

A Swiss army knife?

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A Swiss army knife? How science challenges our understanding of mindfulness in the workplace[☆]

Maree Roche, Darren Good, Christopher Lyddy, Michelle R. Tuckey, Marina Grazier, Hannes Leroy, Ute Hülshager

KEYWORDS

Mindfulness;
Evidence;
Environments;
Interventions;
Leadership;
Well-being

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INTRODUCTION

In the modern world, mindfulness practices such as meditation have recently been adopted successfully in therapeutic

contexts including clinical psychology. More recently, mindfulness has attracted the attention of organizations, including management and corporate trainers, as they seek to gain the positive outcomes of mindfulness for individuals in the workplace. Fuelling this rapidly emerging \$1B industry is a swift growth in research demonstrating the value of mindfulness in organizational life. Our search of peer reviewed publications on “mindfulness and workplace” found a 181% increase from 2013 to 2017. However, despite its potential

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value, mindfulness can be challenging to integrate into organizational life. In this paper we provide insight into the best of science and practice to help organizational decision makers better understand and navigate the complexities in mindfulness at work, and thus derive benefits from these interventions.

After describing what mindfulness is, we situate mindfulness alongside traditional training interventions, and then review the benefits of mindfulness in the workplace. In doing so, we point out the potential levers available for managers to pull in order to influence mindfulness in their organization. We close with a discussion of emerging applications and challenges in applying mindfulness in the workplace.

WHAT IS MINDFULNESS?

Broadly speaking, mindfulness involves non-reactive and non-evaluative awareness and attention to the present moment. In other words, mindfulness involves present moment awareness and attention. This aspect of mindfulness is important because our minds wander – about half of our waking hours. Rather than being in the moment, people tend to think about the future, such as potential problems or issues, or to ruminate about the past, such as undesirable incidents that have taken place. When mindfully anchored in the present, individuals tend to avoid the habitual tendency to evaluate, react, and ruminate about events. They focus their attention on the present. This quality of the mind enables a person to observe both internal states, including thoughts and feelings, as well as external events, without attaching meanings to them. In summary, mindfulness is present-focused non-judgemental attention and awareness.

It is important to distinguish the different ways that mindfulness can be understood and examined in the workplace. For example, is mindfulness a permanent aspect of a person's psychological abilities? Does it change from day to day? Can mindfulness be learned? If so, what is the best way to learn mindfulness? In fact, and confusingly, mindfulness can be thought of and measured in at least four different ways: (1) as a momentary state (differing day to day, and even moment to moment); (2) a dispositional trait (viewed as a more fixed or stable quality); (3) a period of practice in daily life (meditation); and (4) as a formalised training intervention.

The differences among these four ways of thinking about mindfulness are shown in [Box 1](#) and [Fig. 1](#). The extent to which an individual brings non-judgemental, present-focused attention and awareness to something occurring at a particular moment in time is *state* mindfulness. Just as some individuals are more outgoing than others, some individuals are also more mindful than others. Therefore, the degree that a person regularly remains in this state of mindfulness is considered *trait* mindfulness ([Box 1](#)).

Developing mindfulness can occur through *mindfulness practices*, when attention and awareness are intentionally focused on the present. Consistently cultivating a state of mindfulness increases an individual's ability to stay mindful, resulting in even higher trait mindfulness. This process can be facilitated through a *mindfulness intervention*. Training programs on mindfulness practices and related topics such as stress typically are given over weeks/months. These interventions involve

Box 1. Psychological Operationalisations of Mindfulness (See Jamieson & Tuckey, 2017)

Psychologists operationalize mindfulness in four basic ways: dispositional trait, momentary state, brief practice, or a longer-term intervention.

- **Trait:** People have a natural, baseline quality of mindfulness that goes with them throughout their day. This involves an ability to be consistently present, regardless of their context.

- **State:** One can be more or less mindful in a given moment, feeling either very attuned to present experience, or engaging in a more abstract and conceptual way about the past or future.

- **Practice:** Individuals can readily intensify their degree of mindfulness through formal meditation (e.g., sitting on a cushion and watching the breath intently, loving kindness meditation, contemplative practice, and mindful reflection) or other types of informal meditation (e.g., tuning in momentarily into sensation of the body, noticing the external world through the senses, and a range of other informal practices).

- **Formal Intervention:** Individuals can enhance their tendency towards mindfulness through on-going mindfulness practice and participation in interventions largely developed in clinical settings but adapted for workplaces. These interventions are Mindfulness-Based Stress Reduction, (see MBSR; Kabat-Zinn, 2009), Mindfulness-Based Cognitive Therapy (see MBCT; Segal, Williams & Teasdale, 2013), Dialectical Behavior Therapy (see DBT; Linehan, 1993) and Acceptance and Commitment Therapy (see ACT; Hayes, Luoma, Bond, Masuda and Lillis, 2006). There are also a few validated apps like Headspace or 10% Happier and/or the Happiness Trap.

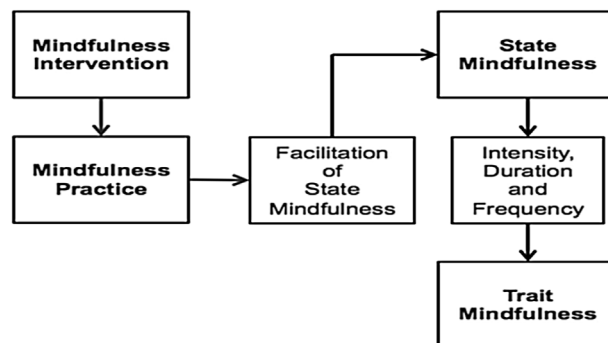


Figure 1 Different conceptualisations of mindfulness, and their inter-connections (see the bibliography for a review of Jamieson & Tuckey's, 2017 research)

intensive practice, which induce state mindfulness, and over time can lead to trait mindfulness (see Fig. 1).

Being Mindful at Work

Understanding mindfulness is more complex than the above conception when it is situated in the workplace. Focusing on the present is not how most people operate at work. Hence, the question: why might it be valuable to be mindful in the workplace?

There is consensus among psychologists that the mind typically works to attain goals. Mental processes are optimized to pursue goals in order to permit survival in an uncertain world. This involves maintaining a sense of self that can be extrapolated to the future, which helps when making predictions as to whether up-coming situations and required actions are good or bad. For example, knowing whether you would work well with another person requires having a sense of self over time, as well as an ability to predict potential work demands, and the goals to pursue. This need is so constant that we humans default to the mental mode of “Doing,” particularly in the workplace. This Doing mode is, of course, extremely helpful for making decisions – how else would you figure out whether you should do something?

So how does mindfulness fit into a workplace consumed by “Doing?” Most jobs today are hectic, frenetic, crazy – anything but allowing time to be contemplative. Thus it is hard to imagine how people in such work environments can be mindful. However, preliminary evidence suggests that this is indeed possible.

Mindfulness, or what can be thought of as our “Being” mode, involves a number of properties that differ markedly from the default “Doing mode of mind” (see Fig. 2). This mode involves experiencing the present moment fully, and accepting it rather than judging it as good or bad. Instead of recalling and anticipating events, it involves being intensely present. Instead of a stream of constant and automatic thought, it involves “mental quiet” that enables employees to engage in work with mental clarity and perspective. For example, current evidence in the behavioral sciences shows

Doing	Property	Being
Indirect, Conceptual	Perception	Direct, Nonconceptual
Story is Reality	Perceived Reality	Direct Experience is Reality
Past, Future	Temporality	Present
Evaluation	Judgment	Acceptance
Striving	Goals	Non-striving
Automatic	Agency	Intentional, Conscious

Figure 2 Doing and Being Modes of Mind (See Bibliography-Lyddy & Good, 2017 for further explanations)

that the Being mode provides an alternative way of engaging at work, rather than relying on the unhelpful aspects of the Doing mode. It expands our tool-kit for dealing with workplace challenges. Often, the Doing mode is not the right tool for the job; it is like using a hammer when you need to put in a screw. For example, when searching for a fresh, creative response to a problem, it is helpful to be fully present, and to put aside past approaches. Mindfulness helps individuals to “clean their mental plate” so as to facilitate a fresh start.

Being and Doing modes need to be balanced simultaneously. For this reason, mindfulness at work has been termed in a recent paper by Lyddy and Good (2017) as “Being While Doing.” Why is this combination valuable?

BENEFITS OF MINDFULNESS AT WORK

As individuals engage in Being While Doing, they have more cognitive tools at their disposal to function better in an array of workplace situations. Mindfulness starts with attention. The modern world bombards us constantly with stimuli that drain and distract our attention. Mindfulness directs and conserves attention, keeping it anchored in the present, on our work and those around us. Through higher-quality attention, mindfulness helps us think, feel and act better (see Fig. 3). It helps us to be more creative, hold more information in our minds, and make better decisions. Mindful employees have better mood states because they are less reactive emotionally. Mindfulness increases our ability to attain goals, especially when they conflict with automatic habits. Mindfulness practice physically reshapes the brain’s structure and how brain regions work together. It slows biochemical processes linked to aging including inflammation, stress hormones, telomeres, and even age-related

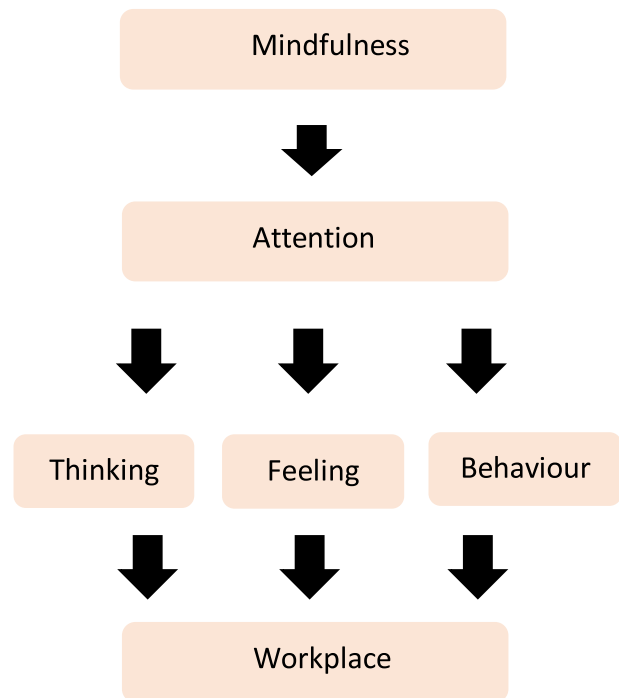


Figure 3 Mindfulness, Attention and Outcomes relevant to Workplaces. (See Bibliography Good et al., 2016)

neurological decay. This suggests that individuals who are mindful may have longer careers.

Not surprisingly, individuals who attend, think, feel and act in a mindful way also feel and function better at work. There is some evidence that by improving thinking, feeling, and behaviour, mindfulness increases desired workplace outcomes, including job performance, and inter-personal relationships. Mindfulness, as noted earlier, influences core psychological processes, especially attention and self-regulation. This explains why mindfulness has broad and significant benefits.

Mindfulness also helps individuals with their sense of well-being. Trait mindfulness, in particular, has been shown to elevate job satisfaction and work engagement, while minimizing feelings of burnout. Emerging evidence suggests that being mindful improves task execution, compassion towards others, and reduces unethical conduct. Trait mindfulness among nuclear power plant operators has been linked to safety behaviors. Being mindful helps leaders curb their hostile impulses, reducing their degree of subordinate abuse. Mindfulness has been linked to transformative leadership, and better subordinate performance and job attitudes. Task conflict in mindful teams decreases toxic relationships. In summary, mindfulness leads to numerous benefits in terms of mainstream workplace outcomes.

MANAGING MINDFULNESS AT WORK

What can managers do to encourage employee's ability to foster "Being While Doing?" The answer is two-fold: (1) offer opportunities for mindfulness training interventions and (2) manage the workplace environment in ways that support mindfulness. We expand on each of these options below.

Mindfulness Training

As early as the 1970s clinical psychologists were using mindfulness training as an intervention to help people manage distress and ill-health. Today's interventions include Mindfulness-Based Stress Reduction (MBSR), Mindfulness-Based Cognitive Therapy (MBCT), and Acceptance and Commitment Therapy (ACT). There is growing evidence for the benefits of all three for improving physical and psychological health conditions *in clinical samples*. These established interventions are outlined in [Table 1](#). The first generation

of mindfulness programs in the workplace was adapted from these clinically oriented programs, modified for the work environment.

However, of the breadth of mindfulness training being used in organizations, very few intervention programs have been evaluated with the same level of thoroughness as the programmes used in clinical psychology settings. Currently, we know the most about the effectiveness of the modified versions of MBSR. Its use increases *employee* health and well-being.

The diversity of mindfulness-based interventions in work settings makes it difficult to determine which aspects of a training program contribute to its effectiveness. For example, there is variation in the mindfulness activities taught as part of the training (e.g., body scan, loving kindness meditation), duration of the training (from one day to one year), number and timing of the training sessions, session length, training modes (such as face-to-face, online, group discussion, written elements), and 'homework' practice requirements. Interventions that deviate too far from established MBSR procedures may not produce changes in mindfulness in organizational settings. For example, some interventions put in place additional features thought to be relevant for the work setting (e.g., health promotion activities or physical exercise), but with little bearing on mindfulness and this could hamper the effectiveness of a mindfulness intervention. In short, caution is needed to avoid diluting the "active ingredients" that have been found to predict the effectiveness of the interventions in a clinical setting.

The appropriate training of instructors is another important issue. While clinical interventions are administered by trained professionals, such as psychologists, no such certification is required for workplace mindfulness trainers. Care needs to be taken that the training is delivered by experienced and qualified mindfulness instructors, such as those from established programs at credible institutions such as the University of Massachusetts Medical Center in the USA or the University of Oxford in the UK.

It remains unknown whether changes in mindfulness, well-being, and organizational outcomes stemming from mindfulness training persist *over time*. As with many training programs, intervention outcomes may weaken as employees return to their working environment. At the end of formal training, employees likely benefit from continued mindfulness practice, yet it may be difficult to conduct these practices effectively or consistently in typical workplace

Table 1 Key Features of Major Clinically Oriented Mindfulness Interventions (see the work of Jamieson & Tuckey, 2017)

Intervention	Target population	Aim
Mindfulness Based Stress Reduction (MBSR)	Individuals with chronic pain	To improve physical and psychological well-being through present moment awareness.
Mindfulness Based Cognitive Therapy (MBCT) a form of cognitive therapy that includes mindfulness.	Individuals with a high risk for depressive relapse	To provide clients with skills to assist in the prevention of depressive relapse.
Acceptance and Commitment therapy (ACT). A form of cognitive behavioral therapy.	Unspecified. Wellbeing	To increase psychological flexibility, conceptualized as present moment awareness and altering of behavior when necessary to align with one's values.

environments. Managers should think carefully about how to support workers in being mindful after they return to work. What is the starting point for helping managers address this critical issue? We provide an example and suggestions based on a Case Study in [Boxes 2–4](#).

Mindfulness and Work Environments

As mindfulness practices become established as outlined above, managers should think beyond training and consider how the work environment supports or impedes mindfulness.

Two explanations have emerged on how the work environment impacts mindfulness. First, evidence suggests that mindfulness requires “mental energy” to bring attention to the present moment. The degree to which employees are able to act mindfully is contingent on their energy and the

Box 2. Adaptation of case study of mindfulness at work. The case of CVS

Example of Corporate Veterinary Services (CVS)

The business world is embracing mindfulness with open arms, and there is emerging evidence of the business benefits of mindfulness training: Dow Chemicals, SAP Intel and General Mills all report business gains (see Institute for Mindful Leadership).

However, as outlined above, there are challenges in implementing and realising the benefits of a mindfulness training programme. For example, in the clinical literature, MBCT has benefits for recurrent depression or MBSR for stress, but ‘one size’ does not fit all in the context and variation of needs in workplaces. Workplace programmes dilute the core and scientifically evaluated ingredients of successful clinical programmes, potentially losing the benefits of the clinical programme in workforce contexts.

Secondly, there few cases worldwide that demonstrate successful implementation of repeatable mindfulness training delivered as a strategic programme, over multiple years and throughout an entire organization. These include Corporate Veterinary Services (CVS) Europe (CVS), SAP, Intel, and General Mills. In this article we will refer to the mindfulness training at CVS in the UK. CVS drew on an MBCT programme, successfully adapted as a six-week group-training programme for the entire workforce to help them manage wellbeing, and run over six years. The CVS mindfulness programme was adapted and delivered by The Mindfulness Exchange, with the adaptation being considered carefully. For a full outline of adaptation and implementation issues, see [Box 3](#), and for an outline of trainer selection, see [Box 4](#).

Box 3. CVS Cautions in adapting a mindfulness programme

CVS systematic program development of mindfulness training:

1. Agree the benefits up front. Get senior support for the return on investment case and communicate the benefits clearly to the Leadership team and employees. At CVS there was a particular need for mindfulness to address the stress inherent in the Veterinary profession which experiences four times the average rates of suicide. Google’s business need was for emotional intelligence.
2. BUT Be realistic. Mindfulness training is not a ‘band aid’. The role of mindfulness training is NOT to fix dysfunctional working practices.
3. Manage and support the program: Connect the training content to organizational goals. At CVS, staff rosters were adapted to enable attendance during the working day, course materials and travel expenses fully funded and emails sent out to endorse the training.
4. Voluntary attendance. Gain commitment to attend. Use peer ‘good news’ stories, entries in the HR handbook and local ambassadors to spread understanding of the training benefits.
5. Contextualise the training. Ensure the approach appropriate for the company’s cultural environment, strategy and values. Does it fit with ‘the way we do things around here’? At CVS the use of language, working examples, mindfulness practices and delivery content were tailored.
6. Trainer knowledge. This is a big area further outlined below. At a minimum, the mindfulness teacher needs to have relevant mindfulness and corporate experience to be able to ‘join the dots’ between mindfulness theory and its practical application, company by company.
7. Keep it adaptable. The training structure and trainer must fit the contextual needs of each company and also of each group and its participants, over time. Over six years the TME training at CVS had to adapt to a volatile, uncertain, complex and ambiguous environment.
8. Workplace-centric. Is the approach workplace ‘training’ (cf therapeutic or spiritually led) At CVS, a direct teaching style with clear explanations based on scientific findings, provided the experience that underpinned engagement.
9. Logistically sensible. Training processes and styles need to be relevant for the workforce. This means, for example, face-to-face for vets, but online for IT staff. Scheduling of training and class duration will vary, for example to meet the needs of flexitime or shift workers.

Box 4. Selecting a Mindfulness Trainer

Selecting a Mindfulness Trainer

Qualified mindfulness professionals need to have experienced and sustained an ongoing mindfulness practice. They also need to be able to communicate the experiential nature of mindfulness as well as deliver a systematic programme for organisations, and tailor it for the needs of individuals. This checklist was developed to enable effective decisions for organisations, around trainers, and this was followed carefully at CVS.

1. They must be able to deliver an evidence-based training program e.g., Adapted MBCT or MBSR: Validated approaches grounded in science offer a stronger return on your investment with credibility to engage the widest audience.
2. Does the trainer have relevant mental health training or psychological understanding? Desired outcomes vary by organisation so a business coach may deliver positive performance outcomes, whereas a clinically trained teacher will have wider skills in the MBSR, MBCT and ACT areas.
3. It's a three-way relationship: The trainer has to manage relationships between the enterprise, its employees and the integrity of the mindfulness training programme. Trainers relevant to your organisational setting can more skilfully contextualise and embed the training for deeper benefits, while being true to mindfulness teaching.
4. Delivering the agreed outcomes: While they may be able to deliver an evidence-based program, is their mindfulness training ALSO workplace specific, e.g. Workplace MT or Google's Search Inside Yourself?
5. Adherence to a code of conduct. Do they have a mentor or supervisor, and can they illustrate ongoing certification in this emerging application of mindfulness?
6. Manages Risk: Do they understand how to recognise and manage mental health conditions that may reveal themselves through the informal and formal meditation exercises? Can they advise on referral processes?

degree to which other work activities and experiences draw on – or replenish – this energy. Emerging research also shows how demanding aspects of work hamper mindfulness. Factors that decrease mindfulness include high work demands and time pressure, frequent interruptions and insufficient recovery periods. Mental energy and attentional resources depend on the workplace context. On days that

Box 5. Leadership, mindfulness and future developments

Task-oriented leadership.

Some of the toughest issues in task-oriented leadership or “management” are not in the management of others, but in the *area of self-management*. Here, mindfulness can help leaders become aware of their difficulties and aid effective decisions. There is a plethora of research that demonstrates the development of self-regulatory capacities associated with mindfulness, and these are central to leadership. Task-oriented leadership involves one's ability to “get things done” including things like complex decision-making, problem solving, and organisational skills. As human beings, we have numerous flaws or errors in our decision-making. By enhancing the quality of attention, mindfulness can help leaders become aware of these limitation

Ethics-oriented leadership. Ethics-oriented leadership involves one's ability to cope with ethical dilemmas, understand contextual rules and regulations, and develop character elements that help one navigate through slippery situations. In past literature, this has been referred to with constructs such as servant, authentic, and ethical leadership. In the realm of ethical leadership is the notion of a “conscience” – that little voice in our head that tells us right from wrong. An enhanced quality of attention can help with more contextual awareness – understanding the contextual sensitivities in terms of what is considered to be ethical in a certain situation or context.

For an overview of how mindfulness is incorporated into leadership development curricula, we encourage you to contact the authors. While the benefits of mindfulness and leadership are outlined here, much greater research is needed to substantiate the range and number of ‘promises made’ in leadership development courses.

Relation-oriented leadership. Relationship-oriented leadership involves one's ability to “connect with others” including things like emotional intelligence, active listening, appreciating diversity, and compassion. Connecting well with others is hard because of a fundamental challenge of perspective taking. It needs a heightened quality of attention not only to pick up on the verbal and non-verbal signals that others are sending us, but equally to be aware of our own reactions to them, making sure we take the time to truly listen to others

without either interpreting it in our own way or completely losing ourselves in the story of others. As outlined above, mindfulness is key in developing the relationship between leaders and followers.

Change-oriented leadership. Change-oriented leadership involves one's ability to cope with external complexity and change, both as a passive object to change, but also as a more active subject to change, being the initiator of change. This involves things like learning orientation, coping with adversity, creativity, and intrapreneurship, and also political skills, vision-oriented leadership, presence and charisma. The accepting quality of mindfulness can do wonders in a business world where leaders are continuously subject to a changing work environment. Mindfulness installs a learning orientation that pushes individuals towards acceptance of those things that they cannot change but also towards continuous improvement of things that are under their control. The development of leadership and mindfulness is depicted in Fig. 4 below.

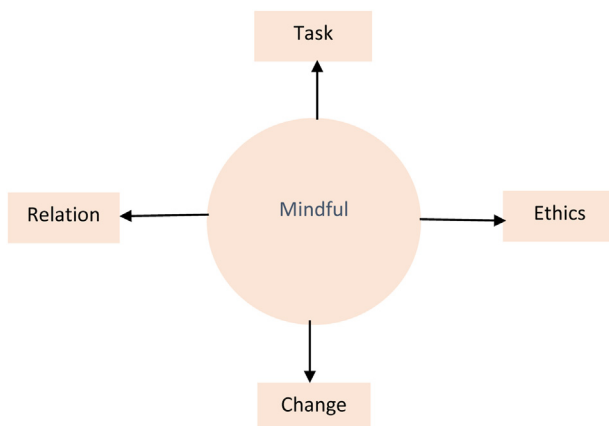


Figure 4 Intersection of leadership and mindfulness

employees experienced a high workload, they experience more fatigue and lower levels of mindfulness than usual. Employees grappling with high task demands and high workload are also inclined towards automatic thought leaving them with little room for awareness and attentiveness – the Being mode. High task demands, high workloads, lack of leadership, time pressure and lack of quiet space deplete the attentional resources required for mindfulness at work.

Factors that support state mindfulness include having a quiet space, supportive leadership, and sufficient time to finish work tasks. Employees with supportive managers have reported higher levels of mindfulness than employees without

managerial support. Employees who have an office where they can shield themselves from workplace demands are better able to attend to their work in a mindful way. What can managers do to ensure the environment at work is ripe for mindfulness? Develop those factors above that support mindfulness such as managerial support, quiet space and time to complete tasks.

Mindfulness and Leadership

What benefits does mindfulness offer for leadership development? What are some of the benefits of mindful leaders, when faced with organizational issues? To answer these questions, we offer some mindfulness and leadership insights (Box 5).

Final Cautionary Issues

Mindfulness should not be used as a quick fix for organizational issues, such as lack of employee engagement. Mindfulness involves a sustained change in an employee's mindset, which may require a substantial and sustained investment to take root. Mindfulness training, taught and evaluated by experts, sustained over time through employee involvement, is all needed both prior and subsequent to initial training. While evidence from the clinical domain supports mindfulness, those of us implementing mindfulness at work, as an intervention, are advised to do so with caution.

In order to harness the full potential of mindfulness, we need to understand how to implement the enduring benefits of mindfulness practices. Just like keeping fit or losing weight, a mindfulness program can only work if employees attend the training and then practice what they have learned before and after each training session.

Finally, we suggest that being mindful at work takes more than being involved in a (high-quality) intervention. It requires thinking holistically about the workplace context. Work is often cognitively depleting due to workload demands, emotional burdens, and non-supportive leaders. It also involves thinking about how individuals show up at work, and what they experience when they go home.

CONCLUSION

Overall, managers and practitioners need to be aware of the strengths as well as the challenges associated with inculcating mindfulness in the workplace. Mindfulness does not compensate for bad leadership, toxic cultures, or unfair work demands. Interventions to improve mindfulness at work require careful adaptation and implementation. With these caveats in mind, we are encouraged by the mounting scientific evidence of the benefits of mindfulness. While the above cautions can serve as a guide to readers, the evidence suggests that mindfulness at work has tremendous value for employees. It is with this level of excitement, tempered by an awareness of the above cautions, that we envisage a promising future for mindfulness at work.



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In terms of interventions within the work place, and the current state of their effectiveness, rigour and evaluation, we suggest you read: Jamieson, S.D., & Tuckey, M.R. (2017). Mindfulness interventions in the workplace: A critique of the current state of the literature. *Journal of Occupational Health Psychology*, 22, 180–193. This article also provides an overview the differing conceptualisations of mindfulness – state, trait, intervention or

practice - as well as the psychological mindfulness interventions, such as MBCT, MBSR that have been tested and used previously. It also examines how they fare within the workplace setting.

Ute Hülshager's work has examined the workplace context – or antecedents of mindfulness at work – and the context that enables (or detracts from) employees' ability to be mindful at work. This article outlines issues at work such as work overload, quiet spaces and leadership in creating the conditions in which employees can be mindful. See Hülshager, U. R., Walkowiak, A., & Thommes, M. S. (in press). How can mindfulness be promoted? Workload and recovery experiences as antecedents of daily fluctuations in mindfulness. *Journal of Occupational and Organizational Psychology*.

Finally we suggest that readers examine mindfulness interventions at work through the work done by the Institute for Mindful Leadership <https://instituteformindfulleadership.org/research/>. This website has further information on mindfulness training, adaptation of programmes, evaluation and key important issues in selecting a trainer, that aids in the intervention being sustained and effective.

Maree Roche (University of Waikato. Waikato Management School, Faculty of Management, University of Waikato | Private Bag 3105, Hamilton 3240, New Zealand, Tel.: +64 7837 9214, e-mail: maree.roche@waikato.ac.nz (Corresponding author)). Maree Roche is Co-Director of the Leadership Unit, Waikato Management School, New Zealand. Maree's expertise is in leadership and wellbeing and she has published widely in top tier management and psychology journals including *Personnel Psychology*, *Journal of Business Ethics* and *Journal of Occupational and Health Psychology*.

Darren Good (Pepperdine Graziadio Business School, USA). Darren Good is Associate Professor of Applied Behavioral Science, at Pepperdine Graziadio Business School, California, USA. He is widely published in business management and psychological science journals. He also serves as associate editor, *Organizational Psychology*, *Frontiers in Psychology*. Dr. Good is considered among the leading scholars addressing the topic of mindfulness in the workplace.

Christopher Lyddy (Providence College). Christopher Lyddy is Assistant Professor at Providence College, Rhode Island, USA. His research explores the nature, integration, and impacts of mindfulness at work. He has published multiple research articles on mindfulness, including an influential review at the *Journal of Management*.

Michelle Tuckey (University of South Australia, Australia). Michelle Tuckey is Professor of Work & Organisational Psychology at the University of South Australia. Michelle is widely published on topics related to workplace bullying, stress, and well-being, and currently serves on the Editorial Boards of the *Journal of Occupational Health Psychology* and *International Journal of Stress Management*.

Marina Grazier (Mindfulness Exchange, UK). Marina Grazier trained and taught at the Oxford Mindfulness Centre and Co-Founded The Mindfulness Exchange (TME) in 2012. Located in the UK, Marina also pioneers mindfulness trainer training, for mindfulness teachers and corporate professionals taking mindfulness into the workplace.

Hannes Leroy (Erasmus University, The Netherlands). At Erasmus University, Rotterdam, The Netherlands, Hannes Leroy is Associate Professor. Dr Leroy's expertise is in leadership development at work, with a focus on authenticity and mindfulness. Hannes has published in top tier journals including Academy of Management Journal, Journal of Applied Psychology, and Journal of Management.

Ute Hülsheger (Maastricht University, The Netherlands). Ute Hülsheger is Professor of Occupational Health Psychology at Maastricht University, The Netherlands and head of section Work and Organizational Psychology. She has published on mindfulness in the work context in top-tier outlets and has served on various editorial boards, including the Journal of Applied Psychology, Journal of Occupational Health Psychology and Journal of Business and Psychology.