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MORE THAN MEDITATION

How managers can effectively put the science of workplace mindfulness to work

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Abstract

The global demand for mindfulness training has increased enormously in recent years. Countless organizations have a keen interest in mindfulness because of the acute stress many employees feel at work and because they hope that mindfulness will help increase wellbeing and even productivity, yet in a gentle, sustainable way. Currently, most in-company mindfulness courses equate mindfulness with meditation. However, meditating is only one of numerous science-based ways to bring mindfulness into work contexts. Moreover, meditation is not always the most effective path towards workplace mindfulness. It can be counter-productive or even lead to adverse effects. This can occur especially in organizations where high dedication and self-sacrifice are prized commodities while engaging in mindful self-care may be counter-cultural or, in extreme cases, might even bring up latent trauma.

You will learn step-by-step what the management science of workplace mindfulness is, why it is not the same as mindfulness meditation, and how you can help embed mindfulness in your work culture sustainably. You can also translate this science directly into action by pausing and trying out several mindfulness exercises, included throughout this chapter and designed to illustrate to you how you can bring the science of workplace mindfulness to your own life.

1. What is this thing called mindfulness?

What mindfulness is can be explained quite simply by describing the opposite: when individuals or groups operate in 'autopilot mode', essentially navigating through the challenges of the day with their minds absent and without really thinking about what is actually in front of them. Leaders all over the world immediately understand that it is a real problem for organizations when employees manage their daily work largely on autopilot, because organizations do not function when employees are physically present but mentally absent. If absent-mindedness or 'being on autopilot' are the opposite of mindfulness, then mindfulness should be understood as a state of being conscious, awake, aware. Although these ideas sounds rather complicated, everyone knows what it feels like to be fully present in the here and now, when you become aware of a situation with all of your five senses, open to receiving new information in the moment in real-time, and perhaps also learning something new, grasping new perspectives. In a groundbreaking study in 2010, the American researchers Matthew Killingsworth and Daniel Gilbert found that over the course of a typical work day, we spend almost half of our time with our minds being elsewhere than where our bodies are, namely at our work desks (Killingsworth and Gilbert 2010). That this is bad for productivity was by far not as interesting to the researchers as the fact that this renders us less happy than if we were more able to consciously experience our work lives.

First mindfulness exercise for willing readers

If the last sentence in the paragraph above has made you pause, then that is appropriate. In fact, it really does sound at least somewhat naive or perhaps even paradoxical that we should be happier if we were to go through our everyday work lives more consciously. Often, work is not exactly "fun" and many a task at work has little to do with making employees happy. But the point here is that "being happy" means more than merely "having fun". Happiness researchers

(they do indeed exist) such as Sonya Lyubomirsky define "happiness" as a construct that consists of two aspects: first, feeling good or pleasant, and second, having meaning in one's life (Lyubomirsky, Sheldon & Schkade 2005). Matthew Killingsworth and Daniel Gilbert have found that we often fail to recognize the (perhaps longer-term or more fundamental) meaning of our work when we are mentally absent or multi-tasking at work. The two researchers conclude that mental absence makes people unhappy at work.

Where has your mind been whilst reading this paragraph? Have you been able to concentrate exclusively on what you were reading? To what extent did your mind move in and out of being "on task", taking in the words in front of you? What might this mean for you right here and now, and for your ultimate satisfaction with reading this chapter?

Why has mindfulness become so interesting to business, politics, and even professional athletes like British racing cyclists Chris Froome and Bradley Wiggins, who invested considerable energy in applying the mindfulness techniques they had learned from sports psychologist Steve Peters before winning the Tour de France? Because a solid body of science links mindfulness with better physical and mental health and with better relationships at home and at work. And because mindfulness is not a quality that some have, and others not. Instead, mindfulness is a state of mind or way of being that can be learned and that helps individuals face especially difficult situations in their (working) life. This latest insight is good news for companies interested in helping improve not only the well-being and working relationships of their employees, but also in promoting sustainable workplace performance. Mindfulness can be taught to any person who is open to learning and practicing this different way of being and acting in the present. Therefore, in principle, entire organizations may benefit from mindfulness, not just those individuals who are particularly interested in this topic.

So, then, what is mindfulness? Mindfulness is not easy to define. Although to date more than 33 definitions of mindfulness have been published in the scientific literature (Nilsson and Kazemi 2016), many mindfulness experts cite the definition of founder of the world's most well-known and extensively researched Mindfulness-Based Stress Reduction (MBSR) program, Jon Kabat-Zinn: paying attention to the present moment, on purpose, and non-judgmentally (Kabat-Zinn 1994).

That sounds complicated. And a little bit like Buddhism. This is because in the late 1970s, Jon Kabat-Zinn brought his knowledge of Buddhism to his research into stress-reduction at the Massachusetts Institute of Technology (MIT). Mindfulness is an important goal in Buddhism and Buddhists learn mindfulness through meditation. The word "meditation" comes from the Latin *meditatum*, which means "contemplating" or "reflecting." Although meditating is often associated with religious practices, it is, in itself, an ideology-free, mental act or brain exercise, during which one often sits still and does nothing but use the breath as an anchor, to become more aware of sensations, emotions, thoughts, physical impulses, and reactions.

Second mindfulness exercise for willing readers

[Please only do this exercise if you don't have any issues with controlling your breath (e.g. asthma or hyperventilation).]

Breathe slowly and deeply in and out three times. Where do you feel your breath in the body right now? Perhaps you can feel your breath in your nose or in your mouth or throat or maybe in your ribcage or stomach. As soon as you notice where you feel your breath, concentrate completely on this spot for a few moments. This is your breathing spot; you can use this spot in your body as an anchor to practice mindfulness meditation. How does it feel to concentrate on this breathing spot; your anchor for noticing your breath at will? What is it like to find this breathing spot after losing your concentration for a few moments?

Jon Kabat-Zinn, as well as hundreds of scientists following in his footsteps over the past 30 years, has explored the connection between mindfulness meditation, stress management, and mental health so extensively that there are literally thousands of scientific studies on the subject today. Researchers at Oxford University demonstrated a few years ago that mindfulness meditation can work just as effectively against chronic depression as antidepressants (Kuyken, Hayes, Barrett et al., 2015). This is a ground-breaking insight, as chronic depression is very often based on chemical alterations in the brain, assumed to be ameliorated most effectively by inducing external chemicals such as antidepressants. That mental exercise such as mindfulness meditation can achieve the same result (without any chemical or neurobiological side effects) speaks to the extensive link between mind and body (or rather between brain processes and bodily functions). And we can strengthen this connection if we proactively focus our attention in this way.

2. This is how mindfulness works: coming to our (five) senses

Mindfulness is not the same as meditation. As already mentioned, mindfulness is a state of mind or way of being that results from actions or (mental) practice. Some people are naturally mindful, live consciously, and avoid

making premature judgments, but for many, mindfulness is the *outcome* of specific actions designed to increase it, e.g. through mindfulness meditation.

The important thing for managers is to know how to achieve such a mentally open and flexible state of mind and what can be done *concretely* to switch off the mental 'autopilot' in order to become fully aware of the present moment.

To become mindful, we need to come to our senses. Literally and metaphorically.

We can come to our senses literally by focusing specifically on our five senses. This means focusing our attention on one of our five sensory perceptions, e.g., on seeing objects (such as a shape, color, or pattern), on feeling (e.g., sensing or noticing our breath), or on hearing stimuli (such as music, noise, or other sounds in the environment). The goal of such concentration exercises focused on our five senses is to develop an awareness of what is actually happening in and around us, as opposed to *imagining* that we know what is happening in the moment. Many of our thoughts come and go from moment to moment, and our inner 'autopilot' constantly feeds us commentary about our situation and about our lives. Often this commentary is based on unconscious and sometimes outdated or rash judgments (such as "I'm too old for that" or "she will never be able to do this"). Thereby, coming to our senses means creating a certain degree of mental distance between our "self" and this inner 'autopilot' and its never-ending flow of comments and judgments. This mental distance arises from consciously directing one's perception in the moment, particularly by focusing on one specific sensory perception alone, or on fewer ones than what we normally do, and in this way we are able to become more aware of all the information available to us in the situation, through our five senses. Mindfulness meditators are often encouraged to close their eyes because this restricts the sensory input through seeing and thus simplifies the act of concentrating on one of the other senses.

This conscious control over our perception of reality through our five senses can enable us to recognize new information available to us in the present moment, and in so doing, we may become aware of different perspectives of the present situation (e.g., "today my body / the situation feels different than yesterday") and make decisions that are in line with the actual situation rather than based on subconscious impulses or automatic (pre-)judgments.

A few years ago, when I was researching the work of Daniel Kahneman, I realized why mindfulness has such great potential for helping improve decision-making for leaders in major projects. Kahneman is a Nobel Laureate in Economics and has systematically demonstrated in his work how many of our decisions are flawed, not only in private life, but especially in work situations. However, the one major advice that Kahneman gives to the readers of his book *Thinking Fast and Slow* (2011) to improve their decisions is that they should literally "experience" life as often as possible, and as often as possible suppress the urge "to anticipate remembering" (Kahneman 2011). By "anticipating remembering," Kahneman refers to the human tendency to, for example, imagine in the midst of a conversation how one will later look back on that conversation or tell others about it, all the while being involved in the conversation. Or the tendency that more and more of us have in today's interconnected world to take a picture of the dinner plate in front of us and send it to our social media contacts, instead of enjoying the sights and smells of the food, and *experiencing* these fully. Kahneman effectively advises people to come to their five senses. That essentially is the action of engaging in mindfulness practice.

Back to meditation. Meditation is definitely an effective method for increasing our attention on the present moment, but mindfulness training does not always have to contain meditation. Mindfulness is not just about taking a break from everyday life, sitting still, closing your eyes, and looking inward. On the contrary, Kahneman's advice suggests that we should be more consciously engaged in our lives rather than shut life out from our experience. In this way we can indeed perceive and process all the information available to us in the moment. This is how mindfulness helps us change our relationship with the data in front of us, and this is essential for making good decisions in important situations.

For example, researcher Esther Papies and her colleagues found that the participants in her research studies were consuming sweets less mindlessly after being instructed to look at images of food and not only to become aware of their reaction to these images and the impulses caused by them, but also to notice that such reactions spontaneously and constantly come and go (Papies, Barsalou and Custers 2012).

Ellen Langer, a professor at Harvard University who began studying mindfulness at the same time as Jon Kabat-Zinn, defines mindfulness as a flexible state of mind that enables us to become actively engaged in the present (Langer 1989), which resonates with Kahneman's advice above. This means that there are many more tools in the toolbox of a mindful manager than meditation exercises alone to help embed mindfulness into their projects and operations.

In 1979, when Ellen Langer began her research career on mindfulness, she conducted a groundbreaking study: She took a group of old, frail men into a location specially created for this experiment; a location that simulated the world of 1959, when all of these men were 20 years younger, more physically fit, and mobile. The only instruction that Langer gave to the participants in this study was that they should fully immerse themselves (with all five senses) in this environment and engage with each other *as if* they were in fact experiencing the world of 1959, rather than merely discussing this unfamiliar situation. Although these old men were all aware that this was an experiment, the researchers

found that not only were their mental capacities improved when they returned to their normal lives at the end of the two-week immersion experiment, but also their physical condition had changed so positively that they were judged by strangers to be significantly younger than before the experiment, and much younger than another group of men of the same age who served as the control group, exclusively discussing the world of 1959 for two weeks. In other words, the experience of being in a "younger" environment had led to physiological "rejuvenation" of these men (Langer 2009).

You can do the next mindfulness exercise anytime, without sitting still or closing your eyes. The only requirement here is that you are mentally 100% present.

Third mindfulness exercise for willing readers

Come literally to your senses. Concentrate on two of your five senses over the next few moments: First concentrate on doing nothing but listen, and subsequently focus all your attention on seeing, looking around. Start by directing your attention exclusively to listening to all the sounds in your environment (without reading or doing anything else). Only when you have heard at least three sounds (voices, noise, etc.) that you had not noticed before, change your sensory focus and concentrate exclusively on what you see before your eyes: look around you, up and down, behind you. Look out for at least three colors, shapes, or patterns that you had not noticed before.

How are you feeling now?

For most people, such a mental exercise feels relaxing. We literally come to our senses when we consciously focus on our senses. Why is that? It is an automatic neurobiological process in the body. When we consciously perceive our experience of the present through our five senses, our body automatically mobilizes the parasympathetic nervous system, i.e., the "resting or recovery nerve" of the vegetative nervous system. The parasympathetic nervous system has a predominantly opposite function to its counterpart, the sympathetic. The sympathetic nervous system is mobilized when we feel we are under stress, challenge, or threat, and generates bodily processes designed to master this challenge. This is often called the fight / flight reflex. When the parasympathetic nervous system is mobilized, the sympathetic nerve is deactivated, and vice versa. Our body is designed to balance the parasympathetic and sympathetic; or, in other words, we are not designed to feel we are in fight / flight mode more often than feeling relaxed.

Mark Williams of Oxford University, the founder of Mindfulness-Based Cognitive Therapy (MBCT), explains that mindfulness meditation can help individuals switch from being in 'doing mode' to 'being mode,' and this helps them feel more balanced (Williams 2010). In 'doing mode' we act, or we think about acting. Quite often, we engage in several things at the same time, hence multitasking is a big part of 'doing mode'. We are also often engaged in 'multi-thinking': Thinking about two or three other things while doing something, e.g., reading a text while thinking of something else or making plans in our heads about what we want to do when we finish reading the text. While reading this text you are currently in 'doing mode': processing information, analyzing facts, and, possibly, mentally preparing arguments for or against the reading material in front of your eyes.

Fourth mindfulness exercise for willing readers

Stop and think about what you have just thought about. In other words, what has just happened inside your mind? In addition to reading this reading, has your mind done anything else? Can you clarify for yourself what additional thoughts were on your mind while reading the previous paragraph, if any? How might this have impacted your concentration, perhaps even your current mood? What options or new choices might become possible for you with such awareness, for doing what is appropriate and right for you personally, right in this moment?

In contrast to the 'doing mode,' the 'being mode' is not about acting, or thinking about (previous or future) actions, but about perceiving through our five senses, e.g. to consciously feel the wind or rain on your face when you are outdoors, or to hear the laughter of a child, or to fully appreciate the smell and taste of food. In 'being mode' you are not goal-oriented. Words, thoughts and often also actions are not in the foreground. Problem-solving and analyzing facts are pushed into the background. When we are operating in this mode, we simply exist, fully present in the moment, neither commenting nor judging it. It is probably because of this apparent lack of evaluating reality that traditionally, organizations have not proactively encouraged their employees to dwell in this mode of being while being at work.

Nevertheless, this topic is becoming more and more relevant for managers interested in sustaining performance of their teams. This can be explained using a study conducted by Andrew Hafenbrack and his colleagues with numerous participants from all over the world. The research team instructed half of the study participants to practice mindfulness for 15 minutes (in similar ways to the exercises above); the other half was asked to simply relax for the same amount of time and thus served as control group. Subsequently, all participants were asked to make a decision

regarding a short hypothetical case study concerned with "sunk costs". Investments become "Sunk costs" when you have already invested a lot (money, time, work), but when – rationally speaking – they are no longer valuable and should be dropped to avoid further losses. Most people find it very difficult to make a rational “sunk cost” decision because nobody likes to make a loss. This is why many of us keep clothes in our wardrobes that we no longer fit into, and why many people find it hard to break long-standing relationships, no matter how unsatisfying they may be today.

In Hafenbrack's study, however, those participants who had practiced mindfulness before making the “sunk cost” decision consistently made the difficult but appropriate choice to shed these hypothetical "sunken costs," in stark contrast to the control group's decision pattern. More interesting, however, was how this mindful decision-making process came about: The researchers were able to see that two processes mediated the decision path towards a more rational choice: first, the mindfulness practitioners felt more relaxed and positive, and second, their attention was directly focused on the present, therefore they were able to fully concentrate on the data in the case study at hand (Hafenbrack, Kinias, and Barsade 2014).

To summarize, mindfulness practice is neither unnatural nor esoteric. We need to "merely" come to our senses and, at least for a moment, switch gears: From the often fast-paced and sometimes impulsive ‘doing mode’ to a 'being mode'. The precise way in which an individual can switch between these two modes, however, varies from person to person. Every person has their own natural tendencies and strategies to switch off the action impulse of the 'doing mode,' and these tendencies change over the life span. Young people often have a lot of energy, and therefore feel most alive and present when they are physically active, feeling their body intensely through intense effort. Older people instead tend to seek out more calming, quieter ways to switch from ‘doing’ to ‘being’. In this context, Herbert Benson of Harvard Medical School has defined two critical success factors that must be in place so that any kind of mindfulness practice can invoke the relaxation response in the ‘being mode’: First, *during* the mindfulness exercise we have to be able to focus our attention fully on the present (rather than continuing to think or worry about work or other things in our lives). And second, *afterwards*, we should feel more refreshed, relaxed, or re-energized. Only when both of these success factors are present can any mindfulness practice actually generate mindfulness. Only then can mindfulness become effective.

Fifth mindfulness exercise for willing readers

Think about how you came to your senses during the last week. What did you actually do to switch from 'doing mode' to 'being mode'? Do you need more or less sensory stimulation (sights, sounds etc.) in order to be able to switch off? To what extent have you been able to stop worrying or thinking about problems when you were away from work? If you've switched to 'being mode' at least once over the last week, did you also feel noticeably more relaxed or even just a little bit more energized afterwards? If not, what could you specifically do or change about your personal approach to relaxation to feel more balanced in your everyday life? What price would you be willing to pay to achieve this goal?

3. Why we should not conflate mindfulness with meditation

In my own research and teaching, I work with hundreds of senior leaders every year, primarily in government and in the military, to help embed mindfulness in their day-to-day work. Although many prominent mindfulness research projects and mindfulness training programs focus on meditation as their standard method to generate a state of mindfulness, meditation is only a small fraction of the interventions I work out in collaboration with my counterparts.

This approach is based on the insight that individuals in workplaces never act in isolation. Much of what influences us, both in life and in work, and what sometimes prevents us from coming to our senses and making the "right" decision (in other words consistent with our actual long-term goals, rather than momentary and perhaps even unconscious impulses), is based on complex factors that often operate outside of our conscious awareness, often competing with our personal motivations. Much of the work in the 21st century is interactive and decisions are negotiated in teams, depending on work routines (i.e., “the way we do things around here”) or other internal policies or politics. Embedding mindfulness in companies is much more about change management and modifying habitual behavior patterns; a more complex endeavor than a simplistic interpretation of the successes achieved by clinical and laboratory mindfulness studies might suggest.

In recent years, more scientific mindfulness studies have been published that somewhat curb the enthusiasm in the popular media for mindfulness and meditation. For example, Stephanie Coronado-Montoya and her colleagues demonstrated in 2016, through a thorough statistical analysis of all available published clinical mindfulness meditation studies, that the proportion of published studies with positive results is statistically higher than what would be likely under normal circumstances. The authors argue that these studies have been published proportionally more frequently than others documenting negative or zero effects of mindfulness initiatives because of the public's great interest in this type of research (Coronado-Montoya, Lewis, Kwakkenbos et al., 2016).

In addition, a group of 15 of the world's leading mindfulness meditation scholars and neurologists published an article in 2017 entitled "Mind the Hype". The authors explain how numerous methodologically flawed studies extol the benefits of mindfulness meditation without verifying over a medium or longer term whether any initial enthusiasm about mindfulness is in fact sustained. This article also reports that there are at least 20 case studies in the scientific press documenting negative consequences of mindfulness meditation (van Dam, van Vugt, Vago et al., 2017).

Leading management thinkers are even calling for an end to the "meditation madness" (Grant 2015). While this attitude may well judge mindfulness too prematurely, the scant peer-reviewed literature examining mindfulness meditation programs in companies over the medium term does not paint a more positive picture: The only article available in the scientific literature to date on this topic is the rigorously designed study by Jantien van Berkel and colleagues who reported in 2014 that an intervention based on mindfulness meditation with 257 employees neither led to improved mental health nor reductions in stress or burnout after 6 and 12 months (van Berkel, Boot, Proper, et al., 2014).

Most workplace mindfulness training programs are based on the eight-week MBSR course designed by Jon Kabat-Zinn and his colleagues (Kabat-Zinn 2011). MBSR is designed for individuals with chronic mental or physical health problems. As mentioned earlier, MBSR and related courses are highly effective with clinical populations. MBSR courses in companies are often shortened or modified in part and offered by human resources departments primarily to improve employees' mental health and wellbeing. Many mindfulness trainers introduce their mindfulness meditation courses to participants by telling stories of how meditation has helped them overcome traumatic life events and severe physical or mental health challenges. Andy Puddingcombe, co-founder of the meditation app *headspace*, is a prominent example. He explained to a newspaper reporter that mindfulness meditation helps him cope with the physical and emotional effects of his cancer diagnosis (Jenkins 2014).

In my experience and observation, corporate mindfulness meditation programs are especially popular among people who are relatively open about being overwhelmed and suffering from a lack of physical or mental wellbeing, and for whom wellness is such a high priority that they welcome the opportunity to participate in a meditation program.

But most employees and leaders in the organizations I work with do not have such a profile. For numerous decision-makers in government projects, quick decisions need to be taken frequently and a strong culture of dedication and self-sacrifice drives the priorities of a fast-paced, mission-driven workplace, even though many of them value brief meditation training sessions with a mindfulness trainer and the perceived "holiday" these represent from the "true essence" of their work realities.

In many organizations that I observe and advise, quick thinking and acting is appreciated and celebrated. Employees who are extremely busy are at least informally celebrated as heroic problem-solvers. Achieving 'more with less', quickly and promptly, seems to be in line with today's *zeitgeist*, even though many of these 'heroic' overachievers complain in private that this is not sustainable in the long run. Mindfulness meditation is frequently mentioned as an antidote against the ever-increasing pace of today's work life, because it surely *makes sense to come our senses* in the face of all this perpetual busyness. Many leaders tell me they know about the obvious benefits of mindfulness, saying that it is similar to the benefits of eating less meat or drinking less alcohol. But especially senior leaders in multi-stakeholder environments appear to find it difficult to translate this advice into real-life action. It seems that sitting still and meditating is somewhat analogous to a race car driver slamming on the brakes while speeding at full throttle.

Such a stark change from speeding at full throttle (metaphorically speaking) is, according to the latest findings in neurobiology, not always useful. Allow me to take a short detour into neurobiology to better explain the link between mindfulness and automatic stress response. This is because a more detailed understanding of how individuals deal with stress and perceived threats at a neurobiological (and thus largely unconscious, reflexive) level will help us unpack why meditation training can sometimes be less helpful in work contexts, even counterproductive.

Stephen Porges, behavioral neurobiologist at the Kinsey Institute of Indiana University, has been exploring our autonomic nervous system for the last 20 years. This somatic system determines our automatic (unconscious) reactive behavior when we are under stress. In addition to the sympathetic and parasympathetic mentioned before, our human nervous system has evolved to be hierarchical and adaptable, but it is important to note that our stress response is practically completely below our cognitive control (Porges 2004). Over the course of our development history, we have developed three behavioral strategies whenever our body senses a threat (which is synonymous with "feeling stressed"). The evolutionarily older strategies are less effective than those we have developed in our more recent evolutionary history. We share the evolutionarily oldest strategy with almost all vertebrates, especially reptiles: Immobilization, i.e., *freeze* or dissociative behavior. The body thus signals to the brain that annihilation is imminent, and the best behavioral strategy is to anticipate this annihilation and pretend that it has already happened.

All mammals have additionally developed a mobilization system, which has proven to be more effective than immobilization: *fight or flight*. Fight or flight looks similar in all mammals: A raised voice, preparing the body for attack or escape if the source of the threat is judged (rapidly and unconsciously) to be more powerful. Finally, humans have developed another automatic stress response system in addition to mobilization: *social engagement*, i.e. seeking interpersonal contact in order to eliminate ambiguity and detect intentions through communication and nonverbal

gestures, separating friend from foe by correctly identifying verbal tone and facial expressions, and overcoming conflict through negotiation and collaboration. From an evolutionary perspective, this has proven to be most effective in helping humans manage threats in their environments.

According to Porges (2004), every human being goes through the same three evolutionary stages of automatic stress response as they grow up. Young toddlers often freeze (or pretend to be invisible) when they realize they might be in danger. We often consider this amusing when this 'danger' is nothing more than a reprimand from a parent. Children practice dealing with conflict using fight or flight strategies: some children get into schoolyard brawls (*fight*) or avoid aggressive classmates (*flight*). As teenagers, most individuals learn how to recognize verbal and nonverbal communication signals during interpersonal interactions and start to manage and overcome difficulty through engaging with others: asking questions to clarify the intent behind behavior they find difficult to understand, offer emotional support through words and in the shape of hugs or sympathetic smiles when they notice others in distress, and other related actions that help individuals feel socially connected and supported.

Because our autonomic nervous system is not only hierarchical but also adaptable, we resort to older evolutionary strategies when we judge our more sophisticated strategies to be ineffective, e.g., we resort to *fight / flight* when communication is deemed futile, and we resort to *freeze* when *fight / flight* is deemed futile. And as our automatic stress response adapts over the course of our life span, we tend to resort more and more to those stress response strategies that were deemed most successful in the past. Even if more sophisticated (evolutionarily successful) strategies are theoretically available to us (such as *social engagement* or *fight / flight*), these may no longer be deemed appropriate. This can manifest itself in organizations when employees observe that *social engagement* is ineffective or not rewarded as a response to challenge and difficulty, and instead more and more frequently pick fights or work harder and longer hours. If over time these *fight / flight* strategies also come to be regarded as ineffective or futile, employees will effectively resort to *freeze*: they disconnect or dissociate from all organizational life.

What does all this have to do with mindfulness meditation and management or leadership in organizations? Porges' research suggests that especially in populations where individuals have consciously or unconsciously experienced trauma, such as personnel engaged in highly stressful work, e.g., in emergency services, healthcare, but also increasingly in fast-moving and highly competitive commercial and non-profit sectors, individuals' autonomic nervous systems adapt in a way to avoid immobilization at all cost. This is because during trauma, even the body's *freeze* stress response is experienced as futile and life-threatening. Therefore, any activities that simulate immobilization or *freeze*, such as a mindfulness meditation, may be perceived as threatening at an unconscious level. That's why an increasing number of highly dedicated and successful managers and leaders tend to practice extreme sports in their free time (e.g., triathlons or ironman competitions). Essentially, these individuals' automatic bodily stress response pattern has adapted by perpetuating workplace behavior that simulates *fight / flight* in their leisure time.

Sixth mindfulness exercise for willing readers

Think about the behavioral strategies you have developed over the course of your life in response to stress and difficulty. To what extent can you discern a certain hierarchy or tendency in the stress response strategies you habitually resort to? What is your go-to strategy for dealing with challenging situations at work today? What advantages and disadvantages can you see here? What specific actions could you engage in to expand your behavioral repertoire in this regard?

4. Mindfulness as a collective phenomenon

As far as mindfulness for managers and for organizations as a whole is concerned, world-leading mindfulness researcher Katherine Sutcliffe and colleagues argue that mindfulness should be understood not merely as an individual phenomenon, but as a multidimensional concept that includes meditative as well as other non-meditative practices and individual as well as collective mindfulness processes applied to workplaces (Sutcliffe, Vogus, and Dane 2016). In so doing, these researchers have linked the popular literature around individually-focused mindfulness meditation with the lesser-known (but equally comprehensive) science on "collective mindfulness."

Since the early 1990s, University of Michigan psychologist Karl Weick and his colleagues have been investigating "collective mindfulness," studying teams and organizations who are *collectively* mindful. Weick and colleagues have published their findings in leading management journals and demonstrated that when mindfulness permeates the organization's daily routines as well as the micro and macro cultures that make up the organization, the entire organization is characterized by "collective mindfulness" (Weick and Roberts 1993; Weick, Sutcliffe, and Obstfeld 2000; Weick and Sutcliffe 2007; Vogus and Sutcliffe 2012). It then becomes resilient at system-wide scale, and such an organization is then called a High-Reliability Organization (HRO; Weick and Sutcliffe 2006).

So what exactly is collective mindfulness about? Essentially, it is not all that different from the stated aims of many individually-focused mindfulness training programs. Take the popular individual-focused MBSR course, for

instance; its aim is to help individuals manage stress better. By the same token, collective mindfulness consists of five interpersonal or social processes designed to anticipate and successfully respond to difficulty and challenge, albeit at a higher level of analysis, i.e., concerning the whole team or organization. Essentially, this is mindfulness-based stress management at a larger scale.

Specifically, five processes are involved in collective mindfulness. In other words, teams organize mindfully when they have a collective culture characterized by:

1. Noticing day to day operations; making sure the team is aware of dynamic changes that may occur from day to day in the organization's operations or its environment.
2. Proactively anticipating errors and problems; specifically focusing on 'negative' information so problems do not become disasters.
3. Enabling real-time experts to make decisions; recognizing that the person with the most expertise and thus authority to decide on important issues may not always be the person with the highest rank or most long-standing experience.
4. Valuing resource flexibility; investing time and effort in enabling team members to become sufficiently familiar with other roles' responsibilities so that individuals' tasks can be performed by anyone required in a particular situation.
5. Refusing to simplify matters; by constantly questioning whether the current solutions are appropriate and striving to continuously improve.

That organizing mindfully at collective level is financially worthwhile has been well documented in science. For example, researchers found in a survey of US hospitals that collective mindfulness is associated with far fewer medication errors (Vogus and Sutcliffe 2007a). A similar survey of a range of Intensive Care Units and emergency clinics has concluded that employees who organize mindfully are 8.3% less likely to be emotionally exhausted and that there is 13.6% less work turnover in these mindful teams. The authors of this study speculate that these types of mindfulness-based workflows could, on average, save hospitals between \$ 169,000 and \$ 1,000,000 (Vogus, Cooil, Sitterding et al., 2014).

However, empirical studies are rare that consider mindfulness as a multidimensional concept, focusing not only on individual-level outcomes but also on collective mindfulness. This is the focus of my current research with the UK government, aimed at increasing mindfulness at both individual and collective level reliably and sustainably.

The suggestions in the next section are based on this research.

5. How to embed mindfulness sustainably into organizations

Based on what I have outlined above, two conclusions for embedding mindfulness reliably and sustainably in organizations become apparent:

First, beware of mandating meditation mindlessly in a mindfulness training program. Not only might some participants consider sitting still and contemplating their inner landscape at some (often unconscious) level inappropriate, especially if they are highly dedicated performers in an organization characterized by high commitment and public service, and even if they intellectually connect with the motivation for engaging in meditative practice. In some cases, deep meditation practice can be extremely harmful, as Miguel Farias of Coventry University in the UK points out. According to Farias, two-thirds of all participants in meditation classes have experienced negative side effects e.g., some degree of panic, depression or confusion, and one in fourteen participants suffer severe side effects, such as psychoses when participating in mindfulness meditation courses (Farias 2015). Many mindfulness trainers are not professionally trained psychotherapists; in these cases they may do more harm than good.

Second, through mindfulness exercises, one can learn to focus on other previously ignored impulses. Mindfulness meditation, which focuses on individuals, is primarily about becoming aware of inner impulses and about correctly identifying and consciously managing these according to the current situation and environment. The same principles apply to mindfulness at social or collective levels, but focusing collectively, i.e., on the (often unconscious) collective habits and routines that drive collective impulses. This is because our work environment and our decisions in work situations are less affected by the unconscious spontaneous impulses of individuals, but by the (often equally unconscious) behavioral tendencies, rituals, and *culture* of work communities.

Hence there is no point in introducing mindfulness into teams or organizations without a genuine understanding of the team's current work situation and their organizational environment. As mentioned above, being mindful means paying attention to the situation one finds oneself in. Management consultants sometimes quip that "culture eats strategy for breakfast," which essentially means that corporate culture is always more potent than any strategy set by a board of directors (based on a quote from a board member of an American hospital company who aptly expressed the great power of corporate culture; Davies 2002). It is this organizational culture that makes or breaks any mindfulness training strategy. For this reason, mindfulness interventions are more about change management than skills development.

What's the best way to do it? It starts with understanding the organization's culture. Only in this way can the context-specific behavioral structures be tackled systematically that cause employees to either integrate individual strategies such as mindfulness meditation in their behavioral repertoire or not. Only in this way can leaders learn to recognize relevant behavioral impulses and to steer the organization over the long term in the direction of mindfulness. Otherwise, all good intentions of a mindfulness training program that seeks solely to enhance the meditation skills of the employees are "eaten for breakfast" by the corporate culture.

In the previous section, I outlined the five work processes that, according to Weick and his colleagues, are crucial for ensuring that teams and organizations organize mindfully, and which in turn generate sustainable performance and resilience of the organization overall. In my mindfulness work, I use these five processes to take stock with managers and teams about how mindfully people at work interact with each other, and which aspects of collective mindfulness might most usefully be targeted through mindfulness intervention work.

Seventh mindfulness exercise for willing readers

Revisit the five collective mindfulness processes from section 4. Consider how you would rate your organization (or team) in each of these five characteristics, e.g., by assessing their performance against each point, e.g., "Very good" for point 1, "sufficient" for point 2, "poor" for point 3, and so on. What insights might these assessments provide to you about how collectively mindful your organization (or team) operates currently? What strategies or actions might you take to help your organization (or team) become more collectively mindful?

In my experience, such an inventory of collective mindfulness at work is far more important than meditation training. Not because meditation is unimportant, but because the vast majority of participants in my mindfulness courses quickly learn relevant meditation skills. In addition, we are always much more concerned about the contrast between a mindful culture of action and specific behavioral routines and (sub-)cultures that work against individuals actually practicing mindfulness consistently and sustainably, especially when they are busy or when it seems that such acts of self-care are at risk of being relegated to the bottom of the list of corporate priorities. For my corporate collaborators, learning mindfulness meditation skills is the smallest challenge they face in terms of embedding mindfulness.

In addition, it is important to include multiple activity strands when defining a mindfulness strategy for an organization. This means that a mindfulness intervention would need to include training for individuals to engage in self-care and practice techniques to increase their personal wellbeing, such as setting boundaries around their work time and scope. But managers as well as visible organizational actors always need to be involved also. These actors can openly discuss their own self-care strategies with their team members and publicly endorse and support new behaviors as praiseworthy from others. This can signal a change from the status quo, and trouble-shoot issues and concerns that will inevitably arise when a group of individuals are asked to change their behavioral repertoire. In this way, the organization's culture may have a chance of changing, slowly but sustainably.

Above all, however, all individual-oriented mindfulness strategies should be connected to the five characteristics of collective mindfulness. For example, it is essential to agree with an entire team or operation how any new self-care strategy, such as for example a daily meditation at work, individually or in a team, should be embedded flexibly and in recognition of upcoming dynamic changes in the team or in the organization's environment. How, for example, will the team make sure they keep their commitment to mindfulness practice intact despite changing priorities at work in future? What is the essence or underlying value that everyone can agree upon? Mindfulness is about being and *staying* present in *any* situation, especially a challenging one, hence focusing on challenging questions about uncertainty and situational change is key for successfully implementing a sustainable behavior change strategy towards mindfulness.

Chapter Takeaways/Lessons

1. Meditation is only one of many methods to increase mindfulness in workplaces.
2. We become mindful at work by coming to our (five) senses, literally and metaphorically.
3. In high-stress workplace populations, prolonged periods of silent meditation may bring up latent trauma.
4. Organizations should consider multiple levels of mindfulness interventions, at individual as well as at collective levels.
5. Understanding an organization's context and culture is more important for the success of a mindfulness intervention than training individuals in mindfulness skills.

Reflection Questions

1. What is the difference between mindfulness and meditation?
2. What are some ways in which you can "come to your senses" at work, and how will this help you become more mindful?
3. How can you increase the level of social engagement in your workplace, and what effect will this have on performance under pressure in your organization?
4. What interpersonal qualities or characteristics enable the five collective mindfulness processes?
5. Why is it more effective to manage stress collectively than individually? How is this linked to the ultimate goal of mindfulness at work?

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