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Mindfulness in Organizations

Jochen Reb
Singapore Management University, jochenreb@smu.edu.sg

Ellen Choi
Western University

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Chapter 13

MINDFULNESS IN ORGANIZATIONS

Jochen Reb[1] and Ellen Choi[2]*

[1]Singapore Management University, Singapore
[2]Ivey School of Business, Western University, Canada

ABSTRACT

This chapter discusses the practice of mindfulness in organizations. In the first section we describe the growing interest in mindfulness training among organizations and discuss possible reasons for this development. We then review work on the definition and concept of mindfulness as they have been developed in psychology and organizational scholarship. In the second section, we discuss different forms of mindfulness practice in organizations, including Mindfulness-Based Stress Reduction (MBSR) as the most prominent. The third section reviews empirical evidence on the effects of mindfulness on work-related outcomes and processes such as employee performance, employee well-being, leadership, and ethical decision making. We then discuss in more detail a recently developed self-administered mindfulness training program as it contains some unique and interesting features relevant to mindfulness intervention studies. In the fifth section, we present the results from qualitative interviews we conducted with participants of a corporate mindfulness training program. We conclude that the study and application of mindfulness in the workplace offers many promising directions; however, much more research is needed to create a basis of evidence for successful mindfulness training programs. Furthermore, a deeper understanding of the (intended and unintended) consequences, mediating mechanisms, moderating factors, and boundary conditions of mindfulness would benefit organizational scholarship.

INTRODUCTION

An increasing number of organizations are turning towards mindfulness training, a program that usually includes mindfulness meditation as a core component. They do so with a

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[*] Corresponding author: Jochen Reb, Lee Kong Chian School of Business, Singapore Management University, 50 Stamford Road, Singapore 178899. e-mail: jreb@smu.edu.sg.

diverse set of objectives such as reducing stress, improving employee well-being, improving emotional intelligence, or improving performance. These organizations come in all forms, both new and old, based in the U.S. or otherwise, and local or multinational. Among them are companies like Google (Tan, 2012), one of the most famous organizations of our times.

The purpose of this chapter is to shed some light on the practice of mindfulness in organizations. Specifically, we address the following issues in the five sections of this chapter. In this first section, we discuss the increasing interest in mindfulness among organizational scholars and practitioners, as well as some of the current challenges at work that may have contributed to creating conditions under which mindfulness training has become such an interesting proposition for organizations. We also review definitions of mindfulness in general, and from an organizational context. In the second section, we look at the different forms of mindfulness practices related to the work. This includes a brief description of Mindfulness-Based Stress Reduction (MBSR; Kabat-Zinn, 1982, 1994) as the most widely established and researched form of training. Next, we review empirical findings regarding the role of mindfulness in organizations. We focus on the effects of mindfulness interventions, but also draw on survey research that measures mindfulness through self-report. We go into some detail describing an intervention presented in Hülsheger (2012) as it has some features that make it particularly attractive from a research perspective. The intervention draws on established practices such as those used in the MBSR program, but is entirely self-administered, making it easier and less costly to conduct, while avoiding possible confounding effects of the facilitator. Section 4 builds on the previous section and presents results of a study on a corporate mindfulness program, discussing obstacles, success factors, and participant experiences of the program. Finally, in the last section, we contemplate some open questions and directions for future research.

Mindfulness Practices in Organizations

Research on mindfulness, while increasingly well established in psychology and medicine, is still in its infancy within organizational scholarship. However, this is beginning to change for several reasons. First, the hypothesized benefits of mindfulness have received increasing support from empirical research (e.g., Arch & Craske, 2006; Brown & Ryan, 2003; Chiesa & Serreti, 2009; Grossman, Niemann, Schmidt, & Walach, 2004; Lau et al., 2007; Oman, Shapiro, Thoresen, Plante, & Flinders, 2008; Shapiro, Brown, & Biegel, 2007; Walach et al., 2007). This research is slowly making its way into the organizational literature. Second, attention has long been recognized as a crucial bottleneck in organizations, and mindfulness offers a new perspective on the nature and role of attention (Levinthal & Rerup, 2006; Vogus & Sutcliffe, 2012).

Third, and perhaps most importantly, there is a steady crescendo of interest from organizational practitioners in using mindfulness to address workplace challenges. As an indication of the growing popularity, Glomb et al. (2011) noted that a 2011 Google search on "mindfulness" produced more than 6 million links and "mindfulness and work" generated 1.4 million links. In June 2013, the same two searches produced 12.1 million and 17.1 million hits, respectively. This has even led some people to speak of a "mindfulness revolution" in the business world (Stahl & Goldstein 2010), whereas others are worried about a new "mindfulness fad" (Carroll, 2006; Duerr, 2004). Whether or not the revolution takes place, it

is clear that mindfulness is beginning to make its way into organizations. While this may not be happening globally, an increasing number of companies, including some of the most eminent organizations in the world (e.g. Google, Apple, General Mills, and McKinsey Consulting Grou, Hansen, 2012) are working with mindfulness. Mindfulness practice appears to be percolating through the business world as a method of enhancing the well-being and performance of people in the managerial sectors, particularly in high-stress professional environments (Davidson et al., 2003) and organizational leadership (Miller, 2008). Mindfulness practices extend further into a myriad of other areas including health and healing, caregiving, law enforcement and prisons, education, and personnel development..

Where is the interest of organizations coming from? While mindfulness may have always provided certain benefits relevant to work, one could argue that current characteristics of work contain features that make mindfulness a particularly attractive proposition to organizations. Much of modern work takes place in a challenging and competitive environment characterized by long hours (sometimes during periods that were traditionally meant for rest, such as evenings or weekends) that are likely to leave employees exposed to stress, exhaustion, and burnout.

In addition, not only does work stretch over extended periods of time, but the work itself may be experienced by many as more demanding and intense. Gone are the days that we twiddle our thumbs to pass the time; our thumbs are busy texting, posting, and playing games on smart phones that connect us to other places and people beyond the space immediately before us. Humanity is increasingly shifting towards experiencing the world through technologically supported interactions. The current corporate environment perpetuates the plugged-in nature of modern society where constant availability has become a defining characteristic of how we work. This degree of accessibility has bred a culture of expectation for immediate responses and blurred the already fuzzy lines between work and home life. For many knowledge-intensive jobs in particular, problems of information and attention overload have been increasing. Southerton and Tomlinson (2005) refer to the "time squeeze" as the perception that there is a constant shortage of time, creating an increased demand for multitasking, a tool individuals use to squeeze more into their daily lives (Freedman, 2007).

There remains considerable disagreement regarding the costs and benefits of multi-tasking, sometimes heralded as efficiency's great enabler to organizations (Zacarias et al., 2007). One body of research suggests disadvantages. For example, task completion times have been found to increase when multi-tasking as cognitive processes may not allow for simultaneous cognitive operations (Oberauer & Kliegl, 2004; Pashler, 2000). Frequent task switching may result in lower performance at work and lead to symptoms similar to Attention Deficit Disorder (Hallowell, 2005). Excessive multi-tasking can negatively impact organizational performance by increasing stress levels, error frequency, and decreasing the ability to concentrate, think creatively, and make good decisions (McCartney, 1995). One study suggests that American companies lose approximately 2.1 hours of employee productivity per day as a result of work interruptions and multi-tasking behavior (Freedman, 2007). These finding may, however, not apply to all contexts. For example, Lee and Taatgen (2002) found that when dual-tasking individuals are highly skilled in both tasks, the loss in productivity is insignificant. Other studies have shown multi-tasking to increase productivity in the military (Shanker & Richtel, 2011) and healthcare (Chisholm, Collison, Nelson, & Cordell, 2000; Laxmisan et al., 2007). Overall, we contend that multi-tasking is not the solution to current challenges at work.

Current work conditions are accompanied with a hefty price tag. In the United States, stress-related ailments were estimated to cost companies approximately $300 billion a year in increased absenteeism, tardiness, and employee turnover (Walach et al., 2007). Mood disorders alone cost an estimated $50 billion per year and over 321.2 million lost workdays (Kessler et al., 2006). Research has established that job tension is directly tied to a lack of productivity and loss of competitive edge suggesting that these high stakes, high pressure work environments so prevalent in today's organizational makeup, may be detrimental to achieving corporate objectives. Technological platforms today have enhanced operations and in many ways enabled greater forms of efficiency. Yet, one could say that these same advancements are dampened by the setbacks that occur when stressed out workers, divided between their many tasks and short attention spans, are susceptible to error and emotional exhaustion.

Why and how might mindfulness be suited to address, or at least cope, with these challenges? To begin answering this question, we next review how mindfulness has been defined in general and in organizational scholarship.

Concept and Definition of Mindfulness

Definitions Rooted in Contemplative Traditions

The term mindfulness has been defined and operationalized in a variety of different ways, with the unfortunate consequence that it is often not clear what exactly is meant when someone speaks of mindfulness. This has led to calls to state specifically what aspect or component of mindfulness one is referring to, rather than using the broader term mindfulness (Dane, 2011). There is an ongoing debate between the scientific camp and the Buddhist camp, with the latter sometimes being concerned that scientists are stripping away the true meaning of mindfulness through a reductionist approach that does not do justice to mindfulness. At the same time, the debate as to what mindfulness really is exists even within scientific (and Buddhist) circles. This chapter is not the place to resolve this debate. Therefore, we have decided to take a more inclusive view of mindfulness, as presented below, and try to specify the particular aspect or component of mindfulness when it can be identified.

Perhaps the most widely known definition of mindfulness in the scientific literature is "paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1994, p. 4). This is the conceptualization underlying the MBSR program (Kabat-Zinn, 1994), the secular mindfulness training program that has, by far, received the most research attention. The definition includes three components: intention, attention, and attitude (Shapiro et al., 2006). Many other definitions and conceptualizations are based on it, although they may omit the intention aspect, especially in work that deals with self-report scales of mindfulness rather than (intentional) mindfulness practice (e.g., Bishop et al. 2004; Brown & Ryan, 2003; Brown, Ryan, & Creswell, 2007).

Baer et al. (2006) analyzed multiple instruments attempting to operationalize mindfulness and found five key skills (observing, describing, acting with awareness, non-judgment of inner experience, and non-reactivity to inner experience) upon which they based their Five Facet Mindfulness Questionnaire (FFMQ). Following this structure, mindfulness can be compartmentalized across three main subdivisions: 1) being fully aware of the present moment; 2) the quality of awareness; and 3) the attitude of the observer.

When one becomes aware of what is occurring in the present moment, one is consciously sustaining attention to the present moment and *acting with awareness* as opposed to acting in automatic pilot mode (Baer et al., 2006). In fact, it may be helpful to understand present moment mindfulness by contrasting it with mindlessness. For example, Reb and Narayanan (2013) stated that "being mindless can be defined as neither paying attention to, nor having awareness of, the activities one is engaged in or of the internal states and processes (e.g., emotions) one is experiencing" (p. 4). Examples of mindlessness include performing tasks on autopilot, daydreaming, or ruminating about the past or the future (Brown & Ryan, 2003). Dane (2011) noted the conceptual distinction of living *in* the present from living *for* the present, which could manifest as delusion, impulsiveness, hedonism, and fatalism (Zimbardo & Boyd, 1999).

Within mindfulness literature, awareness and attention are distinct constructs. Attention can be described as sustained bare attention, where sustained attention is the ability to remain alert from moment to moment over an extended period of time (Rapgay & Bystrisky, 2009). Quality of attention as opposed to the quantity of attention refers to the reduction of extraneous mental chatter when focusing on a particular task (Weick & Sutcliffe, 2006). The distinction that Weick and Sutcliffe (2006) make between the quantity and quality of attention is poignant. We often give our attention to matters, but rarely do we give them our full attention. Awareness refers to the conscious observation of the contents of the mind (Mikulas, 2011). According to Brown, Ryan and Creswell (2007), awareness also includes the five physical senses, the kinesthetic senses, and the activities of the mind. Similarly, Baer et al. (2008) defined *observing* as "noticing or attending to internal and external experiences, such as sensations, cognitions, emotions, sights, sounds, and smells" (p. 333).

Mindful awareness can be understood as observing and/or witnessing without reacting to the immediate thought or impulse. *Nonreactivity to inner experience* allows for thoughts and feelings to pass without getting swept away by them (Baer et al., 2006). When one practices mindfulness, one begins to take notice of what happens in the mind leading to a partial decoupling of mental events and their psychological, emotional and physiological reactions consequently resulting in a more balanced emotional and affective state (Walach et al., 2007). This state of equanimity has been argued to allow for a more conscious, less conditioned response and to be conducive to stress resistance and resilience (Teasdale, Segal, & Williams, 1995). Shapiro and colleagues (2006) argued for the crucial role of reperceiving (or decentering), which is the process of disidentification from the contents of one's thoughts and the ability to view moment-by-moment experience with greater clarity and objectivity. It is a meta-cognitive process involving a fundamental shift in perspective. Here an individual increases their capacity for objectivity about their own experience allowing them to experience reality as it is, rather than a story constructed from a system of concepts of what is or should be (Shapiro et al., 2006).

The final subdivision of mindfulness pertains to the attitude of the individual. Drawing from the FFMQ (Baer et al., 2006), *nonjudging of inner experience* refers to taking a non-evaluative stance toward thoughts and feelings. This commitment to consciously accept thoughts without assessing them is what MBSR refers to as the "open attitude" (Kabat-Zinn, 1994). One theory for the effectiveness of mindfulness practice as a means of treating stress and anxiety is its ability to circumvent cognitive distortions that are easily, and often unconsciously, indulged by eliminating judgment from thoughts and emotions. For instance, blaming others for the experiences we feel or battling the long mental list of *shoulds* and

should nots become more difficult when we decouple our thoughts from reaction and adopt an accepting attitude towards the contents of the mind.

Much of the above conceptualizes mindfulness as a state or mode. In psychological and organizational research, the use of self-report measures of mindfulness is common. Within this research, mindfulness has also been conceptualized as a trait, which refers to relatively stable differences in the tendency to be in a state of mindful awareness (Brown, Ryan, & Creswell, 2007; Glomb et al. 2011). The third component in Kabat-Zinn's definition, intention, or intentional practice of mindfulness, has played no significant role, possibly because it may beperceived as less relevant in this context. Intentionality may be more appropriate within a set of practices meant to enhance mindfulness and bring other benefits, for example in a traditional, contemplative context, or in training programs such as MBSR (Kabat-Zinn, 1994). This raises the question as to how essential intentionality is for mindfulness.

Conceptualization of Mindfulness within Organizational Scholarship

Within organizational scholarship, a second use of the term mindfulness predates the conceptualization rooted in contemplative traditions discussed above. This definition stems from Langer's mindfulness research program (e.g., Langer, 1989). We discuss this conceptualization and the associated research here because our intention is to be more, rather than less, inclusive, because this scholarship has made significant contributions. This research raises important questions as to the relation between the phenomena that have been labeled by the same term, but appear distinct yet related.

The conceptualization of mindfulness in this research is distinctly more cognitive than attentional. Here, mindful information processing refers to creatively differentiating and actively categorizing stimuli and phenomena into continuously refined categories. This process of cognitive differentiation allows pre-established concepts built on conditioned habits and automatically generated frameworks to be transcended such that new information can be re-conceptualized separate from the confines of memory alone (Langer & Piper, 1987). This mental filing technique enables the creation and refinement of connections, and a "more nuanced appreciation of context and alternative ways to deal with it" (Langer, 1989, p. 159). For example, if a person were to use a chair as a stepladder they have "mindfully constructed a new categorization of the object" (Dane, 2011 p. 1003; see Langer & Piper, 1987 for more examples).

Weick and colleagues (1999) founded their conception of organizational mindfulness on Langer's (1989) perspective of absorbing stimuli and actively categorizing information to make sense of the context. The more aware the organization is of their present situation and potential threats, the more mindful the organization is. More specifically, organizational mindfulness can be deconstructed along five mechanisms: (1) a preoccupation with failure, namely the organization's openness to a consistent and thorough analysis of potential threats; (2) a reluctance to simplify interpretations whereby an organization questions their existing assumptions and considers reliable alternatives; (3) a sensitivity to operations where an effort is made to understand the organization's big picture status in real time; (4) a commitment to resilience where errors and setbacks are cherished and analyzed for their lessons; and (5) decision making based on experience as opposed to authority (Weick et al., 1999; Weick & Sutcliffe, 2006). It has been argued that organizational mindfulness is a strategic, top-down,

enduring organizational characteristic (Ray, Baker, & Plowman, 2011) that refers to the extent an organization is preoccupied with emerging threats to their operation and builds their capabilities to effectively respond to risk (Weick et al., 1999; Weick & Sutcliffe, 2001, 2006). This work has been applied particularly to so-called high reliability organizations which have little room for error, or where errors can result in dramatic consequences (e.g., nuclear power plants, airplane cockpits). The argument has been that organizational mindfulness helps, and may even be essential for, such organizations to perform with high reliability. Some research has argued, therefore, that mindfulness may be useful in jobs that require this kind of attention, whereas it may be detrimental to jobs that are routine in nature and may better (more efficiently) be performed on auto pilot (Levinthal & Rerup, 2006).

In contrast to organizational mindfulness, mindful organizing has been argued to be a dynamic social process depicted by ongoing actions rather than a stable characteristic (McPhee, Myers, & Trethewey, 2006). It is conceptualized as a bottom-up process that aggregates the behaviors of organizational members from context retrieved from the front-line (Vogus & Sutcliffe, 2012). Mindful organizing has been called fragile in comparison to organizational mindfulness (Feldman & Pentland, 2003; Weick et al., 1999) since different processes of organizing emerge each time depending on the context and the players. Mindful organizing exists to the extent it is collectively enacted (Levinthal & Rerup, 2006; Vogus & Sutcliffe, 2007a, 2007b; Weick & Sutcliffe, 2006), i.e. the extent to which an organization holds shared perceptions of protocols and behaviors (Morgeson & Hofmann, 1999). If an emergency response unit cohesively reacts to the call signal with a homogenous process, they would show high levels of mindful organizing. Along these lines, mindful organizing is more likely to develop throughout a workgroup or department (Vogus & Sutcliffe, 2012). The benefits of mindful organizing are purported to have strategic and operational benefits by embedding feedback loops and communication channels between front line employees and leadership to refine organizational processes (Vogus & Sutcliffe, 2012).

Finally, within the context of organizational research on mindfulness, the question as to related constructs has received some attention. For example, mindfulness has been distinguished from absorption and flow (Dane, 2011). Absorption describes a state where the individual is deeply attentive to and engaged with their present task, activity or role (Aragwal & Karahanna, 2000; Rothbard, 2001; Wild, Kuiken, & Schopflocher, 1995), but unlike mindfulness, in a state of absorption, individuals block out inputs that are not central to the immediate activity (Rothbard, 2001). Flow refers to a high level of engagement in an optimally challenging activity that produces intense concentration and a strong feeling of control (Csikszentmihalyi, 1979). In a state of flow, individuals no longer perceive themselves as being distinct from the activity thus, unlike mindfulness where they remain aware of the wider environment, he or she will be unlikely to perceive external stimuli unrelated to the task at hand (Csikszentmihalyi, 1979).

In summary, organizational research has used two distinct conceptualizations of mindfulness. Given our interest in mindfulness training, the work we discuss in the remainder of this chapter draws mostly on the conceptualization of mindfulness in the contemplative traditions and its modern, secular, derivations such as Kabat-Zinn (1994) and Brown, Ryan and Creswell (2007). Nevertheless, it is useful to know that these two approaches exist in organizational scholarship. Perhaps future research will clarify the links between the two of them, leading to a fuller understanding of the integration of individual- and organizational-level mindfulness processes.

DIFFERENT FORMS OF WORK-RELATED MINDFULNESS PRACTICE

In this section, we discuss how mindfulness is being practiced as it relates to work. We distinguish broadly between four different forms of work-related mindfulness practice. First is personal practice of individuals that does not take place at work, but nevertheless influences the individual's working behavior. Second are mindfulness practices taught in educational settings, in particular, business schools. While this approach again is not taking place within the organizations of practitioners, these programs are explicitly targeting individuals as working people. Third are MBSR courses within organizational settings. Fourth are mindfulness programs specifically tailored to an organizational/work context.

Individual Practice

At first glance, a person's mindfulness practice outside of work, such as at home, in an MBSR course, with a meditation group, or as part of a personal spiritual or religious practice, may not appear to fall under the topic of this chapter. However, when viewed more broadly, such practice can still be considered work-related inasmuch as it influences the person's work-related cognitions, emotions, attitudes, and behaviors. In other words, individual practice can be considered relevant inasmuch as its effects spill over into the workplace. In some cases, such spillover may be intended. That is, it may be part of the practitioner's purpose to, for example, be able to develop more presence at work, to increase efficiency and performance, or to become more fulfilled through working mindfully. However, in many cases, any spillover effects, positive or negative, may be unintentional. For example, a person may engage in practices to be a more mindful parent, and this may also make the person more mindful at work.

One interesting aspect of individual practice that makes it different from the practices within organizational settings described below is that it is not organizationally sanctioned. Mindfulness programs that are paid for by organizations or that are conducted within educational settings typically emphasize goals that are consistent with organizational goals. Such goals include increasing performance in the form of task performance, organizational citizenship behaviors (e.g., helping colleagues), increasing loyalty and commitment, reducing turnover intentions, or decreasing deviant behaviors (negative performance such as stealing company property, sabotaging, or working fewer hours than required). Other goals such as well-being and satisfaction may be viewed as a means to the end of objectives, such as sustainable performance.

Personal mindfulness practice may get in the way of some of these goals. For example, through individual practice a person may gain insight into an undesirable work situation and develop a determination to look for a different position. Or, as another example, through individual practice, a person may become more fully aware of ethically questionable actions taken in his/her organizations and their harmful implications and decide to blow the whistle on them (Ruedy & Schweitzer, 2011). Arguably, the more common case may be that individual practice facilitates the achievement of both personal and organizational goals such

as greater well-being and performance at work. Furthermore, one could argue that when a person leaves work after realizing it is not a good fit, or blows the whistle on unethical behavior, it is also in the (long-term) interest of the organization, or at least society. Nevertheless, we think empirical research on how personal mindfulness meditation (or other spiritual practices) may lead to behaviors inconsistent with organizational goals would be fascinating.

Courses at Universities

Perhaps the most significant fact about mindfulness and related practices within business school education is their absence. Despite recent exponential growth in research on mindfulness, as well as the increasing interest from organizations, there seem to be few business schools that include such practices as part of their curriculum in programs such as MBA, executive MBA, or executive education/development (see Bush, 2011, for examples of how mindfulness and other contemplative practices have been incorporated into higher education in a variety of fields,).

Based largely on personal experiences and conversations with colleagues, it appears that among those in charge of making decisions about program design there exists widespread ignorance about research on the benefits of mindfulness and an absence of personal experiences with mindfulness practices. Most business schools appear unconvinced of the value of including such practices as part of their education. The business case for teaching accounting, production planning, or net present value calculations appears much more self-evident than the case for mindfulness training.

There is also skepticism, concern (e.g., about how students might react), and resistance (e.g., due to a perceived relation to religion and incompatibility with a scientific approach to education) regarding these practices. Decision makers may be worried about including something that is "not scientific" into the curriculum, thus lowering perceptions of the credibility and quality of the education provided. To illustrate, we observed how criticism of a newly introduced program culminated in the statement "one instructor even taught meditation in his course".

Clearly, business schools are still far away from integrating mindfulness practices, let alone embracing them as a core skill to be taught. It is instructive in this context to note that the two papers recently published on mindfulness in the Academy of Management's Learning and Education (AMLE) journal were entirely focused on the mindfulness of business schools and mindful processes in business schools rather than the teaching of mindfulness in business schools (Ray, Baker, & Plowman, 2011; Vogus & Sutcliffe, 2012). Much work still needs to be done to communicate, educate, and persuade business schools of the value of mindfulness practices as part of a meaningful business school education. The concerns and expectations business schools hold with respect to the integration and implementation of mindfulness practices into their programs are legitimately justifiable and these will need to be addressed.

Mindfulness-Based Stress Reduction (MBSR)

Turning now to mindfulness training that is actually practiced in organizations, a natural place to start is the MBSR program (Kabat-Zinn, 1994). The goal of MBSR is to alleviate pain and improve wellbeing for individuals suffering from a wide range of chronic diseases and disorders. This program in particular has received by far the most research attention. Over the past four decades the program has seen astonishing growth, partly due to successful efforts at training MBSR teachers. While the program has been developed within a medical context for patients, its success and supportive research results have also made it attractive as a program for non-patient samples. The idea behind this is that most people are not in a state of perfect well-being and mindfulness. Instead, many of us suffer from various degrees of stress, exhaustion, and pain at one time or the other.

Indeed, stress, emotional exhaustion, and burnout are common phenomena in modern organizations. For organizations interested in optimizing the productivity of their workforce stress management practices pose an attractive business case due to the high costs of workplace stress. For example, depression, anxiety and stress have been estimated to cause the loss of 13 million working days per year in the United Kingdom alone (Flaxman & Bond, 2006). Overall, burnt-out employees perform worse, show lower organizational commitment, exhibit higher absenteeism, greater turnover and more job dissatisfaction than engaged employees (Shaufeli & Enzmann, 1998). One study found that nurses experiencing higher levels of burnout were assessed by their patients to be providing lower levels of patient care (Leiter, Harvie & Frizzell, 1998). On a broader scale, individual burnout can have a contagious affect within an organization where a highly stressed out employee can have a negative impact on their colleagues disrupting work tasks, productivity, and overall performance (Maslach, Schaufeli & Leiter, 2001).

MBSR interventions have seen good results particularly in situations where stress is abundant (Astin, 1997; Kabat-Zinn, 2003; Kabat-Zinn, Kipworth, & Burney, 1985; Miller, Fletcher, & Kabat-Zinn, 1995; Speca, Carlson, Goodey, & Angen, 2000). It may be worth noting that other programs rooted in contemplative traditions have also been found to reduce stress levels (e.g., Transcendental Meditation, Carrington et al., 1980; Frew, 1974). However, to the extent that these programs are perceived as promoting a certain form of spirituality or religion, additional obstacles to their application in a secular corporate setting are created. Indeed, one of the attractive features of MBSR is its presentation as a secular practice.

MBSR merges mindfulness mediation and yoga over an 8-week training course where participants are taught techniques designed to hold one's focus in the present moment over extended periods of time (Kabat-Zinn,1994). Participants meet on a weekly basis for two to three hour sessions plus one full-day session. In addition, they are assigned homework where they are required to practice the techniques on their own time using guided meditations and course materials for approximately 45 to 60 minutes per day, six days per week. The program is held in a group setting, but also includes time for individual feedback and support. Techniques focus on awareness training and an examination of thought and behavioral patterns through a systematic curriculum targeted at cultivating an observant, non-evaluative stance towards mental, emotional and physiological sensations. Specifically, participants are equipped with formal mindfulness practices such as body scanning, breath focused meditations, Hatha Yoga practices, and sitting meditations that expand attention to unbounded, choiceless awareness. The phenomenon of stress on body and mind and the impact of stress are discussed along with cognitive behavioral strategies that inculcate methods of self and interpersonal communication to ultimately cultivate greater compassion

and acceptance of self and others. The final week focuses on creating a sustainable practice and mindful decision making that serves both the present moment and an individual's greater life purpose or objectives.

Corporate Mindfulness Programs

Corporate mindfulness programs often consist of two types of practices. First are basic mindfulness exercises such as breath or body awareness. These are widely used in other programs as well. Second are applied practices targeted specifically for the workplace, such as mindful emailing, mindfulness communication, leading mindfully, mindful breaks, or mindful meetings. These practices are targeted at helping employees integrate mindfulness into their daily work lives (Hülsheger et al., 2012).

Further, such programs tend to have roots in traditional contemplative mindfulness practices and teachings. This is partly because trainers and developers of corporate mindfulness training programs often have a strong background in Buddhist meditative practice. The second common root is MBSR. This is likely because MBSR is by far the most prominent and frequently researched of any mindfulness-based program, and many corporate trainers will also have experienced the MBSR course themselves and/or may be qualified to train in MBSR.

The above is meant as a description of common features. Unlike in stress management, there is currently no dominant corporate mindfulness training program. As such, one can find a variety of approaches and training programs that differ on the above dimensions. For example, some programs will be very close to an MBSR program, whereas others will strongly emphasize workplace applications. Common to all programs is that the research base supporting them is extremely weak. Future research efforts should be devoted to developing, researching, and evaluating standardized programs.

Chaskalson (2011) poses several useful questions that developers of corporate training programs should ask themselves. Perhaps, most important among them is, what is the outcome you are looking for? MBSR, for example, was developed to reduce stress. If the objective is to reduce stress among employees, a slightly adapted version of an MBSR program may be the option of choice. However, if the objective is to make employees develop emotional intelligence, as in Google's Search Inside Yourself mindfulness-based emotional intelligence program (Tan, 2012), a different program may be required. Related is the question of who the course will be for. Organizations can be quite hierarchical places and even when they are not, different types of mindfulness programs may be more effective for different jobs or for different levels of an organization.

An interesting feature of corporate mindfulness programs is that employees may participate not out of their own intrinsic motivation, but because they have to. As Chaskalson (2011) points out, this raises some issues with regards to motivation and compliance. This relates to the question of how much one can ask of participants in workplace programs (as compared to programs in health-care settings, where participants are often strongly motivated). Is daily practice required? For how many minutes? And over how many weeks or months should a training program stretch? Answers to these questions partly relate to another question: what is the minimum effective dose of mindfulness training? Clearly, more research is needed here.

As can be seen, corporate mindfulness programs raise challenging and intriguing questions for mindfulness researchers to answer. At the same time, such programs are also being challenged. First, traditionalists may wonder if such programs are too removed from traditional mindfulness practices to even deserve the label "mindfulness". Second, critics question whether mindfulness practice is being used to pacify employees by helping them cope with their stress, rather than solving the underlying problems of a system that is fundamentally unhealthy and inconsistent with fair working conditions. We do not claim to have the answers to these questions, but we think that they can make for a vigorous and insightful debate.

EFFECTS OF MINDFULNESS INTERVENTIONS AT THE WORKPLACE

In this section, we look at empirical research evidence of the effects of mindfulness. We will focus mostly on workplace intervention studies, but given their small numbers, complement these with findings from other studies, such as laboratory experiments or field surveys. The dependent variables of most studies can be grouped into four broad categories: wellbeing, performance, interpersonal variables, and ethical aspects.

Effects on Employee Wellbeing

Mindfulness has been related to reduced depression and anxiety and to enhanced vitality in general samples (Brown & Ryan, 2003; Kabat-Zinn et al., 1992). Two recent meta-analyses found that mindfulness practice may improve wellbeing by reducing levels of state and trait anxiety (Chiesa & Serretti, 2009, 2011; Eberth & Sedlmeier, 2012). It has been argued that mindfulness enables individuals to better manage their experiences, including those charged with strong emotions or physical pain (Baer, 2003; Broderick, 2005; Shapiro et al., 2006; Shepherd & Cardon, 2009). Further still, mindfulness may also reduce anxiety by reducing ruminative and reflexive self-focused attention (Brown, Ryan & Creswell, 2007) and cognitive elaboration of negative thoughts (Weick & Sutcliffe, 2006). While most of these studies have burgeoned out of a clinical context, recent research has examined mindfulness practices in the workplace.

A recent study in Australia explored the effects of meditation on work stress and anxiety (Manocha, Black, Sarris & Stough, 2011). In a 3-arm randomized controlled trial designed to compare two interventions (mental silence, n = 59; relaxation, n = 56) against a waitlist control group (n = 63), 178 participants were engaged in an 8-week program. Eligibility required full-time employment of at least 30 hours per week and a commitment to both the instructional program (one hour sessions twice a week) and daily independent practice (twice a day for 10-20 minutes). Participants were assessed before and after the program on psychological strain, state anxiety, and the depression-dejection subscale of the Profile of Mood States. Results showed a significant improvement for the meditation group compared to both the relaxation and the waitlist control group in psychological strain and depression-dejection scores. Manocha, Gordon, Black, Malhi, and Seidler (2009) conducted a related study on enhancing psychological well-being among 293 medical practitioners who were

taught meditation skills intended to quiet the mind's thought streams. Results showed that participants who reported greater mental silence also experienced lower levels of psychological distress.

Shapiro and colleagues (2004) conducted a three-part study on MBSR's ability to decrease burnout, psychological distress, and increase mindful awareness and attention in nurses. Nurses were recruited to attend a 1-hour informational session about an 8-week stress management program. Of the 30 attendees, 27 enrolled in the 8-week MBSR program. Participants were all employees of the same U.S. organization, spoke and read English, were at least 18-years of age, and held patient interfacing positions. Participants were randomly assigned to the intervention group (n = 14) or the waitlist control group (n = 13). Both groups were tested prior to intervention (T1) and immediately following the completion of the program (T2). The treatment group was assessed one last time (T3) 3 months after post-intervention. The study found that the MBSR intervention's emphasis on self-care, compassion, and healing helped nurses manage stress and reduce burnout. Nurses reported greater relaxation and self-care, and improvement in work and family relationships. Interestingly, they cited restlessness, physical pain, and dealing with difficult emotions as challenges of the program—a finding that challenges the "more is better" logic that tends to pervade mindfulness research (Dane, 2011).

The U.S. Military has also applied mindfulness to reinforce mental wellbeing in their marine training. Their program, called Mindfulness-based Mind Fitness Training (MMFT), is aimed at strengthening psychological resilience and reducing the effects of stressors. Stanley and colleagues (2011) conducted a study adapting mindfulness training to facilitate these objectives in pre-deployment military service-members. Specifically, the study aimed to determine whether participants would complete MMFT exercises and what effects their participation would have on mindfulness and perceived stress levels. The researchers assessed changes in self-reported mindfulness (as measured by the FFMQ; Baer et al., 2006) and perceived stress (as measured by multiple scales including the Perceived Stress Scale; Cohen, Kamarck & Mermelstein, 1983) before and after intervention, and as a function of the duration of individual mindfulness practice. Many of the MMFT exercises were designed as group work to be completed in teams. This element of the training design meant that in assessing the training's effects, analysis had to be conducted at the individual and group level—a unique aspect of this study compared to the majority of the research which focuses on solely individual outcomes. Thirty-four participants of varying ranks were recruited to complete the 8-week MMFT course. They were divided into two groups of 17 throughout the duration of the program. A control group was included from within the same military unit to compare fluctuations in mindfulness and stress without MMFT training. The MMFT program, like MBSR, involved 2 hours of instruction per week over 8 weeks and one full-day seminar. Participants were required to practice for 30 minutes everyday in their own time. During the 3rd and 4th weeks, each person discussed his or her progress with the instructor in a 15-minute interview. Some content was added to reflect necessary curriculum critical for the operational environment as well as material on stress and trauma resilience.

Results showed that participants who spent more time engaged in practice corresponded with greater self-reported mindfulness, and increases in mindfulness were associated with decreases in perceived stress. At the individual level, participants described enhanced abilities to focus and concentrate on a task, improved self-awareness and emotion regulation, and enriched interpersonal relationships. At the group level, team communication and unit

cohesion improved. Leaders who reported greater self-awareness were more open to feedback. In addition, collective enhanced self-knowledge amongst team members resulted in more cooperative behavior, effective task delegation, and team efficacy.

A growing body of research has started to examine well-being, focusing on work engagement, which has been referred to as the antipode of burnout (Bakker, Schaufeli, Leiter, & Taris, 2008; Gonzalez-Roma, Schaufeli, Bakker, & Lloret, 2006). Leroy and colleagues (2013) hypothesized that mindfulness would be positively related to work engagement through authentic functioning, exhibiting self-awareness and self-regulation (Avolio & Gardner, 2005). They joined forces with a mindfulness training institute to collect data during a period of one year and across six distinct organizations. Questionnaires were given to participants at three times: before intervention, immediately after completion of the mindfulness training program, and four months after program completion. Eight groups were formed in total with 6 experimental groups (n = 76) and 2 waitlist control groups (n = 14). The mindfulness training was based on the MBSR curriculum, conducted over eight weeks with weekly sessions and daily individual meditation practices. The study found that mindfulness was positively related to work engagement, and that authentic functioning mediated this relationship.

Effects on Employee Performance

While empirical research on the effect of mindfulness on employee performance is rare, there are good reasons to expect such an effect. For example, mindfulness practice has been shown to improve attention (Brown & Ryan, 2003; Cahn & Polich, 2006; Schwartz, Davidson, & Goleman, 1978), behavioral self-control and more effective goal attainment (Brown & Ryan, 2003; Chatzisarantis & Hagger, 2007), which are all linked to job performance. In their conceptual paper, Glomb et al. (2011) suggested several mediating mechanisms through which mindfulness might influence different dimensions of employee performance. For example, increased working memory could lead to improved ability to perform under stress and increased self-determination and persistence may increase goal-directed behavior, learning and task performance. Mindfulness can also circumvent automaticity, leading to greater cognitive flexibility when reacting to mental impulses (Siegel, 2010). In the workplace, this might manifest in more creative ideas and solutions as the boundaries of habitual thinking are removed. Mindfulness' ability to enhance self-regulation is argued to enable employees to experience satisfaction and effectiveness within their work and non-work roles. For example, Allen and Kiburz (2012) found that working parents who scored higher in trait mindfulness also reported greater work-family balance. The ability of mindfulness practice to decouple thoughts from the self, particularly when dealing with negative events, protects the ego and consequently, one's self-worth (Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000). Empirical research suggests that mindfulness meditation may indeed reduce performance decrements caused by choking under pressure (Slagter et al., 2007). Decoupling thoughts equips individuals with a more accurate view of reality, which should be beneficial for performance.

As an example of an empirical workplace study, Reb, Narayanan, and Ho (2013) conducted a field survey among 231 employees. The authors examined the relation between two aspects of mindfulness, awareness and absent-mindedness, with three dimensions of

employee performance: task performance, organizational citizenship behaviors, and deviance (a form of negative performance). Whereas mindfulness was self-rated, the employees' supervisors rated the three dimensions of performance to avoid common method and self-enhancement biases. They conducted multiple regression analyses controlling for age and gender and entering both awareness and absent-mindedness. Results revealed that whereas both employee awareness and absent-mindedness were related to task performance (positively and negatively, respectively), only awareness was (positively) related to organizational citizenship behaviors, and only absent-mindedness was (negatively) related to deviance. Beyond suggesting that mindfulness relates to employee performance, this research suggests that the specific dimension of performance and aspect of mindfulness may be an important consideration.

Mindfulness in Interpersonal Relations and Leadership

The social and highly dynamic context of organizations makes interpersonal effects of mindfulness practice extremely relevant. An important domain here is leadership. Reb, Narayanan and Chaturvedi (2012) examined the influence of leaders' trait mindfulness on employee performance and wellbeing. Supervisors and their subordinates were recruited to participate in a web-based study on mindfulness at work. Leader mindfulness was measured (MAAS; Brown & Ryan, 2003) along with employee emotional exhaustion (Maslach Burnout Inventory; Maslach & Jackson, 1986), employee work-life balance, psychological need satisfaction, job satisfaction, job performance, task performance, deviance and organizational citizenship behavior. Ratings were completed either by self-report or the individual's supervisor. Results showed the leaders' trait mindfulness was positively associated with several measures of employee wellbeing and job performance. Reb et al. suggested that mindfulness helped leaders build better relations with their employees and be more in tune with them, and as a result they were able to support their employees' needs, resulting in better performance, more satisfied employees.

The effects of mindfulness on enhancing the ability to relate to another in interpersonal relationships may not only be relevant for leaders, but also in other interactive situations, such as communication and negotiation (Block-Lerner et al., 2007; Wachs & Cordova, 2007). Kopelman et al. (2012) posited that the ability to better regulate emotions in negotiations would lead to superior negotiation outcomes. Consistent with this theory, Reb and Narayanan (2013) examined the effects of mindfulness on negotiation outcomes in distributive negotiations and found across several studies that participants who engaged in a short mindfulness practice prior to negotiating achieved better negotiation outcomes than their control condition counterparts.

Mindfulness and Ethical Decision Making

In an age where media headlines have been dominated by global economic crises spawned from unethical behavior and reckless white-collar crime, the influence of mindfulness on ethical decision-making is a timely topic to explore in the workplace. Research suggests that those who are more mindful behave more congruently with their

values and interests (Brown & Ryan, 2003). Also, the manner in which organizational members focus attention affects how they make strategic decisions (Nadkarni & Barr, 2008), which is relevant since unethical decisions may simply stem from a lack of awareness.

In a laboratory study by Ruedy and Schweitzer (2011), participants were given 4 minutes to unscramble 15 anagrams. Each correct answer earned the participant one dollar. At the end of the 4 minutes, participants were instructed to stop. Unbeknownst to participants, carbon paper was placed within the envelopes containing the anagrams and the envelopes were collected at the time limit. Participants were then provided with the answer key and were asked to mark their own answers within the privacy of their cubicles. 55.2% of the 125 participants cheated by adding additional answers to their own lists. While mindfulness scores (MAAS; Brown & Ryan, 2003) did not seem to influence whether or not individuals cheated, they were negatively related to the amount of cheating. In another study, participants complete the MAAS (Brown & Ryan, 2003), the Mindfulness/Mindlessness Scale (MMS; Bodner & Langer, 2001) and an adapted version of the Self-reported Inappropriate Negotiation Strategies Scale (SINS; Robinson et al., 2000) for measuring ethical intention. Data were also collected on the self-importance of moral identity scale (SMI; Aquino & Reed, 2002), and other scales to assess how much they valued rules or principles (formalism) and outcomes (consequentialism) from the Character Traits section of the Measure of Ethical Viewpoints (Brady & Wheeler, 1996). Results showed that more mindful participants were less willing to engage in unethical behavior, exhibited a more principled approach to ethical decision-making, and were more concerned with how ethically they saw themselves rather than how ethically others perceived them to be. Consistent with these findings, Shapiro et al. (2012) reported that MBSR training was associated with improvements in moral reasoning and decision-making, suggesting that mindfulness may in fact make us more ethical and wise.

Compassion is linked to both mindfulness and ethics. Boosting organizational compassion has been associated with improved immunity and lower mortality (Boyatzis, Smith, & Blaize, 2006). Atkins and Parker (2012) argued that compassionate organizational behavior is associated with more helpful behavior, increased trust, support, and cooperation. They argued that compassionate behavior requires a regulated response involving cognition, rather than an automatic reaction. They further suggested that mindfulness may be an important facilitator of compassionate behavior by allowing employees to respond consciously to situations, rather react automatically. They presented *psychological* flexibility, defined as the combination of mindfulness and values-directed action, as a facilitator of compassionate responses. Future research is needed to establish the connection between mindfulness, compassion and ethical behavior in organizations.

Overall, the existing research on mindfulness in organizations is promising. However, much research has relied on observational methods, using self-report measures of mindfulness, with known concerns about internal validity. More research is needed using manipulations and interventions of mindfulness training to replicate current findings and extend the research base further to examine mediating processes and moderating factors.

A SELF-ADMINISTERED MINDFULNESS TRAINING PROGRAM

We believe that a recently developed mindfulness training program by Hülsheger, Alberts, Feinholdt, and Lang (2012) deserves particular attention. This program is designed to be self-administered, a unique adaptation of traditional facilitated mindfulness programs. The majority of other training programs are taught (fully or partly) face-to-face by a mindfulness trainer who leads the practice. Hülsheger et al. conducted two studies on the effects of mindfulness on emotional exhaustion and job satisfaction, mediated through a form of emotion regulation called surface acting. In surface acting, employees display, or fake, emotional expressions without actually feeling them. Surface acting has been related to a number of negative consequences, including emotional exhaustion (Grandey, 2000). Hülsheger et al. proposed that mindfulness is associated with reduced surface action.

Whereas their first study used a diary method, in the second study 64 working adult participants were randomly assigned to what the authors refer to as a "self-training mindfulness intervention group" or to a control group. Their results showed that participants in the mindfulness condition measured lower on emotional exhaustion and higher on job satisfaction after the training than study participants in the control group, and this relation was mediated by surface acting.

The self-administered mindfulness training extended over 10 working days. All instructions for the training, as well as all surveys were organized into one diary booklet. Participants completed some basic measures (demographics, trait measures, baseline measures) before starting with the training. Then, each working day, they read the instructions regarding the mindfulness exercise of that day and completed diary measures after work.

The self-training intervention drew on Mindfulness-Based Cognitive Therapy (Segal, Williams, & Teasdale, 2002) and MBSR (Kabat-Zinn, 1994), and consisted of different exercises used in these programs. Both audio-guided mindfulness meditations and informal daily exercises were employed that aimed at "cultivating an accepting, nonjudgmental attitude to what one experiences in each moment" (pp. 8-9). The mindfulness practices selected for the program were chosen with the view that they "were relatively brief and could be readily integrated into participants' daily (work-) life" (p. 9). Exercises included the body scan, the three-minute breathing space, the daily routine activities, and the raisin exercise. In addition to these mindfulness practices that focus on mindful attention and awareness, loving-kindness meditation was included to "cultivate a compassionate mindset" (p. 9), based on the argument that this is considered an essential aspect of mindfulness practice (e.g., Kuan, 2008; Sanharakshita, 2004; Shapiro & Carlson, 2009; Siegel, 2007, 2010).

The program was sequenced such that it began with easier exercises. Specifically, the raisin exercise, in which a raisin is eaten with awareness, and the body scan, in which all parts of the body are carefully and gently scanned and relaxed, were scheduled for the first training day. The three-minute breathing space (Williams et al., 2007) was "a cornerstone" (p. 9) of the intervention and was to be practiced at least twice a day, every morning and evening throughout the study. On the morning of Day 4, the daily routine activities practice was for participants to select a routine activity, such as driving to work, and perform it in a mindful manner. Finally, loving-kindness meditation was introduced on the evening of Day 4 and practiced once a day. Over subsequent days, participants were directed to extend the loving-kindness meditation first to themselves, and then to loved others, neutral persons, and finally, difficult persons.

The mindfulness training booklet started with a general introduction to mindfulness and mindfulness meditation. It provided "a description of the mindfulness meditation practices

and detailed instructions on how and when to conduct these practices" (p. 9). Importantly, all participants received a CD containing audio-files of the guided meditations. Participants also received additional materials meant to increase and maintain their motivation, such as a postcard with a mindfulness quote to put up in a visible place as a reminder to practice, mindfulness-related citations from mindfulness writers like Eckhart Tolle or Thich Nhat Hanh (as part of the booklet), and daily e-mails with additional mindfulness-related citations.

Participants in the control condition also received a booklet containing the basic survey and diary surveys. No mindfulness instructions were included in this package. They received the complete mindfulness training booklet after completing the study such that they could also do the program if they so desired. This is another advantage of the self-administered program: it makes it very easy and inexpensive to provide a waitlist control group with the same program as the experimental group.

We described this program in some detail because of its novelty and of its potential advantages in a research setting. These advantages include being standardized and avoiding any experimenter effect. In mindfulness training interventions that involve a person as a trainer, the question automatically arises to the influence of the specific features of the trainer (e.g., personality, likeability, qualification, compassion). This potential confound is eliminated in a self-administered program. A self-administered program can also be used more easily, inexpensively, and widely, as it does not require someone who is qualified to lead the mindfulness training program. This method could potentially allow more future research on mindfulness given the lower cost and possible lack of skilled facilitators.

We recognize that a self-administered program also has limitations. One concern is that participants might lose motivation when practicing alone, without the support of a trainer and/or group of participants. To address this concern, Hülsheger et al. included different ways to maintain motivation, such as reminder emails with mindfulness quotes. The selection of motivated participants might also play an important role. Their study was advertised as a study on mindfulness and no financial compensation was offered for participation. As a result, those who signed up may have had a substantial intrinsic motivation and interest in participating. The self-selection of the sample raises concerns about whether the results are generalizable across the broader population. It also presents a likely difference to mindfulness training programs that are conducted within specific organizations, where less motivated employees might participate due to perceived participation pressure from superiors and peers.

Clearly, no method is perfect and should be used exclusively. Thus, future research should best use a balance of different methods to ensure that any finding is not limited to the specific method used in the research. This includes mindfulness programs administered by a qualified trainer. Indeed, an interesting area of enquiry would be to compare self-administered and trainer-conducted mindfulness training interventions. This would help understand the role of a trainer, and the factors and conditions under which each type of program is more or less effective.

AN ORGANIZATIONAL MINDFULNESS TRAINING INTERVENTION

In this section, we describe the process and results of an organizational mindfulness training program to give an idea of how mindfulness is being taught in organizational settings and the experiences and reactions of training participants (see also Reb, 2012, from which all quotations are taken). First, we briefly introduce the organizations involved and describe the structure of the program, before describing results of a qualitative study.

Participating Organization

The mindfulness training program was carried out at the risk management services group in the industrial division of If Insurance. In 2011, If was one of the major property and casualty insurance companies in Europe, focused on the Nordic region. The company had about 6,400 employees. The industrial division's clients were typically larger companies with a complex insurance requirements.

The risk management services group consisted of around 30 employees and many of them participated in the mindfulness training program. Many of the employees were highly educated and trained specialists dealing with particular clients, markets, and aspects of risk assessment. Employees worked mostly individually or in small groups, shaping a culture that was described as tolerant, flexible, and respectful, but also relatively individualistic. The work itself was knowledge-intensive, involving tasks such as data analysis and client interaction. There was a tendency to try to multi-task in order to deal with the different demands of the job. Employees frequently felt they had to be doing several things at a time. A recent internal health survey showed a substantial percentage of employees experiencing a high level of stress. As one employee stated: "There were quite a few people who felt they couldn't live up to the demands of the job".

The head of the group had come to learn about mindfulness and thought that it might help address some of the challenges and goals of his team. It was an official company goal to promote employee health. In his view, employees had enough knowledge about how to live healthy, but they often failed to implement what they knew. He was looking for a health-related program that would make a lasting, positive change in his employees' lives. Fortunately, the group had access to a pool of money that could be used for health-related activities and programs. He thought that a mindfulness training program, tailored to the organizational context, may have such a profound impact. In addition to the health benefits, he also hoped that becoming more mindful might help his employees deal with their work demands in a way that was more efficient and less stressful than other coping strategies, such as multi-tasking. However, any decision about a training program would have to be made with support from the entire team, given the culture of the organization.

Description of the Mindfulness Training Program

After considering several health-related programs, the group decided to go for a mindfulness program offered by the Potential Project. One of the reasons was that their introductory presentation focused strongly on the idea that the mind could be trained, and that mindfulness practices could be applied to the workplace to result in greater work efficiency and effectiveness. The group's interest was stimulated by what was said about the nature of

attention and awareness, and by the promise that this mind training or mindfulness might address the information overload problem. Another reason was that the founder of the Potential Project and the person who carried out the training, came across as business-like in dress and presentation style. This helped address concerns about the fact that mindfulness was not a mainstream topic for a health-related program. As the head of the group said, "I was happy to hear that meditation is now called mindfulness. Meditation sounds like Hare Krishna. Mindfulness has much less baggage. It's much easier to market. It's just 'mental training'."

The Potential Project refers to its approach to training mindfulness at the workplace as Corporate-Based Mindfulness Training (CBMT). The program has been designed to fit the demands and expectations of the corporate world. In the context of the training provided by The Potential Project introduced mindfulness as the ability to intentionally focus one's mind on one thing at a time and to intentionally engage and disengage attention. It was also referred to as the ability to be aware of what one is doing and experiencing, as a kind of meta-attention or observing of oneself.

At If, the program was delivered as an 8-week program. Participation in the program and any of its activities was voluntary, and a few members of the group decided to do other health-related programs (e.g., a weight-loss program). All the sessions were conducted by a single trainer. The program started off with a half-day intensive introductory session. In this session, emphasis was placed on reviewing scientific findings supporting the benefits of mindfulness. After that, the program consisted of weekly sessions during which new mindfulness techniques were introduced and previous practices reviewed. The participants were then given the task of practicing these techniques throughout the week and applying them to their work.

The training program consisted of two general types of activities. The first group consisted of what one could refer to as standard forms of formal mindfulness exercises, such as practicing breath awareness. Over the course of the program, If arranged for a room where participants could convene for a daily 15 minute practice of these formal techniques. Three "ambassadors" were appointed to organize the daily sessions, encourage participants to join in the daily practices, and act as the link between the trainer and the participants.

The second type of activities consisted of the application of mindfulness to the workplace. During the weekly sessions, participants were given ideas and techniques on how to apply mindfulness to different aspects of work. These topics included working with mindfulness, mindful e-mailing, mindful meetings, mindful breaks, and mindful communication. They were encouraged to apply and incorporate these practices in their work.

Participants' Experience with the Training Program

Initial Scepticism

From the perspective of the organization's management, given the time commitment involved in the program, questions concerning the business-case for practising mindfulness are customary. A typical negative first reaction of managers was, "What's in it for us? You're wasting 15 minutes of employees' time every day. That's two per cent of their working hours. What are we getting for this?"

Interviews with program participants also shed some light on their initial stance. Initially, there was substantial scepticism among several group members. For example, one employee recalled his reaction as follows: "I'm a curious guy and everything that's new I'm curious to see what it is. But I'm an engineer. So I was wondering if this is a kind of hocus-pocus. But I gave it a try and I have been participating. I wouldn't say I'm a 'believer' but I have been participating most times". Another (male) employee, also with an engineering background, similarly said, "To be honest, I was a bit sceptical at the beginning. Now I am quite positive. It's beneficial".

Benefits

As the quotations suggest, this initial reservation changed into a more positive attitude for most participants, based on an experience of benefits derived. These benefits included a sense that the practices improved one's ability to work efficiently and effectively. For example, one participant said: "It keeps you more focused when you stay on one task and not start up several parallel tasks, and say, 'Now, I'm going with this and then finish that and then go to the next one'. So, I think it's a good tool. It is also a very good tool to clear your head". Another employee related the following experience: "I had a back log of 200 e-mails for seven years. Now, after two weeks of mindfulness training, I don't have a backlog anymore and no stress about it." Another benefit was an increased sense of being aware of and present with whatever one was doing. As one participant explained, "You should be present when you are somewhere. I've been thinking about when we're travelling, attending meetings and so on. What happens often is that people are on their phones or sending e-mails instead of saying, 'Okay, now we have used a lot of money to gather here. Let's be present here and not be anywhere else. Shut down the phones. There are only very few calls that you have to handle right away'".

The benefits participants reported in the interviews were also revealed through an internal survey the organization conducted about one year after the program started. The results showed that 88% of the employees who participated in the mindfulness training reported some or a high degree of increased ability for focused attention; 82% reported a decrease in distraction; and 59% reported an increase in their ability to handle stress and pressure.

As an unexpected benefit, the daily nature of the program brought employees closer together. Given that much of the work was conducted relatively independently, the training was perceived by some as having improved relations among members of the group. "The team building [had] a positive side-effect", one of the ambassadors observed. One employee noted that the mindfulness program changed the dynamics of the group, as they now shared an experience that could be considered quite personal and intimate: "People felt closer to each other". The head of the group speculated that that some of the benefits of this long program may have been due to the improvement of relationships among colleagues. This, of course, raises the important question as to the active causal ingredients of any such training program.

A further benefit participants were surprised by was that by having a better understanding of the nature of their own attention, employees became better able to understand their co-workers' attention. According to one participant, this had a very positive consequence in that colleagues started to respect each other's attention. For example, employees were more considerate about interrupting their colleagues.

Interestingly, while the program was tailored specifically around applications in the workplace, the benefits extended beyond work for some employees. Some felt that

mindfulness helped their ability to handle relationship problems. For example, one person reported, "I do it also for myself sometimes—like in the traffic jam in the morning".

Challenges

Participants encountered a variety of challenges throughout the program. Compliance was perhaps the main challenge. Participants found it challenging to attend the daily 15-minute sessions throughout the 8-week program and then continue beyond the end of the training program. As could be expected, because participation was voluntary, not everyone participated each day. Over time, the participation rates also dropped. One ambassador estimated that fairly early in the program approximately one-third of participants stopped attending the formal sessions. However, this does not necessarily mean that participants did not practice at all, as some reported working with the second group of applied workplace practices (e.g., mindful e-mailing) even if they were not attending the formal meetings.

A related challenge was to balance the program curriculum to sustain participants' motivation and interest. Some participants felt that the formal part of the program became somewhat boring over time as the same mindfulness instruction tapes were played repeatedly. Yet others believed that too much material was included in the program and as a result, "A lot got lost. It didn't happen. People didn't implement it. Every week introducing a new practice was too much. It would be better to leave out some practices". Perhaps related, one participant felt that while benefits were quickly experienced during the sessions, it was much harder to realize them in work-related tasks. Thus, while eight weeks is comparatively long for an organizational well-being program, it is not clear whether it is long enough to establish habits of working mindfully.

 The head of the group noticed that it was an unusual experience for the engineer-employees to start observing their emotions and feelings and talking about these experiences as part of the mindfulness exercises. This seemed to have led to a certain willingness to open up. The program provided a much richer experience for all involved. However, some also perceived this as a challenge. As one employee elaborated, "It was difficult for me to sit here with my eyes closed. I was new in the company. I thought the other people were not sitting with their eyes closed. They had their eyes open and were watching me."

Success Factors

Interviews revealed several factors that participants considered important for the program to have been experienced as successful. First, several participants thought that, given the same content, some mindfulness trainers might fail where others might succeed. Specifically, participants thought that the trainer needed to personally exemplify the qualities of mindfulness to be convincing and motivating. Participants also pointed to the important role of the ambassadors in keeping the program going. This was perceived as crucial, given that the trainer visited only once a week, but participants were asked to practice daily.

As mentioned previously, the introductory session emphasized scientific findings regarding the benefits of mindfulness. As the trainer mentioned, in developing the program he actively avoided associations with religion (Buddhism), spirituality, and even the term "meditation". Presenting mindfulness as a secular, scientific concept seemed important to get many participants on board. Presenting mindfulness as "mental training" made is accessible

to a broader group of employees. Of course, one of the questions raised by doing so, is whether something essential is lost in this reframing, and whether there are any negative consequences associated with doing so.

Furthermore, participants appreciated the hands-on applications of mindfulness to the challenges they faced at work. The program provided many suggestions on how to implement mindfulness during the workday. This seemed to have facilitated the transfer and development of mindfulness during the involvement in work-related activities.

Another important success factor was organizational support, which manifested in various forms. This ranged from supervisor support for employees to participate in the daily practice, a supportive group culture that also supported this practice (even from employees who did not participate), to the provision of a physical space for the daily practice.

Another important factor to be concerned with are the differences in expectations among participants. Organizational mindfulness training programs, such as this one, differ from open enrolment courses such as MBSR. In the latter, participant expectations are likely to be much more cohesive. According to the trainer, some participants went into the program with the hope that this was going to change their life, whereas others were largely participating because their supervisor encouraged them to do so and their colleagues were doing so.

This section described in some detail a mindfulness training program within an organizational setting and how it was experienced by the participants. The purpose was to highlight some of the unique challenges faced when practicing mindfulness in such a context, as well as some of the benefits experienced. The section also suggests that there may be a number of success factors for such programs. A second purpose was to suggest some directions for future research into the factors that influence the outcomes of organizational mindfulness training programs.

CONCLUSION

We think the case for mindfulness practices in a work context is strong. Benefits of mindfulness practices are supported by considerable research in domains other than the workplace (e.g., Chiesa & Serreti, 2011); however more research is needed to enrich the organizational mindfulness literature. Given pervasive problems such as stress, burnout, and attention overload, mindfulness can offer help to employees (Narayanan & Moynihan, 2006). The research reviewed in this chapter is beginning to provide initial evidence showing that mindfulness is related to reduced emotional exhaustion, increased job satisfaction, improved performance, and even improved work-life balance in employees. We believe that studying mindfulness can help our understanding of work and also provide practicable solutions to help address some of modern work's problems.

However, many open questions and challenges remain for us to address. From a practical perspective, it will be important to understand better the specific characteristics required for a mindfulness training program to be successful in a workplace setting. What kind of (or combinations of) exercises are best, and how should a program be adapted to fit the varying characteristics of the training participants, such as the nature of their jobs, their culture, or their position in the organization? Also, how long, how intense, and how demanding should

such programs be? More broadly, how does mindfulness training relate to, and compare with, other contemplative and health-enhancing practices, such as hatha yoga?

While these questions seem very applied, answering them will most likely require a deeper understanding of how mindfulness works, or the mediating mechanisms that link mindfulness training to outcomes such as employee burnout, emotional intelligence, task performance, helping behaviors, or work-life balance. Further, we need a better understanding of the boundary conditions, as well as possible unintended negative consequences of mindfulness training programs. For example, asking too much of participants may lead to lack of training compliance and a belief that mindfulness is not effective. Also, it has been argued that mindless performance of habitual tasks carries some advantages such as higher efficiency and less demand on self-regulatory resources (Levinthal & Rerup, 2006). For novices, acute internal awareness may sometimes be detrimental. For example, it may be better for novice surgeons to avoid being intensely aware of all of their inner turmoil during an operation. Overall, we believe that advances in our theoretical understanding of how mindfulness works in the workplace will go hand-in-hand with improved interventions.

With respect to theoretical advancements, we believe that organizational research has much to add to the literature on mindfulness. First, research in organizations can shed more light on the link between mindfulness and performance, complementing work on mindfulness and health and well-being. Second, whereas most existing research has been at the individual level, the organizational setting raises questions as to the role of mindfulness in interpersonal settings, such as in a supervisor-subordinate dyad, in project teams, or in entire organizations. Third, whereas most existing research has focused on intentional practice as an antecedent of mindfulness, one might wonder how the organizational context acts as an antecedent, facilitating or impeding the development and presence of mindfulness in employees. For example, a highly stressful or constraint work environment may make it more difficult for employees to be mindful (Reb et al, 2013). Future research could examine whether there are certain organizational cultures that allow or prevent mindfulness to emerge.

The organizational context and culture may also be highly relevant to whether an organization decides to experiment with and/or integrates mindfulness training and practices. Some organizations and their leaders may be more open than others to experiment with a concept that is rooted in contemplative traditions, traditions that may seem at odds with modern workplaces and capitalist societies. For others, mindfulness has to be couched in terms of mind fitness training or attention training. Clearly, more research is needed into what gets organizations to experiment with mindfulness, and what organizational features allow them to do so successfully.

It seems quite clear that many organizations would like to see more evidence for organizationally valued outcomes of mindfulness training. Ultimately, this extends beyond employee performance alone to measures of financial performance. This, however, raises questions as to a possible degeneration of mindfulness. From the perspective of a traditional Buddhist context, the ultimate intention of cultivating mindfulness is as part of the path to liberation. The idea of using mindfulness instrumentally to make more money for company shareholders can understandably seem weird, pointless, worrisome, or outright wrong, depending on the stance one takes. A more optimistic and pragmatic view, however, would be similar to one common to yoga's diffusion into popular Western culture: individuals attracted to the practice as a means of physical exercise may end up receiving psychological, emotional, and spiritual benefits as well.

Another criticism is that mindfulness may be used instrumentally by organizations to keep employees happy, or at least able to cope, helping to prevent change in underlying systemic features to make modern workplaces unhealthy and unfair. We believe that these are valid concerns that can help counterbalance an overly positive and optimistic view of proponents and practitioners of mindfulness (who speak partly on the basis of their personal positive experiences). Future research should also enquire into possible negative effects of mindfulness practices at the workplace.

If it is true that a veritable mindfulness revolution is sweeping the business world, then such questions will not stop the wave but add to the body of water. If, however, mindfulness training will turn out to be yet another management fad, then contemplative practitioners will soon have their practice back to themselves. From our perspective, it would be a pity if mindfulness training was reduced to nothing more than a management fad. Given the accumulating research evidence, we hope that mindfulness practises are here to stay in organizations, making a positive contribution to employee and organizational well-being and, ultimately, the well-being of the societies they are a part of.

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