main benefits of mindfulness within an organizational context involve: better decision-making, an improved connection to others (Shinde and Shinde, 2010), increased happiness, job satisfaction, loyalty, productivity, and innovation. From this, there appears to be a positive relationship between mindfulness and organizational productivity.

### **Stress reduction and organizational productivity – the mediating role of positive mental health**

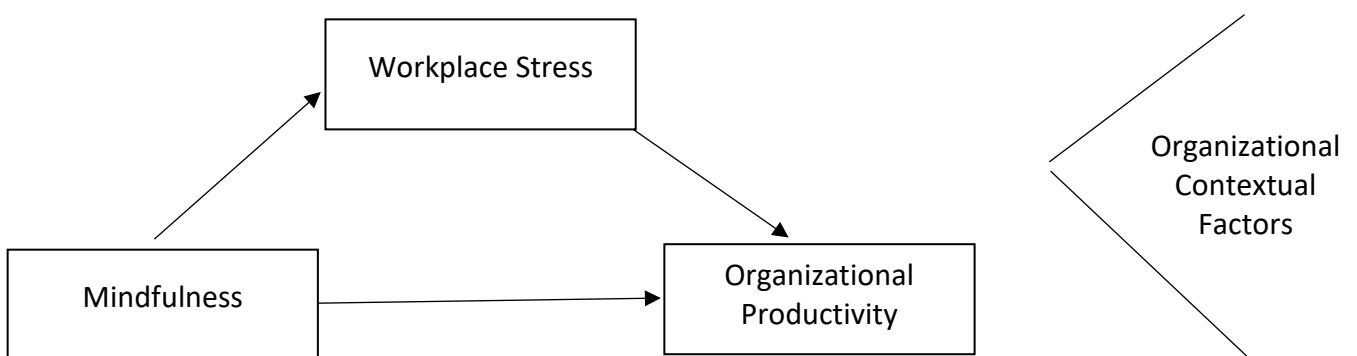
In their literature review, Cooper and Cartwright (1994) found a positive relationship between stress reduction and an increase in financial performance. Kompier et al. (1998) and Justesen et al. (2017) found that interventions that reduced stress, like physical activity, had a positive impact on improving absenteeism and presenteeism, which often lead to increases in productivity. Beyond stress, Trotter et al. (2009) found a positive relationship between improved mental health, in general, and productivity. In sum, these findings suggest that there is a: (1) positive relationship between a

reduction in workplace stress, and by extension improved mental health, and organizational productivity and (2) positive relationship between interventions that reduce workplace stress, and by extension improve mental health, and higher instances of organizational productivity. Although a mediator relationship has not been studied, the latter suggests that the relationship between interventions that reduce workplace stress and higher instances of organizational productivity is mediated by a reduction in workplace stress.

However, Bakas et al. (2020) found that organizational culture had a significant impact on productivity. Likhitkar and Verma (2017) found that the sustainability initiatives of an organization had an impact on employee retention. In their research, Cartwright and Cooper (1995) determined that several interventions in the workplace environment, namely changes to the: organizational structure, human resource procedures, and the flexibility options to employees, had a positive impact on reducing workplace stress and subsequently enhancing performance. From this, it has been demonstrated in the extant literature that organizational contextual factors, such as policies and culture, influence employee performance (Rusu et al., 2016) and, by extension, organizational productivity. Although researchers have focused on assessing the link between mindfulness and performance (e.g., Colzato et al., 2012; Ostafin and Kassman, 2012), researchers have yet to assess the impact of organizational contextual factors on the effectiveness of mindfulness practices within the workplace. To this end, if the workplace is perceived as stressful through aggressive performance targets, the nature of the work, such as high-pressure sales, or the product offering of the organization, such as environmentally unsustainable goods, despite the level of mindfulness introduced, there will likely be a plateau until the organizational contextual factors are improved. Therefore, the relationship between mindfulness and organizational productivity is dependent on organizational contextual factors. According to Figure 1, I postulate the following relationship:

*Proposition #1: The positive relationship between mindfulness and organizational productivity is mediated by a reduction in workplace stress and influenced by organizational contextual factors.*

**Figure 1: Mindfulness and organizational productivity is mediated by a reduction in workplace stress**

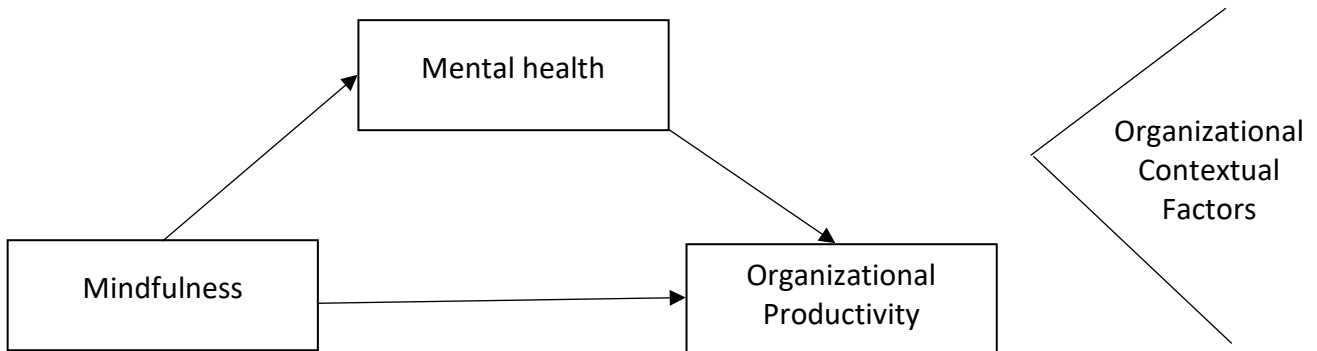


Research has shown that mindfulness practices have been successful in combatting depression (Carr & Hancock, 2017; Overall, 2020), increasing resilience (Kemper et al., 2015), reducing job burnout (Gustafsson et al., 2015), and increasing well-being (Aliche and Onyishi, 2020). These in turn have all had a positive impact on organizational productivity. Building on proposition #1, I argue that the

relationship between mindfulness and organizational productivity is mediated by an improvement in mental health. Henceforth, according to Figure 2, I postulate the following:

*Proposition #2: The positive relationship between mindfulness and organizational productivity is mediated by positive mental health and influenced by organizational contextual factors.*

**Figure 2: Mindfulness and organizational productivity is mediated by positive mental health**



## CONCLUSIONS AND FUTURE DIRECTIONS

In this research, I present two mediating conceptual frameworks that can help future researchers explain better the relationship between mindfulness, positive mental health, and organizational performance. The main contribution to knowledge of this research is demonstrating how the relationship between mindfulness practices and organizational performance is mediated by: (1) a reduction in workplace stress and (2) positive mental health and dependent on organizational contextual factors. This research is important because the study of mindfulness within the context of business is a relatively new field of inquiry and a deeper understanding of the impact that it can have on organizational outcomes is vital.

Future researchers may wish to assess the impact of mindfulness on various working populations. Given the aforementioned data presented by the WHO (2020) pertaining to frontline workers, and specifically nurses, this population would be important to study. By assessing the impact of mindfulness interventions on the mental health of these populations and subsequently improving productivity, this should translate into hospital patients receiving better care and potentially more lives being saved.

Given the benefits, over the past 25 years, there has been a surge in interest among American and European businesses involving mindfulness practices (Purnell-Webb et al., 2002). The Body Shop and Tom's of Maine, for example, have integrated mindfulness within their strategic plans (Purnell-Webb et al., 2002). The leadership of Whole Foods and LinkedIn are actively using mindfulness principles in their corporate lexicon. Indigenous practices have been integrated in the management philosophy at General Motors, AT&T, and Bank of Boston (Roedenbeck, 2006). Companies like Xerox, Pizza Hut, and Taco Bell have started investing in the mind-body connection of their employees by offering them incentives. PricewaterhouseCoopers has implemented various wellness programs that incentivize employees to focus on enhancing their mind-body connection through physical, emotional, mental,



and spiritual wellbeing, which has led to significant improvements in employee wellness (LaVito, 2018). Through the implementation of these programs, many organizations have noted enhanced organizational performance.

However, as indicated in this research, the relationship between mindfulness and organizational performance is influenced by organizational contextual factors. Therefore, it is essential that management create an organizational context, namely: culture, management style, product offering, and policies that are conducive to stimulating mindfulness and positive mental health. Through this, management needs to be authentic in their communications and interactions with all important stakeholders and, by extension, act in sustainable ways.

Although businesses are starting to integrate mindfulness practices within their organizational hierarchies and are incentivizing their labour force to embark on mindfulness interventions, as of this writing, only 33% of North American employers have formal wellness strategies in place. Nearly half are taking an informal approach to employee wellness and 20% do nothing (Overall and Rosalind, forthcoming). Similarly, mindfulness business courses are rarely offered in business schools across North America and Western Europe. Considering the positive impact that they can have on mental health, business school administrators should consider implementing mindfulness training in their curriculum to better equip future managers on how to address the pending mind-body connection challenges that they are likely to experience in their careers.

## Author Profile

**Dr Jeffrey Overall** is an associate professor of entrepreneurship at Ontario Tech University. He is the President and co-founder of the Global Institute for Conscious Economics. He has over 20 years of entrepreneurship experience. He conducts research in three areas of management: (a) conscious business, (b) entrepreneurship, and (c) philosophy of management. Given the overwhelming issues surrounding mental health in the workplace, in general, and among entrepreneurs, in particular, much of his research is dedicated to demonstrating the link between consciousness and: optimum performance, increased productivity, sustainability, and financial performance.

## References

- Alexander, C.N., Rainforth, M.V., and Gelderloos, P. (1991) Transcendental Meditation, Self-Actualization, and Psychological Health: A conceptual overview and statistical meta-analysis. *Journal of Social Behavior and Personality*, 6(5), pp. 189-239.
- Aliche, C.J., & Onyishi, I.E. (2020) Mindfulness and wellbeing in older adults' survivors of herdsmen attack. The mediating effect of positive reappraisal. *Aging & Mental Health*, 24(7), pp. 1132-1140.
- Amar, A. et al. (2015) Effects of Practicing Meditation in the East and the West: Leaders in the West Benefit More. *Academy of Management Conference*, Vancouver 07 to 11 August, 2015.
- Antoine, P. et al. (2018) A Mindfulness-Based Intervention: Differential Effects on Affective and Processual Evolution. *APPLIED PSYCHOLOGY: HEALTH AND WELL-BEING*, 2018, 10 (3), 368–390.
- Bakas, D., Kostis, P., and Petrakis, P. (2020) Culture and labour productivity: An empirical investigation. *Economic Modelling*, 85, pp. 233-243.

- Bartlett et al. (2019) A systematic review and meta-analysis of workplace mindfulness training randomized controlled trials. *APA JOURNAL OF OCCUPATIONAL HEALTH PSYCHOLOGY*. DOI: <https://psycnet.apa.org/doiLanding?doi=10.1037%2Focp0000146>
- Bazerman, M.H. and Tenbrunsel, A.E. (2011) *Blind spots. Why we fail to do what's right and what to do about it*. Princeton University Press. Oxford, UK.
- Bickford, M. (2005) 'Stress in the workplace: A general overview of the causes, the effects, and the solutions', *Canadian Mental Health Association Newfoundland and Labrador Division*.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230–241. <https://doi.org/10.1093/clipsy.bph077>
- Bondolfi, G. et al. (2010) Depression relapse prophylaxis with Mindfulness-Based Cognitive Therapy: Replication and extension in the Swiss health care system. *Journal of Affective Disorders*, 122(3), pp. 224-231.
- Borden, M.E. (2017) *Psychology in the light of the east*. Rowman & Littlefield, London, UK.
- Brocas, I. and Carrillo, J.D. (2008) *The psychology of economic decisions*. Oxford University Press, Oxford, New York.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- CAMH (2020) COVID-19 national survey dashboard. *What Canadians are reporting about their mental health and substance use during the pandemic*. <https://www.camh.ca/en/health-info/mental-health-and-covid-19/covid-19-national-survey>
- Carr, S.M.D., and Hancock, S. (2017) Healing the inner child through portrait therapy: Illness, identity and childhood trauma. *International Journal of Art Therapy*, 22(1), pp. 8-21.
- Colligan, T.W. and Higgins, E.M. (2005) 'Workplace stress: Etiology and consequences', *Journal of Workplace Behavioral Health*, 21 (2): 89-99.
- Collinge, W. and Yarnold, P.R. (2001) Transformational breath work in medical illness: Clinical application and evidence of immunoenhancement. *ISSSEEM. Bridging Science and Spirit*, 12(3), pp. 341-352.
- Colzato, L. S., Ozturk, A., & Hommel, B. (2012). Meditate to create: The impact of focused-attention and open-monitoring training on convergent and divergent thinking. *Frontiers in Psychology*, 3. <https://doi.org/10.3389/fpsyg.2012.00116>
- Cooper, C.L. and Cartwright, S. (1994) Healthy mind; Healthy organization - A proactive approach to occupational stress. *Human Relations*, 47(4), pp. 16-24.
- Danzico, M. (2011) Brains of Buddhist monks scanned in meditation study. *BBC News*. Retrieved from <https://www.bbc.com/news/world-us-canada-12661646>
- Dunne, C. (2018) Welcome to the trip of your life: The rise of underground LSD guides. *The Guardian*. Retrieved from [https://www.theguardian.com/society/2018/dec/06/lsd-guides-psychedelic-assisted-psychotherapy?utm\\_source=MycoMeditations&utm\\_campaign=87f%E2%80%A6](https://www.theguardian.com/society/2018/dec/06/lsd-guides-psychedelic-assisted-psychotherapy?utm_source=MycoMeditations&utm_campaign=87f%E2%80%A6)

- Freeman, A. (1998) Spirituality, well-being, and ministry. *The Journal of Pastoral Care*, 52(1), pp. 7-18.
- Garland, E. L., Gaylord, S. A., & Fredrickson, B. L. (2011). Positive reappraisal mediates the stress-reductive effects of mindfulness: An upward spiral process. *Mindfulness*, 2(1), 59–67. <https://doi.org/10.1007/s12671-011-0043-8>
- Gaynor, M.L. (2013) *The Healing Power of Sound. Recovery from life-threatening illness using sound, voice, and music*. Shambhala Boston & London.
- Godwin, R. (2018) 'You've had what we call a cosmic orgasm': the rise of conscious breathing. *The Guardian*. Retrieved from <https://www.theguardian.com/lifeandstyle/2018/aug/04/cosmic-orgasm-rise-of-conscious-breathing>
- Gustafsson, H., Skoog, T., Davis, P., Kenttä, G., and Haberl, P. (2015) Mindfulness and Its Relationship With Perceived Stress, Affect, and Burnout in Elite Junior Athletes. *Journal of Clinical Sport Psychology*, 9(3), pp. 263–281.
- Johnson, D.A., Frazee, M., Bourn, N.S., and Ivers, N.N. (2019) Evaluating Differences in the Working Alliance Based on Frequency of Mindfulness Practices Among Counselors-in-Training. *The Journal of Humanistic Counseling*, 58(1), pp. 34-52.
- Johnson, S. Cooper, C. Cartwright, S. Donald, I. and Taylor, P. (2005) 'The experience of work-related stress across occupations', *Journal of Managerial Psychology*, 20 (2): 178-187.
- Judith, A. (2016) *Wheels of Life*. Llewellyn Publications. Woodbury, Minnesota.
- Justesen, J.B. et al. (2017) The Effect of Intelligent Physical Exercise Training on Sickness Presenteeism and Absenteeism Among Office Workers. *Journal of Occupational and Environmental Medicine*, 59(10), pp. 942-948.
- Kahneman, D. (2011) *Thinking, fast and slow*. Penguin Books, London: UK
- Kaiser, E.M. (2008) *Efficacy of sensory learning program as treatment modality for complex PTSD*. The University of the Rockies, ProQuest Dissertations Publishing, 2007. 3297005.
- Kemper, K.J., Mo, X., and Khayat, R. (2015) Are Mindfulness and Self-Compassion Associated with Sleep and Resilience in Health Professionals? *The Journal of Alternative and Complementary Medicine*, 21(8), pp. 213-233.
- Köksoy, S. et al. (2018) The Effects of Yoga in Patients Suffering from Subjective Tinnitus. *International Archives of Otorhinolaryngology*, 22(1), pp. 213-220.
- Kompier, M.A.J. et al. (1998) Cases in stress prevention: The success of a participative and stepwise approach. *Stress Medicine*, 14(3), pp. 155-168.
- Kuyken, W. et al. (2016) Efficacy of mindfulness-based cognitive therapy in prevention of depressive relapse. An individual patient data meta-analysis from randomized trials. *JAMA Psychiatry*, 73(6), pp. 565-575.
- LaVito, A. (2018) Anxiety is expensive: Employee mental health costs rise twice as fast as all other medical expenses. Health and Science. *CNBC*. Retrieved from <https://www.cnbc.com/2018/09/26/employers-are-starting-to-think-about-healthy-differently.html>
- Lavretsky, H. (2010). Spirituality and aging. *Aging Health*, 6(6), 749-769.

- Lazar et al. (2005) Meditation experience is associated with increased cortical thickness. *Neuroreport*, 16(17), pp. 1893-1897.
- Likhitkar, P. and Verma, V. (2017) Impact of green HRM practices on organization sustainability and employee retention. *International Journal for Innovative Research in Multidisciplinary Field*, 3(5), pp. 152-158.
- Lim, J.R. (2018) Can Meditation Really Cure Disease?. *Men's Journal*. Retrieved from <https://www.mensjournal.com/health-fitness/how-mindfulness-meditation-can-cure-disease-w446104/>
- Lomas et al. (2019) Mindfulness-based interventions in the workplace: An inclusive meta-analysis of their impact upon wellbeing. *The Journal of Positive Psychology*, 14(5), pp. 232-248.
- Mark, G. M. and Smith, A. P. (2008) 'Stress Models: A Review and Suggested New Direction'. In J. Houdmont and S. Leka (Eds.), *EA-OHP series* (Vol. 3, pp. 111–144). Nottingham, UK: Nottingham University Press.
- McMillan, C. and Overall, J.S. (2017) Crossing the Chasm and Over the Abyss: Perspectives on Organizational Failure. *Academy of Management Perspectives*, 31(4), pp. 271-287
- Mental Health Commission (2020) Why investing in mental health will contribute to Canada's economic prosperity and to the sustainability of our health care system. *Mental Health Commission of Canada*.
- Moore, A., & Malinowski, P. (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition*, 18, 176-186.
- O'Driscoll, M.P. and Cooper, G.L. (2002) 'Job-related stress and burnout', *Psychology at Work*, 204-230.
- Ostafin, B. D., & Kassman, K. T. (2012). Stepping out of history: Mindfulness improves insight problem solving. *Consciousness and Cognition*, 21(2), 1031–1036. <https://doi.org/10.1016/j.concog.2012.02.014>
- Overall, J.S. (2016) Cyclical workplace stress and employee pathology: A conceptual framework. *International Journal of Work Organisation and Emotion*, 7(2), pp. 98-103.
- Overall, J.S. (2020) Mental Health among Entrepreneurs: The Benefits of Consciousness. *International Journal of Entrepreneurship and Economic Issues*, 4(1), pp. 70-74.
- Overall, J., Rosalind, R. (forthcoming) *Capitalist Buddha: Waking up to conscious business*. The Global Institute for Conscious Economics.
- Pollan, M. (2018) *How to Change Your Mind: What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence*. Penguin Press. New York, NY.
- Prakhinkit, S. et al. (2014) Effects of Buddhism Walking Meditation on Depression, Functional Fitness, and Endothelium-Dependent Vasodilation in Depressed Elderly. *The Journal of Alternative and Complementary Medicine*, 20(5), pp. 1-11.
- Proctor, D. (2018) Healing With the Power of Meditation: How to Heal Your Body With Your Mind. *Conscious Lifestyle Magazine*. Retrieved from <https://www.consciouslifestylemag.com/healing-meditation-mind-body/>

- Prommayon, S. et al. (2015) *The Effect of Walking Meditation on Brainwave Activities among Buddhist Priests*. School of Anti-Aging and Regenerative Medicine, Mae Fah Luang University. Unpublished manuscript.
- Purnell-Webb, P. et al. (2002) Understanding spirituality in the workplace: A qualitative study. *Journal of Spirituality, Leadership and Management*, 2002(1), pp. 1-13.
- Robb, A. (2019) The 'flow state': Where creative work thrives. *BBC - Capital*. Retrieved from <http://www.bbc.com/capital/story/20190204-how-to-find-your-flow-state-to-be-peak-creative>
- Roedenbeck, M.R.H. (2006) *Management and 'huna': Integrating Ancient Hawai'ian Spirituality into Daily Ethical Management?* Paper präsentiert auf der Tagung 'EAMTP'. Doctoral Program „Research on Organizational Paths“ Freie Universität Berlin
- Rusu, G., Avasilcai, S., and Hutu, C.A. (2016) *Organizational Context Factors Influencing Employee Performance Appraisal: A Research Framework*. SIM 2015 / 13th International Symposium in Management. *Procedia - Social and Behavioral Sciences* 221 (2016), pp. 57 – 65.
- Seaward, B.L. (1995) Reflections on human spirituality for the worksite. *American Journal of Health Promotion*, 9(3), pp. 165-169.
- Shinde, J.S. and Shinde, U.S. (2010) The Perennial Perspective on Entrepreneurship. *Journal of Strategic Innovation and Sustainability*, 7(1), 72-87.
- Siddique, H. (2017) Magic mushrooms 'reboot' brain in depressed people. *The Guardian*. Retrieved from <https://www.theguardian.com/science/2017/oct/13/magic-mushrooms-reboot-brain-in-depressed-people-study>
- Sultanoff, B.A. (2002) *Chapter 10 - Breath work*. *Handbook of Complementary and Alternative Therapies in Mental Health*, pp. 209-227.
- Taylor, S. (2017) *The Leap: The Psychology of Spiritual Awakening*. New World Library, Novato, California.
- The Lancet Global Health (2020) *Mental health matters*. *The Lancet Global Health* 8(November 2020), pp. e1352. Published by Elsevier Ltd.
- Trotter, V.K. (2009) Measuring work productivity with a mental health self-report measure. *Journal of Occupational and Environmental Medicine*, 51(6), pp. 12-21.
- Vlasic, R.L. (2013) *Waking Up: Radical Self-Change Through Mindfulness and Spirituality*. Unpublished thesis. Michigan School of Professional Psychology.
- Wankhede, M.S. (2007) Buddhism: The root of humanity. *Literary Herald*, 3(6), pp. 100-107.
- Wolever, R.Q. et al. (2012) Effective and Viable Mind-Body Stress Reduction in the Workplace: A Randomized Controlled Trial. *Journal of Occupational Health Psychology* 17(2), pp. 246–258.
- World Health Organization (2020) *Mental health & COVID-19*. Retrieved on August 31, 2020 from <https://www.who.int/news-room/detail/14-05-2020-substantial-investment-needed-to-avert-mental-health-crisis>
- Yasuno, M. (2008) The Role of Spirituality in Leadership for Social Change. *Spirituality in Higher Education*, 4(3), pp. 1-9.
- Young, J.E. (2002) A spectrum of consciousness for CEOs: A business application of Ken Wilber's spectrum of consciousness. *The International Journal of Organizational Analysis*, 10(1), pp. 30-54.