University of New Mexico
UNM Digital Repository

Organization, Information and Learning Sciences
ETDs

Electronic Theses and Dissertations

Spring 5-2018

Mindfulness in the workplace: Mindful self-regulation

Sophia M. Bowers
University of New Mexico

Follow this and additional works at: https://digitalrepository.unm.edu/oils_etds

Part of the Organization Development Commons

Recommended Citation

Sophia M. Bowers

Candidate

Organization, Information & Learning Sciences

Department

This dissertation is approved, and it is acceptable in quality and form for publication:

Approved by the Dissertation Committee:

Dr. Patricia Boverie, Chairperson

Dr. Vanessa Svihla

Dr. Nick Flor

Dr. Fran Wilkinson

MINDFULNESS IN THE WORKPLACE
MINDFUL SELF-REGULATION

by

SOPHIA M. BOWERS

B.S. Engineering, New Mexico Highlands University, 1995
M.B.A, University of California Berkeley, 2003

DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Philosophy

PhD Organization, Information & Learning Sciences

The University of New Mexico
Albuquerque, New Mexico

May, 2018

DEDICATION

This is dedicated to my family who continuously support, encourage, and love me. To my father, Jim, thank you for always being my biggest cheerleader no matter what I choose to do. You laid the groundwork for this dissertation topic many years ago. Remember to breathe. To my brother, David, you have always been a constant support to me, words can't express my gratitude. I will always look up to you. To my mother, Patricia, you have quietly supported me during some of my toughest moments without needing to understand – thank you. To my nephew, Isaak, you bring me joy! Never stop exploring life.

ACKNOWLEDGEMENTS

I wholeheartedly acknowledge Dr. Patricia Boverie, my advisor and dissertation chair, for encouraging me throughout my time in the program and for taking me under her wing in my final stages when I didn't have a chair, her nudging me along moved me forward.

I also thank the rest of my committee. Dr. Vanessa Svihla, for giving me opportunities to do research in a way that was agentive and supportive, and for her persistence and patience in helping me to finally grasp some key concepts. Dr. Nick Flor, for his positive approach to questioning that made me think without discouragement. Dr. Fran Wilkinson, for her constant support of the program, the students in the program, and her teachings in qualitative research that opened me up to this type of research.

MINDFULNESS IN THE WORKPLACE
MINDFUL SELF-REGULATION

By

Sophia M. Bowers

BACHELORS OF SCIENCE, ENGINEERING

MASTERS IN BUSINESS ADMINSTRATION

DOCTOR OF PHILOSOPHY

ABSTRACT

Organizations are under pressure to perform and adapt to an ever-changing environment, creating stress on the employees, translating to direct and indirect costs to the organization. Mindfulness is recognized as an effective approach to managing stress, and has benefits on cognition, attention, and well-being, but limited research has investigated how individuals integrate mindfulness into their workplaces, which is the purpose of this study. The primary research question in this study asked how mindfulness workplace practice help individuals to self-regulate a) attention or thoughts, b) emotions, and c) both attention or thoughts and emotions and what the associated benefits are in mindfulness workplace practice. It also examined the barriers to mindfulness workplace practice and what can support it. This study addressed these questions through a qualitative exploratory approach using semi-structured interviews with working individuals who have a mindfulness practice (N=8). Each participant was interviewed three times for about thirty-minutes over a course of six to ten weeks. The interviews

were transcribed and coded using descriptive and thematic codes to reduce, analyze and report the data. A major finding in this study was self-regulation grounded specific mindfulness facets (non-judging, non-striving, acceptance, letting go) as foundational to the integration of mindfulness in the workplace. I defined this as mindful self-regulation, and found that this fostered the ability to work mindfully. Additionally, the development of community as a grassroots effort encouraged the integration of mindfulness in the workplace. Barriers to mindfulness in the workplace included time, distractions, the work culture of 'doing', and systemic pressure to perform. Support mechanisms included having a space to formally practice mindfulness, developing a community to support mindfulness, and mindful leadership.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1 INTRODUCTION

As the speed and complexity of society increases, both people and organizations need to be more resilient and adaptable in order to remain competitive (Vich, 2015). Organizations that are not able to dynamically solve problems by learning and adapting will struggle to survive (Senge, 1990). Unfortunately, the current approach to meeting the economical organizational demands tend to be in the form of tightened controls, across-the-board cuts, and restructuring plans (Heifetz, Grashow, & Linsky, 2009), essentially requiring organizations to do more with less. This approach impacts the workforce in the form of workplace stress, which has both direct and indirect costs to the organization. The effects of unmanaged stress in the workplace taxes the resilience and adaptability of employees and has the potential to decrease their professional effectiveness (Colligan & Higgins, 2006; Vich, 2015). The calculable direct costs of unmanaged stress in the workplace include lower productivity, poor job performance, and increased healthcare costs (Quick et al., 1997); the harder to quantify indirect costs include worker vitality, workplace communication, decision-making processes, and collegial relationships (Quick et al., 1997). So, while organizations need employees to be adaptable to perform well, they are also creating an environment that generates stress. Mindfulness meditation is one approach to managing stress that has recently seen an explosion of growth. Research on the use of mindfulness meditation is showing wide ranging benefits to human functioning (Brown, Ryan, & Creswell, 2007) including improved psychological functioning (Shapiro, Jazaieri, & Goldin, 2012) and wellbeing (Keng, Smoski, & Robins, 2011).

Phenomenon of interest

There is a wealth of evidence coming from psychology, neuroscience, and medicine, that mindfulness positively affects attention, cognition, emotions, behavior, and physiology (Good et al., 2016). Due to the benefits in these areas, there is a nascent body of research linking meditative mindfulness to better workplace functioning (Glomb, Duffy, Bono, & Yang, 2011). Well known organizations such as Google, Aetna, Mayo Clinic, and the U.S. Army have incorporated mindfulness training programs that have demonstrated improved workplace performance (Jha et al., 2015; Tan, 2012; West et al., 2014; Wolever et al., 2012). This study explores how individuals integrate meditative mindfulness into the workplace.

Background

Meditative mindfulness is not a new concept. It is grounded in the Buddhist tradition which is over 2,000 years old (Gethin, 2015). Within the research community, there are two main streams of mindfulness literature. The Western stream, popularized by Ellen Langer and associates in the 1970s, emphasizes cognitive processing of information and is not connected with meditation (Hart, Ivtzan, & Hart, 2013). The Eastern stream, popularized by Jon Kabat-Zinn and colleagues in the 1970s, emphasizes experiential processing of information supported by meditation (Hart et al., 2013). The research literature does not typically combine the Western and Eastern versions of mindfulness. The Western stream is more prominent in psychology and organizational science and the Eastern stream is more prominent in clinical and medical research. However, as research on mindfulness in the workplace develops, many of the new studies in this field will cite both streams. The research on mindfulness in organization science

began with Langer's conceptualization in the 1990s (Weick, Sutcliffe, & Obstfeld, 1999).

As the research in the Eastern stream gained in popularity, organizational researchers

began considering both. While this study focuses on meditative mindfulness in the

workplace, background on the evolution of mindfulness research in the organizational

literature follows to situate the study.

Western stream of mindfulness

Early research on mindfulness in organizations and the workplace generally cite

Ellen Langer's Western conceptualization of mindfulness. Langer, a social psychologist,

started her work in mindfulness by first investigating mindless behavior. Mindlessness is

characterized by automatic, habitual, and superficial cognitive processing (Langer, 1989).

While automatic behavior can be useful, an over reliance on it can be costly in terms of

performance, cognition, psychological well-being, and longevity (Langer, 1989, 1997).

Mindlessness can be defensively motivated. Repression, for example, occurs when an

individual does not want to attend to a current emotional experience (Brown & Ryan,

2003). Langer (1989) suggests that premature cognitive commitments, or the act of

accepting information without critical thought (i.e. mindlessly) forms how the

information will be used later. She differentiates mindlessness from the unconscious in

that mindlessness can be changed through mindful processing. It is through the formation

of unintentional mindsets (i.e. habits) that mindlessness grows. Mindsets can narrow or

expand possibilities, and culture and language frame and ground mindsets in concepts

and understandings of the world. Costs associated with mindlessness include a narrow

self-image, unintended cruelty, loss of control, learned helplessness, and stunted potential

(Langer, 1989).

In her investigation of the differences that arise between mindful and mindless behavior, Langer conceptualized mindfulness as the "process of drawing novel distinctions" (Langer & Moldoveanu, 2000, p. 1). Her conceptualization focuses on a cognitive approach to mindfulness (Levinthal & Rerup, 2006; Weick & Sutcliffe, 2006; Yeganeh & Kolb, 2009) and views mindfulness as a way to increase control over cognition and behavior, leading to more meaningful experiences (Carson & Langer, 2006; Yeganeh & Kolb, 2009). The foundation for Langer's mindfulness is creating new categories, welcoming new information, having multiple perspectives, having control of context, and focusing on process over outcome (Langer, 1989). Langer's view is that mindfulness increases a person's tolerance to uncertainty, which enables them to be more flexible and less reactive. Langer's approach has been referred to as "mindfulness without meditation" (Ie, Ngnoumen, & Langer, 2014), creative mindfulness (Hart et al., 2013), socio-cognitive mindfulness (Yeganeh & Kolb, 2009), and cognitive mindfulness (Levinthal & Rerup, 2006; Weick & Sutcliffe, 2006). Langer's cognitive conceptualization of mindfulness focuses on processing external information and emphasizes novel categorization and situational awareness . This conceptualization is well integrated with research in High Reliability Organizations (HROs) and information rich environments. HRO's are organizations that operate hazardous systems (i.e. air traffic control, nuclear power plants, naval air operations at sea) that require failure free standards (LaPorte & Consolini, 1991).

Weick et al. (1999) were the first to introduce mindfulness to the organizational science literature. Using Langer's concept of mindfulness and a lens of HROs, they suggest that collective mindfulness arises from the following processes: a) preoccupation

with failure, b) reluctance to simplify interpretations, c) sensitivity to operations, d) commitment to resilience, e) underspecification of structures. They assert that this state of collective mindfulness supports discovery and correction of errors before the errors can be amplified, thus, preventing catastrophes. An underlying goal of Weick et al. (1999) was to communicate the relevance of these mechanisms, which are inherent in HROs, to mainstream organizational theory, suggesting that increasing competition and complexity introduce uncertainty and turbulence. They propose that mindfulness can support successful navigation of new complex situations by revealing unexpected threats. At the core, their work is about mindfulness as a mechanism for information processing and sets the trajectory of subsequent research on mindfulness in the organizational science literature.

Building on this idea of mindfulness and information processing, Fiol and O'Connor (2003) investigate how mindfulness interacts with decision making. They use the concept of bandwagons and the trend of consolidation in the healthcare industry to frame their analysis. A premise of their study comes from (Hansen & Haas, 2001) suggesting that in today's information-rich environment the scarce resource for decision making is the mindful attention devoted to making the information meaningful. Fiol and O'Connor focus on scanning and information processing as the central decision structure for their study and propose that greater mindfulness leads to expanded scanning of information and more context relevant interpretations. This is done by building on three of the mindful behaviors described by Weick et al. (1999): greater reluctance to simplify, greater commitment to resilience, and greater preoccupation with both success and failure. They include a focus on success, which is not included in Weick et al. (1999),

based on the research in appreciative inquiry and positive future visions, though, they caution that inquiry with a focus on success may not be as active as inquiry with a focus on the possibility of failure. The authors argue that perceptual accuracy is improved with mindfulness through enabling the appropriate decision structures of scanning and interpreting information, thus minimizing decisions based on bandwagons. Continuing the trajectory of mindfulness as a mechanism for information processing, their work provides a framework for understanding the relationship between mindfulness and decision-making processes in organizations. An open research question that they identify for this this trajectory of research is to determine "whether and when mindfulness is most valuable for organizations to cultivate" (Fiol & O'Connor, 2003, p. 67). This is an important question to consider even outside of this stream of research on mindfulness.

Because Langer's work in mindfulness is rooted in mindless behavior, much of the subsequent literature on mindfulness describes mindfulness as the opposite of mindlessness, leaving many of the readers with the impression that less mindful behaviors are not beneficial (Levinthal & Rerup, 2006). However, there are notable positive aspects of less-mindful behavior in organizations. For example, (Bargh & Chartrand, 1999) indicate that automatic processes save time and energy, leaving more energy for tasks that require it. Additionally, routine-based behavior contains significant accumulated organizational experience (Levinthal & Rerup, 2006).

On the premise that automatic behavior has merit and may support mindfulness in organizations, Levinthal and Rerup (2006) examine the nuanced interrelationships between mindful and less-mindful (e.g. automatic) behaviors in organizations. The authors present a model of four interrelationships to build their argument of the

interdependence between mindful and less-mindful process. These interrelationships are 1) mindfulness and repertoires of actions, 2) processes for sustaining mindfulness, 3) mindfulness and the enactment of routines, and 4) mindfulness and the encoding of ambiguous outcomes. As part of the model, they indicate that mindful organizational behaviors support both the ability to effectively carry out novel action in a flexible manner, as well as the sustainment of a high level of attention, while less mindful organizational behaviors support valuable, routine-driven behavior and reinforcement learning. The authors emphasize that there are "important points of tension or conflict" (Levinthal & Rerup, 2006, p. 504) between mindful and less-mindful behaviors. For example, less-mindful behaviors support routines which emphasize stability and repeatability, while mindful behaviors support flexibility which stress novelty and responsiveness. The authors note that current literature on mindfulness in organizations represents "mindful and less-mindful behavior as discrete categories of cognition and behavior" (Levinthal & Rerup, 2006, p. 510) and suggest that the processes are more closely linked; this linkage warrants further research and investigation. The concept of metacognition is one way to approach the investigation of cognition and behavior and it is connected to the Eastern conceptualization of mindfulness.

Eastern stream of mindfulness

Jon Kabat-Zinn, a medical researcher, approached mindfulness from a clinical perspective, as a therapeutic approach for patients dealing with chronic pain and other issues (Kabat-Zinn, 1991). Having a personal background in meditation, he wondered if it could have any impact on the patients he worked with at the University of Massachusetts Medical Center. Investigation began informally and led to an exploratory

experimental study with psoriasis patients. The control group of the study underwent the standard UV light therapy while the experimental group underwent the same UV light therapy but were also give short duration guided meditations to listen to during the session. No additional training or meditation exercises were done at home (http://www.umassmed.edu/cfm/mindfulness-based-programs/mbsr-courses/about-mbsr/history-of-mbsr/). The significance of the meditation intervention was surprising and led Dr. Kabat-Zinn to develop a more formal intervention which started as a 10-week program for chronic pain patients (Kabat-Zinn, 1982). The study showed promising preliminary results indicating that a mindfulness training program can help reduce perceived pain in chronic pain patients. Kabat-Zinn (1982) postulates that the meditation training enabled an "uncoupling" of the pain sensation and the affective evaluation of it, thus reducing the reported perceived pain. Subsequent studies reproduced the results (Kabat-Zinn, Lipworth, Burney, Sellers, & Brew, 1984) and the program evolved into the present-day mindfulness-based stress reduction (MBSR) course.

Mindfulness Based Stress Reduction (MBSR) is an intensive training program that includes a variety of formal and informal mindfulness practices (Shapiro & Jazaieri, 2015). It is an 8-week group program and includes weekly meetings 2.5 to 3 hours in length. The meetings consist of guided meditation practice, didactic teaching on mindfulness concepts, reflection from participants, feedback from facilitators, and group discussion around challenges and insights that arise from the practice. There is a 6-hour silent retreat between Classes 6 and 7 that occurs on a weekend, and participants have "homework" consisting of various mindfulness practices including, the body scan, sitting

meditation, walking meditation, gentle yoga, and informal daily mindfulness practices (Kabat-Zinn, 1991; Shapiro & Jazaieri, 2015).

The consistent reports of positive changes in mental and physical health associated with MBSR fueled its growth and prompted a collaboration with Dr. Richard Davidson to investigate the underlying biological processes that meditative mindfulness effects (Davidson et al., 2003). This was a randomized experimental study and the participants were not the traditional clinical patients as in previous studies, they were highly stressed employees at a high-technology corporation (http://www.umassmed.edu/cfm/mindfulness-based-programs/mbsr-courses/about-mbsr/history-of-mbsr/). The experimental group participated in the MBSR program while the control group did not. Brain activity was measured before the MBSR program started, immediately after MBSR ended, and 4 months later. At the end of the MBSR the influenza vaccine was administered to all the participants. The findings show significant increases in the brain area associated with positive affect and an increase in antibodies from the influenza vaccine in the meditation group compared to the control group. This demonstration of the positive effects MBSR had on brain and immune function underscored the need for additional research and fueled the era of studying meditative mindfulness.

Conceptualization of mindfulness

Kabat-Zinn (1994, p. 4) defines mindfulness as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally". It involves metacognitive awareness (Hart et al., 2013) and has been described as "clear-eyed attention to the workings of the mind, body, and behavior" (Brown, Creswell, & Ryan,

2015, p. 1). Boyatzis and McKee (2005) offer the following interpretation of mindfulness as "the capacity to be fully aware of all that one experiences inside the self – body, mind, heart, spirit – and to pay full attention to what is happening around us – people, the natural world, our surroundings, and events" (p. 112) and indicate that it is a "healthy state of cognitive openness, curiosity, and awareness" (p. 113). When we live mindfully, we are constantly and consciously developing self-awareness which enables clarity (Boyatzis & McKee, 2005).

Fundamentally, the concept of mindfulness is concerned with consciousness (Bodhi, 2011; Brown et al., 2015). The study of which has been largely absent in the science literature due to the rise of behaviorism in the early 20th century (Davis & Thompson, 2015). However, researchers in the cognitive science fields have returned to the topic and are exploring how consciousness affects attention, emotion, and experience (Davis & Thompson, 2015). It is unclear if the increase in the consciousness research relates to the surge of research in mindfulness. Nonetheless having a parallel research effort in the cognitive science of consciousness is beneficial because it will deepen "our understanding of how contemplative attention-training practices function in traditional Buddhist and modern clinical contexts." (Davis & Thompson, 2015, p. 42).

Kabat-Zinn (1982) differentiates mindfulness meditation from other concentration meditation practices (e.g. Transcendental Meditation) in that mindfulness meditation does not restrict concentration to one object. It starts with a primary object (typically the breath) and can expand to all physical and mental events to ultimately support "detached self-observation", or meta-cognition/meta-awareness. Metacognitive awareness can be defined "as one's explicit knowledge of the current contents of thought" (Schooler et al.,

2011, p. 321). This awareness allows a person to manage their responses and impulses more skillfully (Vago & Silbersweig, 2012). Meta-awareness has been connected to open monitoring mediation (Gethin, 2015) which is defined as "nonreactively monitoring the content of the experience from moment to moment, primarily as a means to recognize the nature of emotional and cognitive patterns" (Lutz, Slagter, Dunne, & Davidson, 2008, p. 163). Metacognitive awareness is fundamental to meditative mindfulness, the concepts of which are most closely related to the practice of Vipassana or insight meditation in Buddhist traditions (Gethin, 2015). Insight mediation is practiced with the aim of improving introspective processes to alleviate suffering through attentional stability, clarity, and insight (Hart et al., 2013; Wallace & Tsong-kha-pa, 2005).

Confluence of mindfulness in organizational studies

The two streams of mindfulness research had different starting points. The Western stream started as a way to improve cognitive performance through enhancing cognitive attributes with a focus on external stimuli. While the Eastern stream started as therapeutic intervention to ease patients distress through metacognitive processes focused on internal and external stimuli. While the Western and Eastern models are notably different and unique, they share some similarities; (1) both aim to cultivate a present-oriented mind (Ie et al., 2014), (2) both share a quality of openness to considering things anew and creating new possibilities (Hart et al., 2013), (3) both share a fundamental view of the mind-body relationship as dynamic and the ability to moderate experiences through systematic mental practices (Ie et al., 2014). Finally, self-regulation is supported through both types of mindfulness (Hart et al., 2013).

Weick and Sutcliffe (2006) appear to the be first to directly introduce the Eastern

concept of mindfulness to organizational science literature. They suggest that when

individuals move away from concepts and encoding of information, outcomes are

affected more by the quality of attention than by the quantity of attention. They assert that

when individuals become more aware and accepting of the workings of the mind (e.g.

meta-cognition), they are better able to take wise action. They frame their assertion by

focusing on the state of organizing, which is more readily viewed as dynamic and

changing, as opposed to organization, which is more readily viewed as static and fixed.

The frame of organizing lends itself to the concept of impermanence which is central to

mindfulness meditation practice and views the need to reorganize an "inevitable rise and

fall of patterns that are not rooted in one's own personal agency" (Weick & Sutcliffe,

2006, p. 515). The frame of organization, on the other hand, lends itself to achieving and

maintaining a desired state and views the need to reorganize as failure. The authors define

three categories for the research in mindfulness within organizational studies. The first

category is 'distinction making'. The research in this category is grounded in Langer's

conceptualization of mindfulness and include the work of Fiol and O'Connor (2003). The

second category is 'enriched distinction making' and adds the elements of flexibility,

refinement, and dynamic sense-making to respond to diverse and changing stimuli. The

authors include the work of Weick and Sutcliffe (2001) and Levinthal and Rerup (2006)

in this category. The third category is 'beyond distinction making' and is where the

authors introduce the Eastern concept of mindfulness to their work. They ground this

category in the Buddhist concept of samatha, or the ability to reduce distraction and hold

an intended object in the mind. They state that this category of mindfulness is about

"qualities of attention such as its focus, stability, sustainability, filtering, and vividness" (Weick & Sutcliffe, 2006, p. 518) (emphasis added). This view suggests that the categorization interferes with seeing, and that by improving the quality of attention details are captured beyond normalized concepts.

Mindfulness in workplace studies

There are many studies demonstrating the effects of meditative mindfulness on the mind, the body, and behavior (Greeson, 2009). Yet there is still limited empirical research on meditative mindfulness in the workplace (Dane & Brummel, 2014). Some of the workplace related benefits of meditative mindfulness include the following: improved cognitive function (Michael D. Mrazek, Michael S. Franklin, Dawa Tarchin Phillips, Benjamin Baird, & Jonathan W. Schooler, 2013), improved decision making through debiasing the mind (Hafenbrack, Kinias, & Barsade, 2014), increased work engagement and decreased turnover intention (Dane & Brummel, 2014). Additionally, research is starting to link meditative mindfulness to the following workplace outcomes: task performance (Dane, 2011), job performance and turnover intention (Dane & Brummel, 2014), work outcomes through relationships (Giluk, Stewart, & University of Iowa. College of Business, 2010), task and relational functioning/job performance and well-being (Glomb et al., 2011).

Processes of mindfulness

Glomb et al. (2011) developed a model of mental and neurobiological processes of mindfulness practices that support improved "self-regulation of thoughts, emotions, and behaviors" (p. 115) and link them to performance and employee well-being. Both Kabat-Zinn's and Langer's conceptualization of mindfulness are included in their

discussion of mindfulness. However, their research is grounded in Kabat-Zinn's broader conceptualization of mindfulness, defining mindfulness as "nonjudgmental attention to and awareness of internal and external stimuli" (Glomb et al., 2011, p. 120). They note that the literature on mindfulness converge with a central outcome of "improved self-regulation of thoughts, emotions, behaviors, and physiological reactions" (Glomb et al., 2011, p. 123) and present a model of three core processes informed by the literature and seven secondary processes informed by the literature and interviews with meditation practitioners. These core and secondary processes link mindfulness to self-regulation and higher functioning.   The core processes consist of two mental processes and one neurobiological process – see Figure 1.
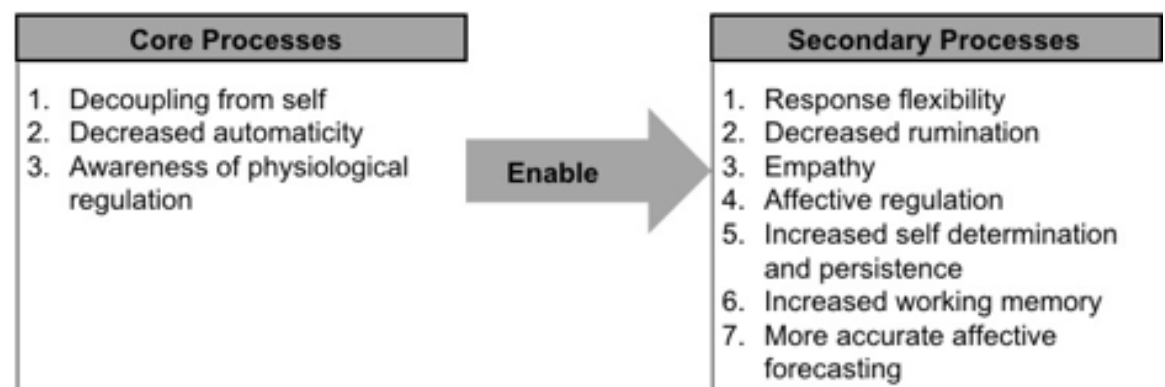
Figure 1: Core and secondary processes from Glomb et al. (2011)

Core processes

The first core process is the mental process of "'decoupling the self' (i.e., ego) from events, experiences, thoughts, and emotions" (Glomb et al., 2011, p. 124). This 'decoupling of self' is also described as 'reperceiving' (Shapiro, Carlson, Astin, & Freedman, 2006) and decentering (Safran & Segal, 1990). Mindfulness-based practices develop the ability to objectively observe stimuli without evaluating or assignment

14

meaning. This objectivity allows space between the individual and their thoughts, emotions, and experiences (Glomb et al., 2011). Shapiro et al. (2006) suggest that "reperceiving is a meta-mechanism of action" (p. 377) that informs more direct mechanisms, such as: a) self-regulation, b) values clarification, c) cognitive, emotional, and behavioral flexibility, and d) exposure. These direct mechanisms facilitate change and positive outcomes. Reperceiving is essentially a shift in perspective. It enables the individual to stand back and simply witness what is happening in the present moment, as opposed to "being immersed in the drama of our personal narrative or life story" (Shapiro et al., 2006, p. 377). Reperceiving is similar to the Western construct of decentering (Safran & Segal, 1990), which is a therapeutic change mechanism that focuses on acquiring a new experience through understanding "one's own role in constructing reality" (Safran & Segal, 1990, p. 6). The ability to decenter, or "step outside of one's immediate experience" (Safran & Segal, 1990, p. 117) creates a shift in the very nature of the experience. Feldman, Greeson, and Senville (2010) note that the process of "de-centering" involves changing the relationship we have with our thoughts rather than trying to control or alter them. Individuals "learn to view thoughts as events in the mind rather than necessarily being reflections of reality of accurate self-view." (Feldman et al., 2010, p. 1002).

The second core process is the mental process of reducing the use of automatic mental processes, or automaticity. Automaticity is relying on "engrained brain states" to "mold awareness of present-day experiences" (Glomb et al., 2011, p. 126). Like mindlessness, automaticity provides mental efficiency, which provides clear survival benefit by providing quick information processing and responses. However, it restricts

perceptions of the present moment which limit the available responses. Automatic habits that are tied to emotions and thoughts are often maladaptive. For example, dealing with stress by drinking alcohol or over eating. Mindfulness decreases automaticity by enabling the individual to observe thoughts with nonjudging awareness. Reducing automatic responses increases the range of responses and allows the person to "consciously sense and shape their thoughts" (Glomb et al., 2011, p. 127). This conscious attendance increases the flexibility in cognitive responses to situations.

The third core process is a neurobiological process of raising awareness of the regulation of physiological systems. A "present-moment nonjudgmental awareness of one's physiological state" enables "a more balanced regulation of the body's physiological response systems" (Glomb et al., 2011, p. 127).

Secondary processes

The core processes above lead to the seven secondary processes which are suggested to improve employee functioning: 1) response flexibility, 2) decreased rumination, 3) empathy, 4) affective regulation, 5) increased self-determination and persistence, 6) increased working memory, 7) more accurate affective forecasting (Glomb et al., 2011). The first five secondary processes are based on research literature and supported by qualitative interviews as part of Glomb et al. (2011). The last two are only based on the literature.

Response flexibility is the first secondary process. Siegel (2007) defines response flexibility as "the capacity to pause before action" (p. 42). This ability to slow down before responding enables a person to respond by following their goals, needs, and values as opposed to a habitual response (Brown et al., 2007). According to Siegel (2007),

16

response flexibility requires: 1) assessment of ongoing stimuli, 2) delay of reaction, 3) ability to select from a variety of responses, 4) initiation of action, which are also supported by the three core processes defined by Glomb et al. (2011). Response flexibility is supported by all three of the core processes. Benefits of response flexibility to the workplace include improved decision making and communication.

The second secondary process is 'decreased rumination'. Rumination is a "repetitive and passive focus on symptoms, causes, and consequences of distress" (Glomb et al., 2011, p. 130). The authors suggest that the possible work-related effects of 'decreased rumination' include: improved coping with stressful events, faster recovery from adverse incidents, increased confidence and self-efficacy, better problem solving, improved concentration, more effective use of social support.

The third secondary process is 'empathy.' Empathy is "the ability to see life from another's perspective" (Glomb et al., 2011, p. 132) and enables compassion. The authors suggest that the process of 'empathy' may have work-related benefits by increasing interactional and informational justice, reducing antisocial behavior, improving organizational citizenship behaviors, and supporting positive leadership behaviors. Empathy correlates to activity in the prefrontal cortex of the brain. The activity in the prefrontal cortex facilitates attunement, or neural integration, of two minds, which is foundational to relational well-being (Siegel, 2007).

The fourth secondary process is 'affective regulation.' 'Affective regulation' is the ability to reduce negative emotions and generate and maintain positive emotion. The work-related benefits suggested by the authors include improved communication,

17

improved coping with stressful events, faster recovery from adverse incidents, and fewer accidents.

The fifth is 'increased self-determination and persistence.' 'Increased self-determination and persistence' include autonomy and understanding individual values. It is through this understanding of values that people can act in congruence with them. This secondary process aligns with self-determination theory (Ryan & Deci, 2000). The work-related benefits suggested by the authors include increased goal-directed effort, improved task performance, greater learning, increased job satisfaction, increased organizational commitment, and increased performance on creative tasks.

The sixth secondary process is 'increased working memory.' 'Working memory' is the capacity to keep limited information active for a short time. Working memory is generally thought to be fixed. However, recently studies have tested the plasticity of fundamental cognitive capacities like working memory (Klingberg, 2010; Slagter, Davidson, & Lutz, 2011). Additionally, high stress has been shown to deteriorate working memory capacity (Jha, Stanley, Kiyonaga, Wong, & Gelfand, 2010). (Mrazek, Franklin, Phillips, Baird, & Schooler, 2013) found that a 2-week mindfulness training program could elicit increased working memory capacity. This and other work (e.g. Jaeggi, Buschkuehl, Jonides, & Perrig, 2008) counter the established assumption that mental ability is fixed. The work-related benefits suggested by Glomb et al. (2011) include reduced negative effect, improved ability to handle multiple demands, and ability to perform under stress.

The seventh secondary process is 'more accurate affective forecasting,' which is the ability to anticipate emotional responses to potential events accurately. The work-

related benefits suggested by the authors include less biased decision making, more accurate expectations, and less frustration and negative emotion.

Research gap

There is growing evidence of the benefits of mindfulness in the in the workplace. Organizations are building mindfulness programs into their training and development programs (Kings & Wardropper, 2016; Nottingham & Peacock, 2016; Tan, 2012). Given the emerging evidence of the benefit of mindfulness in the workplace, it is worthwhile understanding the how individuals integrate mindfulness into the workplace. Individuals as well as organizations may benefit from this research.

Definition of Terms

Agency –The emergent interactive conceptualization of agency is used in this research which views agency as being influenced by individual and the environment of the individual. This view of agency includes self-generated influences (e.g. self-efficacy, self-regulated motivation, anticipated outcomes) (Bandura, 1989).

Attunement – Attunement is awareness of self or other in a way that heightens sensitivity while regulating reactions (Teper & Inzlicht, 2014).

Compassion – Compassion can be defined as "empathy and caring in action". It requires understanding and empathy for others feelings, caring about others, and a willingness to act (Boyatzis & McKee, 2005).

Quality of attention - Quality of attention is related to 'how work is being approached', not just 'what' work is being done. It is connected to working mindfully, which is when one is able to maintain a sense of being while simultaneously doing (Glomb et al., 2011).

This is expanded from Weick and Sutcliffe (2006), which focuses on information processing to support understanding working mindfully better.

Resiliency – Resiliency is the ability to positively bounce back or rebound "from adversity, uncertainty, conflict, failure or even positive change, progress and increased responsibility" (Luthans, 2002, p. 702).

Self-regulation - Self-regulation is the ability to modify one's behavior by managing or altering habitual responses and impulses (Vago & Silbersweig, 2012). A person can self-regulate thoughts, emotions, and attentional focus (Siegel, 2007).

Purpose of the Study

The purpose of this study was to examine how beginning and experienced mindfulness practitioners integrate mindfulness in the work place. There is growing empirical evidence of the benefits of mindfulness in the workplace. Much of this evidence is through correlational studies that measure specific facets of mindfulness, or show the immediate impact of mindfulness after an intervention. They do not, necessarily explore the more nuanced factors associated with integrating mindfulness into the workplace when there is not sponsored support for mindfulness at an organizational level. The following research questions guided my investigation of how individuals integrate mindfulness into the workplace.

Research Questions

RQ1: How does mindfulness workplace practice help individuals to self-regulate a) attention or thoughts, b) emotions, and c) both attention or thoughts and emotions?

SQ1: What are the associated benefits?

RQ2: What are the barriers or challenges?

RQ3: How can mindfulness in the workplace be supported?

CHAPTER 2 REVIEW OF RELATED LITERATURE

Introduction

Mindfulness fosters well-being and increased performance in the workplace by enabling self-regulation, resiliency, and personal agency in individuals. It develops the ability to work mindfully which improves the quality of attention by individuals at work. Mindfulness also supports compassion in individuals which cultivates attunement and improves communication, leading to improved working relationships and group performance. Because of the benefits that mindfulness has shown in the workplace, a handful of progressive organizations have begun to integrate mindfulness at the organizational level, which requires high-level management support and commitment. While there are exemplars of integrating mindfulness at the organizational level, most individuals will not have this level of institutional support and face several potential obstacles.

Mindfulness fosters well-being and increased performance

Well-being is a broad term that can encompass several meanings and is commonly associated with life satisfaction and psychological health. Within the psychology research literature, well-being is generally divided into two perspectives: 1) hedonic, and 2) eudaimonic (Ryan & Deci, 2001). The hedonic view of well-being associates well-being with the happiness of an individual and is primarily a subjective measure. The most common measure of well-being in this view is subjective well-being (SWB) (Diener, 1984). SWB is a multi-facet measure consisting of: life satisfaction, the presence of a positive mood, and the absence of a negative mood. In this line of research studies have linked SWB to several personality traits: repressive-defensiveness, trust,

emotional stability, locus of control – chance, desire for control, hardiness, positive

affectivity, private collective self-esteem, and tension (DeNeve & Cooper, 1998). When

the personality traits are grouped in the Big Five factors, Neuroticism is identified as the

strongest predictor of SWB (DeNeve & Cooper, 1998). The Big Five is a grouping of

personality attributes that converged when subjected to a factor analysis (DeNeve &

Cooper, 1998). The Big Five include: 1) Extroversion, focuses on quantity and intensity

of relationships, 2) Agreeableness, focuses on quality of interpersonal relationships, 3)

Conscientiousness, focuses on task behavior and socially accepted impulse control, 4)

Neuroticisms or Emotional Stability, focuses on adjustment or lack of adjustment, 5)

Openness to Experience, focuses on intelligence, culture, creativity, broad interests, and

cognitive complexity. The personality variables in the fifth factor are often debated

leaving it open to definition (DeNeve & Cooper, 1998).

The eudaimonic view of well-being moves beyond equating well-being with

happiness, to include conceptions of well-being that rely on positive psychological

functioning and quality of life, and includes personal development and expression. It

examines how humans flourish in the face of challenges, or rather it views well-being in

terms of the fully functioning individual (Ryan & Deci, 2001). One of the early

constructs of well-being with a eudaimonic view came from Carol Ryff who theoretically

questioned what it meant to be well psychologically. In doing so, Ryff developed a

multi-dimensional concept of psychological well-being (PWB) that includes six

components of positive psychological functioning: 1) self-acceptance, 2) personal

growth, 3) purpose in life, 4) positive relations with others, 5) environmental mastery, 6)

autonomy (Ryff, 1989; Ryff & Keyes, 1995). Another eudaimonic view of well-being

comes from Waterman (1993), who suggests that well-being is supported in an individual

through living in congruence with their true self in a fully engaged manner, sometimes

described as authenticity. Waterman (1993) developed the construct of personal

expressiveness (PE) to measure the authenticity of individuals' existence. Self-

determination theory (SDT) (Ryan & Deci, 2000) is based on a eudaimonic view. In

SDT, three basic psychological needs – autonomy, competence, and relatedness – are

necessary for psychological growth, integrity, and well-being. Research suggests the that

SDT supports motivation and well-being in the workplace (Gagne & Deci, 2005).

     Well-being in the workplace is important to organizations because it can affect

productivity, absenteeism, and overall contributions to the organization (see (Danna,

1999). Some of the early conceptualizations of well-being in the workplace leveraged

more of a hedonic view. However, more recently the conceptualizations take a combined,

hedonic and eudaimonic view and include measures that can be influenced by the

organization (Harter, Schmidt, & Keyes). There is not a single definition of workplace or

employee well-being. Studies will include multiple measures to develop a construct for

workplace or employee well-being. Some of the measures that have been used to

comprise employee or workplace wellbeing include: needs satisfaction, job satisfaction,

emotional exhaustion, work-related stress, and emotional distress (Reb, Narayanan, &

Ho, 2015; Shonin, Gordon, Dunn, Singh, & Griffiths, 2014).

     Mindfulness has been linked to well-being since its early days in clinical research

(Kabat-Zinn, 1991). A common way to measure mindfulness in non-clinical settings is

the Mindful Attention Awareness Scale (Brown & Ryan, 2003). Brown and Ryan (2003)

developed the MAAS to facilitate studying the relationship between mindfulness and

well-being. They show through correlational, quasi-experimental, and laboratory studies that the unique quality of consciousness that mindfulness supports (attention and awareness) is related to several well-being constructs, including traits and attributes, emotional disturbance, emotional-subjective well-being, eudaimonic well-being, and physical well-being (Brown & Ryan, 2003). Their overall finding is that mindfulness is associated with several well-being indicators and it is measuring a different construct. Because MAAS is validated in non-clinical settings it is often cited in mindfulness research in the workplace (Choi & Leroy, 2015) and has been foundational in the development of mindfulness research.

Performance measures are ubiquitous and necessary in the workplace. At the organizational level, performance measures help to determine the health of an organization. The purpose of performance measures is to quantify the effectiveness and/or efficiency of action (Neely, Gregory, & Platts, 1995). They inform decisions and provide details on how the decisions are affecting business or operations of the organization. Approaches to determining what to measure include approaches like the balanced scorecard (Kaplan & Norton, 1992), which engages with senior management in a way that surfaces and resolves differences in strategic priorities, and Eccles and Pyburn (1992) process to clarify a performance model that links changes in knowledge and processes to the financial performance of the organization. The implementation of these performance models push down into performance measures at the individual level. Job performance at the individual level can be viewed as a property of behavior which affects organizational effectiveness (Motowidlo, 2003). Performance measures can be broadly categorized into task performance and contextual performance (Motowidlo & van

Scotter, 1994). Task performance supports the technical core of the organization, while contextual performance supports the broader organizational, social, and psychological environment (Motowidlo & van Scotter, 1994). Performance measures vary by organization depending on their technical core, strategic vision, and culture. Performance has been linked to well-being in employees, though it is important to note that the construct of well-being in these studies varies and may include hedonic and/or eudaimonic measures (Cropanzano & Wright, 1999; Culbertson, Fullagar, & Mills, 2010; Harter et al.; Wright & Cropanzano, 2000).

Studies have shown mindfulness to be related to overall performance. For example, Shao and Skarlicki (2009) demonstrated a relationship between mindfulness and academic performance in an MBA program. They theorized that mindfulness relates to performance because it enables focus, which is positively related to performance-related tasks necessary for sustained effort and motivation. They measured academic performance as an index of performance consisting of the average of the students' course grades, their project work, and their class participation grade, and mindfulness was measured with MAAS. They found that mindfulness was positively related to performance for women but not for men in this study. While this study has its limitations, which include, a low response rate, a gender imbalance, and localized to one business school, it is one of the early studies that looks at mindfulness and performance with an eye toward organizations. Dane and Brummel (2014) is an interesting study that demonstrates the relationship between mindfulness and performance in a dynamic setting, specifically restaurant servers. It is situated in a work setting and uses survey data from restaurant servers to measure work engagement, turnover intention, and

26

mindfulness (measured with MAAS). They also had the workers' managers assess their job performance. Dane and Brummel (2014) suggest that the role mindfulness plays in job performance in a dynamic work setting is that it enables tending to the present moment while maintaining a large breadth of attention to what is happening in the background (Dane, 2011).

Moreover, mindfulness has been shown to improve both well-being and performance in the workplace. Reb et al. (2015) examine how different dimensions of well-being and performance relate to mindfulness. Using surveys from two different samples they examine the relationship between both awareness and absent-mindedness with various dimensions of employee well-being and employee performance. They looked at possible antecedents, or environmental factors, that may relate to mindfulness and absent-mindedness. They specifically look at how awareness and absent-mindedness relate to various dimensions of well-being and performance and how organizational constraints may affect awareness and absent-mindedness. Instead of using MAAS to measure awareness, they adapt selected items from the Five Factor Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) to fit the work context, with three items measuring awareness at work and four items measuring absent-mindedness at work. This was an interesting approach because the benefit of FFMQ is that it is a multi-dimensional construct of mindfulness that measures the following mindfulness skills: (a) observing, (b) acting with awareness, (c) describing, (d) non-reactivity, and (e) non-judging of inner experience, and they only use one facet of the measure. While it is unclear why they made the decision to adapt FFMQ over MAAS, their scale adaptation showed favorable internal consistency reliability (Cronbach alpha >

0.7). Table 1 provides a table with the measures and instruments for both samples. Results indicate awareness had a significant relationship with all well-being measures, which supports Brown and Ryan's (2003) findings that attention and awareness is related to well-being and extends it to measure of well-being specifically focused on the workplace. Absent-mindedness was only significantly correlated the emotional exhaustion measure of well-being leading one to question if there is a causal relationship. They also found that awareness to be a significant predictor of task performance and OCB but not deviance, while absent-mindedness was negatively related to task performance and deviance but not related to OCB. They also explore possible conditions that facilitate mindfulness at work with the premise that mindfulness may not only be influenced at an individual level but also by environmental or situational variables; Reb and colleagues termed these antecedents of employee mindfulness. Regarding antecedents to mindfulness, supervisor support and job autonomy were positively related to employee awareness but not employee absent-mindedness. Only focusing on awareness and absent-mindedness dimensions of mindfulness was a stated limitation by the authors.

Table 1: Constructs for Reb e.t al. (2015)

Construct	Measure
Employee well-being	Emotional exhaustion (S1)
	Job satisfaction (S1, S2)
	Needs satisfaction (S2)
Employee performance	Task performance (S1, S2)
	Deviance (S1)
	Organizational Citizenship Behavior (OCB) (S2)
Antecedents of mindfulness	Organizational constraints (S1, S2)
	Job autonomy (S1, S2)
	Supervisor support (S1)
	Task routineness (S2)

Using a mindfulness based intervention (MBI), Shonin et al. (2014) show that mindfulness significantly improves work-related well-being and performance outcomes. They used the Meditation Awareness Training (MAT) developed by Van Gordon, Shonin, Sumich, Sundin, and Griffiths (2014) as an experimental intervention to study the effect of an MBI on work-related well-being (WRW) and job performance in full-time employees. Work-related well-being was comprised of multiple measures as shown in Table 2. The target population was office-based middle-hierarchy managers, which tend to have high work related stress because they face demands from both upper management and their employees. They hypothesize that the MAT trained participants would demonstrate significant improvements in WRW and job performance outcomes in relation to the non-meditating control group. The intervention for the control group was an education program based on cognitive-behavioral theory and principals. The results for both the control group and the mindfulness based intervention, show initial positive impact on work-related stress, job satisfaction, psychological distress, and job performance. However, they also did a three-month follow-up test to determine if the gains would be maintained. Both job satisfaction, and work-related stress returned to baseline levels for the control group, while the mindfulness intervention group maintained significant improvements in all the work-related well-being measures as well as performance measures, suggesting sustained benefits of mindfulness interventions to the workplace.

Table 2: Constructs for work-related well-being and performance used by Shonin et al. (2014)

Construct	Measure
Work-related well-being	Work-related stress
	Job satisfaction
	Emotional distress
Performance	Role performance

These studies above show a connection between well-being and increased performance in the workplace. The benefit of mindfulness intervention is a demonstrated sustained benefit to well-being and performance measures (Shonin et al., 2014). Reb et al. (2015) show the antecedents of mindfulness in the workplace that come from the organization. Shao and Skarlicki (2009) theorize the connection of mindfulness to performance is through enabling focus, while Dane and Brummel (2014) indicate it is through its ability to improve cognitive flexibility and alertness and guard against distractions and performance blunders. Self-regulation is central to these abilities which are grounded in the ability to focus.

Mindfulness develops self-regulation, a critical skill for the workplace

Self-regulation is one of the most commonly cited benefits of mindfulness (Glomb, Duffy, Bono, & Yang, 2011). It is often equated to self-control because at a basic level, self-regulation is the ability to modify one's behavior by managing or altering habitual responses and impulses (Vago & Silbersweig, 2012). Moving beyond the basics of self-control, self-regulation can be viewed as an internal process that is purposeful, meaning the self-corrective adjustments are made to maintain the purpose being served, or the underlying intention. Self-regulation shapes how we interact with our emotions,

thoughts, attentional focus and habitual responses in the present moment (Siegel, 2007).

As such, it requires present-moment awareness (Vago & Silbersweig, 2012), which

mindfulness fosters. Mindfulness provides a "reflective space in which people can make

informed choices and respond adaptively to situations, rather than reacting automatically

and on impulse" (Hart, Ivtzan, & Hart, 2013, p. 460). Furthermore, mindfulness increases

self-knowledge, which is a key element of self-regulation (Brown & Ryan, 2003).

Mindfulness strengthens the ability to reduce automatic and habitual responses which is

fundamental for work engagement and well-being (Malinowski & Lim, 2015).

Tasks are at the heart of work. They support the technical core of an organization

(Motowidlo & van Scotter, 1994). Research suggests that attentional focus improves task

performance. With the premise that attending to a task without distraction underlies

performance, Mrazek, Franklin, Phillips, Baird, and Schooler (2013) investigated how

mindfulness training enhances cognitive ability that cannot be attributed to specific

training or testing contexts in a randomized controlled experiment. They studied the

effect of a 2-week mindfulness training course on reading comprehension, working

memory capacity (WMC), and mind wandering in college students taking the Graduate

Records Examination (GRE). Participants were randomly assigned to a mindfulness

class or a nutrition class that met for 45 minutes four times a week for two weeks. The

mindfulness class stressed posture and mental strategies and included 10 to 20 minutes of

focused attention to a sensory experience (breath, taste, sound) with time for group

reflection. It also required participants to meditate daily for 10 minutes outside of class.

The nutrition class included topics in nutrition science and healthy eating strategies. The

participants were required to keep a log of their daily food intake but were not asked to

make dietary changes. The pre-test in this study included a WMC task and a modified verbal-reasoning section from the GRE, which provided the measure for reading comprehension. The pre-test results between mindfulness class participants and nutrition class participants show no significant differences in GRE accuracy, in WMC, or in probe-caught, self-caught, or retrospectively caught mind wandering. The post-test results showed significant differences for each of the performance and mind-wandering variables between the mindfulness training and nutrition training. The nutrition training program did not cause changes in performance or mind wandering, while the mindfulness training led to improved performance mediated by reduced mind wandering. The results indicate mindfulness training improved task focus and execution.

Emotional self-regulation increases impulse control and allows an individual to maintain a sense of calm Goleman (1998) which can help with decision making, a vital skill in the workplace. Research has demonstrated a causal relationship between mindfulness and improved decision making (Hafenbrack, Kinias, & Barsade, 2014). First, (Hafenbrack et al., 2014) used a correlational design to investigate the relationship between mindfulness and decision making, specifically the sunk-cost bias. Two known factors that affect sunk-cost bias, age and self-esteem, were used as controls in this study. Using Amazon's Mechanical Turk survey platform, they recruited participants and had them complete the MAAS questionnaire as well as the Resisting Sunk Costs (RSC) subsection of the Adult Decision-Making Competence Inventory (Bruine de Bruin, Parker, & Fischhoff, 2007) and the Self-Esteem Scale (Rosenberg, 1986). The RSC consists of 10 questions with sunk-cost scenarios and participants use a 6-point scale to respond. The self-esteem questionnaire was used to control for self-esteem in the

analysis. The results of the study show a positive relationship between trait mindfulness and resistance of sunk-cost bias. They then examined the relationship of mindfulness and resistance of sunk-cost bias experimentally to test for the causal relationship. They started with two experimental studies, that use a mindfulness meditation manipulation to test the causal relationship between state-mindfulness and the sunk-cost bias. The manipulation is a 15-minute recorded guided breathing meditation exercise. The control was a 15-minute recording that repeatedly tells participants to think of whatever came to mind. Participants then completed a decision-making task; the outcome indicated if they resist the sunk-cost bias. The results of both studies show that a short guided mindfulness-meditation increased the resistance to the sunk-cost bias. Finally, a third experimental study examined the underlying state mindfulness mechanisms that influence the resistance to sunk-cost bias. The researchers hypothesized that mindfulness supports the resistance of the sunk-cost bias through enabling a decreased focus on the future and the past which reduces the negative effect. In addition to replicating the previous findings, this study also found that mindfulness meditation reduced the temporal focus on the future and past, thus reducing negative affect and leading to an increased resistance to the sunk-cost bias. The authors note that results required only a brief recorded mindfulness-meditation induction as opposed to 8 weeks of face to face training. These findings suggest that engaging in mindfulness meditation prior making decisions may be beneficial.

Self-regulation supports maintaining a sense of calm in the face of ambiguity (Goleman, 1998) which is helpful in learning and problem solving (Hjeltnes, Binder, Moltu, & Dundas, 2015). Mindfulness has been shown to improve problem solving as

well, specifically insight problems, which are problems that require restructuring in order to be solved (Ostafin & Kassman, 2012). Most organizations and people have processes for solving noninsight problems, whereas the ability to solve problems creatively may not be as common. In two experimental studies, Ostafin and Kassman (2012) found a relationship between mindfulness and creative problem-solving. In these studies, creativity was operationalized as the ability to solve insight problems developed by Schooler, Ohlsson, and Brooks (1993), and mindfulness was measured using MAAS. Participants were undergraduates who completed the study for course credit. They were asked to complete the MAAS questionnaire first and then they were invited to solve both insight and noninsight problems. The results of the first study suggest that trait mindfulness contributes to creative problem-solving. Thus, to provide further evidence of the relationship, the researchers did a second study to replicate and extend their findings by adding a state mindfulness question, adapted from MAAS, a state positive affect measure (SAM), and a brief mindfulness intervention with a control group. The results of the second study replicated the relationship between mindfulness and creative problem-solving, while positive affect was not shown to account for the relationship. The mindfulness training was shown to improve insight problem solving and was partially mediated by state mindfulness. While this study does not show causality, the findings indicate that the ability to attend to the present moment is related to the ability to solve problems creatively.

Self-regulation is a central benefit to mindfulness in the workplace (Glomb et al., 2011). It enhances the ability to control emotions and stay focused on the present moment, thus minimizing impulsive behavior and habitual responses and improving task

performance, creative problem solving and decision making. The ability self-regulation provides in shaping how we interact with our emotions and thoughts supports resiliency (Rothstein, McLarnon, & King, 2016).

Mindfulness supports resiliency, a key component to well-being in the workplace

Resiliency is defined as the ability positively bounce back or rebound "from adversity, uncertainty, conflict, failure or even positive change, progress and increased responsibility" (F. Luthans, 2002, p. 702). Resiliency is important to organizations. As King, Newman, and Luthans (2016) point out organizations are often faced with competitive pressures requiring change and more complex work requirements. Resiliency supports well-being and performance of employees (see (Robertson, Cooper, Sarkar, & Curran, 2015) and enables the ability to thrive, even in the face of workplace adversity (Jackson, Firtko, & Edenborough, 2007).

Within the psychology research field, it is commonly understood as a dynamic process that involves, among other things, self-regulation of emotions (Rothstein et al., 2016). Resiliency in organizations may be measured several ways. Within the positive organizational behavioral field, resiliency is commonly measured as part of the Psychological Capital (PsyCap) questionnaire (F. Luthans, Youssef, & Avolio, 2007). PsyCap consists of four measures: hope, self-efficacy, optimism, and resiliency, which have been shown to relate to well-being (Avey, Luthans, Smith, & Palmer, 2010). For example, Psychological capital is suggested to provide organizations with a competitive advantage (Toor & Ofori, 2010) and is associated with performance (B. C. Luthans, Luthans, & Jensen, 2012), positive work behavior (Avey et al., 2010), and well-being (Roche, Haar, & Luthans, 2014). PsyCap interesting to organizational research because

35

the components are "state-like" and can be developed through intervention (Avey et al., 2010).

Good et al. (2016) suggests that mindfulness may foster resilience in stressful work situations (i.e., layoffs, office politics, an abusive boss) through supporting a "decentered perspective" (Bishop et al., 2004; Carmody & Baer, 2008) or the 'decoupling the self" process (Glomb et al., 2011). The decoupling of the external experience from the automatic physical and emotional response is a first step in a resilient response (e.g. positively recover from adverse situation). A mindful response allows for "greater response flexibility across stressful and adverse situations" (Glomb et al., 2011, p. 131).

The healthcare profession is often stressful and demanding highlighting the need for proactive measures to support resilience and well-being (Epstein, 2014). Epstein (2014) suggests that mindfulness training can help support resilience in healthcare professionals because many times withdrawal and turning from distress is the first step in loosing resilience and mindfulness practice turns towards discomfort. Strategies of resilient physicians include mindful related concepts such as acceptance, gratitude, reflection, self-awareness and reflexivity (Zwack & Schweitzer, 2013).

Enacting mindfulness is agentive

Agency is the ability to take action that produces a desired result. While there are several conceptualizations of agency, the emergent interactive conceptualization of agency views both individuals and the environment as influential in the action taken. Bandura (1989) uses this conceptualization of agency in his social cognitive theory, which describes a model of triadic reciprocal causation. The triadic reciprocal causation model suggests that human action is based on three variables: environment, behavior, and

person, where person encompasses cognitive factors and affect (Bandura, 1989). This view of agency includes self-generated influences, such as, self-efficacy, self-regulated motivation, and anticipated outcomes. It is useful when considering agency in organizations because it acknowledges relationship between the organization and agency. Lounsbury (2003) cites this interrelationship between agency and structure, in his call for organizational studies to move beyond a static, process-oriented analysis to include more of the complexities that are inherent in institutions.

Agency has been associated with well-being and human development (Welzel & Inglehart, 2010) and a core component in the conceptualization of hope. Hope is a positive psychology construct that was first introduced by Snyder et al. (1991). They define hope as "a cognitive set that is based on a reciprocally derived sense of successful: (a) agency (goal-directed determination) and (b) pathways (planning of ways to meet goals)" (Snyder et al., 1991, p. 570). These have been referred to as willpower (agency) and way power (pathways) (Donaldson & Ko, 2010). To better frame hope for human resource development (HRD) research F. Luthans and Jensen (2002) added having a goal to Snyder's conceptualization of hope. This expanded conceptualization of hope is part of PsyCap, which measures hope, self-efficacy, resiliency, and optimism, as state-like variables which can be "developed within organizational members through workplace interventions and proactive management" (F. Luthans & Youssef, 2004, p. 152). Positive psychological capital is different from others sources of competitive advantage for organizations in that it can be renewed (F. Luthans & Youssef, 2004). Finally, mindfulness has been shown to increase hope, of which agency is foundational, which supports increased work engagement (Malinowski & Lim, 2015).

Mindfulness builds agency by providing a sense a calm amid stress (Hjeltnes et al., 2015). In a qualitative study examining how an MBSR program helped university students with academic evaluation anxiety face their fear of failure, Hjeltnes et al. (2015) found that mindfulness provided the students with practical ways to feel calm, thus providing a growing sense of agency. In the workplace, mindfulness has been shown to generate agency through enabling a "renewed ability to cope with work demands and stress" (Hugh-Jones, Rose, Koutsopoulou, & Simms-Ellis, 2017, p. 7). Mindfulness creates the conditions for developing a personal sense of agency through providing tools that provide individuals with a sense of control (Allen, Bromley, Kuyken, & Sonnenberg, 2009).

A sense of control is often used by Langer in her writings on mindfulness. For example, "Mindful awareness of different options gives us greater control. This feeling of greater control, in turn, encourages us to be more mindful. Rather than being a chore, mindfulness engages us in a continuing momentum" (Langer, 1989, pp. 201-202). Siegel (2007) suggests that Langer's use of the term control signifies a feeling of agency, where the locus of control ties into feelings of agency which support well-being (Welzel & Inglehart, 2010). Mindfulness within the eastern conceptualization supports agency through the response flexibility it enables, such that more options present themselves when we are mindful, thus providing a sense having a choice of how to respond to situations that we cannot necessarily change. Intention, then, becomes central to this sense of agency, as Siegel (2007) states "we become an agent of intention, not a controller of perspectives" (p. 248).

Agency of the present is beneficial when navigating the ever-changing dynamics in organizational life because it supports a balanced and temporal framing of sensemaking (Guiette & Vandenbempt, 2016). Sensemaking in organizational studies is a framework for the process of how individuals negotiate and create understanding based on perception, cognition, action and memory (Weick, 1995). Sensemaking is an ongoing process of organizing that occurs by comprehending a situation explicitly and turning this understanding into action (Weick, Sutcliffe, & Obstfeld, 2005). Within sensemaking, action and thought necessary. However, there is need to balance the complexity of thought that is requires with less complexity of action (Colville, Brown, & Pye, 2012). Mindfulness enables making sense of this complexity in a reflexive way that Guiette and Vandenbempt (2016) term mindful coping. Mindful coping "interrupts automatic patterns of conditioned behaviour whereby practitioners become aware of their predominant detachment in making sense of complexity" (Guiette & Vandenbempt, 2016, p. 90). Sensemaking grounded in mindful coping is temporally located in the present moment, enabling the ability to reflexively make sense of the unfolding cues in the "here and now" (Guiette & Vandenbempt, 2016). It embodies the concepts of 'real-time reflexivity' (Weick, 2002), 'reflection-in-practice' (Schön, 1983), 'inquiry' (Dewey, 1910) which are associated with the quality of attention that Weick, Sutcliffe, and Obstfeld (1999) discussed in their conceptualization of collective mindfulness in organizations.

Working mindfully improves the quality of attention

In their broadening view of mindfulness in organizations, Weick and Putnam (2006) suggest that the quality of attention is key for improved organizational functioning. This quality of attention, which is supported by meditation, can diminish

39

dependence on concepts (Weick & Putnam, 2006) and increase focus on sources of distractions in a way that mitigates their negative impacts to work (Mrazek et al., 2013). The essence of Weick and Putnam's (2006) 'quality of attention' and 'quantity of attention' can be expanded to work in general by considering 'how' work is approached, not just 'what' work is being done. Good et al. (2016) suggests that one can 'work mindfully' when they can work with awareness in the present moment. More specifically, 'working mindfully' requires maintaining a sense of being while simultaneously doing.

Reid (2009) offers some insight into 'working mindfully' may be approached in the occupational therapy (OT) profession through her single case discussion which provides a framework for bringing mindfulness into the OT profession. She suggests that mindfulness can inform and enhance the OT's capabilities, specifically around managing change. A focus on being curious and open to novel situations, particularly around cultural differences is part of working mindfully in an OT setting. Openness supports the ability to be more sensitive to client's cultural and personal beliefs. Focusing on the immediate experiences with its nuances and then building from there with knowledge and skills of the OT profession can be considered 'working mindfully' within the context of the OT profession. Working mindfully will vary from profession to profession, however, the notion of mindful presence is foundational in all contexts. It combines the present moment focus with a broad attentional breadth discussed in Dane (2011), while maintaining the other aspects of mindfulness, including attitude and intention. This supports compassion, attunement, communication, and interpersonal relationships.

Mindfulness supports compassion

Mindfulness training has been shown to improve compassion (Birnie, Speca, & Carlson, 2010; Hjeltnes et al., 2015). Compassion, as manifest in caring relationships has been linked to resiliency of change (Wilson & Ferch, 2005). Similar to resilience, compassion is considered a character strength supported by meditation (Ireland, 2013). Mindfulness enables compassion through the process of empathy, where empathy is "the ability to see life from another's perspective" (Glomb et al., 2011, p. 132).

Boyatzis and McKee (2005) define compassion as "empathy and caring in action" and suggest that compassion has three components, (1) understanding and empathy for others' feelings, (2) caring for others, (3) willingness to act on those feelings of care and empathy. They assert that compassion in the workplace both favorably impacts the bottom line and enables sustainable effectiveness of leaders. Work-related benefits of compassion include increased interactional and information justice, reduction of antisocial behavior, improved organizational citizenship behaviors, and positive leadership behaviors (Glomb et al., 2011). Lilius et al. (2008) note that experiencing compassion at work generates positive emotion and affective organizational commitment.

There are several ways that compassion manifests in the workplace. Boyatzis and McKee (2005) suggest that cultivating compassion at work simply starts with listening. While Lilius et al. (2008) offer the follow forms of compassion at work: (1) giving emotional support, (2) giving time and providing flexibility, and (3) giving material goods. Dangers of compassion at work include, the potential to inhibit decisions oriented to maximizing profits (i.e. layoffs) (Good et al., 2016) and the potential to be viewed as weak or less competitive.

Mindfulness cultivates attunement

Siegel (2007) suggests that mindful awareness is form of intrapersonal attunement and supports interpersonal attunement. Attunement is a concept used in interpersonal relationship studies to examine how one person focuses attention on the internal world of another person (Siegel, 2007). Sensitivity in the form of being able to accurately detect something, is one way to think about attunement. For example, meditation practitioners who focus on internal sensations (i.e. breath) tend to have enhanced sensitivity to internal stimuli (Teper & Inzlicht, 2014). At the heart of this sensitivity is awareness. Thus, attunement is awareness. The acceptance facet of mindfulness acts to attenuates or regulate this heightened sensitivity to stimuli (Teper & Inzlicht, 2014). So, while mindful individuals may have heightened sensitivity to internal stimuli (i.e. emotions) they seem to be able to regulate their reactions (Teper & Inzlicht, 2014). From a work perspective, this ability to regulate reactions may affect how open individuals are to constructive criticism and feedback (Hyland, Lee, & Mills, 2015). Additionally, Dane (2011) notes that mindfulness enables individuals to be "attuned to a relatively large number of external and internal phenomena" (p. 1001) which is helpful in dynamic work settings which require individuals to have a wide attentional breadth. Furthermore, empathy or compassion enable individuals to be attuned to subtle communication queues from others (Goleman, 1998). We are social creatures and attunement enables a sense of "feeling felt" or connection with another person which fosters community. For example, attunement to the "emotional undercurrents of individuals and the group as a whole" (p. 59) enhances the emotional intelligence and functioning of the team (Goleman, Boyatzis, & McKee,

2002). Siegel (2009) refers to this as attuned communication and suggests that it is found in healthy relationships worldwide.

Mindfulness improves communication

Goleman (1995) added communication skills to the construct of emotional intelligence, specifically around the understanding and expression of emotions. Glomb et al. (2011) suggests that mindfulness improves communication through enabling more flexible responses and regulating affect. This is supported in Huston, Garland, and Farb (2011) where they found evidence that mindfulness training reduced negative reactivity in communication. It is also supported Jones and Hansen (2015) who found evidence that mindful individuals can manage verbal information more effectively. They suggest that this is due to the connection of our awareness of thoughts to our stream of consciousness which includes words and images. They also found that mindfulness moderates the interpretation of verbal communication of others and minimizes dysfunctional communicative coping strategies, such as blaming others, avoidance, and expressions of anger and aggression.

Mindful communication has been shown to improve well-being and medical care provided through improved "ability to be attentive and listen deeply to patients' concerns, respond to patients more effectively, and develop adaptive reserve (Beckman et al., 2012, p. 815) or rather, mindful listening. Mindful listening means "being fully present to oneself and the person to whom one is listening" (Ozum, 2006, p. 1026). It requires self-awareness, and awareness of the other, which can also be described as attunement. A study investigating the relationship of mindfulness and self-compassion with psychological distress and communication found a trend showing that mindfulness of a

43

partner related to more open communication of an individual (Schellekens et al., 2017). This ability to garner more open communication can be very useful in the workplace, where communication is necessary. Organizational learning relies on the making information that resides inside of individuals explicit (Nonaka, 1994).

Mindfulness in the workplace leads to improved working relationships and group performance

Improved relationship functioning helps develop a positive spiral of learning, organizing, and performing in the workplace. Mindfulness may improve relation functioning through compassion, attunement, and mindful communication. Wachs and Cordova (2007) suggest that mindfulness improves relationships and communication by increasing both attunement and the capacity to communicate emotional information. Though the focus of Wachs and Cordova (2007) was on intimate relationships, there is evidence that mindfulness can support improved relationships and group performance in the workplace.

Using an experimental mixed method design, Cleirigh and Greaney (2015) examined the effects of mindfulness training on group task performance. Additionally, the researchers examined the differences in group cohesion. Participants were placed in one of two conditions, mindfulness and control. All participants were asked to complete a Mindfulness Attitudes Scale (MAS) questionnaire which was developed by the researchers to measure attitudes towards mindfulness and was used to control for participants with a negative attitude towards mindfulness. Participants were then asked to partake in an intervention. The participants in the mindfulness condition were given a brief mindfulness intervention lasting 10 minutes. It consisted of an introduction to

mindfulness, a breath awareness exercise, and an emotional experience exercise. The participants in the control condition were given a neutral intervention which consisted of two educational recordings from a public radio station. State mindfulness of all the participants was then measured using the Toronto Mindfulness (TMS) (Lau et al., 2006). The TMS measures two-factors of mindfulness, "curiosity (the level of openness and curiosity to experience) and decentering (the awareness of thoughts without becoming entangled in them)" (Lau et al., 2006, p. 603). Participants were then split into groups of four. These smaller groups only contained members of the same condition. The groups were asked to complete a group winter survival task as described in Johnson and Johnson (2000). Group task performance was assessed through decisions of the group compared to expert solutions. After the group task the participants completed the TMS again to measure state mindfulness and group cohesion was measured. Results indicate that mindfulness has a positive effect on group performance. The mindfulness condition scored significantly higher in the group task. Additionally, the results indicate a possible relationship between group performance and group cohesion. An interesting addition to this study would be to video tape the group task to analyze the interactions of the participants to determine what behaviors influenced the final group task result. This type of data might lend itself to the creation of a mindfulness interaction analysis grounded in self-report mindfulness scales which would be beneficial in guiding qualitative studies that move beyond interview data to include observational measures.

In a multiple-baseline design study, Singh et al. (2002) measured the effect that a mindfulness training intervention given to a treatment team had on quality of care as measured by family friendliness. The intervention includes general mindfulness concepts,

meditation practice focused on present-moment awareness, and application of the seven characteristics of mindfulness (Kabat-Zinn, 1991) to specific aspects of the treatment team planning. A particularly interesting aspect of this study is that the initial intervention was planned to only be an overview of mindfulness concepts and practices as a general method of self-discovery and self-development useful in everyday life. Through the discussion in this portion of the intervention, the team requested basic training in mindfulness meditation and its application to treatment team functioning. This keen interest resulted in training that the team asked for, as opposed to being required. Thus, the locus of control was internal, not external, resulting in active engagement in the development of the intervention. Results showed a significant and sustainable increase in family friendliness measure of the team. The researchers state that while the mindfulness training was effective in this setting, it may not be so all the time, noting that effectiveness at a team level requires a culture that advocates, encourages, and reinforces it.

Integration of mindfulness at the organizational level is rare

While there is growing evidence that mindfulness has positive effects for the workplace, it is not ubiquitous. As Singh et al. (2002) point out, success of a mindfulness intervention in a group work setting may require a culture that advocates, encourages, and reinforces it. Many times, this requires high level management support.

Kings and Wardropper (2016) present a case study on mindfulness at a large financial organization. One of the authors, Emma Wardropper, is the human resource (HR) champion for mindfulness with the organization as was responsible for the initiation and integration of mindfulness into the culture and values at the organization. The

organizational culture is one that is competitive and forward-thinking. Though it is a very demanding and busy environment, absentee levels due to sickness is lower than industry standards. Yet HR were seeing trends in the workforce around the need to more effectively cope with stress and meet performance requirements.

This prompted meetings with senior stakeholders to garner their support in establishing mindfulness program. Success at other well established large organizations helped in gaining the necessary executive support. The mindfulness program was introduced slowly, starting first with two-hour introduction workshops, the success of which lead to the offering of a pilot full 8-week MBSR based course that was adapted to reflect the values of the organization and maintain a consistent tone and language of the company.

Self-report measures for stress and mindfulness were administered before and after the 8-week course and showed significantly lower stress and higher mindfulness in participants of the 8-week course. Additionally, Qualitative data in the form of narrative feedback was gathered and analyzed. The analysis of the pilot course resulted in a compelling case to senior stakeholders to fund an ongoing offering of this adapted 8-week course. In addition to supporting on-going 8-week course offerings to employees, the organization added a physical space for employees to practice that has meditation cushions and stools, as well as large acoustic-style chairs equipped for guided meditation recordings. In addition, monthly follow-up sessions, a buddy system, and a dedicated mindfulness intranet website was supported by the organization to support employees maintaining a regular practice.

Similarly, Nottingham and Peacock (2016) present a case study of a mindfulness training program that developed over an eight-year journey at a large international media organization. This program was also spearheaded by HR and had a goal of weaving mindfulness into the organizational culture through adding a mindfulness based program into the training and development curriculum. To do so, senior executive support was essential but the concept of mindfulness was out of their comfort zone so an experiential leadership program based on mindfulness was delivered first. The training enabled a shared experience that enhanced relationships through a sense of collective responsibility and promoted better communication between teams and clients. The success of this senior leadership training enabled the HR team to develop a six-week MBI; they call The Mindful Advantage. This training was implemented slowly, as an evolution not revolution. To provide a return on investment (ROI) for management participants fill out a questionnaire at the beginning of the six-week program and the end. Results showed significant positive changes using matched-pairs test. Qualitative data was collected from participants as well, and showed that participants found value in the course and that it enabled them to deal with pressure and stress more effectively as well as manage their time better.

Support of mindfulness in the workplace at this level requires senior level support. The key mechanisms that enable integration at the organizational level are: senior level support, demonstrated need, demonstrated return on investment, customization of material to align with culture of the organization, and time. Not all organizations are willing or able to support mindfulness at this level leaving it up to individuals to actively bring mindfulness into the workplace, or not.

Potential obstacles to mindfulness in the workplace

There are many potential obstacles that individuals may face when attempting to integrate mindfulness into work, that include time, work environment/organizational constraints, doing versus being, and identity. Work demands continue to grow. Time is an obvious obstacle to mindfulness. In today's environment, more and more individuals are putting in greater than forty hours of work each week (Saad, 2014) and technology enables work to be ever-present making it easy to get caught up in mindlessly moving from one thing to the next. The workplace itself may be structured in a way that makes mindfulness difficult. Though the study was not intervention based, Reb and Atkins (2015) provide evidence that organizational constraints and organizational support predicted employee mindfulness. This suggests that the organizational environment plays a role in both facilitating and hindering mindfulness in the workplace. Possible antecedents to employee mindfulness include organizational constraints (e.g. poor equipment, inadequate training, conflicting job demands), job autonomy (i.e. agency), supervisor support, task routineness. Good et al. (2016) note some challenges of studying mindfulness in the workplace that pertain to fundamental assumptions of management theory, that of doing/being dichotomy and identity and the self. Though they present these as challenges to management theory, they are also challenges that individuals may face.

The work environment is based on doing, it is goal driven and future-oriented, with a focus on results (Walsh, 1995), while mindfulness is based on being, and "involves attending the present without striving" (Good et al., 2016, p. 132), as such, there is an orthogonal relationship between work and mindfulness (Good et al., 2016). Work is

oriented around doing in a highly cognitive mode, setting goals, interpreting complex

environments, decision making, etc. (Walsh, 1995). While mindfulness is oriented about

being. The differences in these modes may be viewed as opposing and incompatible

(Good et al., 2016). For example, organizational life tends to require goal-oriented

behavior supported by cognitive operations (Cyert & March, 1963), while mindfulness

takes a non-striving stance supported by attending to the present. Thus, there is an

inherent challenge in bringing mindfulness into the workplace.

Identity has a strong influence on attitudes and behaviors in the workplace and is

an important construct in organizational science (Ashforth, Harrison, & Corley, 2008).

For example, the motivation to perform well is a key factor affecting performance and

related to identity (van Knippenberg, 2000). Many organizational theories that are

grounded in identity use a narrative based approach, for example, sensemaking(Weick,

1995). Sensemaking suggests that identity shapes how individuals interpret events.

CHAPTER 3 METHODOLOGY

This study explores qualitatively how individuals integrate mindfulness into the workplace using semi-structured interviews. A qualitative research approach was selected because the guiding research question was to investigate 'how' individuals integrate mindfulness into the workplace. The goal in exploring this question qualitatively was to gain a deeper and more nuanced understanding of how individuals who do not have the benefit of formal organizational support (e.g., Kings & Wardropper, 2016; Nottingham & Peacock, 2016) integrate mindfulness into work.

This study is grounded in the theoretical framework of social constructivism. The epistemology of social constructivism is that knowledge is subjective and formed through interactions with others through broad open ended questions (Creswell, 2013). The researcher acknowledges their involvement in the co-creation of knowledge. The questions in this study required the participant to bring topics to the forefront of their mind, causing reflection and conscious thought around their mindfulness practice and mindfulness in the workplace. This is understood and acknowledged by the researcher and not viewed as a limitation. In fact, bringing more awareness to an individual about mindfulness in the workplace encourages the very act, thus enabling sharing and reflection.

This study used semi-structured interviews as the method of data gathering. In the social sciences, qualitative interviewing is commonly used when information is needed that aligns with the conversational nature of humans (Brinkmann, 2013). Mindfulness is something that is done in the privacy of a person's head, and it is not something easily observed. While, it does manifest in behaviors, the act of observing a

behavior does not provide information about what was going on in the mind of the individual. Therefore, we must rely on conversations with people to get at the experiential data of mindfulness. Semi-structured interviews are purposeful. They are conducted to produce knowledge through the participant's descriptions of their 'life world' or experienced phenomenon (Brinkmann, 2013). A semi-structured approach allows the questions to be grounded in the research questions while leaving room to accommodate new topics emerging from the participant in the interview. Within this semi-structured approach the researcher acknowledges they are a co-constructor of the conversation and the knowledge created therein (Brinkmann, 2013).

Because participants were all working individuals, they were offered the choice of having the interviews take place face-to-face or over the telephone to minimize the impact on their time. While face-to-face interviews offer the richest data because the researcher and participant are present together, enabling additional information to be communicated in the form of facial expressions, body language, and gestures (Brinkmann, 2013), telephone interviews are a viable alternative (Shuy, 2002). I considered the trade-offs between the additional data that face-to-face interviews offer and the potential burden it would add to the participants in the form of time and logistics, and the ease of telephone interviews without the added value of non-verbal cues. Given the relatively innocuous nature of the questions and the fact that the participants were working individuals, and likely very busy, I decided it was more valuable to retain participants by offering a choice than the additional data that may be gained through face-to-face interviews only. I recorded context data for each interview that included the date and how the interview was conducted, face-to-face or telephone.

Participants

The target populations for this study were working individuals who were either new to mindfulness (i.e., MBSR participant) or have been practicing mindfulness for more than a year. To be included in the study, participants had to be working either part-time or full-time and be at least 18 years of age with conversational English skills. I used purposive and snowball sampling to reach the target population. Ten individuals expressed interest in participating in the study. However, I dropped two individuals from the study due to lack of response when trying to schedule the interviews, leaving eight participants who completed the study.

The demographics collected in the initial questionnaire consisted of gender, employment status, age, meditation experience, and industry (see Table 3). Overall the distribution of demographics was balanced. The participants worked in a variety of industries. I requested further information during the first interview related to industry and determined that of the three individuals who selected education as their industry, one was a teacher in K-12, one was a grant coordinator in higher education, and one was in information technology (IT) in higher education. Additionally, the participant who indicated pharmaceutical industry in the questionnaire does IT work in this industry.

Table 3: Demographics as reported in initial questionnaire

Demographic	Distribution	Details
Gender	Equal	4 - Male
		4 - Female
Employment Status	Majority full time	7 - Full time
		1 - Part-time
Age	Equal	4 - 50-64 age range
		4 - 30-49 age range
Meditation Experience	Equal	2 - Neophytes (< 1 year)
		2 - Beginners (1-5 years)

Demographic	Distribution	Details
Industry	Variety *Majority in field of IT (4)*	2 - Intermediate (5-10 years) 2 - Advanced (10+ years) 2 - Information Technology 3 - Education 1 - Business consulting 1 - Healthcare 1 - Pharmaceutical

Data collection tools

The initial demographic questionnaire and consent form was administered with Google forms. Interview guides were used to ensure key questions were asked as part of the semi-structured interviews. A digital audio recorder with universal serial bus (USB) connectivity was used to record the interviews and download them to a computer for transcription. Handwritten notes were captured during the interviews to highlight key ideas and help keep the flow of the interview moving. These notes allowed me to come back to specific topics that I wanted more clarity or deeper discussion on, without breaking the chain of thought of the participant. They were also referred to prior to the next interview with the participants. Transcriptions were done in Word and InqScribe. Ultimately all transcriptions were transferred into InqScribe with time stamps.

Procedures

I submitted this study to the Institutional Review Board (IRB) and was granted exempt status. The overall study design is shown in Figure 2. I recruited beginning practitioners through in-person announcements at three local MBSR classes and experienced practitioners via an electronic announcement. I administered consent forms electronically as part of the questionnaire link. This was to make it easier for participants who may not be local. In this study, one participant was not locally situated.
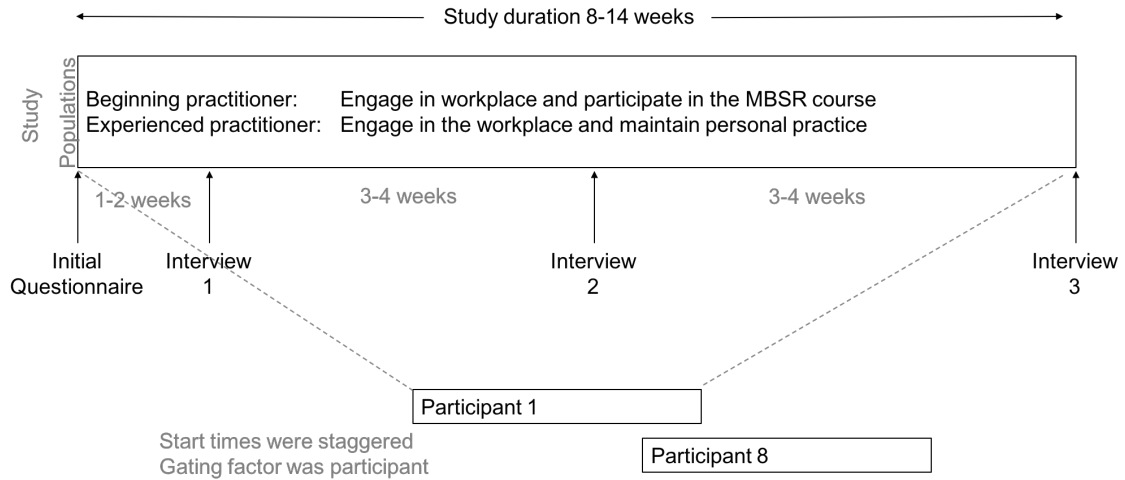
Figure 2: Study Design

After recruitment, interested parties contacted me and I provided the link to the

initial questionnaire and electronic consent form was sent. Once the questionnaire and

consent form was filled in, I contacted the participant to set up the first interview. I

scheduled subsequent interviews via e-mail.

Figure 3 shows the high-level interview objectives for both sets of participants.

The differences in the objectives exist because it was thought that skill and understanding

of mindfulness would differ between the two groups. Interview guides are provided in

Appendix A.

Figure 3: Interview Objectives

Data Analysis

I used an intentional and systematic approach to investigate the data, which was iterative. The process of code development and the code definitions are described below. This approach of investigating the data intentionally and systematically provided an endemic process that shaped my analysis (Ravitch & Carl, 2016). Inherent in this is my interpretation of the data as it relates to the existing literature and the first level descriptive based codes.

Research questions

RQ1: How does mindfulness workplace practice help individuals to self-regulate a) attention or thoughts, b) emotions, and c) both attention or thoughts and emotions?

  SQ1: What are the associated benefits?

RQ2: What are the barriers or challenges?

RQ3: How can mindfulness in the workplace be supported?

First level coding - data reduction

The first step in the coding process was to reduce the data. I reduced the data by developing binary codes that were grounded in the primary research questions (RQ1, RQ2, RQ3), which resulted in the following codes: integration of mindfulness, barriers to mindfulness, support for mindfulness. I used binary values (i.e., 1 = present, 0 = not present). These codes are not mutually exclusive. In other words, a datum may have information present for each data reduction code. As is often the case with qualitative data many concepts may be included in a single chunk of data. Table 4 provides description of the codes.

Table 4: First level data reduction codes. Binary value: 1 = present, 0 = not present

Code/Question	Description
Integration of mindfulness	This contains information on how the participant integrates mindfulness into the workplace
Barriers to mindfulness	This contains information on barriers to mindfulness in the workplace
Support of mindfulness	This contains information on how mindfulness can be supported in the workplace

Figure 4 provides example of the data I coded, showing that data has concepts in multiple codes. I included the first sample transcript in the integration of mindfulness because it contains information from the participant on how they integrate mindfulness in meetings, making a conscious effort to pay attention and not start planning or thinking about something else. It also revealed barriers to mindfulness because it describes a common occurrence in the workplace, especially when it comes to meetings—the ease at

which we slip into doing something else instead of being present for the meeting. I included the second sample transcript in the integration of mindfulness because it contains information about a mindfulness club that the participants started at their workplace, which provides a time and space for employees to meditate during the weekend. I also included it in the support of mindfulness, because it provides an example of what can be done to support mindfulness in the workplace (i.e. providing a space).

	Integration of mindfulness	Barrier to mindfulness	Support of mindfulness
TRANSCRIPT			
Uh, you know at work where I really try to practice is, you know like, when you're in meetings and maybe it's not necessarily pertinent to you; it's really easy to start looking at what all do you have in your day or planning and not really paying attention to what's going on, so I'm trying to get out of that (pause) kind of activity where you're (pause) thinking about what's coming up or, you know, what else you have to get done today instead of just paying attention to what's going on right at the moment.	1	1	0
Yeah, so I think, um, one thing that I, it was awesome to hear from the mindfulness group is that one person expressed that she feels really, ah, happy to see a club like that at work in the sense that… We formed out of the Learning Center and to have that sort of that acknowledgement, I guess, by the company that this is something that could be helpful and in a sense having the permission to take a good breaks during the middle of the day. She felt almost kind of grateful, you know, that there is this acknowledgement that this is something that's good for the employees.	1	0	1

Figure 4: Sample data from initial data reduction codes

Open coding

After the data was reduced, I did first level open coding to look for manifest content, or the direct visible and obvious components (Saldana, 2016). The unit of analysis was primarily the participants' responses and I chunked longer responses to allow for more fidelity (Saldana, 2016). The open coding exercise was an iterative exercise and yielded several descriptive codes that were subsequently used, in conjunction with the literature, to develop thematic codes. In addition to the first level open descriptive codes, binary codes were defined for: SQ1, perceived work-related benefits. Table 5 provides description of the binary codes for work-related benefits.

Table 5: Codes for SQ1 Binary value: 1 = present, 0 = not present

Code/Question	Description
Perceived benefits	This contains information on any perceived benefits because of mindfulness practice

Figure 5 provides an example of the data I coded. Like the data reduction codes, these codes are not mutually exclusive either. In the sample transcript, barrier to mindfulness was present in the discussion of getting caught up in doing instead of being, and the perceived benefits was present in the discussion around seeing the benefit of mindfulness in the classroom by being more attuned to the student.

TRANSCRIPT	Barrier to mindfulness	Perceived Benefits
I have already, to be honest, I really have already seen a difference in the classroom because I've found lately, at least, I find myself more attuned to the student who is standing right in front of me, right then. Um, where I'm saying to myself, this is the most important thing I need to be doing right now this minute. Not thinking about what, you know, what I need to be working on next or something but just where are they at? What do I need to support them best? Um, its just that, it's just that being attuned to being in the present. I really can't say that I did a very good job of that before. I, I ah, they have been talking to us a lot in the class, and I love this part of… and I don't know when in my life it became… when doing became more important than just being. Because I remember, I remember being, being so important at one point in my life where, you know, you could just hang out. But at some point, I don't know when this really changed in my life, but now it really have become all about what you are doing right this minute. And I really don't want to impose that on my students. And, and, so I, that is something that I've noticed I'm bringing with me into the classroom. Sometimes its ok for them just to be. We don't have to be doing every second of the day.	1	1

Figure 5: Sample data for the binary codes for SQ1 and RQ2

Thematic codes

Figure 6 provides the overall coding map and a discussion follows with the definitions for each thematic code and example data. Thematic codes were developed using data and the existing literature.

RQ1: Integration of mindfulness

Thematic codes

Self-regulation   Compassion
Resiliency   Attunement
Agency   Communication
Quality of attention   Community

RQ2: Barriers to mindfulness
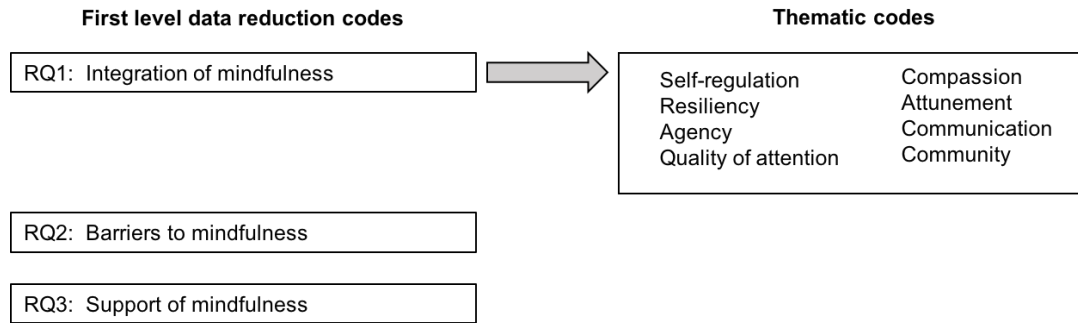
RQ3: Support of mindfulness

Figure 6: Coding map

      I derived thematic codes through several iterations of reviewing the open codes and existing literature. The codes are not mutually exclusive and may have components that interact or are similar. This is the case in the literature as well. Figure 7 provides the coding scheme for the thematic codes.

Code: Thematic	Description	Value 1	Value 0	Value -1
Self-regulation	Ability to modify one's behavior by managing or altering habitual responses. It shapes how we interact with our emotions, thoughts, attentional focus and habitual responses.	Self-regulation of attention or thoughts is present.	Self-regulation of emotion is present.	Both self-regulation of attention and emotion are present
Resiliency	Abillity to positively bounce back or rebound "from adversity, uncertainty, conflict failure or even positive change, progress and incresed responsibility". The ability to decouple from the automatic physical and emotional response supports resilience. Practices that support resiliency is acceptance, gratitude, and reflection.	The process of decoupling from an automatic physical or emotional response is present	A practices that support resiliency (acceptance, gratitude, or reflection) is present.	Both the process of decoupling and a practice that supports resiliency (acceptance, gratitude, or reflection) are present.
Agency	Ability to take action that produces a desired result. Emergent interactive conceptualization views both individuals and the environment are influential in agency. Personal sense of agency can be developed through a sense of control and having a sense of having more choices in how to respond.	A sense of control is present	A sense of having more choices is present	Both a sense of control and a sense of having more choices is present
Quality of attention	Quality of attention is related to 'how work is being approached', not just 'what' work is being done. It is connected to working mindfully, which is when one is able to maintain a sense of being while simultaneously doing.	A sense of 'being' is present	A sense of 'doing' is present	Both a sense of 'being' and 'doing' is present
Compassion	Compassion is empathy and caring in action. It is manifest in the workplace in many ways, such as, listening, giving of emotional support, giving time and providing flexiblity.	Listening is present	Giving of emotional suport, time, or providing flexibilty is present	Both listening and giving of emotional support, time, flexibility is present
Attunement	Attunement is awareness. Intrapersonal attunement is awareness of self while interpersonal attunement is awareness of other.	Awareness of self is present	Awarness of other is present	Awarness of both self and other is present
Community	Community of practice is a group of individuals who share a concern or passion for something they do, and learn how to do it better as they interact regularly.	Mindfulness community of practice demonstrated throught shared practice of mindfulness is present. Demonstrated through individuals mediating together	Mindfulness community of practice demonstrated through collective intelligence is present. Demonstrated through reflective practices between individuals.	Presence of a shared concern is present. This can be demonstrated very broadly as shared humanity or as shared understanding. This is not part of a mindfulness community of practice per se, it refers to community in a much broader sense.

Figure 7: Coding scheme for the thematic codes

Ethical Considerations

Participation in this study was voluntary and the interviews were scheduled at a convenient time for the participants. Participants were given the choice of phone or in person interview. I conducted phone interviews in a private location. I assigned unique identifiers to each of the participants and de-identified data as soon as possible. I saved the key to identifiers in a password protected file on my computer which is backed up to an external hard drive. I replaced data in the transcripts that could potentially be traced back to a participant with aliases or generic terms.

Trustworthiness and validity

With text as data, multiple meanings are possible and interpretation occurs (Graneheim & Lundman, 2004). Validity of qualitative research is shaped by the lens of the researcher and participants (Ravitch & Carl, 2016). Having a shared understanding of mindfulness that is rooted in Kabat-Zinn's conceptualization was important for this study. As part of the interview process, I asked participants for their definition of mindfulness. This was done to gain understanding of the participants' view of mindfulness. It provided a shared understanding between participant and researcher, which assisted in the interpretation of data.

Efforts were made to increase credibility, transferability, and dependability through the research design. The researcher and a professional transcriptionist transcribed all audio records. I reviewed and edited transcriptions to ensure accuracy and descriptive validity. When interpreting the data, I used both emic and etic language. I provided both the summary of the findings and the full findings section to the participants for review

and comment. To provide theoretical validity, I developed the conceptual framework iteratively as part of the coding process.

Potential Research Bias

The researcher is the primary instrument in qualitative research (Creswell, 2013; Ravitch & Carl, 2016). As the researcher in this co-construction of knowledge it is important to understand my positionality and the role it plays in the research design and analysis. Part of my motivation for this study is the fact that I have personally experienced the benefits of mindfulness in both my personal and professional life in profound ways. I understand the challenges in keeping a consistent practice and have observed my own benefits mindfulness in the workplace, as well as the challenges one faces. Having a meditation practice was useful in this study because it allowed for a shared understanding and vocabulary with the participants and enabled deeper discussions. Though, it also presented the risk of misinterpreting what the participant was saying by assuming it mirrored my experience or understanding. To mitigate misinterpretation and bias, I asked participants follow on questions to check for understanding.

CHAPTER 4 RESULTS

Introduction

To investigate how individuals integrate mindfulness into the workplace, I was guided by the following research questions.

RQ1: How does mindfulness workplace practice help individuals to self-regulate a) attention or thoughts, b) emotions, and c) both attention or thoughts and emotions?

SQ1: What are the associated benefits?

RQ2: What are the barriers or challenges?

RQ3: How can mindfulness in the workplace be supported?

Overall, I found that individuals integrate mindfulness into the workplace in a variety of ways in the face of common barriers. Here, I present my results, organized by my research questions in the sequence presented.

How does mindfulness workplace practice help individuals to self-regulate a) attention or thoughts, b) emotions, and c) both attention or thoughts and emotions?

Self-regulation of attention or thoughts

The benefits of self-regulation of attention or thoughts in the workplace included improved focus, increased productivity, better time management, increased calmness and clarity, and increased ability to context switch. For the individual, this type of self-regulation enabled agency by offering choice and increased their quality of attention by helping them to focus. Lily indicated that she practices mindfulness in meetings to help her stay focused.

"Uh, you know at work where I really try to practice is, you know like, when you're in meetings and maybe it's not necessarily pertinent to you; it's really easy to start looking at what all do you have in your day or planning and not really paying attention to what's going on, so I'm trying to get out of that (pause) kind of activity where you're (pause) thinking about what's coming up or, you know, what else you have to get done today instead of just paying attention to what's going on right at the moment." (Lily)

This example showed an intentional and purposeful approach of using mindfulness to engage more fully in meetings. Similarly, Jessica made a conscious decision to turn off her e-mail notification as part of her mindfulness practice. This one small change, enabled her to only check e-mail when she needed to check e-mail instead of being distracted every few minutes by an e-mail coming in. She indicated that this has helped her productivity and time management considerably.

Another example of self-regulation of attention or thoughts supporting productivity and time management was provided by Lily, where she indicates that mindfulness enabled her to focus on priorities which was especially helpful when her department was understaffed which his supported through self-regulation of attention.

"um, for me probably the most beneficial places I see it are right now, one is, I'm short staffed in my department and so I'm managing two people's jobs. Um. So, I'm trying to use it to help

me as I'm um, figuring out day to day what I can accomplish and

what I'm ok with accomplishing. And just trying to be ok with

that" (Lily)

This aspect of not getting worked up over the items she couldn't finish is self-regulatory as well because it is managing her thoughts and attention in a way that is accepting and releasing of expectations. This acceptance, eased the mind of worry and stress.

Self-regulation of thoughts and attention reduces the sensation of being frazzled. It quiets the mind and the 'swirl'. Swirl is the word Lisa used to describe the sensation of being frazzled and all over the place.

"It's when I have a lot of things to do, they all need to get done,

and there's too many choices to pick from; or I end up doing task-

avoidance and I create new tasks in order to give myself too many

choices". (Lisa)

She uses the word swirl to describe it because it is a feeling sensation for her. Intrapersonal attunement developed through her mindfulness practice helps Lisa to both recognize when she is experiencing swirl, and focus on one thing to get out of it.

"Oh yes, it is definitely a feeling. The feeling is of… and that's

why I call it a swirl because it's like everything is, like encircling

me and I feel part… it's like a tornado! I'm just in it, everything
else is in it with me and it's hard to grab hold of just one thing.
When I do just take the one thing and focus on that then the
tornado sort of just calms down and everything settles." (Lisa)

Using her mindfulness practice she can regulate her thoughts and focus her attention one thing, instead of bouncing from topic to topic. This helps Lisa with her productivity. This self-regulation of attentional focus helps to quiet her mind and offers space to consider one thing at a time.

As Richard indicated, quieting his mind supports productivity because in reduces unhelpful thoughts and brings calmness and clarity.

"My goal is just to get the voices to stop talking for a while. Be
more productive, and frankly for me to have some calmness that
goes with that clarity instead of having all those conversations that
we have. Think about the conversations we really have; I wonder
what they're thinking about me? I wonder if they're thinking I'm
an idiot. Those are the kinds of voices you would really like to
eliminate." (Richard)

Self-regulation of thoughts and attention was also shown to help with the common challenge of context switching in the workplace, which can be challenging. Take Jack, for example, who wears several hats in his manager role. One minute he may be sitting

down to solve a technical problem and the next minute he is trying to work with employees who aren't getting along. Mindfulness helps him to "to be able to let go of whatever it is you were doing… whatever hat you were wearing a second ago, put on a new and be effective in that new role" (Jack). The letting go element that Jack brings up is the self-regulation of thought and attention. This does not always happen instantly, another participant, Charlie, describes it as a process that involves "a release of what came before and an openness to what's coming next" (Charlie).

Lisa, a program manager, handles everything from finance, event coordination, IT, human resources, payroll, general office issues and more. Lisa starts her day with ten to fifteen minutes of breathing meditation exercises because this helps her start her day from a sense of centeredness. She then continues to check in with herself throughout the day to stay grounded and switch between the many hats that she wears in her job. I found a sense of agency present in these examples of self-regulation of thought and attention. In some cases, it was agency as a sense of control, like with Jessica's conscious decision to turn off e-mail notifications, which was an act of self-regulation of attention. In other cases, it was agency as a sense of having choice that was achieved through self-regulation of thoughts and personal attunement, that help to reduce the chatter and swirl sensation. I found that the benefits of self-regulation of thought and attention includes productivity, better time management, and improved ability to context switch, all of which provide value to the organization.

Self-regulation of emotions

Self-regulation of emotions enabled participants to minimize their habitual reactions, thus enabling response flexibility (Siegel, 2007). The benefit of this is less

reactivity, decreased stress, and an increase in agency. George describes the process of self-regulation of emotions by given an example of the three things that happen when we react to a stimulus. "Something comes in, an emotion is provoked, there's a feeling in the body," these things we don't have control over, "but we can control and create gaps in how we react" (George). Mindfulness opens the ability to extend that gap "so we are not at the mercy of our conditioned and reflexive response" (George). This attunement to one's self allows George to build resiliency by decoupling his response from the emotions felt while accepting that there is nothing he can do to prevent the emotions. This also builds agency by providing a sense of control and choice in how he reacts. The self-regulation of emotions is coupled with self-regulation of thoughts because many times an emotion will connect to a storyline of associated thoughts.

A "chimeric threat" was the term that George used to when talking about a threat that is not real, it is made up in our mind due to an external event, being called into your manager's office, for example. He shared that a chimeric threat can cause a fear based response with elevated heart rate and his mind races with thoughts that try to anticipate what his manager is thinking or that he is in trouble. Self-regulation of emotion enables him to pause and stop ruminating thoughts. This begins to touch on the self-regulation of attention or thoughts and emotions.

> "And so again that idea of, you know, oh boy I'm in trouble, he
> must be thinking that I'm in trouble… taking a step back from that
> and saying wait a second, actually, I don't know… I have no data

right now, and while that's uncomfortable it's way better than

making assumptions." (George)

Self-regulation of attention or thoughts and emotions

As detailed in the literature review, self-regulation of attention or thoughts and

emotions benefits offers the individual benefits of resiliency, agency, quality of attention,

compassion and inter-personal attunement. The workplace benefits include: better

working relationships, improved teamwork, and increased information sharing.

Mindfulness offers the opportunity to understand the mind by recognizing the storylines

and the automatic, reflexive reactions, based in emotions, that accompany them. The

combination of self-regulation of emotions with self-regulation of attention or thoughts

creates internal attunement generates agency. Charlie describes this as a development of

transparency or translucency to the thoughts that enables less attachment and

personalization and develops stability, clarity, and strength of mind.

"It's like recalling um uh, what that mind is like, sort of a mind that

is more spacious and clear, and so on. so you're, you kind of, you

know, these storylines that pop up during the day that are very

convincing and then when you sit those storylines develop sort of a

transparency or translucency and so if you have some drama or

struggle that's going on and you start seeing through it then it's like

oh ok, that's actually not the big deal that I thought it was. And ah,

then so You can kind of work with it a little more skillfully, um,

70

instead of seeing something come up as a threat or a personal

affront; or any number of stories that can come up during the day.

And that's what I think um sitting has helped with; it's helped

develop some stability, and clarity and strength of mind." (Charlie)

The combined self-regulation of emotions and attention or thoughts leads to more

productive interactions and better working relationships. This was highlighted by

Richard, who indicated that he is seeing a difference at work with his mindfulness

practice when it comes to interactions with collaborators and other stake holders in his

consulting business.

"I actually now begin to parse out the emotions; I'm cognizant of

those emotions and I'm like man, I'm feeling really irritated with

that guy; why is that, as opposed to 'god I'm gonna… once we

leave this room he's out of this proposal; he'll never see the

sight…' which is the way we historically have done stuff, I

assume. We… maybe it's just me, but if you're not on board with

my deal you're not in my deal. And so, I've been a bit enlightened

by that I suppose." (Richard)

Richard's mindfulness practice has made him more attuned to his emotions and is now

able to investigate those emotional reactions and understand them better. This ability to

decouple from his emotions supports resiliency and builds agency by giving him a choice

in his response as opposed to reacting out of habit or conditioned response. This is described in Richard's words below.

"I'm geared up to do some pretty heavy-duty impact work that's going to be pretty public and I've actually been contemplating… kind of keeping a perspective on how it's different this time than it's been in the past. Because the stuff that I do contract work-wise gets me in front of a lot of people who are often very mean. This is the thing about policy research; what you find is people have dogs in the game; if you conclude that this program was or was not effective there are people that come out after you. I'm kind of disassociating and saying I wonder how I'll respond now as opposed to…(trails off) Wouldn't it be cool if somebody came after you and goes, 'Not only does your data suck but I hate your mother too,' you know those kind of things. Wouldn't it be kinda cool to just go, 'Hah, and here's some other stuff', as opposed to internalizing that and feeling it and the blood goes into your ears and you can feel… Yeah or you literally realize you can't hear anybody because… You know that's true; it's a narrowing of focus; it's that fight or flight thing kicking in… but it really is; it totally narrows your capacity to think broadly because all you're trying to do is figure out how to get out of there or hit back." (Richard)

Self-regulation of attention or thoughts and emotions improves working relationships by supporting intra-personal and inter-personal attunement and compassion. Jessica shared an example of a situation where her practice of mindful communication with a co-worker, who she previously had been impatient with, turned into a very positive interaction that strengthened their team and generated a sense of gratitude for Jessica.

"Yeah! I was thinking about you actually the other day, something happened around that example I gave you, you know, like the coworker that I felt that she was being, I don't know, I guess longwinded is the term – but she's also kind of hovering, you know, um, and partially I don't take it um, ah, how shall I put it; I sometimes get annoyed that she does that to me; but I was mentioning to you that I try to use mindful communication and there was this one particular, ah, conversation that we had where she really… you know, it should have taken five minutes but it ended up taking half an hour... (laugh) Um, But she actually ended up giving some very useful information although it took a half an hour there were certain moments, I was, of course getting agitated. I was at moments getting to just want to kind of, you know, find some reason to leave (laugh). But I was kind of glad that I stayed because, in the end I actually got some really useful information and, um, she introduced me to a colleague who maybe help an issue I was encountering, and, a, so I really, you know, felt grateful

and expressed my thanks. And her reply which was really touching

for me, she said oh, you know, I'm just watching out for, my, our

team – BST is our team's – I'm just watching out for my BST little

sis." (Jessica)

Self-regulation of emotion and thoughts were present for Jessica in this interaction

because she had to regulate her feelings of impatience with her colleague, as well as,

regulate her thoughts around the interaction taking too long. This self-regulation allowed

Jessica to be attuned to her co-worker. Jessica's example of her mindful communication

practice with a co-worker is grounded in compassion. Listening and giving time are two

ways that compassion is manifest at work (Lilius, Worline, Dutton, Kanov, & Maitlis,

2011). In Jessica's example, this resulted in a strengthening of her work relationship with

her colleague and generated sharing of valuable information. This outcome resulted in a

sense of gratitude in Jessica which builds resiliency.

Mindful self-regulation

A common thread with the self-regulation results above is that mindfulness

supported the self-regulation process. More specifically, the self-regulation found in this

study was supported by facets of mindfulness that are not generally measured studies on

mindfulness in the workplace (i.e. non-judging, non-striving, acceptance, and letting go).

This suggests that mindfulness based-self regulation construct may add to the literature in

this field.

Mindful self-regulation fosters working mindfully, which is a quality of attention

that enables "being while doing." One participant, Lisa, describes it as how your chose to

74

perform your work, you can perform them in a frantic mode, or you can do them in a

calm and relaxed mode, or anywhere in between. For her, when she takes time during the

day to do a guided meditation or some breathing exercises, she can approach work in a

calm and relaxed mode.

One participant, Jack, suggests that being able to switch contexts easily is a form

of working mindfully or doing while being. He relates this specifically to his role a

manager, he has to wear several hats, which requires him to be able to stop what he is

doing in one moment and step into something else. Doing this requires "letting go" of

what you were just working on and "accepting" the next thing that comes in. This is a

form of mindful self-regulation, because self-regulation of thought is supported by the

"letting go" and "acceptance" facets of mindfulness.

Working mindfully requires a "checking in" with yourself in the present moment.

It can mean noticing physical sensations that are based in emotion, fear for example, or

feeling protective of a co-worker in a meeting, and instead of jumping to protect or

defend, you can pause and consider what response is best. This is done through intra-

personal attunement, which is a heightened sensitivity to internal stimuli combined with

an ability to regulate reactions. The acceptance facet of mindfulness supports mindful

self-regulation.

Working mindfully can be difficult to do, with all the day-to-day expectations of

what needs to get done within a certain time frame. For example, the stress of preparing

for an important client meeting can cause mindfulness to be put on the back burner. A

self-regulation grounded in the "non-striving" facet of mindfulness approach might

enable an approach that allows for intense periods of focus combined with breaks to step

away and just be. The grounding in the "non-striving" facet of mindfulness enables an approach that is calm and centered as opposed to stressed out and fearful of not performing.

What are the benefits of mindful self-regulation?

I found that mindful self-regulation supports several positive behaviors and capabilities that are beneficial in the workplace. Mindful self-regulation supports intra-personal attunement which heightens self-awareness of internal stimuli (e.g. emotions, thoughts) while minimizing reactions. This creates a space for the individual to have more choice in how they respond which is agentive. The self-awareness gained through mindful self-regulation increases the quality of attention that is available and fosters working mindfully. Inter-personal attunement, which is heightened awareness of another person, is also supported by mindful self-regulation. Inter-personal attunement builds compassion, which when manifest in the workplace increases listening and giving of time and flexibility. Mindful self-regulation also supports resiliency by allowing a decoupling of self through the non-judging, non-striving, accepting, and letting facets of mindfulness. Resiliency supports well-being and enables one to thrive. These positive behaviors and capabilities supported the following work-related benefits: focus, productivity, time management, calmness and clarity, ability to context switch, less reactivity, better working relationships, improved teamwork, and increased information sharing.

What are the barriers or challenges?

Time

I found that time is a common barrier to mindfulness in the workplace. Big life changes or travel can change the amount of time that a person has for the formal practice. The formal practice of meditation supports individuals' ability for self-regulation, which is at the heart of bringing mindfulness to work. When the formal practice drops off, we can fall back into reactionary responses.

> "Unfortunately he and I just had an altercation about week ago where, kind of, his expectations changed so it makes it difficult. Um, so if.. and it put me, maybe it caught me off guard because I hadn't done as religious mindfulness practice with all the travel and with the things that have just been overall chaotic. Um, cause I know when I was practicing more religiously or more consistently, um, I felt more prepared for that."

Identity

The notion of not having enough time can mix in with our identity and cause tension around using our time to meditate or to "do" something. Richard points out that one of the barriers he sees with mindfulness in the workplace, particularly in America, is that 'doing' equates with success. This makes developing a formal sitting meditation practice challenging because it can feel unproductive, or a waste of time, because he could be doing something from his long list of tasks.

"One of the that I've been coping with is that I'm a do-er. Here's a

barrier for you, um, I and I think most Americans are trained this

way. You literally, um, are you literally are trained that if you are

not doing you are… Failing, literally." (Richard)

Systemic pressure

Another barrier brought up by Charlie is the pressure that is placed on people to

get them to perform. Charlie indicates that is a systemic thing in work environments of

applying pressure to get more out of them. He also described it as aggression in the

workplace around deadlines and performance.

"Well, I think that goes back to a very key, systemic thing that I

think we have going on in our work environments which is the

application of pressure to people, and that goes back to managing

expectations. Um, you know, uh, there are different, uh, levers that

management will try and apply to people who are working, to try

to get them to perform better" (Charlie)

How can mindfulness in the workplace be supported?

Mindfulness can be supported in the workplace by providing a place and the

permission to practice. The environment in the workplace can shift when individuals

take time out to center and ground themselves. Lisa has space for her mindfulness

practice. She starts her day with ten to fifteen minutes of breathing meditation exercises, which help her start her day from a sense of centeredness. She then continues to check in with herself throughout the day to stay grounded. This practice strengthens her self-regulation throughout the day.

Providing employees with a space and permission to take time out and formally practice mindfulness in a group setting is also helpful. Jessica's company provides a space for the lunch time meditation club she started. The number of people that participate in these sits varies from week to week. On average, there are 3-6 people. Jessica attributes time as big barrier for individuals. She indicates that having the company support this effort is beneficial because it acknowledges that the company see that it is beneficial to the employees and in a sense, gives them "permission" to take a break in this way.

These lunchtime meditation groups provide structure, inspiration, and motivation to have a regular practice during the work day. For example, due to a couple of big life changes, Jack's formal practice had tapered off. Recently he was told about colleagues trying to organize a lunchtime meditation group. This was like an epiphany for Jack, because it was a simple way to get back to more formal practice.

> "And so, that, you know things would slowly fall off and for a
> while I was able to keep the meditation going but then that kind of
> sloughed off too and so for a while… It's just, like I said, you
> know, once or twice a month I'd try to find some time to do it but
> it really kind of sloughed off. It wasn't until someone brought it,

79

brought this, the lunchtime meditation here it sort of got me thinking about it again; it got me thinking… I mean, I guess I had gotten to a point where I thought it's just not possible with the workload I have and the stress I have. I can't stop and do it; there's not a time over the course of the day or I don't have the energy or willpower or whatever the word is to sit and do it. And so I started to give it up for the moment and then the lunchtime meditation was real helpful because it sort of reintroduced it and brought that energy back in, so it got me thinking again. But it seems so goofy, or silly, to think wow, just doing it at lunch; anyone could have thought of that, right? I didn't think of it at all. It was like the greatest idea I'd heard in weeks… So that was, so I guess so really I'd kind of given it up at least for the moment and this sort of brought it back into my line of sight again. (Jack)

Community provides a shared understanding and can inspire practice. Community develops a shared understanding and common language and encourages discussion and dialogue which fosters reflection bringing more awareness around bringing mindfulness into the workplace. Community can also normalize the challenges of mindfulness resulting in less negative feelings about not practicing as regularly as one would like.

Developing a grassroots community for mindfulness in the workplace

An interesting finding of this study was the initiation of and participation in grassroots efforts in the workplace. I found participants engaging in grassroots efforts of

lunch time group meditation practice. The benefit of this to the workplace are individuals

who are more centered and better able to enact the mindfulness practices mentioned

above with all the associated benefits and practicing in a group at work has the potential

to shift the work environment, even if it is only a few people.

"I think there's a social aspect to it where you create a… where if

you have... well, and I guess there's different levels, but if you

have people who are meditating together in the workplace then that

creates a certain kind of culture that I think can be really positive

because, I mean, if you have a group of people who are meditating

it means you have a group of people who believe that this is

important and useful so that gives a language and shared

experience that's unique to a group that didn't have it. Um and

then... and so I think, so that's directly social if you're doing it with

people, but then I also think that if you are… I think just even

indirectly, if you have a group of people in the social setting or in

the workplace who are meditating, where, and even if most people

don't do it but you have a few people who do, I almost feel it's like

a little ray of light that gets shone on the workplace and it opens up

a little bit of space." (Jack)

The benefit of the lunch time meditation is that is gives the individual some time to step

away from the stress and drama of the workplace and practice being an observer instead

of a consumer. This is a subtle shift that enables a sense of calmness that provides a sense of agency.

"Well and so that's another, That's another thing too is that I don't know... well, it's not that I don't know, I can tell you that there's not any direct physical responses or reactions to the meditation that, where, you know, all of a sudden everything's better or there's a significant change. And that is, Honestly I do think that's part of the reason I slowed down too is that for the effort it took to do it it seemed like the reward was so subtle, you know, that maybe it wasn't worth it. Um, So that's sort of the macro level; the more subtle level means something happened. There's… I mean doing it at lunchtime here again – I know I keep coming back to that – but it was really kind of an epiphany for me, but it's being in the middle of all the stress and all the drama at work and then stopping and meditating, it really showed the value of it. And so, just, um, But again it's still pretty subtle; it's not like all of a sudden I have all this new energy, but there is…but I am able to shift during the course of the day and stop and literally breathe and I now I'm talking around it a lot. So what benefit to I get from it, I guess it's that subtle shift of um being calm, focusing on just being an observer and not just being a almost like a consumer of the things always shooting at the time; taking a step back and just observing

everything that's going on instead of being sort of a victim of these

things being shot at me." (Jack)

Mindful Leadership

Several of the participants stated that having mindful leaders would help support mindfulness in the workplace. The main reason is because they would embody the practice and set an example for the employees.

"Well I think for sure, for sure, for sure one thing, is and really the only thing, is that if there were more practitioners in the workplace. Um, really the only way to actually lead effectively is by example in my opinion. There's that; I think having just having more mindfulness at all levels but certainly leaders or managers at all levels that are exhibiting the behaviors that they would like to see in the people that work for them." (George)

As social creatures, we take cues from our environment by modeling behavior. Leaders affect the environment of the workplace and have the ability to shift employees state of being through their actions and behaviors. As George points out, modeling mindful behaviors would lead to more mindful behaviors of the employees. Mindful leadership, thus, is an important mechanism for building mindfulness in the workplace. In closing, mindfulness can be supported in the workplace by enabling more practice to occur, this can be in the form of allowing time and space, development of a community, and mindful leaders.

CHAPTER 5 DISCUSSION

Research on mindfulness in the workplace is nascent. Early studies have linked mindfulness to well-being and performance (Dane & Brummel, 2013; Reb & Atkins, 2015; Reb, Narayanan, & Ho, 2015; Shao & Skarlicki, 2009; Shonin, Gordon, Dunn, Singh, & Griffiths, 2014). A commonly cited benefit of mindfulness is self-regulation (Glomb, Duffy, Bono, & Yang, 2011) which supports attentional focus. Studies show mindfulness to support task performance ((Mrazek, Franklin, Phillips, Baird, & Schooler, 2013), decision making (Hafenbrack, Kinias, & Barsade, 2014), and problem solving (Hjeltnes, Binder, Moltu, & Dundas, 2015) through self-regulation. This can be through self-regulation of attention and thoughts, or self-regulation of emotion. Furthermore, self-regulation is suggested to support workplace resiliency (Rothstein, McLarnon, & King, 2016), which mindfulness has also been shown to support ((Epstein, 2014; Good et al., 2016). Mindfulness has also been linked to agency (Hjeltnes et al., 2015), compassion (Birnie, Speca, & Carlson, 2010; Hjeltnes et al., 2015; Nottingham & Peacock, 2016), quality of attention (Weick & Putnam, 2006), and communication (Beckman et al., 2012; Huston, Garland, & Farb, 2011; Jones & Hansen, 2015). Finally, mindfulness has been connected to attunement (Dane, 2011; Hyland, Lee, & Mills, 2015), and group performance (Cleirigh & Greaney, 2015; Singh et al., 2002).

Mindful self-regulation foundational for working mindfully

My findings echoed many of the connections already cited in the literature. It also revealed mindful self-regulation as a main mechanism for integrating mindfulness into the workplace. I defined the term mindful self-regulation as self-regulation that is grounded in key mindfulness facets: non-judging, non-striving, acceptance and letting,

and can be enacting through regulation of attention or focus, regulation or emotions, or regulation of both attention or thoughts, and emotions. Mindful self-regulation supports the following positive organization behaviors and concepts: agency, resiliency, quality of attention, compassion, and attunement. The work-related benefits of mindful self-regulation include: improved focus, increased productivity, better time management, increased ability to switch contexts, improved communication, better working relationships, better teaming, and increased information sharing in their employees – see figure 8. Furthermore, Good et al. (2016) suggest that management theory may need to adjust its view of doing and being in the workplace to accommodate "being while doing" which they described as working mindfully. This study found that mindful self-regulation supports working mindfully.

Mindful self-regulation is self-regulation grounded in the following facets of mindfulness: non-judging, non-striving, acceptance, and letting go.

Mindful self-regulation of attention or thoughts

Mindful self-regulation of emotions

Supports
agency, quality of attention

Supports
agency, resiliency, quality of attention, attunement (self and others), compassion

Supports
attunement, resiliency, agency

Work related benefits
focus, productivity, time management, calmness and clarity, ability to context switch

Work related benefits
better working relationships, improved teamwork, increased information sharing
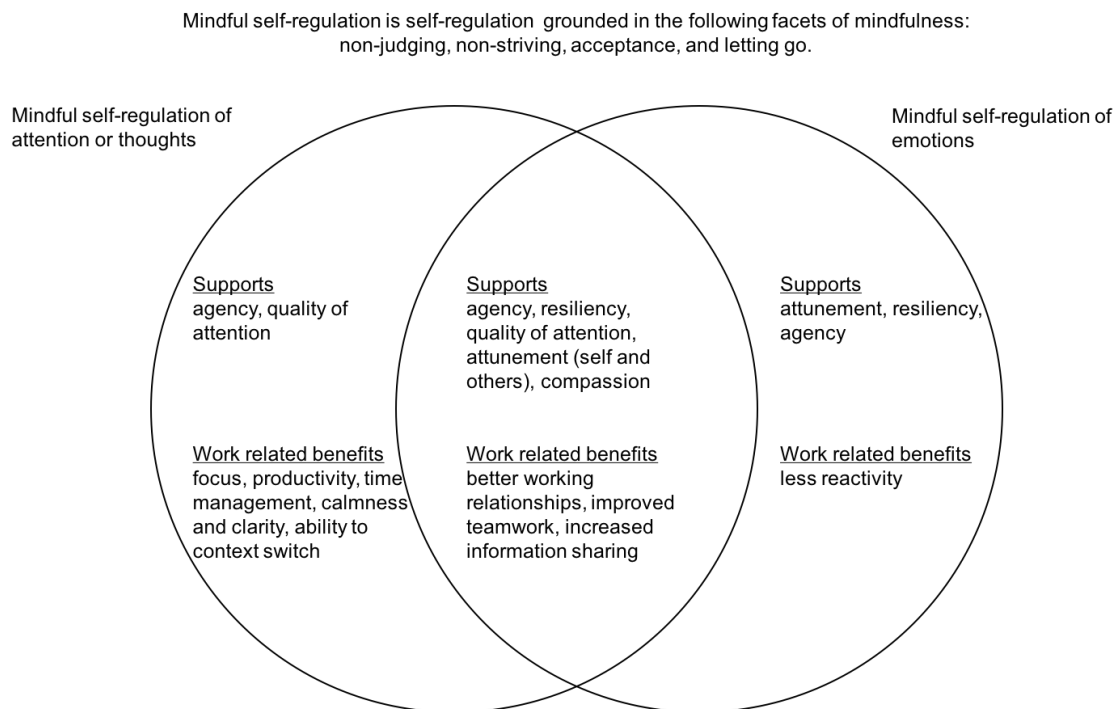
Work related benefits
less reactivity

Figure 8: Mindful self-regulation, the positive organization behavior/concepts it supports, and the resulting work-related benefits

Literature on mindful leadership is emerging (c.f., Ehrlich, 2017; Hougaard, Carter, & Coutts, 2016; Sethi, 2009), though much of this literature is not empirical. For example, Hougaard et al. (2016) suggest that in today's 'information overload' work environment leaders need to slow down to be successful, indicating that it is an attention economy requiring sharp focus and open awareness to be effective, and mindfulness is a path to have both. Sethi (2009) suggests that mindfulness is a key leadership competency because of the three key skills it enables: focus, awareness, and living in the moment. He suggests these skills enable authentic team behavior allowing them to look at the reality of a situation and "develop sharper strategies and deliver more coordinated and precise execution (Sethi, 2009, p. 8). Ehrlich (2017) offers a framework supporting mindfulness in leaders and organizations. He notes that mindfulness is an "inside out" approach that gives you clues about your reactions and impact. This approach is complimentary to the "outside-in" approaches of practice, feedback, and modeling. Ehrlich suggests that training employees in mindfulness in not enough, training in mindful leadership is required to enable mindful organizations. Reb, Narayanan, and Chaturvedi (2014) demonstrated the influence of leadership on key organizational measures by examining the influence of leaders' mindfulness on employee well-being and performance through two correlational studies, conducted in Singapore, involving supervisors and their subordinates. They found that leader mindfulness as measured by MAAS was significantly related to both employee well-being and performance.

Conclusion

This study investigated how individuals integrate mindfulness into the workplace, the primary guiding question was how does mindfulness workplace practice help individuals to self-regulate a) attention or thoughts, b) emotions, and c) both attention or thoughts and emotions, and what are the associated benefits. This study found self-regulation grounded in key mindfulness facets (i.e. non-judging, non-striving, acceptance, letting go) to be foundational in the integration of mindfulness in the workplace, and defined this as mindful self-regulation. Mindful self-regulation was found to support several positive organizational behaviors including: agency, resiliency, quality of attention, compassion, and attunement that related to the following work-related benefits: improved focus, increased productivity, better time management, increased ability to switch contexts, improved communication, better working relationships, better teaming, and increased information sharing in their employees. An element that is not present in the existing literature is the development of community as a mechanism for integrating mindfulness into the workplace. This study found several participants engaging in grassroots efforts of lunch time formal mindfulness practice.

Additionally, this study explored some of the barriers to mindfulness as well as the support of mindfulness. The big barriers to mindfulness in the workplace are time, distractions, the work culture of 'doing,' and systemic pressure to perform. Having a space to take some time out during the workday to formally practice mindfulness supports overcoming the time barrier, and the formal practice heightens self-regulation informed by mindfulness. The development of community to support mindfulness in the workplace is another way to overcome some of the barrier. Community offers support

87

through shared understanding and a common language, which encourages a deepening of practice. When individuals take time during the workday to practice formally, they can 'reset' and approach work from a more mindful state. Workplace meditation groups support this integration of formal practice during the workday by offering structure and inspiration. Finally, mindful leadership was identified and something that would support mindfulness in the workplace. This is a new topic in the literature and one that would benefit from further empirical exploration.

Limitations

As with any qualitative study, the findings in this study are not generalizable or predictive. The sample size was limited to 8 participants and while there was a good demographic balance, it was heavily weighted with people working in IT and over 30 years of age. It is not clear how the data may be affected with younger generation practitioners. Because data were limited to interviews, the lack of process data—observations in the workplace—or data collected from other members in the same workplace is a limitation; such data could reveal nuanced and subtle factors that participants themselves may not recognize. Future research should address this gap.

Another theoretical lens, either guiding the research methods or the analysis could reveal other issues, opportunities, and points of view with regard to workplace mindfulness. For instance, future studies could investigate the impact of mindful leadership programs on organizational change efforts. This could be done through a longitudinal mixed methods approach that includes on-going measurement of mindful self-regulation, key behaviors and attitudes necessary for change to occur, and measures of success for the initiative. The impact of mindfulness on organizational learning could

be examined through mindful self-regulation measures combined with relevant measures for organizational learning, such as, openness to sharing knowledge, willingness to take on new challenges, and how perceived failure is handled.

Finally, as a practitioner of mindfulness, I may have drawn interpretations and noticed features of participants' talk that those without such practice might not have noticed. Likewise, my own experiences may have drawn my attention toward and away from certain aspects. Just as I have advocated for communities of practice in mindfulness, having a community of researchers focused collectively could enhance this work.

Implications

This study adds to the literature by introducing the concept of mindful self-regulation. While this concept was inherent in previous work, my study pulls it out explicitly and connects it with positive organizational behaviors. This connection provides a framework that can enable a broader perspective of mindfulness in the workplace. Many of the quantitative studies use measures of mindfulness related to attentional focus (e.g. MAAS).

Further development of a construct for mindful self-regulation could expand the research of mindfulness in the workplace. Additionally, the conceptual framework and codes that were developed can offer an approach to studying mindfulness in the workplace that incorporates a multifaceted view of mindfulness with several positive organizational behaviors or attributes, which can help frame future research. Finally, this study also provides some practical suggestions for bringing more mindfulness to the workplace that doesn't require a lot of investment. For example, there is value in

supporting employees' grassroots efforts to engage in formal mindfulness practices over

lunch by providing a space and permission to promote it. From a practitioner

perspective, there seems to be a need to support the development of a community of

practice for mindfulness in the workplace.

Integrating Mindfulness into the Workplace – Interview Guide

Research Questions

This study is aimed at understanding 1) the individual process of integrating

mindfulness concepts and practices into their workplace, 2) the perceived benefits to the

individual, 3) the perceived benefits to the organization where they work, and 4) the

barriers encountered when attempting to integrate mindfulness concepts. Thus the

guiding research questions to this inquiry are:

1. How do individuals integrate mindfulness concepts and practices at work?
2. What are the individual's perceived benefits of mindfulness in the workplace?
3. From their perspective, how does this impact their organization?
4. What barriers do individuals encounter when attempting to integrate mindfulness concepts and practices at work?

Introduction common to all interviews:

• Remind participant of study goals, confidentiality, and their right to remove themselves from the study at any time
• Communicate that recording of the interview will occur and when it has started
• Communicate the objective of the interview.
  Approach common to all interviews:

1. Ask question
2. Negotiate meaning if necessary
   ○ Participant may to work through their interpretation of the question
3. Request for concrete description
   ○ Only needed if the participant provides a generalized answer
4. Provide interpretation of the description is necessary for shared understanding
   ○ Researcher to summarize quickly their understanding of description
5. Coda
   ○ Concluding remark indicating that follow-on questions or next question can be asked

Interview 1 (30 min)

- Objective
  - Establish rapport, gather work context information, ask about stress at work
- Approach
  - Semi-structured Interview
- Interview Guide
  - This interview is to help establish the context of your work environment and the stress you encounter in the workplace
  - First I'd like you to describe your work environment (office, customer service, knowledge worker, etc.)
    - *For example, I work at large multinational business to business company in the tech sector. My days involve a lot of meetings and interacting with co-workers.*
  - What are your most common areas of stress at work?
  - How do you currently manage your work stress?
  - Would you say that you handle work stress skillfully? Why? Why not?
    Beginning practitioner

  - With what you currently know about MBSR, where do you anticipate the most benefit/application in your workplace?
    Experienced practitioner

  - Do you integrate mindfulness into your workplace? If so how? If not, why?

Interview 2: Midpoint of program

Beginning practitioner

- Objective:
    - Understand how the program going. Understand if they are actively trying to integrate mindfulness at work. If so, understand how and the specific situations.
- Approach:
    - Semi-structured interview
- Interview Guide – questions may be modified to build on previous interviews
    - How is the MBSR program going for you thus far?
    - Have you found work to be less stressful?
    - Are any of the concepts or practices from the MBSR course applicable to dealing with stress in your work environment? Please describe.
    - Have you incorporated any of the concepts/practices to your work environment? Please describe.
    - What barriers have you found to incorporating concepts/practices to your work environment?

Experienced practitioner

- Objective:
    - Get specific examples of integration of mindfulness in workplace
- Approach:
    - Semi-structured interview
- Interview Guide:
    - What brought you to your meditation practice?
    - Did you notice a change in your work satisfaction when you started your meditation practice (if applicable)?
    - Please describe a situation at work where you have actively integrated your meditation practice? Is this current?

Interview 3: End of the program.

Beginning practitioner

- Objective:
    - Understand if continuing to integrate. Investigate scenarios from midpoint interview and what has transpired.
- Approach
    - Semi-structured
- Interview Guide
    - Last time you talked about XXX, how is that going?
    - Have you found MBSR course to benefit you at work? If so, how?
    - Has your overall stress at work changed? In what way?
    - After completing the MBSR course and reflecting on it in the workplace setting through participating in this study, How would you describe mindfulness in the workplace?

Experienced practitioner

- Objective:
    - Understand what barriers exist to integrating mindfulness into workplace for them. Understand what benefits they perceive. Understand their definition of mindfulness in the workplace.
- Approach
    - Semi-structured
- Interview Guide
    - If applicable ask about previous situations and how they have progressed
    - What barriers do you face when trying to integrate mindfulness into the workplace?
    - What benefits do you associate with integrating mindfulness into the workplace?
    - How would you describe mindfulness in the workplace?

REFERENCES

Allen, M., Bromley, A., Kuyken, W., & Sonnenberg, S. J. (2009). Participants' experiences of mindfulness-based cognitive therapy: "It changed me in just about every way possible". Behavioural and cognitive psychotherapy, 37(4), 413-430.

Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). Identification in organizations: an examination of four fundamental questions, 325.

Avey, J. B., Luthans, F., Smith, R. M., & Palmer, N. F. (2010). Impact of positive psychological capital on employee well-being over time. Journal of Occupational Health Psychology, 15(1), 17-28.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. Assessment, 13(1), 27-45.

Bandura, A. (1989). Human agency in social cognitive theory. American Psychologist, 44(9), 1175-1184. doi:10.1037/0003-066X.44.9.1175

Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. American Psychologist, 54(7), 462-479. doi:10.1037/0003-066X.54.7.462

Beckman, H. B., Wendland, M., Mooney, C., Krasner, M. S., Suchman, A. L., Quill, T. E., & Epstein, R. M. (2012). The impact of a program in mindful communication on primary care physicians. Academic Medicine, 87(6), 815-819.

Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self-compassion and empathy in the context of mindfulness-based stress reduction (MBSR). Stress & Health: Journal of the International Society for the Investigation of Stress, 26(5), 359-371.

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., . . .

    Devins, G. (2004). Mindfulness: A proposed operational definition. Clinical

    Psychology: Science and Practice, 11(3), 230-241.

Bodhi, B. (2011). What does mindfulness really mean? A canonical perspective.

    Contemporary Buddhism, 12(1), 19-39. doi:10.1080/14639947.2011.564813

Boyatzis, R. E., & McKee, A. (2005). Resonant leadership: Renewing yourself and

    connecting with others through mindfulness, hope, and compassion. Boston ::

    Harvard Business School Press.

Brinkmann, S. (2013). Qualitative interviewing. Oxford :: Oxford University Press.

Brown, K. W., Creswell, J. D., & Ryan, R. M. (2015). The evolution of mindful science.

    In K. W. Brown, J. D. Creswell, & R. M. Ryan (Eds.), Handbook of mindfulness :

    theory, research, and practice. New York :: The Guilford Press.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its

    role in psychological well-being. Journal of Personality and Social Psychology,

    84(4), 822-848. doi:10.1037/0022-3514.84.4.822

Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical

    foundations and evidence for its salutary effects. Psychological Inquiry, 18(4),

    211-237. doi:10.1080/10478400701598298

Bruine de Bruin, W., Parker, A. M., & Fischhoff, B. (2007). Individual differences in

    adult decision-making competence. Journal of Personality and Social Psychology,

    92(5), 938-956. doi:10.1037/0022-3514.92.5.938

Carmody, J., & Baer, R. A. (2008). Relationships between mindfulness practice and

    levels of mindfulness, medical and psychological symptoms and well-being in a

mindfulness-based stress reduction program. Journal of Behavioral Medicine, 31(1), 23-33.

Carson, S. H., & Langer, E. J. (2006). Mindfulness and self-acceptance. Journal of Rational-Emotive and Cognitive-Behavior Therapy, 24(1), 29-43.

Choi, E., & Leroy, H. (2015). Methods of mindfulness: How mindfulness is studied in the workplace. In J. Reb & P. W. B. Atkins (Eds.), Mindfulness in organizations: Foundations, research, and applications (pp. 67-99): Cambridge University Press.

Cleirigh, D. O., & Greaney, J. (2015). Mindfulness and group performance: An exploratory investigation into the effects of brief mindfulness intervention on group task performance. Mindfulness, 6(3), 601-609.

Colligan, T., & Higgins, E. (2006). Workplace stress: etiology and consequences. Journal of Workplace Behavioral Health, 21(2), 89-97.

Colville, I., Brown, A. D., & Pye, A. (2012). Simplexity: Sensemaking, organizing and storytelling for our time. Human Relations, 65(1), 5-15.

Creswell, J. W. (2013). Qualitative inquiry and research design : choosing among five approaches (3rd ed. ed.). Los Angeles :: SAGE Publications.

Cropanzano, R., & Wright, T. A. (1999). A 5-year study of change in the relationship between well-being and job performance. Consulting Psychology Journal: Practice and Research, 51(4), 252-265.

Culbertson, S. S., Fullagar, C. J., & Mills, M. J. (2010). Feeling good and doing great: The relationship between psychological capital and well-being. Journal of Occupational Health Psychology, 15(4), 421-433. doi:10.1037/a0020720

Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. Englewood Cliffs, NJ: Prentice-Hall.

Dane, E. (2011). Paying attention to mindfulness and Its effects on task performance in the workplace. Journal of Management, 37(4), 997-1018.

Dane, E., & Brummel, B. J. (2013). Examining workplace mindfulness and its relations to job performance and turnover intention. Human Relations, 67(1), 105-128.

Dane, E., & Brummel, B. J. (2014). Examining workplace mindfulness and its relations to job performance and turnover intention. Human Relations, 67(1), 105-128. doi:10.1177/0018726713487753

Danna, K. (1999). Health and well-being in the workplace: a review and synthesis of the literature. Journal of Management, 25(3), 357-384.

Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., . . . Sheridan, J. F. (2003). Alterations in brain and immune function produced by mindfulness meditation. Psychosomatic medicine, 65(4), 564-570.

Davis, J. H., & Thompson, E. (2015). Developing attention and decreasing affective bias. In K. W. Brown, J. D. Creswell, & R. M. Ryan (Eds.), Handbook of mindfulness : theory, research, and practice (pp. 42-61). New York :: The Guilford Press.

DeNeve, K. M., & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. Psychological Bulletin, 124(2), 197-229. doi:10.1037/0033-2909.124.2.197

Dewey, J. (1910). How we think. Boston, Mass. :: D.C. Heath & Co.

Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95(3), 542-575. doi:10.1037/0033-2909.95.3.542

Donaldson, S. I., & Ko, I. (2010). Positive organizational psychology, behavior, and scholarship: A review of the emerging literature and evidence base. The Journal of Positive Psychology, 5(3), 177-191.

Eccles, R. G., & Pyburn, P. J. (1992). Creating a comprehensive system to measure performance. Management accounting., LXXIV(4), 41.

Ehrlich, J. (2017). Mindful leadership. Organizational Dynamics, 46(4).

Epstein, R. M. (2014). What will it take for physicians to practice mindfully?: Promoting quality of care, quality of caring, resilience, and well-being The Wiley Blackwell Handbook of Mindfulness (pp. 584-607): John Wiley & Sons, Ltd : Chichester, UK.

Feldman, G., Greeson, J., & Senville, J. (2010). Differential effects of mindful breathing, progressive muscle relaxation, and loving-kindness meditation on decentering and negative reactions to repetitive thoughts. Behaviour Research and Therapy, 48(10), 1002-1011.

Fiol, C. M., & O'Connor, E. J. (2003). Waking up! Mindfulness in the face of bandwagons. Academy of Management Review, 28(1), 54-70. doi:10.5465/AMR.2003.8925227

Gagne, M., & Deci, E. L. (2005). Self-determination theory and work motivation. Journal of Organizational Behavior, 26(4), 331-362.

Gethin, R. (2015). Buddhist conceptualizations of mindfulness. In K. W. Brown, J. D. Creswell, & R. M. Ryan (Eds.), Handbook of mindfulness : theory, research, and practice (pp. 9-41). New York :: The Guilford Press.

Giluk, T. L., Stewart, G. L., & University of Iowa. College of Business, A. (2010).

    Mindfulness-based stress reduction facilitating work outcomes through

    experienced affect and high-quality relationships. University of Iowa, [Iowa City,

    Iowa] :. Retrieved from http://ir.uiowa.edu/etd/674 WorldCat.org database.

Glomb, T. M., Duffy, M. K., Bono, J. E., & Yang, T. (2011). Mindfulness at work

    Research in Personnel and Human Resources Management ; 30 (pp. 115-157):

    Howard House, Wagon Lane, Bingley, GBR, BD16 1WA: Emerald Group

    Publishing Ltd., 2011.

Goleman, D. (1995). Emotional intelligence. New York :: Bantam Books.

Goleman, D. (1998). What Makes a Leader? Harvard Business Review, 76(6).

Goleman, D., Boyatzis, R., & McKee, A. (2002). The emotional reality of teams. NPR

    Journal of Organizational Excellence, 21(2), 55-65.

Good, D. J., Lyddy, C. J., Glomb, T. M., Duffy, M. K., Bono, J. E., Brown, K. W., . . .

    Lazar, S. W. (2016). Contemplating mindfulness at work: an integrative review.

    Journal of Management, 42(1), 114-142.

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing

    research: concepts, procedures and measures to achieve trustworthiness. Nurse

    Education Today, 24(2), 105-112. doi:https://doi.org/10.1016/j.nedt.2003.10.001

Greeson, J. M. (2009). Mindfulness research update: 2008. Complementary Health

    Practice Review, 14(1), 10-18.

Guiette, A., & Vandenbempt, K. (2016). Learning in times of dynamic complexity

    through balancing phenomenal qualities of sensemaking. Management Learning,

    47(1), 83-99.

Hafenbrack, A. C., Kinias, Z., & Barsade, S. G. (2014). Debiasing the mind through

meditation: Mindfulness and the sunk-cost bias. Psychological Science (Sage

Publications Inc.), 25(2), 369-376. doi:10.1177/0956797613503853

Hafenbrack, A. C., Kinias, Z., & Barsade, S. G. (2014). Debiasing the mind through

meditation: mindfulness and the sunk-cost bias. Psychological science, 25(2),

369-376.

Hansen, M. T., & Haas, M. R. (2001). Competing for attention in knowledge markets:

Electronic document dissemination in a management consulting company.

Administrative Science Quarterly, 46(1), 1-28.

Hart, R., Ivtzan, I., & Hart, D. (2013). Mind the gap in mindfulness research: A

comparative account of the leading schools of thought. Review of General

Psychology, 17(4), 453-466. doi:10.1037/a0035212

Harter, J. K., Schmidt, F. L., & Keyes, C. L. M. Well-being in the workplace and its

relationship to business outcomes: A review of the Gallup studies Flourishing:

Positive psychology and the life well-lived. (pp. 205-224): American

Psychological Association : Washington.

Heifetz, R., Grashow, A., & Linsky, M. (2009). Leadership in a (permanent) crisis.

Harvard Business Review, 87(7/8), 62-69.

Hjeltnes, A., Binder, P.-E., Moltu, C., & Dundas, I. (2015). Facing the fear of failure: An

explorative qualitative study of client experiences in a mindfulness-based stress

reduction program for university students with academic evaluation anxiety.

International Journal of Qualitative Studies on Health & Well-Being, 10.

Hougaard, R., Carter, J., & Coutts, G. (2016). Mindful leadership: Achieving results by managing the mind. Leader to Leader, 2016(79), 49-56.

Hugh-Jones, S., Rose, S., Koutsopoulou, G. Z., & Simms-Ellis, R. (2017). How is stress reduced by a workplace mindfulness intervention? A qualitative study conceptualising experiences of change. Mindfulness. doi:10.1007/s12671-017-0790-2

Huston, D. C., Garland, E. L., & Farb, N. A. S. (2011). Mechanisms of mindfulness in communication training. Journal of Applied Communication Research, 39(4), 406-421. doi:10.1080/00909882.2011.608696

Hyland, P. K., Lee, R. A., & Mills, M. J. (2015). Mindfulness at work: a new approach to improving individual and organizational performance. Industrial & Organizational Psychology, 8(4), 576-602. doi:10.1017/iop.2015.41

Ie, A., Ngnoumen, C. T., & Langer, E. J. (Eds.). (2014). The Wiley Blackwell handbook of mindfulness. Volume I. Chichester, West Sussex, United Kingdom :: John Wiley & Sons.

Ireland, M. J. (2013). Meditation and psychological health: Modeling theoretically derived predictors, processes, and outcomes. Mindfulness, 4(4), 362-374. doi:10.1007/s12671-012-0136-z

Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: a literature review. Journal of Advanced Nursing, 60(1), 1-9. doi:10.1111/j.1365-2648.2007.04412.x

Jaeggi, S. M., Buschkuehl, M., Jonides, J., & Perrig, W. J. (2008). Improving fluid intelligence with training on working memory. PROCEEDINGS- NATIONAL ACADEMY OF SCIENCES USA, 105(19), 6829-6833.

Jha, A., Morrison, A., Dainer-Best, J., Parker, S., Rostrup, N., & Stanley, E. (2015). Minds "at attention": Mindfulness training curbs attentional lapses in military cohorts. PLoS ONE, 10(2), 1-19. doi:10.1371/journal.pone.0116889

Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., & Gelfand, L. (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. Emotion, 10(1), 54-64. doi:10.1037/a0018438

Johnson, D. W., & Johnson, F. P. (2000). Joining together : group theory and group skills (7th ed. ed.). Boston :: Allyn and Bacon.

Jones, S. M., & Hansen, W. (2015). The impact of mindfulness on supportive communication skills: Three exploratory studies. Mindfulness, 6(5), 1115-1128. doi:10.1007/s12671-014-0362-7

Kabat-Zinn, J. (1982). An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: theoretical considerations and preliminary results. . General Hospital Psychiatry, 4(1), 33-47.

Kabat-Zinn, J. (1991). Full catastrophe living : using the wisdom of your body and mind to face stress, pain, and illness. New York, N.Y. :: Pub. by Dell Pub., a division of Bantam Doubleday Dell Pub. Group.

Kabat-Zinn, J. (1994). Wherever you go, there you are : mindfulness meditation in everyday life (1st ed. ed.). New York :: Hyperion.

Kabat-Zinn, J., Lipworth, L., Burney, R., Sellers, W., & Brew, M. (1984). Reproducibility and four year follow-up of a training program in mindfulness meditation for the self-regulation of chronic pain. Pain, 18 Suppl 1, S303.

Kaplan, R. S., & Norton, D. P. (1992). The balanced scorecard--measures that drive performance. Harvard Business Review, 70(1), 71-79.

Keng, S.-L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. Clinical Psychology Review, 31(6), 1041-1056.

King, D. D., Newman, A., & Luthans, F. (2016). Not if, but when we need resilience in the workplace. Journal of Organizational Behavior, 37(5), 782-786. doi:10.1002/job.2063

Kings, R., & Wardropper, E. (2016). Creating a mindful culture within financial services: Capital One. In M. Chapman-Clarke (Ed.), Mindfulness in the workplace: An evidence-based approach to improving wellbeing and maximizing performance (pp. 94-112). Great Britain and United States: Kogan Page Limited.

Klingberg, T. (2010). Training and plasticity of working memory. Trends in Cognitive Sciences, 14(7), 317-324.

Langer, E. J. (1989). Mindfulness. Reading, Mass. :: Addison-Wesley Pub. Co.

Langer, E. J. (1997). The power of mindful learning: Addison-Wesley.

Langer, E. J., & Moldoveanu, M. (2000). The construct of mindfulness. JOSI Journal of Social Issues, 56(1), 1-9.

LaPorte, T. R., & Consolini, P. M. (1991). Working in practice but not in theory: Theoretical challenges of "High-Reliability Organizations". Journal of Public Adminstration Research and Theory: J-PART, 1(1), 19-48.

Lau, M. A., Bishop, S. R., Segal, Z. V., Buis, T., Anderson, N. D., Carlson, L., . . . Devins, G. (2006). The toronto mindfulness scale: Development and validation. Journal of clinical psychology, 62(12), 1445-1467. doi:10.1002/jclp.20326

Levinthal, D., & Rerup, C. (2006). Crossing an Apparent Chasm: Bridging Mindful and Less-Mindful Perspectives on Organizational Learning. Organization Science, 17(4), 502-513.

Lilius, J., Worline, M., Dutton, J., Kanov, J., & Maitlis, S. (2011). Understanding compassion capability. Human Relations, 64(7), 873-899.

Lilius, J. M., Worline, M. C., Maitlis, S., Kanov, J., Dutton, J. E., & Frost, P. (2008). The contours and consequences of compassion at work. Journal of Organizational Behavior, 29(2), 193-218.

Lounsbury, M. (2003). The problem of order revisted: Towards a more critical institutional perspective. In R. Westwood & S. Clegg (Eds.), Debating organization: Point - counterpoint in organizational studies (pp. 210-219): Blackwell Publishing Ltd.

Luthans, B. C., Luthans, K. W., & Jensen, S. M. (2012). The impact of business school students' psychological capital on academic performance. Journal of Education for Business, 87(5), 253-259. doi:10.1080/08832323.2011.609844

Luthans, F. (2002). The need for and meaning of positive organizational behavior. Journal of Organizational Behavior, 23(6), 695-706.

Luthans, F., & Jensen, S. M. (2002). Hope: A new positive strength for human resource development. Resource Development Review, 1(3), 304-322.

Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. Organizational Dynamics, 33(2), 143-160.

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). Psychological capital : developing the human competitive edge. Oxford ;: Oxford University Press.

Lutz, A., Slagter, H. A., Dunne, J. D., & Davidson, R. J. (2008). Attention regulation and monitoring in meditation. Trends in Cognitive Sciences, 12(4), 163-169.

Malinowski, P., & Lim, H. J. (2015). Mindfulness at work: Positive affect, hope, and optimism mediate the relationship between dispositional mindfulness, work engagement, and well-being. Mindfulness, 6(6), 1250-1262.

Motowidlo, S. J. (2003). Job performance. Handbook of psychology.

Motowidlo, S. J., & van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. Journal of Applied Psychology, 79(4), 475-480.

Mrazek, M. D., Franklin, M. S., Phillips, D. T., Baird, B., & Schooler, J. W. (2013). Mindfulness training improves working memory capacity and GRE performance while reducing mind wandering. Psychological Science (Sage Publications Inc.), 24(5), 776-781. doi:10.1177/0956797612459659

Mrazek, M. D., Franklin, M. S., Phillips, D. T., Baird, B., & Schooler, J. W. (2013). Mindfulness training improves working memory capacity and GRE performance while reducing mind wandering. Psychological science, 24(5), 776-781.

Neely, A., Gregory, M., & Platts, K. (1995). Performance measurement system design: A literature review and research agenda. International Journal of Operations & Production Management, 15(4), 80-116. doi:doi:10.1108/01443579510083622

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. Organization Science, 5(1), 14-37.

Nottingham, L., & Peacock, S. (2016). Mindfulness in the media world: SMG. In M. Chapman-Clarke (Ed.), Mindfulness in the workplace: An evidence-based approach to improving wellbeing and maximizing performance (pp. 77-93). Great Britain and United States: Kogan Page Limited.

Ostafin, B. D., & Kassman, K. T. (2012). Stepping out of history: Mindfulness improves insight problem solving. Consciousness and Cognition, 21(2), 1031-1036.

Ozum, U. (2006). Transparency, communication and mindfulness. Journal of Management Development, 25(10), 1024-1028.

Quick, J. C., Camara, W. J., Hurrell, J. J., Jr., Johnson, J. V., Piotrkowski, C. S., Sauter, S. L., & Spielberger, C. D. (1997). Introduction and historical overview. Journal of Occupational Health Psychology, 2(1), 3-6. doi:10.1037/1076-8998.2.1.3

Ravitch, S. M., & Carl, N. M. (2016). Qualitative research : bridging the conceptual, theoretical, and methodological. Los Angeles :: SAGE.

Reb, J., & Atkins, P. W. B. (2015). Mindfulness in organizations : foundations, research, and applications. Cambridge ;: Cambridge University Press.

Reb, J., Narayanan, J., & Chaturvedi, S. (2014). Leading mindfully: Two studies on the influence of supervisor trait mindfulness on employee well-being and performance. Mindfulness, 5(1), 36-45.

Reb, J., Narayanan, J., & Ho, Z. W. (2015). Mindfulness at work: antecedents and

    consequences of employee awareness and absent-mindedness. Mindfulness, 6(1),

    111-122.

Reid, D. (2009). Capturing presence moments: the art of mindful practice in occupational

    therapy. Canadian journal of occupational therapy. Revue canadienne

    d'ergothérapie, 76(3), 180-188.

Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the

    workplace from 2003 to 2014: A systematic review. Journal of Occupational and

    Organizational Psychology, 88(3), 533-562.

Roche, M., Haar, J. M., & Luthans, F. (2014). The role of mindfulness and psychological

    capital on the well-being of leaders. Journal of Occupational Health Psychology,

    19(4), 476-489. doi:10.1037/a0037183

Rosenberg, M. (1986). Conceiving the self (Reprint ed. ed.). Malabar, Fla. :: R.E.

    Krieger.

Rothstein, M. G., McLarnon, M. J. W., & King, G. (2016). The role of self-regulation in

    workplace resiliency. Industrial & Organizational Psychology, 9(2).

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of

    intrinsic motivation, social development, and well-being. American Psychologist,

    55(1), 68-78. doi:10.1037/0003-066X.55.1.68

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of

    research on hedonic and eudaimonic well-being. Annual Review of Psychology,

    52(1), 141.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of

 psychological well-being. Journal of Personality and Social Psychology, 57(6),

 1069-1081. doi:10.1037/0022-3514.57.6.1069

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being

 revisited. Journal of Personality and Social Psychology, 69(4), 719-727.

 doi:10.1037/0022-3514.69.4.719

Saad, L. (2014). The "40-Hour" workweek is actually longer -- by seven hours. Full-time

 U.S. workers, on average, report working 47 hours weekly.   Retrieved from

 http://www.gallup.com/poll/175286/hour-workweek-actually-longer-seven-

 hours.aspx

Safran, J. D., & Segal, Z. V. (1990). Interpersonal process in cognitive therapy. New

 York: Basic Books, Inc.

Saldana, J. (2016). The coding manual for qualitative researchers (3rd ed.). Los Angeles:

 SAGE.

Sarter, N. B., & Woods, D. D. (1991). Situation awareness: A critical but ill-defined

 phenomenon. The International Journal of Aviation Psychology, 1(1), 45-57.

 doi:10.1207/s15327108ijap0101_4

Schellekens, M. P. J., Karremans, J. C., van der Drift, M. A., Molema, J., van den Hurk,

 D. G. M., Prins, J. B., & Speckens, A. E. M. (2017). Are mindfulness and self-

 compassion related to psychological distress and communication in couples

 facing lung cancer? A dyadic approach. Mindfulness, 8(2), 325-336.

 doi:10.1007/s12671-016-0602-0

Schön, D. A. (1983). The reflective practitioner: How professionals think in action. New York :: Basic Books.

Schooler, J. W., Ohlsson, S., & Brooks, K. (1993). Thoughts beyond words: When language overshadows insight. Journal of Experimental Psychology: General, 122(2), 166-183. doi:10.1037/0096-3445.122.2.166

Schooler, J. W., Smallwood, J., Christoff, K., Handy, T. C., Reichle, E. D., & Sayette, M. A. (2011). Meta-awareness, perceptual decoupling and the wandering mind. Trends in Cognitive Sciences, 15(7), 319-326.

Senge, P. M. (1990). The fifth discipline : the art and practice of the learning organization (1st ed. ed.). New York :: Doubleday/Currency.

Sethi, D. (2009). Mindful leadership. Leader to Leader, 2009(51), 7-11.

Shao, R., & Skarlicki, D. P. (2009). The role of mindfulness in predicting individual performance. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 41(4), 195-201.

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. Journal of clinical psychology, 62(3), 373-386.

Shapiro, S. L., & Jazaieri, H. (2015). Mindfulness-based stress reduction for healthy stressed adults. In K. W. Brown, J. D. Creswell, & R. M. Ryan (Eds.), Handbook of mindfulness : theory, research, and practice (pp. 269-282). New York :: The Guilford Press.

Shapiro, S. L., Jazaieri, H., & Goldin, P. R. (2012). Mindfulness-based stress reduction effects on moral reasoning and decision making. Journal of Positive Psychology, 7(6), 504-515.

Shonin, E., Gordon, W., Dunn, T., Singh, N., & Griffiths, M. (2014). Meditation

Awareness Training (MAT) for work-related wellbeing and job performance: A

randomised controlled trial. International Journal of Mental Health & Addiction,

12(6).

Shuy, R. W. (2002). In-person versus telephone interviewing. In J. F. Gubrium & J.

Holstein, A. (Eds.), Handbook of interview research: Context and method (pp.

537-555). Thousand Oaks: Sage Publications.

Siegel, D. J. (2007). The mindful brain: Reflection and attunement in the cultivation of

well-being. New York: W.W. Norton.

Siegel, D. J. (2009). Mindful awareness, mindsight, and neural integration. The

Humanistic Psychologist, 37(2), 137-158. doi:10.1080/08873260902892220

Singh, N. N., Wechsler, H. A., Curtis, W. J., Sabaawi, M., Myers, R. E., & Singh, S. D.

(2002). Effects of role-play and mindfulness training on enhancing the family

friendliness of the admissions treatment team process. Journal of Emotional and

Behavioral Disorders, 10(2), 90-98.

Slagter, H. A., Davidson, R. J., & Lutz, A. (2011). Mental training as a tool in the

neuroscientific study of brain and cognitive plasticity. Frontiers in Human

Neuroscience, 5.

Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S.

T., . . . Harney, P. (1991). The will and the ways: Development and validation of

an individual-differences measure of hope. Journal of Personality and Social

Psychology, 60(4), 570-585. doi:10.1037/0022-3514.60.4.570

Tan, C.-M. (2012). Search inside yourself : the unexpected path to achieving success, happiness (and world peace). New York :: HarperOne.

Teper, R., & Inzlicht, M. (2014). Mindful acceptance dampens neuroaffective reactions to external and rewarding performance feedback. Emotion, 14(1), 105-114. doi:10.1037/a0034296

Toor, S.-u.-R., & Ofori, G. (2010). Positive psychological capital as a source of sustainable competitive advantage for organizations. Journal of Construction Engineering & Management, 136(3), 341-352. doi:10.1061/(ASCE)CO.1943-7862.0000135

Vago, D. R., & Silbersweig, D. A. (2012). Self-awareness, self-regulation, and self-transcendence (S-ART): A framework for understanding the neurobiological mechanisms of mindfulness. Frontiers in Human Neuroscience, 6. doi:10.3389/fnhum.2012.00296

Van Gordon, W., Shonin, E., Sumich, A., Sundin, E. C., & Griffiths, M. D. (2014). Meditation awareness training (MAT) for psychological well-being in a sub-clinical sample of university students: A controlled pilot study. Mindfulness, 5(4), 381-391.

van Knippenberg, D. (2000). Work motivation and performance : a social identity perspective. Applied Psychology.

Vich, M. (2015). The emerging role of mindfulness research in the workplace and its challenges. Central European Business Review, 4(3), 35-47.

Wachs, K., & Cordova, J. V. (2007). Mindful relating: Exploring mindfulness and emotion repertoires in intimate relationships. Journal of marital and family therapy, 33(4), 464-481.

Wallace, B. A., & Tsong-kha-pa, B.-b.-g.-p. (2005). Balancing the mind : a Tibetan Buddhist approach to refining attention. Ithaca, NY :: Snow Lion Publications.

Walsh, J. P. (1995). Managerial and organizational cognition: Notes from a trip down memory lane. Organization Science, 6(3), 280-321.

Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. Journal of Personality and Social Psychology, 64(4), 678-691. doi:10.1037/0022-3514.64.4.678

Weick, K. E. (1995). Sensemaking in organizations. Thousand Oaks :: Sage Publications.

Weick, K. E. (2002). Essai: Real-time reflexivity: Prods to reflection. Organization Studies, 23(6), 893-898.

Weick, K. E., & Putnam, T. (2006). Organizing for mindfulness : Eastern wisdom and western knowledge. Journal of Management Inquiry, 15(3), 275-287.

Weick, K. E., & Sutcliffe, K. M. (2001). Managing the unexpected: Assuring high performance in an age of complexity (1st ed. ed.). San Francisco :: Jossey-Bass.

Weick, K. E., & Sutcliffe, K. M. (2006). Mindfulness and the quality of organizational attention. Organization Science, 17(4), 514-524.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (1999). Organizing for high reliability: processes of collective mindfulness. Research in organizational behavior : an annual series of analytical essays and critical reviews.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of

    sensemaking. Organization Science, 16(4), 409-421. doi:10.1287/orsc.1050.0133

Welzel, C., & Inglehart, R. (2010). Agency, values, and well-being: A human

    development model. Social Indicators Research, 97(1), 43-63. Retrieved from

West, C. P., Dyrbye, L. N., Rabatin, J. T., Call, T. G., Davidson, J. H., Multari, A., . . .

    Shanafelt, T. D. (2014). Intervention to promote physician well-being, job

    satisfaction, and professionalism: a randomized clinical trial. JAMA internal

    medicine, 174(4), 527-533.

Wilson, S. M., & Ferch, S. R. (2005). Enhancing Resilience in the Workplace Through

    the Practice of Caring Relationships. Organization Development Journal, 23(4),

    45-60.

Wolever, R. Q., Bobinet, K. J., McCabe, K., Mackenzie, E. R., Fekete, E., Kusnick, C. A.,

    & Baime, M. (2012). Effective and viable mind-body stress reduction in the

    workplace: A randomized controlled trial. Journal of Occupational Health

    Psychology, 17(2), 246-258. doi:10.1037/a0027278

Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as

    predictors of job performance. Journal of Occupational Health Psychology, 5(1),

    84-94. doi:10.1037/1076-8998.5.1.84

Yeganeh, B., & Kolb, D. (2009). Mindfulness and experiential learning. OD Practitioner,

    41(3), 13-18.

Zwack, J., & Schweitzer, J. (2013). If every fifth physician Is affected by burnout, what

    about the other four? Resilience strategies of experienced physicians. Academic

    Medicine, 88(3), 382-389.