

University of Windsor

Scholarship at UWindsor

Major Papers

Theses, Dissertations, and Major Papers

January 2022

Mindfulness: A Systematic Review

Milica Kozomara

University of Windsor, kozomarm@uwindsor.ca

Follow this and additional works at: <https://scholar.uwindsor.ca/major-papers>



Part of the [Business Administration, Management, and Operations Commons](#)

Recommended Citation

Kozomara, Milica, "Mindfulness: A Systematic Review" (2022). *Major Papers*. 200.
<https://scholar.uwindsor.ca/major-papers/200>

This Major Research Paper is brought to you for free and open access by the Theses, Dissertations, and Major Papers at Scholarship at UWindsor. It has been accepted for inclusion in Major Papers by an authorized administrator of Scholarship at UWindsor. For more information, please contact scholarship@uwindsor.ca.

Mindfulness: A Systematic Review

By

Milica Kozomara

A Major Research Paper

Submitted to the Faculty of Graduate Studies
through the Odette School of Business
in Partial Fulfillment of the Requirements for
the Degree of Master of Business Administration

at the University of Windsor

Windsor, Ontario, Canada

2021

© 2021 Milica Kozomara

Mindfulness: A Systematic Review

by

Milica Kozomara

APPROVED BY:

K. Robson
Odette School of Business

K. Walker, Advisor
Odette School of Business

December 10, 2021

DECLARATION OF ORIGINALITY

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication.

I certify that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis and have included copies of such copyright clearances to my appendix.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.

ABSTRACT

A systematic review of the mindfulness literature is conducted. A sample of 54 academic articles was created and an analysis of the empirical evidence on the effects of mindfulness on work-related outcomes and processes—such as employee performance, leadership, and ethical decision making—was conducted. The sample was analyzed to address four underlying issues in the literature: (1) the need for a complete definition of mindfulness, (2) the need for more developed theory, (3) the difficulties associated with operationalizing mindfulness, and (4) to identify gaps in the literature and areas for future research. We conclude that: (1) there may be different forms of mindfulness practice in organizations that impact varying aspects of organizational effectiveness and (2) the study and application of mindfulness in organizations offers promising directions; however, more research is needed to create a basis of evidence for successful mindfulness training programs. Further, a deeper understanding of the theories used to understand the mechanisms, consequences, and conditions of mindfulness would benefit organizational effectiveness.

TABLE OF CONTENTS

DECLARATION OF ORIGINALITY	ii
ABSTRACT	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
INTRODUCTION	1
CHAPTER 1	3
METHODOLOGY AND SAMPLE	3
Key Word and Article Identification	3
Quality Assessment	4
<i>Group 1: 2003-2012</i>	5
<i>Group 2: 2013-2019</i>	6
<i>Group 3: 2019-2021</i>	7
Data Extraction	7
Data Synthesis	7
CHAPTER 2	8
DEFINING MINDFULNESS	8
How Mindfulness is Oriented	10
Individual Mindfulness	11
Collective Mindfulness	12
Eastern Conceptions of Mindfulness.....	13
Western Conceptions of Mindfulness	15
Defining Mindfulness	16
Constructing a Definition	16
CHAPTER 3	19
THEORIES USED TO EXAMINE MINDFULNESS	19
Theory of High Reliability Organizations (HROs)	19

Theory of Psychological Capital	20
Conservation of Resources Theory	22
Self-Determination Theory	22
CHAPTER 4	25
Control Variables	26
Industry	27
Geographic Region	28
Time	29
Dependent Variables	30
Mindfulness and Ethical Behaviour	30
Mindfulness and Job Performance	31
Mindfulness and Decision-Making	32
Mindfulness, Leadership, and Employee Well-Being	33
Independent Variables	33
Mindfulness as a State or Trait	34
Technique Used to Understand Mindfulness	35
Survey Response Scales	35
DISCUSSION	40
Organizational Implications	40
Future Research	43
The Definition of Mindfulness	45
Theoretical Research Gaps	46
Operationalization Research Gaps	47
CHAPTER 6	50
CONCLUSION	50
Contributions	50
Summary	51
REFERENCES	53
APPENDICES	64

VITA AUCTORIS77

LIST OF TABLES

Table 1: *Rank Order of Journals Publishing Quality Mindfulness Papers*

Table 2: *Definitions of Mindfulness Referenced in the Sample*

LIST OF FIGURES

- Figure 1: *Key Terms Related to Mindfulness*
- Figure 2: *Control Variables Used in Sample*
- Figure 3: *Cross-Cultural Analyses of Mindfulness*
- Figure 4: *Dependent Variables Used in Sample*
- Figure 5: *Independent Variables Used in Sample*
- Figure 6: *Mindfulness Scales Used in the Sample*
- Figure 7: *Future Research Topics*

INTRODUCTION

While the topic of mindfulness appeared in organizational science in the early 2000s, it has been widely known for much longer in Buddhist traditions. Since its widespread growth, multidisciplinary evidence suggests that mindfulness is fundamentally connected to organizational effectiveness. There is a general consensus that mindfulness has positive effects on a variety of employee performance factors and organizational effectiveness, including resistance to stress (Hülshager et al., 2013) and problem-solving skills (Olafsen, 2017). However, authors of the mindfulness literature have described it in different ways (Fiol & O'Connor, 2003; Levinthal & Rerup, 2006; Weick & Sutcliffe, 2006; Weick and Putnam, 2006), and there is a lack of definitional consensus. To date, there has been no systematic review of the mindfulness literature to analyze its definitions, theories used to understand it, variables used to explain it and its relationships, and a summation of the major findings.

In this paper these gaps are addressed using a systematic review, where 54 well-cited articles were selected as the study sample. Using the created sample four contributions to the mindfulness literature are made: (1) A new comprehensive definition is provided; (2) Theories used and how they have contributed to our understanding of mindfulness are described; (3) Its operationalization and relationships to other variables are delineated, and; (4) The major findings of mindfulness within organizations are identified.

This paper proceeds as follows. The sample is described in Chapter 1. In Chapter 2, mindfulness is differentiated from related terms and concepts of individual mindfulness and collective mindfulness. Eastern and Western conceptualizations of the term are

discussed and a new definition that bridges the gap between the two is constructed. In chapter 3, contribution to theoretical development is provided by delineating what mindfulness is not, and an in depth-analysis of the four most commonly used theories in the sample are discussed. These theories include (1) the theory of high reliability organizations (HROs), (2) the theory of psychological capital, (3) attribution theory, and (4) self-determination theory. In Chapter 4, a discussion of the operationalization of mindfulness is provided tying its measurement to the new definition. In Chapter 5, research findings for mindfulness within organizations are discussed. In Chapter 6, areas for future research to better conceptualize mindfulness are reviewed. In this paper, each of the four contributions are discussed separately. However, it is important to recognize how each is related. For example, an analysis of the varying theories that developed the term help inform our definition, which informs our operationalization. The interconnectedness of the topics is discussed in Chapter 7.

CHAPTER 1

METHODOLOGY AND SAMPLE

A comprehensive review on mindfulness was conducted. In this chapter, the development of the sample is provided, incorporating 54 highly cited academic papers over an 18-year time period. Highly cited papers included those that received more citations when compared to other papers published in the same field over the same period of time. For papers published between 2003 to 2012, an article had to have a minimum of two citations per year since publication to qualify as a highly cited paper. For papers published between 2012 to 2019, an article had to have a minimum of five citations since publication to qualify as a highly cited paper. Citations were not considered for papers published between 2019 to 2021 since these articles have not had enough time to accumulate citations. We limited the results to categories of business, management, and ethics disciplines. There were four steps to the systematic review process used in this study: (1) key word and article identification, (2) quality assessment, (3) data extraction, (4) data synthesis. Each step is described sequentially.

Key Word and Article Identification

The overall intent of the literature review was to conduct an analysis of the mindfulness literature and gather measurable outcome studies of mindfulness practices within organizations. The search was limited to articles that contained the word mindfulness in the title or abstract, which resulted in 10,964 results on the Web of Science database. The Web of Science database was used for two reasons. First, it allows for a broad search from numerous disciplines. Second, it provides citation counts to determine the quality of papers to relevant research results. Applying search criteria to only include

articles published in business, management, or ethics disciplines further reduced the sample to 201 results.

In our search for mindfulness in the title and abstract, possible additional key words became apparent, specifically, reflection, consciousness and compassion. Accordingly, these additional words were also searched in the title and abstract. A search for reflection resulted in 11 highly cited papers, consciousness 9 highly cited papers, and compassion 5 highly cited papers. Reading through these papers revealed that the additional words were not directly relevant to mindfulness but included broader discussions independent of mindfulness. For example, the article titled, “Building an Inclusive Diversity Culture,” fit search criteria since the term “reflection” was in the abstract and the article was published in the Journal of Business Ethics. After reading the article, it became apparent that the its focus was on the principles, processes, and practices that create more inclusive work environments. Further, the conceptual framework introduced in this paper includes four transformational stages, the first being reflection. The article does not measure reflection or mindfulness, nor does it discuss how either impact organizational effectiveness. Another article titled “Facilitating Management Learning – Developing Critical Reflection through Reflective Tools,” also fit search criteria, but reading the article revealed that again it was not relevant to mindfulness.

Quality Assessment

The second step in the literature review process is a quality assessment of the articles identified in step one. In this step, the sample was 201 articles and was further reduced to include only the most heavily cited papers on mindfulness. The sample largely reflects articles from the Journal of Business Ethics (29%) and the Journal of Business

Research (18%) and it provides empirical evidence on the effects of mindfulness on work-related outcomes and processes. As a result, the findings in the review may contribute to all three disciplines from the search criteria—business, management, and ethics.

Since the number of citations that a paper receives largely depends on when it was written, a newer paper may not have had adequate time to accumulate as many citations as an older paper would. At the same time, the topic of mindfulness gained popularity in recent years and has seen an increase in publications since the early 2000s. Thus, to ensure that high quality papers published recently were included in the literature review, it was necessary to classify the papers into three groups based on the date of publications and apply different assessment criteria to each group: Group 1: 2003-2012, Group 2: 2013-2019, Group 3: 2019-2021. Although Group 2 and 3 both include the year 2019, different selection criteria were applied to each group (discussed further below) and no duplication of articles was recorded.

Group 1: 2003-2012

The time frame for Group 1 was chosen as the topic of mindfulness increased in popularity and in publications in the early 2000s (Fiol and O'Connor, 2003; Levinthal and Rerup, 2006; Weick and Sutcliffe, 2006). Further, focusing on more recent published articles allowed us to focus on today's state of the conceptualizing and theorizing about mindfulness. The first highly cited paper on the *Web of Science* database on mindfulness was published in 2003. One publication was noted in 1990; however, the paper was a high-level discussion of mindfulness and did not go into depth relative to the other papers included in the final sample for this research. Further, a 10-year time frame for the grouping of articles is common with other systematic reviews (Walker, 2010).

Following a systematic review, all papers in the sample published between the years 2003 and 2012 were subjected to a quality test using the number of citations as the criterion. As a quality assessment each paper in the sample had to have a minimum of two citations per year on average (the same approach has been applied in previous systematic reviews. See for example: Walker, 2010). This was calculated by taking the total number of citations divided by the number of years since publication. The final sample in Group 1 was 16 articles.

Group 2: 2013-2019

Articles in Group 2 were published on *Web of Science* between 2013-2019 and had mindfulness in their title or abstract. To pass the quality test in Group 2, articles had to have a minimum requirement of at least five citations since publication and either: (1) have had an average of two citations per year; or, (2) have been published in one of the leading six journals in the area. Originally, and following previous systematic reviews (see Walker, 2010) a minimum 10 citations since publication were required. However, this resulted in too few papers, so the minimum requirement was reduced to five citations.

The top six journals were determined by examining the 18 articles in Group 1, which appeared in 10 different journals. The top six journals comprised 77 percent of the articles identified in Group 1, and all had published at least two papers on the topic of mindfulness. The top six journals include the Journal of Business Ethics, the Journal of Business Research, Management Learning, Organization Science, Academy of Management Inquiry, and Academy of Management Review (Table 1). The final sample in Group 2 was 25 articles.

Group 3: 2019-2021

Group 3 included all articles appearing in one of the top six journals identified in Group 1 and were published between 2019 and 2021. Since these articles were recently published, they have not yet had time to accumulate citations. Articles that were published during this time and had already been included in Group 2 were not included in Group 3 (i.e., no duplication required). The final sample in Group 3 was 13 articles.

Data Extraction

To reduce author subjectivity, data was collected and interpreted using a standardized data extraction protocol (Winchester and Salji, 2016). A data extraction form was used which included: the title of the article, the name of the author(s), the year of publication, key findings from the abstract, definitions provided, theories used, methods of research and the variables used (independent, dependent, and control variables), contributions, the context of the articles, and additional comments. This resulted in a document of 35 pages (an average of 0.65 pages per article) of data, which provided the basis for the analysis of this literature review.

Data Synthesis

In the analysis of the mindfulness literature, three major gaps were identified in the literature: (1) a lack of a comprehensive definition (2) a lack of developed theory, and (3) weak methods used to operationalize the construct. These three underlying issues will guide the discussion in the remainder of the paper.

CHAPTER 2

DEFINING MINDFULNESS

Despite the widespread growth of mindfulness in organization science and the debate on its appropriation in the business context (Aviles & Dent, 2015), a widely used definition does not exist. In order to construct a comprehensive definition of the term, it is critical to differentiate between the different types of mindfulness discussed in the literature. Of the 54 articles in the sample, 48 articles provided definitions of mindfulness (see Table 3). Some articles provided multiple definitions. The total number of definitions provided in the sample was 55. This is a clear demonstration of a lack of definitional consensus. Brown and Ryan's (2003: p. 822) definition of "a receptive attention to and awareness of present events and experience", was used twice in the sample. Another variation of Brown and Ryan's (2003: p. 824) definition was used twice, which states that mindfulness is a "present-centered attention and awareness". Dane and Brummel's (2013: p. 108) definition was also used twice: "a state of consciousness in which attention is focused on present-moment phenomena occurring externally and internally." The remaining 42 articles had different definitions. Despite the lack of agreement on a single definition, some terms reoccurred, including: 'attention,' 'awareness,' and 'alertness' which were repeated in the definitions 34, 22, and six times, respectively. The definitions of these terms, as well as the ways in which they overlap with mindfulness and diverge from mindfulness are listed in Figure 1.

Figure 1: Key Terms Related to Mindfulness

Term	Definition	Overlap with Mindfulness	Divergence from Mindfulness
Attention	“The act of fixing the mind on something” (Gendlin, 2006).	Like mindfulness, it encourages acceptance of experiences without judgement.	Mindfulness is about letting go and non-attachment, whereas attention on its own is about going deeper and exploring.
Awareness	“Knowledge or perception of a situation or fact” (Yaure, 1973).	Mindfulness involves non-judgement awareness of one’s self, including awareness of thoughts, feelings and motivations.	The difference is in the state of one’s mind. Mindfulness is about introspection and adjusting one’s thought process, while awareness is sense-based mind control to live in the present.
Alertness	“Being aware of what one is doing in the movements of the body, the moments in the mind” (Fiol and O’Connor, 2003).	Alertness to what is happening is what allows individual to gain insight into the causes of suffering. Both terms involve being intent on what one is doing.	Alertness is a state of being ready to react immediately, whereas mindfulness cultivates a process of noticing and bringing attention to things without jumping into action.

Deciphering what mindfulness is or is not or should or should not be can be facilitated by contrasting the related terms listed in Figure 1. The definitions of these terms illustrate that while they are closely related to mindfulness, they differ. We know from the literature that attention, awareness, and alertness provide a focus for mindfulness and mindfulness provides relative continuity to these traits – so it can be said they are relationships of mutual support, but the terms can be not used interchangeably.

The sample discusses two primary focuses of mindfulness at different levels including (1) individual mindfulness, and (2) collective mindfulness, commonly referred

to as organizational mindfulness and explores the relationship among the two. While many authors consider these concepts to be related, the exact nature of the connection is unclear. While research suggests that individual and collective mindfulness enhance positive outcomes, scholars describe these concepts in different ways (e.g. Bishop et al., 2006; Weick & Sutcliffe, 2006), and a lack of consensus about a comprehensive definition of the term remains. The concept of mindfulness is further delineated in the sample through its Eastern and Western origins.

A thorough review of the literature underscores the importance of differentiating mindfulness from the related terms: Individual Mindfulness, Collective Mindfulness, and the concepts of mindfulness in the thought of Eastern and Western views. Each term is defined, differentiated and discussed sequentially.

How Mindfulness is Oriented

The two terms – individual mindfulness and collective mindfulness – were differentiated in the sample. Table 3 displays the definitions of authors who examined both terms. While not all authors in the sample differentiated between the two terms, most did suggest a useful and congruent distinction between these two frequently confused terms. The differentiation of the terms is evidence that mindfulness is a broad term that cannot be used interchangeably with individual and collective forms of mindfulness. In other words, it is a broad concept that occurs at the individual level or collective level and should be distinguished to better describe what is being analyzed and measured. Further, key terms such as relaxation, presence, focus, and meditation were used repeatedly in the literature to describe mindfulness. It is important to note that while these words have similar definitions, they cannot be used interchangeably with the term mindfulness.

Individual Mindfulness

Several authors create their own conceptualization of the individual mindfulness. Bishop et al. (2006: p. 233) describe it as “an open, present-centered awareness and attention.” Langer (2006: p. 30) defined the term as “attention or an active process by which learners are able to create new distinctions.” Langer’s perspective is different from other definitions of the term in that it argues that individual mindfulness is sensitive to “perspective and context” Langer (2006: p. 30). Levinthal and Rerup (2006: p. 502) further support Langer’s definition in their definition of individual mindfulness as a state of mind. They suggest that individual mindfulness is “a state of active awareness characterized by an openness to new information, and a willingness to view contexts from multiple perspectives.” It is a state that can be trained through meditation and is something most people experience at some point in their lives (Sutcliffe et al., 2016). Weick and Sutcliffe (2006) suggest that individual mindfulness is a construct made up of five parts: observing, accepting without judgement, acting with awareness, describing, and non-reacting to inner experiences. Further, Barry and Meisiek (2010: p. 1505) offer a broad definition, suggesting that individual mindfulness can be defined as “a heightened state of involvement and wakefulness or being in the present.”

Despite the general variance about the conceptualization of individual mindfulness, the definitions offered in the literature allow us to make general assumptions. The concept of individual mindfulness discusses an awareness of an individual toward their environment. This awareness is understood as a process of tracking one’s experience as a primary facet of consciousness (Brown & Ryan, 2006), which is focused and qualitatively better than usual. It is unclear if a better awareness means that it is broader, covering a wide

array of one's experience, or narrower, focusing on what is necessary. It appears that both are significant, and that individual mindfulness enables us to discover small changes depending on what is required in the given context. Since it allows individuals to view situations without judging them or immediately appraising them as negative (Chandwani et al., 2016), it exceeds their capacity, which reduces stress from these situations (Hulsheger et al., 2013). Further, individual mindfulness has been linked to several positive effects such as adaptability, creativity, judgement, productivity, and attention (Hales & Chakravorty, 2016).

Moreover, individual mindfulness is described as a state of mind that draws new distinctions that require individuals to be aware of the current situation and to readily adapt to changes in their environment. From the varying conceptualizations of the term, three key elements have been identified, including (1) self-awareness, (2) presence and present centeredness, and (3) acceptance by non-judgement.

Collective Mindfulness

In the late 1990's, researchers started to explore mindfulness at the organizational level, called collective mindfulness or organizational mindfulness. The term collective mindfulness was created by Weick and Sutcliffe, and stems from the concept of Langer's Western definition of mindfulness. It encompasses an openness to experience, awareness of problem solving, environmental sensitivity, and the concept of new categories creation (Langer, 1989). Barry and Meisiek (2010: 1505) define collective mindfulness as "the capacity of groups and individuals to be acutely aware of significant details, to notice errors in the making, and to have the shared expertise and freedom to act on what they notice." In the sample, eight articles reference Weick and Sutcliffe's (2001) conceptualization of

collective mindfulness, which include the creation of the term 'highly reliable organizations (HROs). Weick and Sutcliffe's (2006) definition states that collective mindfulness is the basis for highly reliable organizations to continually implement five principles including 1) preoccupation with failure, (2) reluctance to simplify, (3) sensitivity to operations, (4) commitment to resilience, and (5) deference to expertise. A majority of the studies in the sample emphasize collective mindfulness in relation to maintaining the five characteristics of HROs. These five principles make up collective mindfulness and help organizations perceive risks and manage those risks accordingly (Vogus & Sutcliffe, 2012). Collective mindfulness is a way of executing processes in an organization, where gaining a detailed understanding of context is critical. The definition of collective mindfulness remains limited as the theory of HROs continues to develop.

Despite the fact that organizational mindfulness derived from individual mindfulness, the connection between the two remains unclear in the literature. Some scholars try to combine the awareness and attention of individuals with collective mindfulness of organizations and suggest that the two can be connected. However, the way in which the individual mindfulness of members of an organization influence organizational mindfulness, as well as the way in which collective mindfulness influences the individual mindfulness of the members in an organization is unclear. Since collective mindfulness is a relatively new area of research, there remains a large gap between the two terms and this is highlighted in the sample (e.g. Sutcliffe et al., 2016). Chapter 3 in this literature review sheds light on this relationship from a theoretical point of view.

Eastern Conceptions of Mindfulness

The emergence of Eastern mindfulness comes from the introspective approaches of many religious traditions in India (Carmody, 2014). The word “mindfulness” comes from the Pali word, *sati*, which in Indian Buddhist culture is associated with being aware and alert. Further, the term implies *vipassana*, which means insight and can be described as one of two qualities of mind (Marques, 2012). The term originated in India when Buddha had the goal of reducing mental suffering through meditation. Pali is no longer a spoken language, so the teachings of mindfulness have been adapted in each country where Buddhism spread, and there is variation in the ways different traditions and cultures understand the construct.

As Eastern mindfulness adapted to Western conceptions, the definitions used to describe it evolved from traditional constructs (Bishop et al., 2004; Brown & Ryan, 2004). Given that the term has religious roots, there is a continuous debate as to where its “true” meaning is to be found (Grossman, 2011). Moreover, the word “mindful” has roots in the English language, which has extended the confusion around a comprehensive definition. While mindfulness training programs vary in detail and origin, most Eastern definitions in the literature focus on Kabat-Zinn’s work of “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally” (Weick & Putnam, 2006). A list of additional keywords is also used to describe Eastern mindfulness, including being in the moment, present-centered awareness, embodiment, beginner’s mind, being rather than doing.

While tradition Eastern conceptions of mindfulness assert the need for practicing meditation as a characteristic of mindfulness training programs and reducing stress

(Kernochan et al., 2007), it is important to note that current operational definitions in the literature differ from those derived from traditional Buddhist conceptions of mindfulness. The literature discusses a Buddhist-based conceptualization of the term “right mindfulness,” which provides a theoretical and ethical approach to the individual-level construct of mindfulness that informs organizational theory.

Western Conceptions of Mindfulness

Western conceptions of mindfulness emerged from the ideas of attribution theory in social psychology, which are discussed in greater detail in Chapter 3. These views on mindfulness appear to be most synonymous to those of later emerging Buddhist traditions. In the literature, Langer’s (2001) work is cited in nine articles, in which she challenges the notion that people only act rationally on their belief system and are guided by unconsciously processed information. Her mindfulness interventions encourage individuals and groups to recognize the unconscious processes that shape actions, replacing them with more mindful ones. In western definitions, human suffering is created, or heightened, by people unconsciously utilizing outdated mindsets to navigate everyday situations (Langer et al., 2001).

Of the articles that discussed mindfulness from Western thought, Langer’s approach is the most highly contrasted definition of mindfulness from Eastern thought. It focuses on the endpoint of being more mindful and is the mode of functioning that actively engages in reconstructing the world by creating new distinctions and thus directing attention to new cues that may be controlled or manipulated (Oglisastri et Zuniga, 2016). Western definitions imply approaching situations with curiosity and cognitive flexibility, keeping one open to new information. This perspective emphasizes creativity and more

abundant behavioral responses to situations. In other words, the work cited by Langer informs definitions of Western mindfulness by including key terms such as creativity, attending, and learning. Western definitions imply that interventions manipulating the environment increase awareness of mindsets and result in more creative perspectives (Weick & Putnam, 2006). By challenging individuals to pursue more creative perspectives, Western mindfulness programs make more apparent the automatic/unconscious categories of cognition that shape responses.

Defining Mindfulness

Within the study sample of 54 articles, 48 different definitions were extracted. Table 3 presents all of the definitions. Additionally, since the topic is gaining popularity in a variety of disciplines, each of which has its own theoretical approaches, different authors use different terms to describe it. Moreover, deciphering what mindfulness is or is not or should and should not be can be facilitated by contrasting individual mindfulness to collective mindfulness, and Eastern and Western mindfulness.

Constructing a Definition

The 48 definitions were analyzed with a specific focus on the key elements of the concepts of individual mindfulness, collective mindfulness, as well as Eastern and Western conceptions of the term. The analysis resulted in the identification of four key elements including (1) presence and present centeredness, (2) awareness and attention, (3) cognitive processing and (4) attitude cultivation. Presence and awareness were often connected in the sample, referring to the stability of mindfulness, which means the degree to which one is grounded in awareness itself. The cognitive facet of mindfulness referred to non-judgmental attention. In other words, it means cultivating and maintaining a cognitive

ability known as mindfulness practice. Finally, attitude cultivation was a common element of mindfulness definitions in the sample. It referred to seven attitudinal foundations, including: non-judging, patience, beginner's mind, trust, non-striving, acceptance, and letting go. These attitudes support one another and are interconnected. It was suggested that practicing one will lead to the cultivation of others.

An additional key element was identified as being absent in Western conceptions of the term, that is: ethics. Taking into consideration that the construct of mindfulness has Buddhist origins and that Buddhism upholds demanding ethical values as a core way of living, noting that ethics is absent from the definitions in the sample is significant. As noted previously, the construct of mindfulness originated from a practice called "sati," which was defined as cultivating awareness of our relation to things and attaining a "correct view" of the world (Marques, 2012). *Sati* is about proper ethical discernment and distinguishing right from wrong. Moreover, understanding the origins of mindfulness supports the call for future definitions of mindfulness to include ethics.

Ethical considerations that are lacking in the literature formed the basis for constructing a new definition of mindfulness grounded in ethics and ethical mindfulness. With the aim of bridging the gap between Eastern and Western conceptions of mindfulness, we argue that incorporating this key element is crucial in filling in the gap that exists in modern Western definitions. The development of ethical mindfulness would enable individuals to conduct themselves with greater awareness and attention, and to cultivate an attitude of compassion and empathy toward others, thereby creating a consciousness that may have a positive impact on workplace productivity and on organizational effectiveness at large. From an organizational perspective, the Western definitions informed by

Buddhism may consider highlighting the ethical dimension encompassing empathy, compassion, and a sense of responsibility toward others.

Accordingly, mindfulness can be defined as *an open, present-centered non-judgmental awareness of internal and external experiences*. A definition of mindfulness should highlight that mindfulness is a broad concept with multiple levels. It should incorporate the key terms that form the basis of Eastern views of mindfulness, and the ethical considerations needed to complete Western views, bridging the gap between the two. The above definition is meant to be inclusive of all forms of mindfulness, but future research should be specific about what is being analyzed and measured.

Theoretical frameworks were also important to frame the definitions given in the research. They helped identify the origins of the varying types of mindfulness discussed in this chapter, as well as whether the purpose of mindfulness was solely to benefit the individual, the organization, or a combination of the two. Chapter three examines these theories in detail.

CHAPTER 3

THEORIES USED TO EXAMINE MINDFULNESS

Chapter 3 discusses the theories used to understand mindfulness. Of the 54 articles in the mindfulness literature, 17 theories were used, meaning only 31.5 percent of articles in the sample used a theoretical foundation to understand mindfulness. Theories mentioned two or more times are discussed in greater detail in the remainder of this chapter. The most prominent theories in the literature included the Theory of High Reliability Organizations (HROs), cited in five academic papers, Self-Determination Theory cited in three, and the Theory of Psychological Capital and Conservation of Resources Theory both cited in two. All other theories were cited once in the literature. While only cited once, Social Attribution Theory provided important understanding for mindfulness. In particular, the most apparent principle that varying types of mindfulness have in common is the idea that an individual's experience of the world is shaped by how they perceive it. In the Western understanding of mindfulness, this principle stems from Social Attribution Theory, in which one's experience of the world is reconstructed in the mind by attributing objects to senses.

Theory of High Reliability Organizations (HROs)

The theory of High Reliability Organizations (HROs) was created by a team of researchers who countered Perrow's claim that failure is inevitable after the 1979 Three Mile Island nuclear plant incident. Researchers questioned Perrow's assertion by observing that some organizations exhibited higher rates of reliability. In 1984, researchers from the University of California, Berkeley suggested that error-free performance in organizations

occurs because of an active search for reliability and suggested the High Reliability Organizing theory (Linnenluecke, 2015).

In 1993, Weick and Roberts built on that suggestion by asserting that high reliability organizations have accomplished collective mental processes, such as mindful attention. They proposed the concept of the collective mind, arguing that an increase in mindfulness decreases the chance of errors in an organization. In 2001, Weick and Roberts added to the already existing theory of high reliability organizing by creating a mindfulness infrastructure at the level of collective mindfulness, which is characterized in the sample as an ability to determine threats and respond quickly to prevent problems from occurring (Weick & Sutcliffe, 2006). They converged on five principles to implement the concept of mindfulness organizationally. These principles include (1) preoccupation with failures, (2) reluctance to simplify, (3) sensitivity to operations, (4) commitment to resilience, and (5) deference to expertise. In the last two decades, HROs have moved into organizational theory and have been used to understand the practice and effects of mindfulness at an organizational level.

Theory of Psychological Capital

Stemming from the term “positive psychology,” the Theory of Psychological Capital (PsyCap) was introduced by researchers in 1999 when they focused on a concept that led to understanding “Positive Organizational Behaviour” (POB). POB is defined as “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (Luthans & Church, 2002: 58). Luthans and his colleagues built on this term by developing the term PsyCap, defined as “an

individual's positive psychological state of development” (Luthans, et al., 2007: 64) which is characterized by having high levels of hope (alternative ways to succeed), self-efficacy (belief in oneself to accept and exert effort when faced with challenging tasks), resiliency (sustaining and growing from adversity), and optimism (positive attribution about succeeding in the present and future).

Resiliency is core part of the Theory of Psychological capital, associated with high levels of mindfulness at the individual level. If a problem arises, resilience recognizes the ability to recover and return to a normal state of being, using the situation as an opportunity for growth. The term is defined as the capacity to rebound from adversity (Luthans, 2002). The term is closely correlated to key terms such as learning, growth and recovery, all linked to the individual and organizational levels of mindfulness. In the mindfulness literature, individual resilience is defined as management skills in situations of uncertainty, whereas resilient organizations can be defined as a group of individuals who can work through change and recognize it as opportunity (Roche et al., 2014).

Relevant to the sample of articles, mindful individuals decouple themselves from events and emotions and refrain from judging. Second, mindfulness decreases automatic mental processes (Glomb et al., 2011). These processes increase choice in response to a situation, rather than reflexively reacting. For leaders in stressful situations, greater mindfulness enables them to view situations for what they are, without worry about past or present negative events (Roche et al., 2014).

While the relationship between mindfulness and PsyCap were not empirically studied in the literature, it was suggested that mindfulness promotes the positive effects of PsyCap in preventing and overcoming adverse outcomes at the organizational level.

However, the relationship between mindfulness and resilience remains unclear and calls for more research.

Conservation of Resources Theory

The literature links mindfulness with the Conservation of Resources Theory (COR) by conceptualizing the relationship between workload (Bishop et al., 2004) experiences as antecedents of mindfulness. More specifically, it considers the role of attention in mindfulness, and proposes that a high workload impedes the experience of mindfulness. According to COR Theory (Hobfoll, 1989), individuals aim to protect resources that help them attain their goals: specifically, energy required for the high levels of attention and awareness involved in mindfulness.

To understand how workload and recovery experiences help or impede on mindfulness practices, one article focuses on the role of fatigue as a mediating mechanism (Hulsheger et al., 2012). Fatigue refers to levels of energy and is characterised by feelings of exhaustion and lack of motivation to exert effort (Hulsheger et al., 2012). Findings show that decreases in workplace and recovery experiences help replenish self-regulatory capacities, which is assumed to mediate the relationship with mindfulness. It can be said that the relationship between workload and mindfulness is explained by an individual's availability of resources as indicated by level of fatigue. By combining COR Theory with theoretical work on mindfulness, the literature suggests that the self-regulation of attention through increased COR is a core element of mindfulness.

Self-Determination Theory

Self-Determination Theory (SDT) suggests that people are motivated to grow and change by three universal psychological needs: competence, relatedness or connection, and

autonomy (Ryan & Deci, 2000: 70). The theory ranges from understanding why people act (autonomy or control) to what they choose to do (intrinsic vs. extrinsic goals) to predict their overall quality of life. As it pertains to mindfulness, SDT is conceptualized as open awareness to events, where it helps individuals consider their actions, values, and act authentically (Hafenbrack, 2017).

Mindfulness has been linked to many constructs in SDT that promote emotional regulation, cognitive performance, and more adaptive behaviours to workplace stressors (Charoensukmongkol, 2013). When an individual pursues more intrinsically oriented goals (nourishing personal relationships or contributing to their work environments, for example) they are more likely to experience overall well-being (Ryan & Deci, 2000).

Ryan and Deci (2001) theorized that self-regulation as a result of self-determination is linked to greater mindfulness. However, the extent of this relationship is limited and remains conceptual in nature. They focused on the role of mindfulness and ego involvement, which is significant in the mindfulness research because more mindful individuals are more likely to be open to information. This promotes a greater ability to integrate experience into an individual's sense of self. In line with the definition of SDT, when an individual is more motivated to grow and change independently, they see a greater increase in well-being (Ryan et al., 2013). These types of attributes have been relevant in exploring SDT to understand mindfulness. For example, Barnes et al. (2007) found that mindfulness predicted greater relationship satisfaction in the workplace. After a conflict takes place, colleagues high in mindfulness show less anger, negativity and withdrawal from their work. These positive outcomes associated with mindfulness are proposed to

result from high self-determination and the motivation to grow and change from lived experiences.

CHAPTER 4

OPERATIONALIZATION OF MINDFULNESS

This chapter discusses the operationalization of mindfulness. Within the sample, 39 papers were empirical, representing 72 percent of the sample. Of these, 26 were quantitative and 13 were qualitative. Common variables throughout the empirical studies included ethical behaviours, referenced eight times throughout the sample, job performance and decision-making (each referenced six times), and organizational learning, leadership, and employee well-being (each referenced five times). Self-awareness, reliability, and adaptability were each referenced four times throughout the sample, and intent to turnover was referenced three times.

The following characteristics of the data were observed. First, the empirical literature is mostly quantitative as only 33 percent were qualitative. This indicates that the existing research on mindfulness is quantitatively studied, indicating that there is a lack of qualitative research. This might also suggest that certain techniques, like surveys, are overused and other methods, like interviews or observation are lacking.

Second, of the entire sample of 54 articles, research was most commonly conducted in North America (12). Other geographic areas sampled in the literature included nine studies from Asia, seven from Europe, five from South America, two were cross-continental studies, one study was from the Middle East, and one was from Australia. North American countries included the United States as well as Canada; Asia included China, Malaysia, Pakistan, Thailand, and Singapore; Europe included Spain, England, Sweden, and the European Union grouping of countries; South America included Costa Rica and one referred to Latin America in its entirety; the Middle East included Israel; cross-

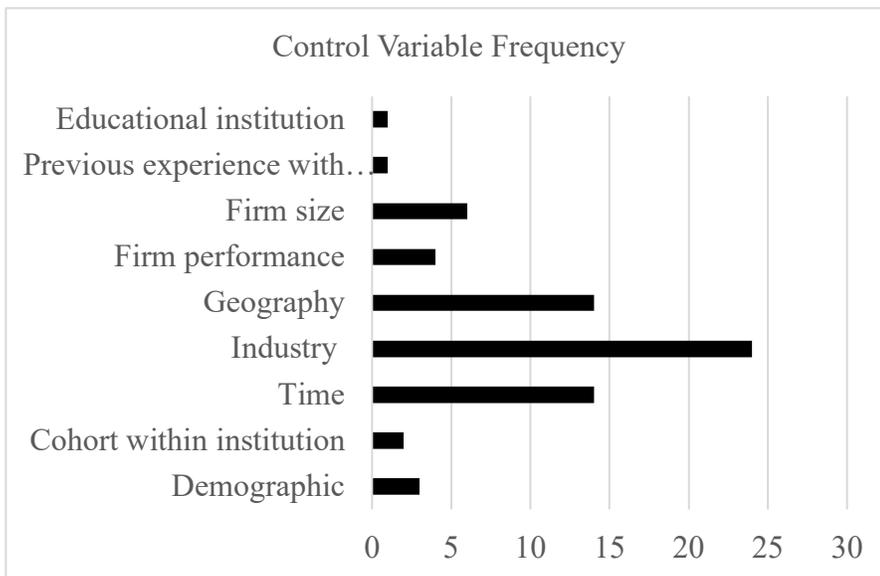
continental studies included all the continents listed above, as well as Africa. Considering the mix of continents, it appears that mindfulness is a widely studied topic across the world. However, the majority of studies were conducted in North America, which suggests that future research may engage cross-cultural analyses of mindfulness (particularly outside of North America).

Figures 1, 2, 3 and 4 outline the frequency of control, dependant, and independent variables evaluated across 54 articles, respectively, as well as cross cultural analyses within the sample. The figures include all control, dependant, and independent variables used at least once across the sample.

Control Variables

The most frequently used control variables in the sample were industry (24), geography (15), and time (14). The frequency of each variable is illustrated in the Figure 1 and discussed below.

Figure 2: Control Variables Used in the Sample



Industry

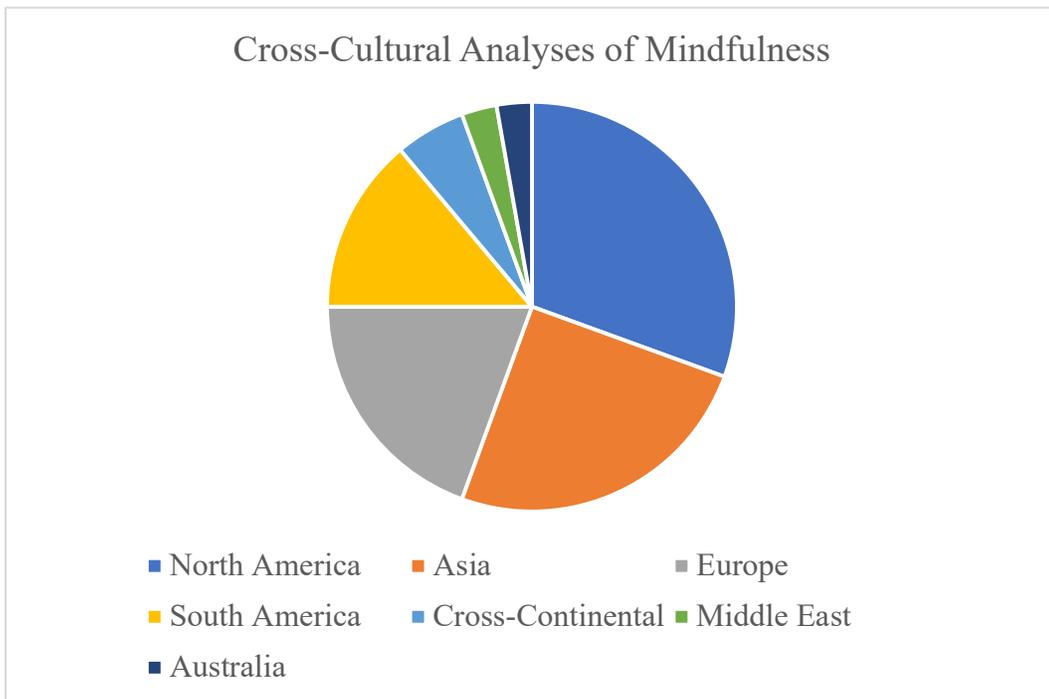
Controlling for industries was significant to determine which industries benefited from mindfulness interventions. The literature reflected 24 studies that used industry as a control variable. Some articles controlled for the demographic within specific industries. For example, Baron and Baron (2018) controlled for the demographic within North American educational institutions. Each study focused on one particular industry, as opposed to conducting studies across multiple industries. Using a single industry controlled for the impact of industry differences when determining relationships between employees and organizations adapting the practice of mindfulness. In the sample, mindfulness was most commonly studied in the health care industry with seven articles representing this group. In addition, six articles studied educational institutions, where three of these articles studied business students specifically. One article by Valentine et al., (2010) combined the two commonly studied industries by sampling individuals employed at an education-based healthcare institution. The findings in this article suggested that mindfulness-based training programs are effective for physicians, nurses, students, and healthcare personnel for improving indicators of well-being, stress-resilience, and burnout (Valentine et al., 2010). Although this industry was the most commonly studied in the sample, much of the data was experimental, where only six findings indicated promise of mindfulness training as a means to improve the well-being of healthcare workers, thereby improve the quality of healthcare organizations. More empirical research is needed to substantiate the claim that mindfulness is a suitable option for health care workers and health care organizations. Other industries less commonly reflected in the sample included government institutions, not-for-profit organization, and information technology and innovation, all referenced three times.

Hospitality and manufacturing were both referenced once. As the it currently stands, mindfulness is an emerging theme in these industries, with little empirical evidence available to understand the interplay between mindfulness and specific industry workers.

Geographic Region

Geographic region was the second most controlled variable represented in 15 articles in the sample. It was included to, as much as possible, standardize environmental factors external to the company that may impact the success of implementing mindfulness-based training programs. The data provided evidence that while mindfulness was most commonly studied in North America (31 percent of articles), Asia (25 percent), and Europe (19 percent), and least common in South America (14 percent), the Middle East (3 percent), and Australia (3 percent).

Figure 3: Cross-Cultural Analyses of Mindfulness



Time

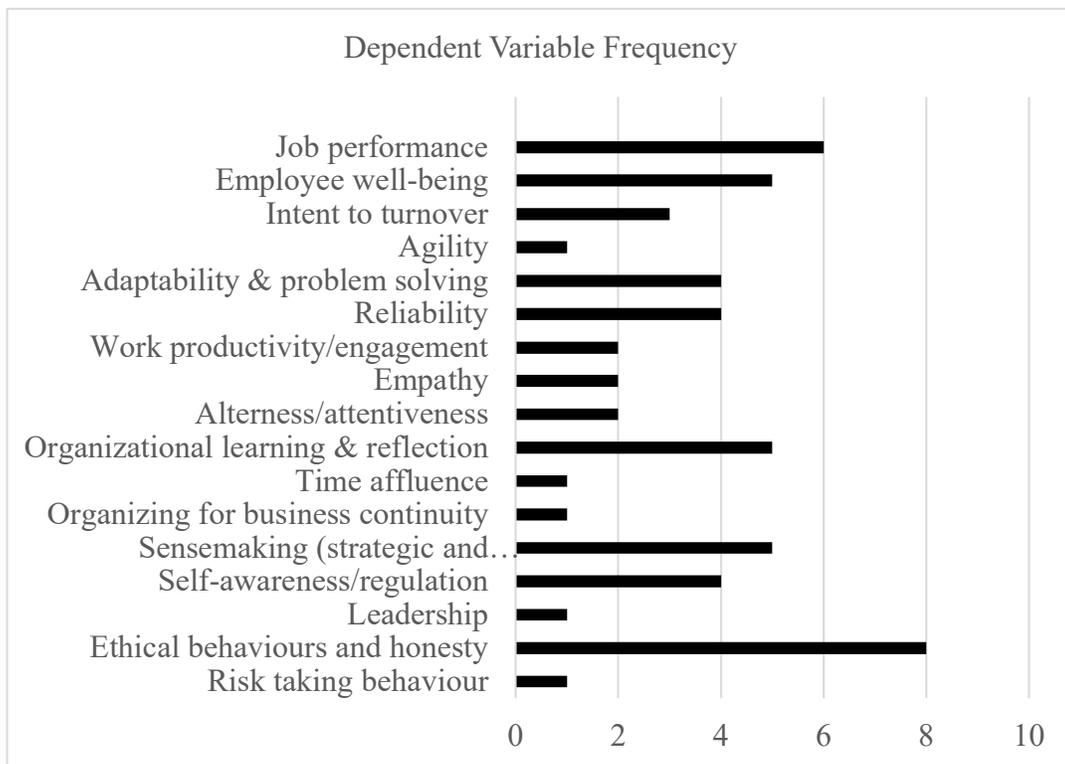
Time was commonly treated as a control variable, represented in 14 studies in the sample. The literature showed that long mindfulness practices lead to increased mindfulness and positive individual and organizational outcomes (Rooney et al., 2021). To evaluate the impact of a mindfulness-based training program, participants in these 14 studies were tested before and after participation in mindfulness programs, ranging from one to 30 days. In other words, assessments in all 14 articles that used time as a control variable conducted before training (pre), after the training (post) and in some instances, weeks after the completion of the training/intervention (follow-up). Participants were evaluated with self-report scales measuring mindfulness, as well as performance tasks. Time was recorded to infer relationships between the main variables of interest. Further, it was held as a constant meaning the instructions and time spent on each individual participating in varying studies was the same.

The research suggests mindfulness programs are effective for individuals with a commitment to mindfulness practice of at least 10 days (Moore & Malinoski, 2009; Sauer and Baer, 2010). However, a gap in the research exists in gathering empirical evidence for shorter mindfulness interventions. In the literature, none of the articles that used time as a control variable observed changes to levels of mindfulness after the use of a brief practice and whether as little as five minutes would be enough to elicit these changes. Future research could focus on two ways of examining time, including how long meditation interventions should be practiced for positive results, and the length of meditation sessions.

Dependent Variables

The most frequent variables used in the 26 quantitative studies were ethical behaviours (referenced eight times), job performance and strategic decision-making (each referenced six times), organizational learning, leadership, and employee well-being (each referenced five times). The frequency of each variable is listed in Figure 3 and discussed below.

Figure 4: Dependent Variables Used in the Sample



Mindfulness and Ethical Behaviour

The research suggests that individuals who are more mindful behave more congruently with their values and interests and are more likely to behave ethically (Gentina et al., 2020). In a study by Ruedy and Schweitzer (2010), participants were given four minutes to unscramble 15 anagrams. Each correct answer earned the participant one dollar. At the end of the four minutes, participants were instructed to stop. Carbon paper was

placed within the envelope containing the anagrams and the envelopes were collected at the time limit. Participants were provided the answer key and asked to mark their own answers. The findings showed that 55.2 percent of the 125 participants cheated by adding additional answers to their own lists. While mindfulness scores (MAAS; Brown & Ryan, 2003), did not appear to influence whether participants cheated, the results were negatively related to the amount of cheating.

Another study conducted by Valentine et al., (2010) in an education-based healthcare institution, found that mindfulness negatively related to role conflict but positively related to mindfulness. Consistent with these findings was a study by Small and Lew (2021) where participants completed the Five Facet Scale (Baer, 2006) for measuring ethical intention. Results showed that mindful participants were less willing to engage in unethical behaviour and exhibited a more principled approach to ethical decision-making in the workplace. Also consistent with these findings, Shapiro et al., (2012) found that Mindfulness-Based Stress Reduction (Kabat-Zinn, 1982) was associated with improvements in moral reasoning and decision-making, suggesting that the concepts were related. With competing evidence on the ethical outcome of mindfulness within organizations, future research is needed to substantiate the correlation between the two. Much of the literature relied on observational methods, using self-report measures of mindfulness. Thus, more research is needed to replicate current findings and extend the research base further.

Mindfulness and Job Performance

The research suggests that mindfulness was associated with various aspects of job performance and there is a positive correlation between the two. For example, mindfulness

practice has been shown to improve attention (Brown & Ryan, 2003), behavioral self-control and self-awareness (Brown & Ryan, 2003), which are all linked to job performance. In their conceptual paper, Glomb et al., (2011) suggested several mindfulness interventions which might influence different dimensions of employee performance. For example, increasing working memory could lead to improved ability to perform under stress and self-determination, while persistence may increase goal achieving behaviour. One empirical study on mindfulness by Reb et al., (2013) surveyed 231 employees. The authors examined the relationship between mindfulness, self-awareness, and task performance. Mindfulness was self-rated, and the employees' supervisors rated the three measures to avoid biases. Results revealed that employee awareness was positively related to task performance. There was a range of varying measures of job performance, mostly specific to occupational domains, such as health care professionals and government workers (Kumar et al., 2012). Beyond suggesting that mindfulness relates to employee performance, the research suggests that the specific dimensions of performance and mindfulness may be important considerations for future research.

Mindfulness and Decision-Making

Mindfulness practice appears to serve the aims of focusing on a single point of attention, with the intention of developing capacity for attention and concentration (Keng et al., 2011). In the sample three experiments of post-secondary students found that those who attended a mindfulness class for 45 minutes, four times a week for two weeks, performed better on a GRE test and reported less mind-wandering than students who had not participated in mindfulness classes (Schooler et al., 2013). The literature suggests an

impact on cognitive function more broadly, linking mindfulness to social and non-social decision-making through its impact on emotional regulation (Yu et Zellmer-Bruhn, 2018).

Mindfulness, Leadership, and Employee Well-Being

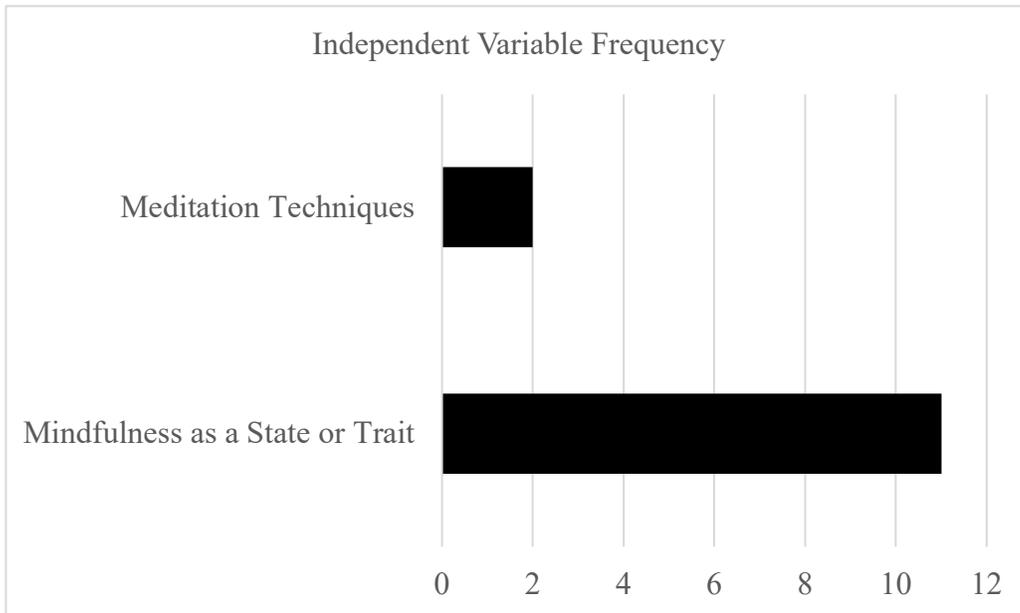
The social context of organizations makes the leadership effects of mindfulness practice relevant. Reb et al., (2019) examined the influence of leaders' mindfulness on employee performance. Supervisors and their subordinates were recruited to participate in a web-based study on mindfulness at work. Leader mindfulness was measured (MAAS; Brown & Ryan, 2003), where ratings were completed by self-report. Results showed that leaders' mindfulness was positively associated with several measures of employee well-being. Reb et al., suggested that mindfulness helped leaders build better relationships with their employees, thereby supporting their employees' needs, creating the environment for better performance.

A study by Hulsheger et al., (2013) is consistent with these findings. It includes empirical evidence that offers evidence of the relational outcomes of leaders' mindfulness practices. Further, Donaldson-Feilder et al., (2018) conclude that leaders' mindfulness interventions have the potential to enhance leadership capabilities. They suggest the need for more research examining leadership and mindfulness.

Independent Variables

The most common independent variable used in the sample was mindfulness as a state or trait, referenced in 11 articles. The remaining two articles measured mindfulness with meditation techniques.

Figure 5: Independent Variables Used in the Sample



Mindfulness as a State or Trait

In the sample, there were 11 published self-reported measures of state or trait mindfulness in adults. State mindfulness concerns the quality of mindful presence at a given moment, or within a window of time, whereas trait mindfulness generally concerns the cross-situational frequency of mindful states over time (Raza et al., 2018).

Individual differences in trait mindfulness are believed to come from two sources. First, many academic scholars believe mindfulness training can lead to higher levels of mindfulness. Second, research suggests that individuals may vary naturally in this trait, with differences in genetics, socialization, or other factors. All five measures of trait mindfulness were developed with these understandings in mind (Dreyfus, 2011).

Results from the sample suggested the benefits of implementing interventions that increased trait and state mindfulness extended to both individual and organizational domains. With regards to individual mindfulness, trait mindfulness was found to be

positively correlated with emotional regulation and overall well-being (Aranega et al., 2020), and negatively correlated to perceived stress (Charoensukmongkol, P. 2013). Organizationally, the results suggested that state mindfulness may reduce employee turnover and improve job satisfaction (Raza et al., 2018).

The data suggested that in order for mindfulness engagement to impact trait or state mindfulness, there may be a threshold that needs to be met. The literature suggested that trait mindfulness was present for individuals with a long commitment to mindfulness practice (Moore & Malinoski, 2009; Sauer et al., 2010). This addressed an important gap in the literature on mindfulness. That is, empirically measuring changes to trait or state mindfulness, and testing the effectiveness of mindfulness practices of different durations. Future research should investigate whether brief practice has the same positive individual and organizational outcomes, the same way that longer mindfulness-based training programs do. This may be an important area of research for organizations, because it can reduce costs and improve organizational output at a quicker rate.

Technique Used to Understand Mindfulness

Survey Response Scales

Survey response scales were the most commonly used technique to understand mindfulness, used in 36 of the 39 empirical studies. Four trait scales were most commonly used to operationalize mindfulness, including the Five Facet Mindfulness Questionnaire (FMQ; Baer et al., 2006), the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003), the Toronto Mindfulness Scale (TMS; Lau et al., 2006), and the Mindfulness/Mindlessness Scale (MMS; Bodner & Langer, 2001). Figure five lists the tables with their corresponding descriptions and frequency of use.

Figure 6: Mindfulness Scales Used in the Sample

Scale	Description	Frequency of Use
Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003)	A 15-item trait measure rated on a 6-point Likert-scale assessing the awareness and attention to internal and external events.	7
Five-Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006)	A 39-item trait measure rated on a 5-point Likert-scale encompassing the five facets of mindfulness: (1) observing, (2) describing, (3) acting with awareness, (4) non-judgment of inner experience, and (5) non-reactivity to inner experience.	6
Toronto Mindfulness Scale (TMS; Lau et al., 2006)	A 13-item trait measure rated on a 5-point scale ranging from 0 (not at all) to 4 (very much) designed to measure “state-like” experiences.	2
Mindfulness/Mindlessness Scale (MMS; Bodner & Langer, 2001).	A 31-item questionnaire that focuses on four factors: engagement, novelty seeking, flexibility, and production.	1

Surveys were a widely applied method of studying mindfulness. Among the studies that used surveys to study mindfulness, all had two considerations in common. First, as discussed in the section above, the studies using surveys assessed which surveys were best suited to specific measures. A second consideration of implementing surveys were logistics (i.e. when and how often) they were implemented. Studies measured pre- and post-surveys, with one study measuring a follow-up survey. However, the timing and frequency of data collection decisions were subject to constraints such as access to participants and response rates.

Reb et al., (2013) conducted a cross-sectional survey where they incorporated multi-sourced reporting on 231 employees, which examined the relationship between mindfulness (awareness and present centeredness) and employee performance. While mindfulness was self-reported, the employee's supervisors rated task performance. As hypothesized, awareness was positively related and absent mindfulness negatively related to task performance. This is an example of multi-source data strengthening and suggesting an alternative to self-report methods. These considerations helped to address some of the existing limitations of survey response scales. These limitations are discussed below.

Validity in Scales. While the Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003) was the most commonly used scale, it received criticism by scholars (Grossman, 2008) for failing to consider mindfulness to be more than a one-dimensional construct (Baer et al., 2006). With knowledge on the Buddhist origins of mindfulness, the literature that used scales to measure mindfulness suggested that the scale was developed without any insight from Buddhist origins. Further, the MAAS presumed that an individual had enough self-awareness enough to accurately respond (Grossman, 2008). However, it can be assumed that many case subjects without prior mindfulness knowledge may not have the ability to accurately assess themselves. This may cause the construct validity of mindfulness to be weakened.

Baer and colleagues (2006) created the FFMQ based on five mindfulness skills: acting with awareness, describing, non-reactivity, observing, and non-judgement. The FFMQ differs from the MAAS as it included attitude as a facet of mindfulness, in addition to attention to awareness. Although the two scales measure different facets of mindfulness,

both claimed to measure the overall construct without distinction, indicating that they possess high convergent validity.

The four scales show us that mindfulness can be distinguished among different dimensions. First, they differ by the elements of mindfulness they seek to measure. Second, they differ by how mindfulness is scored. While some scales produce multiple scores for the different elements of mindfulness, others generate a single score. The Toronto Mindfulness Scale (Lau et al., 2006), for example, has both a state and trait version of its scale. Fourth, some scales were developed with long term mindfulness practices and reflect long-term studies as a result. Finally, the scales differ by the audience they were intended for. For example, the MAAS tests on clinical and non-clinical populations, thus being a strong fit for healthcare studies in the sample, whereas the TMS (Lau et al., 2006) distinguishes between individuals who vary in experience with mindfulness training.

Suggestions for Future Research

Future research should consider whether self-reported scales measure mindfulness by understanding the multiple levels of the construct and account for scale diversity. Many of the measures were designed for particular populations or specific goals in mind, such as assessing the day-to-day experiences of mindfulness on employees at work. Further, more empirical research is needed to show whether some mindfulness scale factors are stronger at representing other measures, such as adaptability, productivity, or attention (Hales & Chakravorty, 2016). This type of research would not only clarify the selected measure of a particular study, but also create a clearer understanding of research findings. Understanding the most commonly utilized scales for assessing mindfulness and the varying ways in which they differ is evidently critical for future research.

Survey Alternatives

Given the difficulties associated with self-report mindfulness, validity, and the difficulty in mindfulness altogether, incorporating alternative measures may benefit future research. Grossman (2008) findings suggest that mindfulness self-reports would benefit more from asking individuals to report how much they value characteristics associated with mindfulness instead of only asking how skilled they are in those facets. Sauer et al., (2013) findings suggest that researchers should incorporate alternatives like qualitative approaches and assessment from others in addition to self-report measures. As it currently stands, the mindfulness literature reflects a small percentage of studies that use qualitative data to gather evidence.

CHAPTER 5

DISCUSSION

The research suggested several benefits of reviewing and implementing mindfulness-based training programs within organizations. This paper explored the relationship between individual and organizational mindfulness as well as its Eastern and Western origins. Further, it analyzed whether individual mindfulness was connected to organizational mindfulness, and whether organizational mindfulness was related to individual mindfulness. The literature suggested that organizational mindfulness was based on individual mindfulness in employees. In practice, a mindful organization should set up the conditions for individuals to exhibit mindful behaviour, such as specific routines, guidelines, or training programs (Weick et al., 1999; Weick & Sutcliffe, 2001). Further, organizations should consider the internal benefits of mindfulness, the relationship between individual and organizational constructs of mindfulness, a cost-benefit analysis of implementing such programs, and the overall value of promoting mindfulness-based programs among its employees.

Organizational Implications

According to the literature, mindfulness can be considered both a state and a practice that can be taught by leaders, such as recognizing new perspectives or planning for events (Sutcliffe et al, 2016). Defining traits on individual and organizational mindfulness included a present centeredness, heightened awareness and attention, cognitive processing abilities, and attitude cultivation. Strong positive effects of individual mindfulness on productivity and performance mentioned earlier in this paper demonstrated the important of individual mindfulness for organizations that want to remain competitive

(Sutcliffe et al, 2016). Studies in the literature analyzed the effects of the programs and provided evidence that they increase individual mindfulness (Grossman et al., 2004; Carmody & Baer, 2008). Thus, incorporating individual mindfulness-based training programs into an organization's system of employee development can be an effective way of developing individual mindfulness in employees. Furthermore, organizations should focus on developing mindfulness at the individual level.

Beyond mindfulness at the individual level, the literature discussed several means by which an organization can increase organizational mindfulness, which were referred to as mindfulness training methods or mindfulness-based training programs. In the sample, several organizations put mindfulness training methods into practice, such as Mindfulness-Based Stress Reduction (Kabat-Zinn, 1982), Acceptance and Commitment Therapy (Hayes et al., 1999), and Mindfulness-Based Cognitive Therapy (Segal et al., 2002). A study by Reb et al., (2013) analyzed attitudes of 231 employees. The researchers concluded that mindfulness was positively associated with employee wellbeing, which was measured by job satisfaction, and was also associated with ethical behaviour, motivation, leadership, and employee well-being. A study by Chu (2010) further supported these findings in a two-part study where data was collected from a sample of 351 working adults and measured the effect of their ability to focus on the task at hand. The results indicated that those in the mindfulness intervention experience improved task performance when compared with the control using a pre- and post- measure. We cannot conclude that mindfulness is the direct cause of improved task performance, or the outcomes measured in the sample; rather, we might hypothesize that based on these findings, a positive relationship will exist between mindfulness practices and organizational outcomes. A clear link between the two will

require future research, larger sample size, random allocation of participants, and longitudinal data.

The studies discussed above provided initial evidence that mindfulness contributed to higher performance and individual improvements. Some studies for example (Reb et al., 2013 and Chu, 2010) provided proof that mindfulness improves organizational outcomes, substantiating the claim that organizational mindfulness can be improved through mindfulness interventions such as training programs. Although the literature is unclear on the exact relationship between individual mindfulness and organizational mindfulness, it suggests that individual mindfulness can lead to increased collective mindfulness. Thus, it can be predicted that organizations will see improvements (more mindful employees) by investing in individual mindfulness interventions. With that said, further research is needed that uses a range of measures to confirm the hypothesis that individual mindfulness interventions are an effective way to increase organizational performance.

The literature reviewed largely reflects the positive impact that mindfulness interventions have on both individuals and organizations. Based on this evidence, it can be argued that mindfulness training is desirable to organizations. The literature was less clear on the idea of expertise as it pertained to mindfulness. Weick et al. (1999) claimed that the abundance of mindfulness an individual exhibits depends on the size of the action being repeated. Actions in this case were defined as the ability to react to situations or events. In other words, Weick and his colleagues suggested that the extent to which an individual mindfully reacts to situations likely depends on how well they understand them. With this knowledge, we recommend future researchers explore the duration, intensity, and range of expertise required to support the development of mindfulness at an individual level, and a

result, at the organizational level (Vogus & Welbourne, 2003). Finally, it is important to address that this paper purposely considered literature from only one database, the Web of Science database. The Web of Science was selected because it enabled us to assess the quality of academic papers in the mindfulness literature. However, this narrowed search did represent a limitation to the paper, and future research may explore other databases to test the reliability of our findings. Limitations to our study include the limited search criteria, like mindfulness in the title; and the limited categories we used to reduce the sample size.

Future Research

All things considered, this systematic review of the mindfulness literature found that while the research was comprehensive with far-reaching implications, there was little cohesion in how the construct of mindfulness was defined, theorized, and operationalized. This was a result of the abundance of individual academic contributions to the literature that influenced the definition, theories, and methods of measurement used to study mindfulness. Further, while the consensus on the effects of mindfulness interventions was overwhelmingly positive, the literature lacked analyses on the potential ‘dark side’ of mindfulness. In other words, can mindfulness interventions become harmful and have negative effects on individuals and organizations?

Beyond the scope of mindfulness practices, future research may consider contributing to the development of a comprehensive definition and a broader theoretical approach to analyzing organizations. Empirical studies of spirituality, wellness, compassion, and reflection could consider the multiplicity of interpretations of the construct. In addition, exploring the potential ‘dark side’ of mindfulness would balance

existing research on its positive effects. Focusing on the aforementioned areas of research could provide a valuable lens for business management and ethics fields. Figure 7 summarizes future research topics and areas for opportunity. Each major research area is discussed in greater detail below Figure 7.

Figure 7: Future Research Topics

Major Research Area	Specific Research Topics and/or Questions
The Definition of Mindfulness	<ol style="list-style-type: none"> 1. Establish a well-defined connection between individual and organizational mindfulness to clearly define which is being analyzed in a particular study. 2. Understand what factors influence the definitions to assess the limitations of the definitions (Gautier & Pache, 2015). 3. How is the specific construct in a particular study measured and is state or trait mindfulness being measured? How does this impact the definition used in a study?
Theoretical Gaps	<ol style="list-style-type: none"> 1. Examine theories to strengthen the understand of the different levels of mindfulness and their relationships. 2. Understand the extent to which mindfulness should be integrated. 3. Determine the optimal parts of organizations that should be targeted for mindfulness-based training programs to maximize the effectiveness of such interventions.
The Operationalization of Mindfulness	<ol style="list-style-type: none"> 1. Develop self-report scales to include other facets of mindfulness. For example, measure participants on traits similar to mindfulness, such as self-compassion and awareness, alongside measures of mindfulness, and note any sequential changes. This can be used to develop theories so that we might be able to develop better ways of working more with what mindfulness taps in to. 2. Understand the impact of mindfulness on profit and the extent to which it impacts an organization's profitability.

‘Dark Side’ of Mindfulness	<ol style="list-style-type: none"> 1. Understand the ways in which mindfulness is not effective. Are their specific types of people, organizations, industries, or approaches to mindfulness interventions that make mindfulness less likely to be effective? 2. Does becoming more aware (through mindfulness and meditation) of unpleasant feelings become uncomfortable and even harmful to individuals or organizations?
----------------------------	--

The Definition of Mindfulness

After a thorough review of the literature, it can be said that a well-defined connection between individual mindfulness and the development or organizational mindfulness remains unclear. The sample suggested that individual mindfulness aids in the development of organizational mindfulness, regardless of whether one or all employees are mindful (Chandwani et al., 2016; Sutcliffe et al., 2016). While the literature told us that individual mindfulness was helpful in developing organizational mindfulness, it was not enough by itself. This was due to the difference in how each construct was defined. Individual mindfulness was described as a psychological process, whereas organizational mindfulness was delineated as a set of social processes and structures set up by an organization’s leadership to achieve specific goals (Gray, 2007).

Developing a comprehensive definition can help researchers further delineate between the two constructs to develop a richer understanding of the principles and processes required to achieve individual and organizational mindfulness. The definition in this literature review was created with the knowledge that mindfulness is a broad concept with multiple levels. Future definitions of the construct should incorporate the key terms that form the different facets of mindfulness, because bridging the gap between the two is crucial for future research.

Theoretical Research Gaps

Although four theories were discussed in the literature to develop a more thorough understanding of mindfulness, some things remain unclear and open for future research. There are likely elements of both individual and organizational mindfulness, as well as relationships between the two that exist but have yet to be discovered. For example, theories between the nature of the relationship between aspects of individual mindfulness and organizational mindfulness was lacking in existing research. To that end, theories of mindfulness should be examined to strengthen an understanding of the different levels of mindfulness and their relationship.

While examining the literature, it became clear that differences in opinion existed on the extent to which mindfulness should be integrated and what parts of organizations should be targeted to increase the effects of mindfulness. In other words, there were varying opinions on which parts of organizations are most critical for implementing mindfulness to be effective. For example, findings from a study by Goldman-Schuyler et al., (2010) indicated mindfulness-based practice can help leaders of an organization support the growth and development of their employees. They considered mindfulness a method to assist in managing organizational change. Although this was important in discussions of mindfulness, the sample did not use any theories that analyzed which parts of organizations should be targeted for mindfulness-based training programs. For example, Vogus (2003) broadly stated that organizational mindfulness must be present in certain parts of an organization, rather than looking at the organization at a whole. Consistent with Vogus' claim, Weick et al. (1999) research (which was referenced in six articles in the literature), emphasized the importance of directing mindfulness-based training programs on front-line

workers, since these individuals were the ones encountering problems and must react to situations and events. While more research is needed to determine the effects of mindfulness on specific parts of organizations, the question of optimal concentration of mindfulness within organization remains a question with opportunity for future theoretical research. As it stands, the literature provided evidence us that mindfulness may have varying impacts on different parts of organizations.

Without further research and theory development, practical applications and theoretical predictions of mindfulness may be targeted to the wrong parts of organizations and minimize their impact of outcomes.

Operationalization Research Gaps

The multiple survey scales (Brown & Ryan, 2003; Baer et al., 2006; Lau et al., 2006; Bodner & Langer, 2001) used to operationalize mindfulness included key skills that measure mindfulness. This included awareness, attention, observing, describing, acting with awareness, non-judgment of inner experience, non-reactivity to inner experience, engagement, novelty seeking, flexibility, and production. Following these structures, mindfulness was compartmentalized across three main subdivisions: 1) being fully aware of the present moment; 2) the quality of awareness; and 3) the attitude of the observer. Future research may consider developing the scales to include other facets of mindfulness, beyond the ones listed above. For example, measuring participant traits similar to mindfulness, such as awareness, alertness, and self-compassion, alongside measures of mindfulness, and noting sequential changes may help us develop more theories so that we might be able to develop better ways of working more with what mindfulness taps in to. Beyond expanding the facets of mindfulness included within the scales, survey scales may

benefit from asking individuals to report how much they value the facets of mindfulness being measured instead of only asking how skilled they are in those characteristics.

A gap in the research was a lack of cost-benefit analyses. The case for integrating mindfulness into organizations can be solidified by operationalizing mindfulness to conduct cost-benefit analyses. By and large, corporations are often driven by their profitability. With that said, an increased focus on profits can point an organization inward, where employees focus on short-term goals and motivation and innovation are low, thereby decreasing the potential benefits of mindfulness (Gartenberg & Serafeim, 2016). This means that mindfulness-based training programs should be operationalized to understand their focus on profit and the extent to which they impact profitability.

If organizations can produce an overall net gain of mindfulness – meaning its positive impact outweighs the costs of integrating mindfulness-based training programs, then organizations will have a strong incentive to implement these programs. For example, Vogus and Everett (2014) studied the impacts of mindfulness on employee turnover. They calculated that the impact of integrating mindfulness-based training programs was a 13.6% decrease in employee turnover, which resulted in approximately \$169,000 and \$1,014,560 in savings for the organization, respectively. An article by Charoensukmongkol (2013), analyzed employee burnout. He found that mindfulness intervention decreased burnout and helped individuals adopt more problem focused coping in order to deal with work-related stress and complete tasks. While mindfulness contributed indirectly to high job satisfaction, findings suggested that implementing mindfulness-based training programs resulted in increased employee productivity, thereby saving costs. (Charoensukmongkol, 2013).

It is recommended that cost-benefit analyses become a larger component to studying mindfulness. These analyses will be critical in generating organizational buy-in to the potential value of mindfulness, facilitating the research required to fully substantiate the promise of the research reviewed in the literature. Even so, the current literature supported the view that mindfulness plays a positive role in organizational contexts.

Potential ‘Dark Side’ of Mindfulness

There is evidence to support the claim that few psychological processes are universally beneficial. Positive experiences, such as mindfulness, follow an inverted U-shaped trajectory where their positive effects eventually turn negative (Uusberg et al., 2016). According to Hafenbrack and Vohs (2018), state mindfulness impairs motivation to complete performance tasks. They argue that detachment and task focus explain why mindfulness does not alter task performance. Hafenbrack and Vohs’ findings contradict findings from the literature and suggest that mindfulness may have negative effects on organizational outcomes such as task performance. Although the sample does not discuss the potential dark side to mindfulness, future research may consider investigating mindfulness interventions for signs of potential negative effects. This includes studying mindfulness-related processes such as mindful attention, mindful qualities, emotion regulation, and meditation, to understand its negative effects under different conditions. Investigating all the outcomes of mindfulness may provide more balanced research on the mix of positive and negative effects. This type of research may maximize the effectiveness of mindfulness interventions among individuals and within organizations.

CHAPTER 6

CONCLUSION

Contributions

In this systematic review a sample was created of the 54 most cited academic articles in the mindfulness literature. The papers were analyzed to: (1) develop a definition of mindfulness; (2) learn which theories have been applied to improve our understanding of mindfulness; (3) review how mindfulness has been operationalized; and, (4) identify gaps in the literature and areas for future research.

The sample showed that no single, commonly used definition of mindfulness existed. It was observed that mindfulness was an umbrella term used to characterize a large number of processes, practices, and characteristics, closely related to the capacities of self-awareness, presence and present centeredness, and acceptance by non-judgement. This paper contributed to the literature by providing an inclusive definition that considered the most cited definitions.

Four theories were used in the literature to develop a more thorough understanding of mindfulness outcomes on employees and organizations. However, theories to understand the relationships between individual and organizational mindfulness were lacking. While the sample provided evidence that mindfulness may have varying impacts within different parts of organizations, theoretical advances on which mindfulness interventions are best suited for the parts of organization remain an area for opportunity.

Although there is a growing interest in the field, academic research investigating the potential benefits of mindfulness at work is still required. This is largely due to the difficulty of the operationalization of mindfulness, and because there is a lack of consensus

on the measurement of the construct. Subjective surveys were the most commonly used measure, used in 92 percent of empirical studies in the sample. Findings showed there was a lack of cross-level analysis between individuals and organizations, a lack of qualitative data, and inconclusive results on organizational performance as the need for more detailed analyses, such as cost-benefit analyses.

Finally, gaps in the literature were identified that provide future research opportunities. Specifically, three areas require further research: (1) only 31.5 percent of the highly cited papers in the sample used a theory to understand mindfulness. Clearly, there is a need for (2) a comprehensive definition of mindfulness, (3) the application of theoretical concepts to better understand mindfulness within individuals and organizations; (4) the further study of mindfulness mechanisms to determine organizational benefits, (5) outcomes of mindfulness interventions, and (6) the potential ‘dark side’ of mindfulness.

Summary

In conclusion, this paper found that mindfulness is a widely studied concept gaining traction in recent decades. The literature on mindfulness has been dominated by two leading schools of thought that have been adopted by several researchers since. This paper found that the two strands of research have been moving in parallel lines for decades, scarcely recognizing one another, with little attempt to classify and bridge the relationship between the two. While similarities in the varying definitions of mindfulness exist, the sample suggests they differ in several core aspects: their constructs, theoretical scope, and conceptual focus. Even further, the mindfulness mechanisms employed as well as the outcomes of mindfulness interventions differ greatly in the literature. As new papers on mindfulness emerge, they must include critical construct validation and empirical testing.

Mindfulness has the potential to facilitate organizational change and corporate well-being and should, therefore, become a core element in management science research.

REFERENCES

- Aikens, K., Astin, J., Pelletier, K., Levanovich, K. (2014). Mindfulness Goes to Work
Impact of an Online Workplace Intervention. *Journal of Occupational and
Environmental Medicine/American College of Occupational and Environmental
Medicine*, 56(7): 721-31. [http://doi.org/ 10.1097/JOM.0000000000000209](http://doi.org/10.1097/JOM.0000000000000209).
- Aranega, A, Y., Sánchez, R. C., Pérez, C, G. (2020). General intelligence and emotional
intelligence in senior management in the distribution sector: An applied analysis
with synthetic indicators. *Psychology & Marketing*, 37(1), 6–14. [https://doi.org
/10.1002/mar.21275](https://doi.org/10.1002/mar.21275).
- Aviles, P., & Dent, EB. (2015). The Role of Mindfulness in Leading Organizational
Transformation: A Systematic Review. *The Journal of Applied Management &
Entrepreneurship*, 20(3), 31-55. <http://doi.org/10.9774/GLEAF.3709.2015.ju.00005>.
- Baer, R, A., Smith, G, T., Hopkins, J., Krietemeyer, J. (2006). Using Self-Report
Assessment Methods to Explore Facets of Mindfulness. *PubMed*, 13(1): 27-45.
<http://doi.org/10.1177/1073191105283504>.
- Barnes, S., Brown, K. W., Krusemark, E., Campbell, W. K., and Rogge, R. D. (2007). The
role of mindfulness in romantic relationship satisfaction and responses to
relationship stress. *Journal of Marital Family Therapy* 33(4), 482–500.
<https://doi.org/10.1111/j.1752-0606.2007.00033.x>
- Baron, L., Rouleau, V., Grégoire, S., & Baron, C. (2018). Mindfulness and leadership
flexibility. *Journal of Management Development*, 37(2), 165-177. [https://doi.
org/10.1108/JMD-06-2017-0213](https://doi.org/10.1108/JMD-06-2017-0213)
- Barry, D., Meisiek, S. (2010). Seeing More and Seeing Differently: Sensemaking,

Mindfulness, and the Workarounds. *Organization Studies*, 31(11), 1505-1530.

<http://doi.org/10.1177/0170840610380802>

Bishop, SR, Lau, M., Shapiro, S., Carlson, L., Anderson, ND., Carmody, J., Segal, ZV., Abbey, S., Speca, M., Velting, D., Devins, G. (2004). Mindfulness: A Proposed Operational Definition. *Clinical Psychology: Science and Practice*, 11(3), 230-241. <https://doi.org/10.1093/clipsy.bph077>

Bodner, T, E., Langer, E, J. (2001). Individual differences in mindfulness: The Mindfulness/mindlessness scale. *Poster presented at the 13th Annual American Psychological Society Convention Toronto, Ontario, Canada.*

Britton, W, B. (2016). Can mindfulness be too much of a good thing? The value of a middle way. *Current Opinion in Psychology*, 28: 159-165. <https://doi.org/10.1016/j.copsyc.2018.12.011>.

Brown, KW., and Ryan, RM. (2003) The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. *Journal of Personality and Social Psychology*, 84(4), 822-848. <http://dx.doi.org/10.1037/0022-3514.84.4.822>

Brummel, BJ., Dane, E. (2013). Examining workplace mindfulness and its relations to job performance and turnover intention. *Human Relations*, 67(1), 105-128. <http://doi.org/10.1177/0018726713487753>.

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. <http://doi.org/10.1007/s10865-007-9130-7>.

Chandwani, K, D., Ratcliff C, G., Milbury, K., Chaoul, A., Perkins, G., Nagarathna, R.,

- et al. (2016). Examining mediators and moderators of yoga for women with breast cancer undergoing radiotherapy. *Journal of Rehabilitation Medicine*, 52(15), 250–262. <http://doi.org/10.2340.16501977-2740>.
- Charoensukmongkol, P. (2013). The contributions of mindfulness meditation on burnout, coping strategy, and job satisfaction: Evidence from Thailand. *Journal of Management & Organization*, 19(5), 544–558. <https://doi.org/10.1017/jmo.2014.8>
- Cherise, S., & Charlene, L. (2021). Mindfulness, Moral Reasoning and Responsibility: Towards Virtue in Ethical Decision-Making. *Journal of Business Ethics*, 169(1), 103-117. <http://doi.org/10.1007/s10551-019-04272-y>.
- Charoensukmongkol, P. (2013). The contributions of mindfulness meditation on burnout, coping strategy, and job satisfaction: Evidence from Thailand. *Journal of Management & Organization*, 19(5), 544–558. <https://doi.org/10.1017/jmo.2014.8>
- Chu, L. C. (2010). The benefits of meditation vis-à-vis emotional intelligence, perceived stress and negative mental health. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 26(2), 169–180. <http://doi.org/10.1002/smi.1289>.
- Donaldson-Feilder, E., Lewis, R., Yarker, J. (2018). What outcomes have mindfulness and meditation interventions for managers and leaders achieved? A systematic review. *European Journal of Work and Organizational Psychology*, 28(7): 1-19. <http://www.doi.org/10.1080/1359432X.2018.1542379>.
- Dreyfus, G. (2011). Is mindfulness present-centered and non-judgmental? A discussion of the cognitive dimensions of mindfulness. *Contemporary Buddhism*, 12(1): 41-54. <http://doi.org/10.1080/14639947.2011.564815>.

- Fiol, C. Marlene., & Edward J. O'Connor. Waking up! Mindfulness in the Face of Bandwagons. *The Academy of Management Review*, 28(1), 54–70. <https://doi.org/10.2307/30040689>.
- Gartenberg, C., Prat, A., Serafeim, G. (2016). Corporate Purpose and Financial Performance. *Harvard Business School Working Paper*, No. 17-023.
- Gendlin, E. T. (2006). *The town and human attention*. [Transcript]. Talk presented at the Focusing Institute Summer School, Garrison Institute, New York. From http://previous.focusing.org/gendlin/docs/gol_2180.html
- Glomb, T., Duffy, M., Bono, J., Yang, T. (2011). Mindfulness at Work. *Research in Personnel and Human Resources Management*. 30(1), 115-157. [https://doi.org/10.1108/S0742-7301\(2011\)0000030005](https://doi.org/10.1108/S0742-7301(2011)0000030005)
- Goldman Schuyler, K. (2010). Increasing leadership integrity through mind training and embodied learning. *Consulting Psychology Journal: Practice and Research*. 62(1), 21-38. <http://doi.org/10.1037/a0018081>.
- Gray, D. (2007). Facilitating Management Learning – Developing Critical Reflection through Reflective Tools. *Management Learning*, 38(5), 495-517. <https://doi.org/10.1177/1350507607083204>.
- Grossman, P., Niemann, L., et al. (2004). Mindfulness-based stress reduction and health benefits. A meta-analysis. *Journal of Psychosomatic Research*, 57, 35-43. [http://doi.org/10.1016/S0022-3999\(03\)00573-7](http://doi.org/10.1016/S0022-3999(03)00573-7).
- Grossman, P. (2008). On measuring mindfulness in psychosomatic and psychological research. *Journal of Psychosomatic Research*, 64(4), 405 408. <https://doi.org/10.1016/j.jpsychores.2008.02.001>

- Hafenbrack, A. C. (2017). Mindfulness meditation as an on-the-spot workplace intervention. *Journal of Business Research*, 75, 118–129. <https://doi.org/10.1016/j.jbusres.2017.01.017>
- Hafenbrack, A. C., & Vohs, K. D. (2018). Mindfulness meditation impairs task motivation but not performance. *Organizational Behavior and Human Decision Processes*, 147, 1–15. <https://doi.org/10.1016/j.obhdp.2018.05.001>
- Hales, D., Chakravorty., S. (2016). Creating high reliability organizations using mindfulness. *Journal of Business Research*, 69 (8), 2873-2881. <https://doi.org/10.1016/j.jbusres.2015.12.056>.
- Hayes, S. C., Strosahl, K., & Wilson, K. G. (1999). Acceptance and Commitment Therapy: An experiential approach to behavior change. *New York: Guilford Press*.
- Hick, S. F., Chan, L. (2010) Mindfulness-Based Cognitive Therapy for Depression: Effectiveness and Limitations. *Social Work in Mental Health*, 8(3), 225-237. <http://doi.org/10.1080/15332980903405330>.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hulsheger, UR., Alberts, HJ., Feinholdt, A., & Lan, JW. (2013). Benefits of Mindfulness at Work: The Role of Mindfulness in Emotion Regulation, Emotional Exhaustion, and Job Satisfaction. *Journal of Applied Psychology*, 98(2), 310. <http://doi.org/10.1037.a0031313>.
- 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(7), 33-47. [http://dx.doi.org/10.1016/0163-8343\(82\)90026-3](http://dx.doi.org/10.1016/0163-8343(82)90026-3).
- Keng, S., Smoski, M., & Robins, C. (2011). Effects of Mindfulness on Psychological Health: A Review of Empirical Studies. *Clinical psychology review*, 31(1): 1041-56. <http://www.doi.org/10.1016/j.cpr.2011.04.006>.
- Langer, E., Carson, SH. (2006). Mindfulness and self-acceptance. *Journal of Rational-Emotive & Cognitive-Behaviour Therapy*, 24(1), 29-43. <http://doi.org/10.1007/s10942-006-0022-5>
- Lau, M, A., Bishop, S, R., Segal, Z, V., Buis, T., Anderson, N, D., Carlson, L., Shapiro, S., Carmody, J., Abbey, S., Devins, G., (2006). The Toronto Mindfulness Scale: development and validation. *Journal of Clinical Psychology*, 62(12): 1445-67. <http://www.doi.org/10.1002/jclp.20326.PMID:17019673>.
- Levinthal, D., & Rerup, C. (2006). Crossing an Apparent Chasm: Bridging Mindful and Less-Mindful Perspectives on Organizational Learning. *Organization Science*, 17(4), 502-513. <https://doi.org/10.1287/orsc.1060.0197>.
- Langer, E., Pirson, M., & Delizonna, L. (2010). The mindlessness of social comparisons. *Psychology of Aesthetics, Creativity, and the Arts*, 4(2), 68–74. <https://doi.org/10.1037/a0017318>.
- Linnenluecke, M. (2015). Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda. *International Journal of Management Reviews*, 19(1), 4-30. <http://doi.org/10.1111/ijmr.12076>.
- Luthans, F., & Church, A. (2002). Positive Organizational Behavior: Developing and Managing

- Psychological Strengths [and Executive Commentary]. *The Academy of Management Executive*, 16(1), 57-75. <https://doi.org/10.5465/ame.2002.6640181>.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). Psychological capital: developing the human competitive edge. (pp. 124-129, 214-227). Oxford, UK: Oxford University Press.
- Maak, T., & Pless, N. (2004). Building an Inclusive Diversity Culture: Principles, Processes and Practice. *Journal of Business Ethics*, 54(2), 129-147. <https://doi.org/10.1007/s10551-004-9465-8>.
- Moona, M., Ramesh, K. (2012). A study on turnover intention in Fast food industry: - Employees' fit to the organizational culture and the important of their commitment. *International Journal-Academy Research in Business & Social Science*, 2(5): 59-63.
- Moore, A., & Malinowski, P. (2009). Meditation, Mindfulness and Cognitive Flexibility. *Consciousness and Cognition*, 18, 176-186. <https://doi.org/10.1016/j.concog.2008.12.008>.
- Olafsen, AH., Niemiec, CP., Deci, EL., Halvari, H., Nilsen ER., & Williams, G. (2021). Mindfulness buffers the adverse impact of need frustration on employee outcomes: A Self-determination theory perspective. *Journal of Theoretical Social Psychology*, 5(3), 283-296. <http://doi.org/10.1002/jts5.93>.
- Raza, M., Nabeel, A., Awan, H., & Syed K, S. (2012). Relationship between service quality, perceived value, satisfaction and revisit intention in hotel industry. *Interdisciplinary Journal of Contemporary Research in Business*, 4(8): 788-805.
- Ray, J., Baker., L, T., Donde, P. (2011). Organizational Mindfulness in Business Schools.

Academy of Management Learning and Education, 10(2), 188-203.
<http://doi.org/10.5465/amle.10.2.zqr188>.

Reb, J., Narayanan, J., and Chaturvedi, S. (2014). Leading mindfully: two studies on the influence of supervisor trait mindfulness on employee well-being and performance. *Mindfulness* 5, 36–45. <http://doi.org/10.1007/s12671-012-0144-z>

Reb, J., Narayanan, J., and Ho, Z. W. (2015a). Mindfulness at work: antecedents and consequences of employee awareness and absent-mindedness. *Mindfulness* 6, 111–122. <http://doi.org/10.1007/s12671-013-0236-4>

Reb, J., Chaturvedi, S., Narayanan, J., & Kudesia, R. (2019). Leader Mindfulness and Employee Performance: A Sequential Mediation Model of LMX Quality, Interpersonal Justice, and Employee Stress. *Journal of Business Ethics*, 160, 745–763. <http://doi.org/10.1007/s10551-018-3927-x>.

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. <https://doi.org/10.1037/a0037183>.

Ruedy, N. E., & Schweitzer, M. E. (2010). In the moment: The effect of mindfulness on ethical decision making. *Journal of Business Ethics*, 95(Suppl 1), 73–87. <https://doi.org/10.1007/s10551-011-0796-y>

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. <https://doi.org/10.1037/0003-066X.55.1.68>

Ryan, R. M., & Deci, E. L. (2011). A self-determination theory perspective on social,

institutional, cultural, and economic supports for autonomy and their importance for well-being. *Human autonomy in cross-cultural context: Perspectives on the psychology of agency, freedom, and well-being*, 34(1), 45–64). Springer Science + Business Media. https://doi.org/10.1007/978-90-481-9667-8_3

- Sauer, S., Baer, R. (2010). Mindfulness and decentering as mechanisms of change in mindfulness-and acceptance-based interventions. In R. A. Baer (Ed.), *Assessing mindfulness and acceptance processes in clients: Illuminating the theory and practice of change* (pp. 25–50). Context Press/New Harbinger Publications.
- Sauer, S., Walsh, E., Eisenlohr-Moul, T., & Lykins, E. (2013). Comparing Mindfulness-Based Intervention Strategies: Differential Effects of Sitting Meditation, Body Scan, and Mindful Yoga. *Mindfulness*, 4(1), 382-388. <http://doi.org/10.1007/s12671-012-0139-9>.
- Schooler, J. W., Mrazek, M, D., Phillips, D, T., Franklin, M, S., and Broadway, J, M. (2013). Young and restless: validation of the Mind-Wandering Questionnaire (MWQ) reveals disruptive impact of mind-wandering for youth. *Frontiers in Psychology*, 4, Article 560. <https://doi.org/10.3389/fpsyg.2013.00560>
- Shapiro, S., Jazaieri, H., & Goldin, Philippe. (2012). Mindfulness-based stress reduction effects on moral reasoning and decision making. *The Journal of Positive Psychology*. 7. 504-515. <http://doi.org/10.1080/17439760.2012.723732>.
- Segal, Z., Williams, J. M. G., Teasdale, J.D. (2002). Mindfulness-Based Cognitive Therapy for Depression: A New Approach to Preventing Relapse. *Cognitive Behavioural Therapy Book Reviews*, 3(11).
- Sutcliffe, K., and Vogus, J. (2003) Organizing for resilience. *Positive Organizational*

Scholarship: Foundations of a New Discipline, Berrett-Koehler, San Francisco, 7, 94-110.

- Sutcliffe, K. M., Vogus, T. J., Dane, E. (2016). Mindfulness in Organizations: A Cross-Level Review. *Annual Review of Organizational Psychology and Organizational Behaviour*, 3, 55-81. <https://doi.org/10.1146/annurev-orgpsych-041015-062531>.
- Valentine, S., Godkin, L., & Varca, P. (2010) Role Conflict, Mindfulness, and Organizational Ethics in an Education-Based Healthcare Institution. *Journal of Business Ethics*, 94(3), 455-469. <http://doi.org/10.1007/s10551-009-0276-9>.
- Vogus, T., & Welbourne, T. (2003). Structuring for High Reliability: HR Practices and Mindful Processes in Reliability-Seeking Organizations. *Journal of Organizational Behavior*, 24, 877-903. <http://dx.doi.org/10.1002/job.221>.
- Vogus, T. J., & Sutcliffe, K. M. (2012). Organizational mindfulness and mindful organizing: A reconciliation and path forward. *Academy of Management Learning and Education*, 11(4), 722-735. <https://doi.org/10.5465/amle.2011.0002C>.
- Vogus, T. J., Cooil, B., Sitterding, M., & Everett, L. Q. (2014). Safety Organizing, Emotional Exhaustion, and Turnover in Hospital Nursing Units. *Medical Care*, 52(10), 870–876. <http://doi.org/10.1097/MLR.000000000000169>.
- Walker, K. (2010). A Systematic Review of the Corporate Reputation Literature: Definition, Measurement, and Theory. *Corporate Reputation Review*, 12(4), 357-387. <https://doi.org/10.1057/crr.2009.26>
- Weick, KE., & Putnam, T. (2006). Organization for mindfulness—Eastern wisdom and Western knowledge. *Journal of Management Inquiry*, 15(3): 275-287. <https://doi.org/10.1177/1056492606291202>

- Weick, K. E., Quinn, R. E. (1999). Organizational Change and Development. *Annual Review of Psychology*, 50(1), 361-386. <http://doi.org/10.1146/annurev.psych.50.1.361>.
- Weick, K. E., & Sutcliffe, K. M. (2001). Assuring high performance in an age of complexity. *Managing the Unexpected, Sustained Performance Complex World*. 3(2),138-149. <http://doi.org/10.1093/oxfordhb/9780199734610.013.0064>.
- Weick, K. E., & Sutcliffe, K. M. (2006). Mindfulness and the quality of organizational attention. *Organization Science*, 17(4), 514-524. <https://doi.org/10.1287/orsc.1060.0196>
- Winchester, CL., & Salji, M. (2016). Writing a literature review. *Journal of Clinical Urology*, 9(5), 308-312. <https://doi.org/10.1177/2051415816650133>.
- Yaure, K, M. (1973). The Concept of Awareness. *Journal of Thought*, 8(4), 259-269. <https://www.jstor.org/stable/42588381>.
- Yu, L., & Zellmer-Bruhn, M. (2017). Introducing Team Mindfulness and Considering its Safeguard Role Against Conflict Transformation and Social Undermining. *Academy of Management Journal*. 61(1): 324-447. <http://www.doi.org/10.5465/amj.2016.0094>

APPENDICES

Table 1

Rank Order of Journals Publishing Quality Mindfulness Papers (2003-2021)

<i>Journal</i>	<i># Publications</i>	<i>Cumulative</i>	<i>Percent</i>
<i>Journal of Business Ethics</i>	16	16	29
<i>Journal of Business Research</i>	10	26	18
<i>Management Learning</i>	7	33	13
<i>Organization Science</i>	4	37	7
<i>Academy of Management Inquiry</i>	3	40	5
<i>Academy of Management Review</i>	3	43	5
<i>Journal of Management Review</i>	2	45	3
<i>Strategy Management Journal</i>	1	46	2
<i>Organization Studies</i>	1	47	2
<i>Journal of Management and Organization</i>	1	48	2
<i>Journal of Public Policy and Marketing</i>	1	49	2
<i>International Journal of Managing Project in Business</i>	1	50	2
<i>Academy of Management Journal</i>	1	51	2
<i>Cogent Business and Management</i>	1	52	2
<i>Journal of Management Development</i>	1	53	2
<i>Journal of Small Management</i>	1	54	2

Table 2**Study Sample: Listed Chronologically**

<i>Year</i>	<i>Author(s)</i>	<i>Title</i>	<i>Journal</i>
2003	Fiol, CM. and O'Connor, EJ.	Waking up! Mindfulness in the face of bandwagons.	<i>Academy of Management Review.</i>
2006	Levinthal, D. and Rerup, C.	Crossing an apparent chasm: Bridging mindful and Less mindful perspectives on organizational learning.	<i>Organization Science.</i>
2006	Weick, KE. and Sutcliffe, KA.	Mindfulness and the quality of organizational attention.	<i>Organization Science.</i>
2006	Weick, KE. and Putnam, T.	Organization for mindfulness—Eastern wisdom and Western knowledge.	<i>Journal of Management Inquiry.</i>
2007	Kernochan, RA. McCormick, DW. and White, JA.	Spirituality and the management teacher—Reflections of three Buddhists on compassion, mindfulness, and selflessness in the classroom.	<i>Journal of Management Inquiry.</i>
2009	Kasser, T. and Sheldon, KM.	Time Affluence as a Path toward Personal Happiness and Ethical Business Practice; Empirical Evidence from Four Studies.	<i>Journal of Business Ethics.</i>
2009	Jordan, S. Messner, M. and Becker, A.	Reflection and Mindfulness in Organizations: Rationales and Possibilities for Integration.	<i>Management Learning.</i>
2010	Valentine, S. Godkin, L. and Varca, PE.	Role Conflict, Mindfulness, and Organizational Ethics in an Education-Based Healthcare Institution.	<i>Journal of Business Ethics.</i>
2010	Plambeck, N. and	When the Glass is Half Full and	<i>Strategic</i>

	Weber, K.	Half Empty: CEO's Ambivalent Interpretations of Strategic Issues.	<i>Management Journal.</i>
2010	Ruedy, NE. and Schweitzer, ME.	In the Moment: The Effect of Mindfulness on Ethical Decision Making.	<i>Journal of Business Ethics.</i>
2010	Barry, D. and Meisiek, S.	Seeing More and Seeing Differently: Sensemaking, Mindfulness, and the Workarounds.	<i>Organization Studies.</i>
2011	Keevers, L. and Treleaven, L.	Organizing Practices of Reflection: A Practice-Based Study.	<i>Management Learning.</i>
2012	Marques, J.	Consciousness at Work: A Review of Some Important Values, Discussed from a Buddhist Perspective.	<i>Journal of Business Ethics.</i>
2012	Ndubisi, NO.	Mindfulness, reliability, preemptive conflict handling, customer orientation and outcomes in Malaysia's healthcare sector.	<i>Journal of Business Research.</i>
2012	Wheeler, AR. Halbesleben, JRB. and Harris, KJ.	How job-level HRM effectiveness influences employee intent to turnover and workarounds in hospitals.	<i>Journal of Business Research.</i>
2012	Atkins, PWB. And Parker, SK.	Understanding Individual Compassion in Organizations: The Role of Appraisals and Psychological Flexibility.	<i>Academy of Management Review.</i>
2013	Hernes, T. and Irgens, EJ.	Keeping things mindfully on track: Organizational learning under continuity.	<i>Management Learning.</i>
2013	Charoensukmongkol, P.	The contributions of mindfulness meditation on burnout, coping strategy, and job satisfaction: Evidence	<i>Journal of Management & Organization.</i>

		from Thailand.	
2014	Ramsey, C.	Management leaning: A scholarship of practice centered on attention?	<i>Management Learning.</i>
2014	Laureiro-Martinez, D.	Cognitive Control Capabilities, Routinization Propensity, and Decision-Making Performance.	<i>Organization Science.</i>
2016	Zoghbi-Manrique-De-Lara, P. and Guerra, Baez, R.	Exploring the Influence of Ethical Climate on Employee Compassion in the Hospitality Industry.	<i>Journal of Business Ethics.</i>
2016	Bahl, S. Milne, GR. And Boesen-Mariani, S.	Mindfulness: Its Transformative Potential for Consumer, Societal, and Environmental Well-Being.	<i>Journal of Public Policy & Marketing.</i>
2016	Hales, DN. and Chakravorty, SS.	Creating high reliability organizations using mindfulness.	<i>Journal of Business Research.</i>
2016	Turner, N. Kutsch, E. and Leybourne, SA.	Rethinking project reliability using the ambidexterity and mindfulness perspectives.	<i>International Journal of Managing Projects in Business.</i>
2016	Oglisastri, E. and Zuniga, R.	An introduction to mindfulness and sensemaking by highly reliable organizations in Latin America.	<i>Journal of Business Research.</i>
2016	Bucher, S. Jager, UP. And Cardoza, G.	FUNDES: Becoming a strategically mindful non-profit.	<i>Journal of Business Research.</i>
2017	Goldman-Schuyler, K. Skjei, S. Koskela, K. et al.	“Moments of Waking Up”: A Doorway to Mindfulness and Presence.	<i>Journal of Management Review.</i>
2017	Hafenbrack, AC.	Mindfulness Meditation as an On-The-Spot Workplace Intervention.	<i>Journal of Business Research.</i>

2017	Celsi, MW. Nelson, RP. and Gilly, MC.	Temptation's itch: Mindfulness, acceptance, and mindfulness in a debt management program.	<i>Journal of Business Research.</i>
2017	Gardner, JW. Boyer, KK. and Ward, PT.	Achieving Time-Sensitive Organizational Performance Through Mindful Use of Technologies and Routines.	<i>Organization Science.</i>
2018	Yu, LT. and Zellmer-Bruhn, M.	Introducing Team Mindfulness and Considering Its Safeguard Role Against Conflict Transformation and Social Undermining.	<i>Academy of Management Journal.</i>
2018	Rigg, C.	Somatic learning: Bringing the body into critical reflection.	<i>Management Learning.</i>
2018	Vu, MC. Wolfgramm, R. and Spiller, C.	Minding less: Exploring mindfulness and mindlessness in organizations through Skillful Means.	<i>Management Learning.</i>
2018	Raza, B. Ali, M. and Hamid, M.	Impact of trait mindfulness on job satisfaction and turnover intentions: Mediating role of work-family balance and moderating role of work-family conflict.	<i>Cogent Business & Management.</i>
2018	Baron, L. Rouleau, V. and Baron, C.	Mindfulness and leadership flexibility.	<i>Journal of Management Development.</i>
2019	Aranega, AY. Sanchez, RC. and Perez, CG.	Mindfulness' effects on undergraduates' perceptions of self-knowledge and stress levels.	<i>Journal of Business Ethics.</i>
2019	Kudesia, RS.	Mindfulness as Metacognitive Practice.	<i>Academy of Management Review.</i>
2019	Schuh, SC. Zheng, MX. Fernandez,	The Interpersonal Benefits of Leader Mindfulness: A Serial	<i>Journal of Business Ethics.</i>

	JA. <i>et al.</i>	Mediation Model Linking Leader Mindfulness, Leader Procedural Justice Enactment, and Employee Exhaustion and Performance.	
2019	Qui, JXJ. and Rooney, D.	Addressing Unintended Ethical Challenges of Workplace Mindfulness: A Four-Stage Mindfulness Development Model.	<i>Journal of Business Ethics.</i>
2019	Van Gelderen, M. Kibler, E. and Wincent, J.	Mindfulness and Taking Action to Start a New Business.	<i>Journal of Small Business Management.</i>
2019	Mihelic, KK. and Culiberg, B.	Reaping the Fruits of Another's Labor: The Role of Moral Meaningfulness, Mindfulness, and Motivation in Social Loafing.	<i>Journal of Business Ethics.</i>
2019	Reb, J. Chaturvedi, S. Kudesia, RS. <i>et al.</i>	Leader Mindfulness and Employee Performance: A Sequential Mediation Model of LMX Quality, Interpersonal Justice, and Employee Stress.	<i>Journal of Business Ethics.</i>
2020	Vu, Mc. And Burton, N.	Mindful reflexivity: Unpacking the process of transformative learning in mindfulness and discernment.	<i>Management Learning.</i>
2020	Greenbaum, RL. Babalola, M. Kim, YC. <i>et al.</i>	Moral Burden of Bottom-Line Pursuits: How and When Perceptions of Top Management Bottom-Line Mentality Inhibit Supervisors' Ethical Leadership Practices.	<i>Journal of Business Ethics.</i>
2020	Gentina, E. Daniel, C. and Tang, TLP.	Mindfulness Reduces Avaricious Monetary	<i>Journal of Business Ethics.</i>

		Attitudes and Enhances Ethical Consumer Beliefs: Mindfulness Training, Timing, and Practicing Matter.	
2020	Dane, E. and Rockmann, KW.	Traveler's Mind: A Narrative-Based Account of Working and Living Mindfully.	<i>Journal of Management Inquiry.</i>
2020	Aranega, AY. Nunez, MTD. and Sanchez, RC.	Mindfulness as an intrapreneurship tool for improving the working environment and self-awareness.	<i>Journal of Business Research.</i>
2021	Orazi, DC. Chen, JM. and Chan, EY.	To Erect Temples to Virtue: Effects of State Mindfulness on Other-Focused Ethical Behaviours.	<i>Journal of Business Ethics.</i>
2021	Rooney, D. Kupers, W. Zhuravleva, E. <i>et al.</i>	A Developmental Model for Educating Wise Leaders: The Role of Mindfulness and Habitus in Creating Time for Embodying Wisdom.	<i>Journal of Business Ethics.</i>
2021	Christensen-Salen, A. Waluumbwa, FO. Misati, E. <i>et al.</i>	A Multilevel Analysis of the Relationship Between Ethical Leadership and Ostracism: The Roles of Relational Climate, Employee Mindfulness, and Work Unit Structure.	<i>Journal of Business Ethics.</i>
2021	Li, HL. Wu, Y. Wang, YC. <i>et al.</i>	Organizational mindfulness towards digital transformation as a prerequisite of information processing capability to achieve market agility.	<i>Journal of Business Research.</i>
2021	Small, C. and Lew, C.	Mindfulness, Moral Reasoning and Responsibility: Towards Virtue in Ethical Decision-Making.	<i>Journal of Business Ethics.</i>

2021	Bhatti, SH. Santoro, G. Rizzato, F. <i>et al.</i>	Antecedents and consequences of business model innovation in the IT industry.	<i>Journal of Business Research.</i>
2021	Yitshaki, R. Kropp, F. and Honig, B.	The Roles of Compassion in Shaping Social Entrepreneurs' Prosocial Opportunity Recognition.	<i>Journal of Business Ethics.</i>

Table 3**Definitions of Mindfulness Referenced in the Sample**

<i>Author(s), Year: Page</i>	<i>Definition</i>
Fiol, CM. and O'Connor, EJ, 2003:	'The mind is present in embodied everyday experience'.
Levinthal, D. and Rerup, C, 2006:	'A state of active awareness characterized by the continual creation and refinement of categories, an openness to new information, and a willingness to view contexts from multiple perspectives'.
Weick, KE. and Sutcliffe, KA, 2006:	'A psychological state in which individuals engage in active information processing while performing their current tasks such that they are actively analyzing, categorizing, and making distinctions in data'.
Weick, KE. and Putnam, T, 2006:	Eastern: 'Having the ability to hang on to current objects, remember them, and not lose sight of them through distraction, wandering attention, associative thinking, explaining away, or rejection'. Western: 'Enhanced attention to an awareness of current experience or present reality'.
Kernochan, RA. McCormick, DW. And White, JA, 2007:	'...concentrated attention on experience, becoming aware of the present moment, focusing on the tasks at hand to live in the here and now-not losing oneself in thoughts about the future or past'.
Kasser, T. and Sheldon, KM, 2009:	'The feeling that one is frequently in the moment'.
Jordan, S. Messner, M. and Becker, A, 2009:	'An individual learning process categorized by a heightened awareness of the specific circumstances in a given situation'.
Valentine, S. Godkin, L. and Varca, PE, 2010:	'Involves one's ability to realistically and accurately evaluate circumstances in a manner that facilitates the construction of significant ideas'.
Ruedy, NE. and Schweitzer, ME, 2010:	'A quality of consciousness, a non-judging observation on one's internal and external environments.
Barry, D. and Meisiek, S, 2010:	Individual mindfulness: 'The subjective "feel" of mindfulness is that of a heightened state of involvement and wakefulness or being in the present'.

	Collective mindfulness: ‘The capacity of groups and individuals to be acutely aware of significant details, to notice errors in the making, and to have the shared expertise and freedom to act on what they notice’.
Keevers, L. and Treleaven, L, 2011:	‘A flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context’.
Marques, J, 2012:	‘A state of acute awareness, attentiveness, and perceptiveness in everything going on around oneself, while minimizing the effects of self and ego’.
Ndubisi, NO, 2012:	‘A state of reduced attention resulting from premature commitment to beliefs that may not accurately reflect the phenomena at hand’.
	Collective mindfulness: ‘a combination of ongoing scrutiny of existing expectations, continuous refinement and differentiation of expectations based on newer experiences, willingness and capability to invent new expectations that make sense of unprecedented events, a more nuanced appreciation of context and ways to deal with it’ (Weick and Sutcliffe, 2001: p. 42).
Wheeler, AR. Halbesleben, JRB. and Harris, KJ, 2012:	‘An employee's ability to process information and draw novel insights from that information to enhance performance’.
Hernes, T. and Irgens, EJ, 2013:	‘Comes from the building up of potentially useful knowledge while purposely keeping things on course’.
Ramsey, C, 2014:	‘Reflections on how people attend to their immediate surroundings and context’ (Weick and Sutcliffe, 2006).
	‘Emphasizes a non-judgemental attention on both what is going on around us and what is going on inside us’ (Kabat-Zinn, 2005).
	‘Emphasises mindfulness as attention or an active process by which learners are able to create new distinctions’ (Dane, 2011).

Zoghbi-Manrique-de-Lara, P. and Guerra, Baez, R, 2016:	‘A state of consciousness in which attention is focused on present moment phenomena occurring both externally and internally’.
Bahl, S. Milne, GR. And Boesen-Mariani, S 2016:	“‘The awareness that arises by paying attention, on purpose, in the present moment, and non-judgementally’.
Hales, DN. and Chakravorty, SS, 2016:	‘Qualitative techniques that encourage high levels of alertness to a task’.
Bucher, S. Jager, UP. and Cardoza, G, 2016:	‘An individual’s state of mind characterized by heightened awareness and sensitivity to its context’.
	‘Collective mindfulness is based on “attention directed both outward and inward, and preoccupation with here and now’.
Goldman-Schuyler, K. Skjei, S. Koskela, K. <i>et al</i> , 2017:	‘A focused state of mind that can contribute to reduced stress and increased work performance’ (Dane & Brummel, 2014; Shapiro & Carlson, 2009).
Hafenbrack, AC, 2017:	‘A state of consciousness in which people have present awareness and nonjudgmental acceptance of internal and external experience’.
Celsi, MW. Nelson, RP. and Gilly, MC, 2017:	‘An enhanced attention to and awareness of current experience or present reality’.
Gardner, JW. Boyer, KK. and Ward, PT, 2017:	‘The capacity of groups and individuals to be acutely aware of significant details, to notice errors in the making, and to have the shared expertise and freedom to act on what they notice’ (Weick et al. 2000, p. 34).
Yu, LT. and Zellmer-Bruhn, M, 2018:	‘A receptive attention to and awareness of present events and experience’.
Rigg, C, 2018:	‘Learning to pay attention and be aware of what one is sensing and noticing’ (Goldman Schuyler, 2010: 27).
	‘A state of consciousness in which attention is focused on present-moment phenomena occurring externally and internally’ (Dane and Brummel, 2013: 108).
	‘The mental ability to hang on to current objects by bringing wandering (wobbling) attention back to the intended object’ (Weick and Putnam, 2006: 277).
Vu, MC. Wolfgramm, R.	‘Present-centered non-judgmental awareness’.

and Spiller, C, 2018:	
Raza, B. Ali, M. and Hamid, M, 2018:	‘A psychological state in which one focuses attention on events occurring in the present moment’ (Brown & Ryan, 2003).
Baron, L. Rouleau, V. and Baron, C, 2018:	‘The self-regulation of attention so that it is maintained on immediate experience, allowing for increased recognition of mental events in the present moment” and second, “the adoption of a particular orientation toward one’s experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance’.
Aranega, AY. Sanchez, RC. and Perez, CG, 2019:	‘A meditation technique that enables one to be in the moment and to be aware of the present’.
Kudesia, RS, 2019:	‘The metacognitive process by which people adjust their mode of information processing based on the situation at hand’.
Schuh, SC. Zheng, MX. Fernandez, JA. <i>et al</i> , 2019:	‘Attention to the experiences occurring in the present moment, in a nonjudgmental or accepting way’.
Qui, JXJ. and Rooney, D, 2019:	‘The nonjudgmental focus of one’s attention on the experience that occurs in the present moment’.
Van Gelderen, M. Kibler, E. and Wincent, J, 2019:	‘A receptive attention to and awareness of present events and experience’.
Mihelic, KK. and Culiberg, B, 2019:	‘Present-centered attention and awareness’ (Brown and Ryan 2003). ‘The psychological state of consciousness that reflects how present and engrossed students are when they perform required tasks’.
Reb, J. Chaturvedi, S. Kudesia, RS. <i>et al</i> , 2019:	‘An open, present-centered awareness and attention’ (Bishop et al. 2006; Brown et al.2007).
Vu, Mc. And Burton, N, 2020:	‘Based on wisdom, the intellectual understanding of surroundings to moderate desires, transforming the self, and reducing the state of suffering resulting from attachment to desires’.

Greenbaum, RL. Babalola, M. Kim, YC. <i>et al</i> , 2020:	‘When a person is predisposed to experiencing a range of situations with a sense of in-the-moment awareness’ (Brown et al. 2007).
Gentina, E. Daniel, C. and Tang, TLP, 2020:	‘The awareness of the present moment and experience in daily life’.
Dane, E. and Rockmann, KW, 2020:	‘Focusing one’s attention on events and phenomena unfolding in the present moment, thereby resisting the mind’s tendency to wander’.
Aranega, AY. Nunez, MTD. and Sanchez, RC, 2020:	‘A meditation technique which aims to focus on the present moment and to be aware of the present, without having to think about the past or the future, i.e. the “here and now’.
Rooney, D. Kupers, W. Zhuravleva, E. <i>et al</i> , 2021:	‘The formal bodily grounded and mediated practice and an attitude as one pays attention in a particular way: on purpose, in the present moment and non-judgementally’.
Christensen-Salen, A. Waluumbwa, FO. Misati, E. <i>et al</i> , 2021: 620	‘A state of consciousness characterized by receptive attention to and awareness of present events and experiences. (Glomb et al. 2011, p. 119).
Li, HL. Wu, Y. Wang, YC. <i>et al</i> , 2021:	Organizational mindfulness: ‘the extent to which an organization captures discriminatory detail about emerging threats and creates a capability to swiftly act in response to these details’ (Vogus & Sutcliffe, 2012, p. 723).
Small, C. and Lew, C, 2021:	‘Denotes a non-judgemental and present way of giving attention’.
Bhatti, SH. Santoro, G. Rizzato, F. <i>et al</i> , 2021:	‘A state of alertness and lively awareness’.

VITA AUCTORIS

NAME: Milica Kozomara

PLACE OF BIRTH: Windsor, ON

YEAR OF BIRTH: 1998

EDUCATION: Riverside Secondary School, Windsor, ON, 2012–
2016

University of Windsor, B.Comm., Windsor, ON,
2016–2020

University of Windsor, MBA., Windsor, ON, 2020–
2022