

THE GIFT OF BEING PRESENT: UNWRAPPING MINDFULNESS IN LEADERSHIP

by

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DEDICATION

This is dedicated to Jordan Kent. Forever in our hearts. Rest easy, brother.

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I would like to thank my friends and family who supported me throughout these past few years. Despite overwhelming challenges, it is through all of you that I had the strength to see this project through to the end. Thank you to the professors and faculty who offered their guidance and wisdom to ensure this project was a success. I am incredibly grateful for you all.

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ABSTRACT

THE GIFT OF BEING PRESENT: UNWRAPPING MINDFULNESS IN LEADERSHIP

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Over the past two decades, mindfulness has received considerable attention in the organizational sciences, and researchers have even begun examining how a leader's mindfulness may manifest interpersonally to benefit those around them. However, these studies have conceptualized and measured mindfulness from a unidimensional perspective, leaving a potential gap in the literature regarding *which* dimensions of mindfulness are more or less important for interindividual outcomes. The two studies presented in this paper sought to build on previous findings by evaluating mindfulness from a multidimensional lens. The first study involved a cross-sectional survey (n=306) designed to examine the factor structure of the *Five Facet Mindfulness Questionnaire* (FFMQ) and evaluate the relationship between supervisor mindfulness and direct report performance. The factor structure of the FFMQ was confirmed; however, results suggested that neither aggregate supervisor mindfulness nor the individual dimensions significantly predicted performance of their direct reports. In the second study, survey

data was collected from a sample of supervisors (n=92). The factor structure identified in the first study was used to predict direct report performance as well as organizational citizenship behavior (OCB). Findings were consistent with the first study in that overall supervisor mindfulness did not predict either outcome; however, one dimension of the FFMQ was found as a significant predictor of both overall performance and OCB. Potential implications and limitations are discussed.

INTRODUCTION & THEORETICAL FRAMEWORK

As it has been popularized today, mindfulness is most commonly defined as being intentionally aware of the present moment and doing so in a non-judgmental manner (Brown and Ryan, 2003; Kabat-Zinn, 2003). Originating from Buddhist practices and teachings (Sun, 2014), mindfulness is now often incorporated into clinical interventions as a secular avenue for treating certain disorders (Baer, 2003; Chiesa, 2010). While some proclaim that mindfulness is not as beneficial as the literature suggests (Purser & Loy, 2013), the vast majority of articles and publications demonstrate that mindfulness is associated with a variety of positive outcomes for individuals (Eberth & Sedlmeier, 2012; Grossman et al., 2004).

These benefits include improvements to one's psychological health and well-being, such as negative relationships to depression, anxiety, neuroticism, and negative affect (Arch & Craske, 2010; Brown and Ryan, 2003) and positive relationships with life satisfaction, self-esteem, and shortened life-cycles of emotions (Brown and Ryan, 2003; Desbordes et al., 2015; Pepping et al., 2013). Furthermore, mindfulness has been linked to enhanced attention and focus (Brewer et al., 2011; Mrazek et al., 2013; Smallwood & Schooler, 2015; Tang et al., 2007; Tang et al., 2015), and increased working memory capacity (Mrazek et al., 2013; Ruocco & Direkoglu, 2013). Biologically, mindfulness is associated with improved stress response (Brown, et al., 2007; Creswell & Lindsay,

2014) and even increased gray matter in the brain for areas related to learning, emotion regulation, and more (Holzel et al., 2011).

While the above findings demonstrate the benefits of mindfulness in a general context, mindfulness has also been examined extensively within the workplace.

Mindfulness at Work

Considering the fact that employee health and well-being has been established as a *SIOP Top 10 Workplace Trend* in five out of the last six years (Society for Industrial and Organizational Psychology, 2021), it is not surprising that mindfulness, as a cost-effective method of improving employee well-being, has received considerable attention as well. Indeed, with the additional pressures of COVID-19 negatively impacting employee well-being and productivity (Gurcheik, K., 2020), mindfulness offers one way for employees and organizations to appropriately respond to stressful situations at work.

The literature contains several comprehensive reviews pertaining to mindfulness at work (Glomb et al., 2011; Good et al., 2016; Hyland et al., 2015; Reb & Choi, 2014). Mindfulness improves outcomes such as employee job performance (Dane, 2011; Shonin, et al., 2014), well-being (Roeser et al., 2013; Roche et al., 2014), and job satisfaction (Hülshager, 2013). Highly successful companies such as Google have even implemented mindfulness-based programs to benefit employees and the organization at large (Tan, 2012). Among the most popular mindfulness training programs within companies is Mindfulness-Based Stress Reduction, or MBSR (Kabat-Zinn, 1994). While the original intention of this program was for individuals suffering from diseases and disorders, it has

found utility within organizations to improve employee well-being and ultimately reduce burnout (Reb and Choi, 2014).

As the literature demonstrates, there is considerable potential for mindfulness to have a positive impact in the workplace. Yet, most of this attention comes from an intrapersonal perspective. In other words, studies have principally focused on how individuals who are high in trait mindfulness, or have undergone mindfulness training, benefit (themselves). Only recently has research begun to demonstrate how mindfulness can have an *interpersonal* impact in the workplace, meaning that one's mindfulness may influence those around them.

Interpersonal Mindfulness & Leadership

The general theory behind leader mindfulness as a predictor of employee outcomes is based on how mindfulness may manifest interpersonally, from one individual to another. As demonstrated above, mindfulness has several intrapersonal benefits such as enhanced attention and focus, increased emotional intelligence, and improved stress response. It is expected that these characteristics for one individual will have relational implications for those around them. Particularly, we anticipate this relationship to manifest between leaders and their followers. Leaders, as the individuals responsible for setting direction and providing support and feedback to employees (Judge & Piccolo, 2004; Scandura et Schriesheim, 1994), are often the ones best positioned for interpersonal influence within organizations.

A mindful leader, in particular, is better able to remain truly present and engaged with their employees, providing a more supportive environment. This individualized

consideration may signal to employees that their psychological needs are being met (Reb et al., 2014), and therefore freeing up additional resources to perform optimally.

Moreover, the ability of a mindful leader to remain calm when faced with challenging and stressful situations could instill greater confidence and ease with their employees, granting them increased efficacy to improve performance (Lane & Lane, 2001). Mindful leaders are also likely to demonstrate greater awareness of situations, and thus be able to communicate more clearly and effectively to their employees regarding what is expected of them.

A few studies empirically support these ideas. Reb, Narayanan, and Chaturvedi (2014) found that supervisor trait mindfulness was positively associated with both employee well-being and performance. In 2019, Arendt, Verdorfer, and Kugler found that leader mindfulness was positively related to follower satisfaction. Certain studies have also examined *why* these relationships exist. In 2017, Schuh et al. showed that leader mindfulness is positively related to employee performance, and that this relationship is serially mediated by leader procedural justice enactment and employee exhaustion. Furthermore, in 2018, Pinck and Sonnentag found further support that leader mindfulness was related to employee well-being as explained by transformational leadership.

Considering the theoretical and empirical evidence, the present studies focused on employee job performance as one outcome of supervisor mindfulness. Therefore, the first hypothesis anticipates that supervisor mindfulness will positively predict direct report performance.

Hypothesis 1: Supervisor mindfulness will significantly predict direct report overall performance.

The present studies also evaluated a more specific component of job performance: organizational citizenship behavior (OCB). This construct is defined as discretionary behavior or activity beyond the expectations of the job description that supports and enhances unit effectiveness (Organ, 1988). OCBs have been identified as a critical component of performance with potentially substantial implications for organizations (Podsakoff et al., 2009). OCB is commonly discussed and measured using a two-factor conceptualization, where the first factor describes behavior directed towards other individuals, and the second factor describes impersonal behavior directed at the organization at large (Smith et al., 1983; Williams & Anderson, 1991).

Williams and Anderson (1991) developed a widely used measure of OCB designed to specifically capture these two factors. The authors refer to them as OCB-I (those directed at individuals) and OCB-O (those directed at the organization). Given the interpersonal nature of the present studies, I decided to only include OCB-I as the more appropriate facet of organizational citizenship behavior to examine (see Study 2 Measures section for further explanation). As described in the above sections, the mindfulness of a leader is expected to manifest in interpersonal ways. Specifically, leaders high in mindfulness are likely to exhibit increased helping behavior with their employees given the higher levels of empathy and understanding (Dekeyser, 2008).

Additionally, by improving psychological need satisfaction (Reb et al., 2014), these mindful leaders provide enhanced internal resources for their employees, fostering a larger environment of collective support. As such, the second hypothesis is proposed:

Hypothesis 2: Supervisor mindfulness will significantly predict direct report OCB-I.

The Multidimensional Nature of Mindfulness

The present studies further seek to extend this line of research by examining the (potentially) unique and relative predictive validities of the specific dimensions of mindfulness. Although researchers outside the organizational domain regularly conceive of mindfulness as a multidimensional construct (Baer et al., 2004; Baer et al., 2006; Feldman et al., 2007), studies examining the relationship between leader mindfulness and employee outcomes have not measured mindfulness multi-dimensionally. Instead, they have either conceptualized mindfulness as a unidimensional variable or have acknowledged that it contains multiple dimensions, but still used a single composite score (i.e., collapsing across dimensions).

Using an overall measure certainly may have benefits (e.g., brevity, predicting equal outcomes at an equally abstract level; see Ones & Viswesvaran, 1996). However, doing so potentially limits both theoretical understanding and practical usefulness of mindfulness. This is because general and unidimensional measures do not allow for more nuanced understanding of mindfulness and the unique elements that comprise it.

In developing the *Five Facet Mindfulness Questionnaire*, Baer et al. (2006) discovered dissimilar relationships between some of the dimensions and external correlates. Despite moderate-to-strong intercorrelations among mindfulness measures ($r = .31$ to $.67$), their respective correlations with other constructs varied substantially and significantly. For example, emotional intelligence was correlated with the KIMS at $.61$, but with the MAAS at $.22$. Additionally, absentmindedness was correlated with the MAAS at $-.54$, but with the FMI at $-.23$ (Baer et al., 2006).

The authors suggest a possible explanation for these discrepancies: single-factor measures of mindfulness are averaging correlated facets with uncorrelated facets. In other words, one facet of mindfulness may be correlated with the target variable, but another facet may not be. One such measure is the *Freiburg Mindfulness Inventory* (FMI; Walach et al., 2006). The authors of the FMI acknowledge the multidimensional nature of mindfulness, yet they suggest reporting a single, overall score. This is potentially problematic given Baer et al.'s findings, since these facets may differentially relate to external variables. Therefore, measures that only provide a single score of mindfulness may misrepresent how mindfulness, as a composite, is associated with other variables of interest. Since the relationship between leader mindfulness and employee performance has been evaluated using single-score measures such as the FMI and MAAS, I argue that we may not be measuring this relationship in its entirety. In fact, these measures may be capturing different relationships altogether.

On a related note, by combining leader mindfulness into a single, composite score, we lose the ability to determine which elements have a greater impact on an

employee's performance. Although comparable to the bandwidth-fidelity dilemma in personality measurement where broad predictors generate greater validity coefficients for broad criteria (Ones & Viswesvaran, 1996), it has also been found that narrower aspects of a construct may incrementally predict above and beyond the global construct (Dudley et al., 2006). Thus, this paper aims to fill a gap in the literature by examining which dimensions predict this outcome more or less strongly.

The Dimensions of the Five Facet Mindfulness Questionnaire

In order to measure mindfulness multidimensionally, the present studies used the *Five Facet Mindfulness Questionnaire* (FFMQ) from Baer et al. (2006). Those authors developed this measure by examining five established measures of mindfulness including the *Mindful Attention Awareness Scale* (MAAS), the *Freiburg Mindfulness Inventory* (FMI), the *Kentucky Inventory of Mindfulness Skills* (KIMS), the *Cognitive Affective Mindfulness Scale* (CAMS), and the *Mindfulness Questionnaire* (MQ). Using a combined data set of 112 items from the five mindfulness questionnaires listed above, the authors conducted exploratory factor analysis (EFA), and found the scree plot suggested a five-factor solution. Subsequent confirmatory factor analysis (CFA) with an independent sample confirmed the five-factor model. The five resultant mindfulness dimensions are (1) observing, (2) describing, (3) acting with awareness, (4) nonjudgment, and (5) nonreactivity.

Observing refers to the extent that an individual simply notices their immediate surroundings, sensations, and feelings. *Describing* involves one's ability to put their thoughts and feelings into words. *Acting with awareness* measures an individual's ability

to stay present in a given moment without being distracted. *Nonjudgment* refers to one's capacity to accept their thoughts and feelings without feeling guilty or being judgmental towards them. *Nonreactivity* involves the extent to which an individual is able to "step back" from negative events or feelings without immediately reacting to them. Given that these five factors have been established as separate and distinct, it is important to maintain their uniqueness when measuring mindfulness.

To the best of my knowledge, no studies have examined the role of the individual mindfulness facets as they relate to employee outcomes. Therefore, the following hypotheses are predominantly exploratory; nonetheless, I provide theoretical background that seeks to explain why these relationships may exist.

Each of the five elements may potentially contribute to employee performance, but I hypothesize that the two most critical components could be acting with awareness and nonreactivity. Acting with awareness highlights leaders' ability to be truly present with their followers and allows them to establish a supportive environment for their employees. Furthermore, a strong negative correlation between acting with awareness and absentmindedness (Baer et al., 2006) reinforces the capability of a leader to demonstrate active engagement and focus with their directs. Also relevant for acting with awareness is the aspect of individualized consideration found in transformational leadership (Avolio & Bass, 1995), which has been demonstrated to mediate the relationship between leader mindfulness and follower performance (Pinck & Sonnentag, 2017). Given the prevalence of the relationship between supportive climate and employee performance (Luthans et al., 2008) as well as reinforcing the link between leader

mindfulness and transformational leadership, acting with awareness is expected to be a substantial contributor to the association between leader mindfulness and follower performance.

Higher scores on the dimension of nonreactivity suggest that a leader would have the capacity to refrain from reacting negatively in the face of unfavorable or challenging situations. Moreover, since it has been demonstrated that negative leader affect is tied to lower quality performance (Gaddis et al., 2004), a leader's ability to choose when to express anger, fear, or nervousness will likely lead to greater outcomes for their followers, specifically regarding their ability to perform at an optimal level (George, 1995).

While a leader's acting with awareness and nonreactivity sub-scores may be the strongest significant predictors of follower performance, the other facets are still likely to contribute. The dimension of observing, in which a leader is able to pay attention to internal and external stimuli, is indicative of heightened awareness often found in transformational leadership (Carleton et al., 2018). Transformational leadership, in turn, has been linked to employee performance (Buil et al., 2019), as well as having a mediating role described above. The dimension of nonjudgment is likely to play a role in creating a supportive climate for employees considering its focus on acceptance of events, thoughts, and feelings, without judging them as bad or irrational. The dimension of describing is highly correlated with emotional intelligence at $r = .60$ (Baer et al., 2006), which has been linked to employee performance as well (Higgs, 2004).

OCB-Is may also be differentially predicted by the individual mindfulness facets. Hypothesis 2 above explains why overall mindfulness may be related to OCB-Is, but understanding how the specific facets may (or may not) contribute is equally important. Since OCBs are often conceptualized as a more specific component of job performance (Podsakoff et al., 2009), it is expected that not all facets of the FFMQ will significantly predict these behaviors. For example, a leader's ability to *observe* may generally benefit the performance of their direct reports, but I do not anticipate this dimension to predict OCB-Is. *Describing*, on the other hand, may significantly predict interpersonally directed citizenship behavior because of the increased ability to communicate one's thoughts or feelings regarding a situation (Bihari & Mullan, 2014; Burgoon et al., 2000; Huston et al., 2011; Pratscher et al., 2018). By clearly communicating their expectations, leaders are likely to improve the ability of their direct reports to engage in helping behaviors that actively benefit others.

Hypothesis 3: The five dimensions of the FFMQ (observing, describing, acting with awareness, nonjudgment, and nonreactivity) will differentially predict overall performance.

Hypothesis 4: The five dimensions of the FFMQ (observing, describing, acting with awareness, nonjudgment, and nonreactivity) will differentially predict OCB-I.

The Present Studies

Two studies were conducted to test the above hypotheses. The first study involved administering an online survey through the Prolific crowdsourcing website. The purpose of the first study was to evaluate the factor structure and psychometric properties of the FFMQ, as well as establish preliminary relationships between supervisor mindfulness and direct report performance. Respondents (direct reports) completed an adapted version of the FFMQ and BFI-2-S to measure the mindfulness and personality of their supervisor, respectively. They also completed a self-report measure of their own performance.

The purpose of the second study was to replicate previous findings as well as compensate for potential limitations in study 1. Since the Prolific data in the first study were collected from a single direct report who also responded to questions about their supervisor, the second study collected data from the supervisors, who were able to provide self-report mindfulness ratings as well as performance ratings of their direct reports.

STUDY 1

Method

Overview

The first study involved a cross-sectional, online survey created and delivered using Qualtrics. Participants were recruited through the Prolific online participant recruitment website, in which a screener was used to filter for individuals who had a supervisor at work. Prolific is a platform specifically designed to allow researchers access to subject pools for their studies, and therefore provides several advantages over other online platforms such as MTurk (Palan & Schitter, 2018). Participants on Prolific have also been found to be more naïve, more diverse, and provide higher data quality compared to participants of MTurk and CrowdFlower (Peer et al., 2017). Prolific workers completed the 10-minute online survey intended to measure the mindfulness of their supervisors, their own performance, and their openness to experience. To further ensure that online respondents were sufficiently focused while taking the survey, one attention check was utilized (Hauser & Schwarz, 2016).

Participants

Three hundred and twenty individuals completed the survey. All participants were compensated \$2.25 for an hourly rate of \$10.89/hr. Thirteen observations were removed due to missing attention checks, and an additional observation was removed due to not meeting study requirements (i.e., not having a supervisor). The final sample was 306 responses. All demographic questions were open-ended for the purpose of inclusivity and

belongingness. Providing open-ended prompts allows for individuals that do not identify with a specific demographic group to express their identity without feeling “othered” (e.g., only providing three options for gender: Female, Male, and other). The sample was 80.1% White, and the mean age was 29.91 ($SD = 8.85$). Table 1 details the self-reported identities of all participants.

Table 1: Study 1 Demographics

		n (%)
Gender Identity	Man	171 (55.9)
	Woman	125 (40.8)
	Non-binary or N/A	10 (3.3)
Racial Identity	White	245 (80.1)
	Black or African American	3 (1.0)
	Hispanic or Latinx	27 (8.8)
	Asian or Pacific Islander	14 (4.6)
	Middle Eastern	3 (1.0)
	Two or more races	12 (3.9)
	Other or N/A	2 (0.7)

Measures

Supervisor Mindfulness

To measure the mindfulness of their supervisor multidimensionally, Prolific workers completed the *Five Facet Mindfulness Questionnaire* (Baer et al., 2006). This

questionnaire is the product of factor analysis of several other self-report mindfulness measures. The five unique dimensions include: observing, describing, acting with awareness, nonjudgment, and nonreactivity, with coefficient alpha internal consistencies for this study equaling .69, .80, .86, .85, .64, respectively. Participants in study 1 responded to an adapted version of the FFMQ such that items were changed from the first-person to the third-person perspective (e.g., Pronouns were changed from “I” to “They”). This adapted version has been shown to have significant self-other agreement (SOA; May & Reinhardt, 2018).

The scale contains 39 items and is rated on a 1-5 Likert scale, where 1 = *never or very rarely true*, and 5 = *very often or always true*. It is also acknowledged that some items are less observable than others (May & Reinhardt, 2017). One item in particular (item 6 from the original version) was removed due to potential complications of a direct report thinking about their supervisor engaging in a particular behavior.

Sample items for each of the domains are as follows: observing – “They pay attention to sensations, such as the wind in their hair or sun on their face;” describing – “They can usually describe how they feel at the moment in considerable detail;” acting with awareness – “They do jobs or tasks automatically without being aware of what they are doing;” nonjudgment – “They make judgments about whether their thoughts are good or bad;” nonreactivity – “When they have distressing thoughts or images, they just notice them and let them go.”

Direct Report Performance

To measure direct report performance, respondents completed a four-item scale from Van Dyne and LePine (1998) based on their own in-role behaviors. Items were rated on a seven-point Likert scale from 1 = *very much does not meet my supervisor's performance expectations* to 7 = *very much exceeds my supervisor's performance expectations*. Sample items include: "I fulfill the responsibilities specified in my job description" and "I meet performance expectations." Internal consistency for the scale was strong ($\alpha = .91$).

Supervisor Personality

Supervisor personality was also measured to be used as a statistical control, since mindfulness has been found to be correlated with these factors, particularly neuroticism/emotional stability (Giluk, 2009). To measure supervisor personality, participants completed the shortened Big Five Inventory-2, the BFI-2-S (Soto & John, 2017). This scale contains 30-items that measure the five major factors of personality: conscientiousness, extraversion, agreeableness, neuroticism, and openness to experience. Despite being a shortened version, the BFI-2-S remains useful for assessing traits (Soto & John, 2017). Items are rated on a five-point Likert scale ranging from 1 = *disagree strongly* to 5 = *agree strongly*. Coefficient alpha internal consistency for the scale was .77. All items were adapted from the first-person perspective to the third-person.

Data Analysis

In order to evaluate the factor structure and psychometric properties of the FFMQ, confirmatory factor analysis was conducted using the lavaan package in R. A single-

factor model with all items loading onto overall mindfulness was compared to the five-factor model.

To test the first hypothesis that supervisor mindfulness is associated with direct report performance, hierarchical linear regression analysis was conducted. In the first step, the control variable of supervisor neuroticism was added as a predictor, and supervisor mindfulness was added in the second step to evaluate whether it predicted above and beyond neuroticism. To test the third hypothesis – concerning the relative and unique predictive validity of the five FFMQ dimensions – hierarchical regression was again conducted. However, in the second step, the five facets of the FFMQ were individually added as predictors. Study 1 did not evaluate direct report OCBs; therefore, hypothesis two and four were not able to be tested.

Results

Results from the CFA supported the five-factor structure of the FFMQ. Four items were removed due to high modification indices and cross-loadings. The final model's performance was as follows: CFI = .837, TLI = .823, RMSEA = .061, SRMR = .072. Chi-squared difference test suggests the final five-factor model was significantly different than the single-factor model: $\Delta\chi^2(148) = 1876.2, p < .001$.

No hypotheses were supported. Overall supervisor mindfulness did not significantly predict direct report performance when controlling for supervisor neuroticism. Additionally, none of the five facets individually predicted performance.

Table 2: Summary of Hierarchical Regression Analysis for Mindfulness Predicting Performance

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Neuroticism	-.348	.257	-.077	-.274	.335	-.061
Mindfulness				.043	.127	.025
ΔR^2		.006			.000	
ΔF		1.83			.116	

N = 306

* $p < .05$. ** $p < .01$

Table 3: Summary of Hierarchical Regression Analysis for Mindfulness Facets Predicting Performance

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Neuroticism	-.348	.257	-.077	-.274	.335	-.061
Observing				.311	.342	.058
Describing				.273	.369	.056
Awareness				-.252	.290	-.062
Nonjudgement				.409	.352	.079
Nonreactivity				-.227	.439	-.041
ΔR^2		.006			.010	
<i>F</i> for change in R^2		1.83			.591	

N = 306

* $p < .05$. ** $p < .01$

Discussion

It is important to address the null findings from study 1. The first hypothesis was not supported as supervisor mindfulness did not predict direct report performance. This could be due to several explanations. Firstly, it is possible that there simply is no relationship between supervisor mindfulness and direct report performance. This finding is inconsistent with previous studies that have examined this relationship; however, previous studies did not use the FFMQ. As demonstrated from Baer et al. (2006),

different mindfulness measures do not always have comparable relations to other constructs. Further research is needed to examine this relationship specifically using the FFMQ.

The second possible explanation is methodological. By using a self-report measure of performance, and with no countermeasures to detect faking or lying, it is possible that respondents saw no repercussions to rating themselves as a high performer. This was further evidenced by the lack of variance of the performance measure and the highly negative skew of the ratings. Study 2 sought multiple ways to remedy this potential issue. Finally, it is possible that this relationship is moderated by a third variable.

One limitation of this study is that supervisor mindfulness was rated by their direct reports. Mindfulness, and specifically the FFMQ, is intended to be a self-report measure. Complications may arise when rating another individual's mindfulness as some items are less observable from an outside perspective (i.e., certain behaviors expressed in the FFMQ are internalized). In fact, qualitative responses demonstrated that some respondents found it challenging at times to answer these items. Representative comments include "Quite hard to determine how someone else feels about things" and "Some of the questions about how my boss thinks were very hard to answer." This limitation is addressed in study 2 by having supervisors self-report their own mindfulness.

Another limitation of study 1 was already noted above: the self-report measure of performance. Despite the measure being behaviorally based, the performance data were

severely skewed negative (i.e., mostly high ratings) and showed little variance. It is very possible that respondents felt a degree of social desirability to present themselves as better, higher performing employees than may be true (Furnham, 1986). The second study sought to address this limitation by having supervisors provide the performance ratings of the direct reports.

A third limitation of this study was the fact that data was collected during the COVID-19 pandemic. At a time when many individuals are working virtually and spending less time in traditional work environments, it is possible that the respondents (at the time of data collection) were not interacting frequently with their supervisors. This is potentially problematic for evaluating the hypothesized relationships because spending less time with one's supervisor would present fewer opportunities for the supervisor's mindfulness to manifest interpersonally.

STUDY 2

Method

Overview

The second study also used a cross-sectional survey design, but instead of direct reports providing all the ratings, the participants in the second study included both direct reports and their supervisors. Supervisors were first recruited to participate in the study via the SONA Experiment Management System as well as through snowball sampling. These supervisors self-reported their own mindfulness and provided performance ratings for one or more of their direct reports. The direct reports were then contacted with a follow-up survey for them to complete ratings of multiple aspects of their employee well-being. However, given sample size constraints, analyses were only conducted using the supervisor data. These data were still able to be evaluated hierarchically (direct reports nested within supervisors).

Participants

Participants in Study 2 were required to be supervisors within their organizations and have at least one direct report. One-hundred and twenty-eight supervisors responded to the survey. Twenty-seven responses were removed for not providing direct report ratings. Nine additional participants were removed due to missed attention checks or incomplete data, leaving a final sample of 92 supervisors (8 from the snowball sample and 84 from the SONA sample). These remaining supervisors provided performance ratings for 204 of their direct reports. The average age of the supervisors was 27.98 ($SD =$

9.80). Table 2 contains the supervisor’s self-reported gender and racial identities.

Demographic data for the direct reports was not available.

Table 4: Study 2 Demographics

		n (%)
Gender Identity	Man	24 (26.1)
	Woman	26 (28.3)
	N/A	42 (45.6)
Racial Identity	White	16 (17.4)
	Black or African American	3 (3.3)
	Hispanic or Latinx	12 (13.0)
	Asian or Pacific Islander	10 (10.9)
	Middle Eastern	4 (4.3)
	Two or more races	3 (3.3)
	N/A	44 (47.8)

Measures

Supervisor Mindfulness

To measure supervisor mindfulness, respondents completed the *Five Facet Mindfulness Questionnaire* (Baer et al., 2006), comprised of the five unique dimensions from the first study: observing, describing, acting with awareness, nonjudgment, and nonreactivity. Coefficient alpha internal consistencies of the five facets for study 2 were .66, .79, .89, .82, and .77, respectively. The FFMQ contains 39 items and is rated on a 1-5

Likert scale, where 1 = *never or very rarely true*, and 5 = *very often or always true*.

Whereas the first study changed the pronouns to the third-person perspective, the FFMQ used in study 2 retains the original first-person pronoun of “I.” Sample items for each of the domains are as follows: observing – “I pay attention to sensations, such as the wind in my hair or sun on my face;” describing – “I can usually describe how I feel at the moment in considerable detail;” acting with awareness – “I do jobs or tasks automatically without being aware of what I am doing;” nonjudgment – “I make judgments about whether my thoughts are good or bad;” nonreactivity – “When I have distressing thoughts or images, I just notice them and let them go.”

Direct Report Overall Performance

The overall performance of the direct reports was measured using a three-item scale from Motowidlo and Scotter (1994). Participants provided unique ratings for each of their direct reports. All items were rated on a 1-7 scale with anchors at the lower, middle, and upper ranges. The first item was anchored with low (1-2) = does not meet standards for job performance, middle (3-5) = meets standards for job performance, and high (6-7) = exceeds standards for job performance. The second item was anchored low (1-2) = performs at a low level compared to others of the same rank, middle (3-5) = performs at an average level compared to others of the same rank, and high (6-7) = performs at a high level compared to others of the same rank. The final item was anchored with low (1-2) = contributes less to unit effectiveness than most members of the work unit, middle (3-5) = makes an average contribution to unit effectiveness, and high

(6-7) = contributes more to unit effectiveness than most members of the work unit.

Internal consistency for the overall measure was strong ($\alpha = .90$).

Direct Report OCB

To measure direct report organizational citizenship behavior, the second study used an adapted version of the OCB measure from Henderson et al. (2020). As mentioned above, only OCB directed towards other individuals was utilized for the purposes of this study (OCB-I). Specifically, two of the three OCB-O items included in the Henderson et al. measure address matters related to work attendance. Given that the present study collected data during the COVID-19 pandemic where many individuals are working from home, these items were deemed inappropriate. An example item of the OCBI-I scale is: *this employee helps others with heavy workloads*. Since a rating scale was not provided in the original article, the present research used a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. This is consistent with other research that has used this particular OCB scale (Huang & You, 2011). Internal consistency for the OCB-I scale was .77. As with overall performance, participants provided unique ratings for each of their direct reports.

Data Analysis

Due to the multi-level nature of the data (i.e., direct reports nested within supervisors), standard ordinary least squares (OLS) regression would be inappropriate as the assumption of independence would be violated. Therefore, hierarchical linear modeling (HLM) was the primary method of data analysis, using the lme4 package in R. Each hypothesis was tested by first creating a null intercept model for the outcome

variable of interest, with Supervisors as the grouping variable. Intra-class correlations (ICCs) were obtained. Secondary models were then tested which included the predictor(s) for the respective hypothesis. Finally, ANOVAs were conducted to test for statistically significant differences between the two models and ultimately determine whether adding the predictors does affect the criterion. All predictors were grand-mean centered.

Results

Before testing the hypotheses, confirmatory factor analyses were conducted on the FFMQ to ensure the factor structure was consistent with the findings from Study 1. As expected, the model without the items identified as problematic from the first study performed better than the full model containing all items. However, while both models performed substantially better than the single-factor model, it is worth noting that they still demonstrated relatively weak performance according to several metrics (Full model: CFI = .609, TLI = .582, RMSEA = .096, SRMR = .114; Revised model: CFI = .656, TLI = .628, RMSEA = .092, SRMR = .104). The majority of items showed standardized factor loadings in the 0.6 to 0.8 range, and three items had standardized loadings between 0.3 and 0.4. Analyses proceeded with the revised model.

Multi-level CFA was conducted with the two performance measures (overall performance and OCB-I) to statistically demonstrate that it is more appropriate to measure them as two separate outcomes, rather than as a single performance variable. And despite the (expected) high covariance between the two scales, the two-factor model was significantly different than the single-factor model ($\Delta\chi^2(2) = 12.095, p = .002$). Fit measures for the single-factor model were as follows: CFI = .981, TLI = .968, RMSEA =

.062, SRMR (within) = .036. Fit measures for the two-factor model were as follows: CFI = .995, TLI = .990, RMSEA = .035, SRMR (within) = .025. As such, I continued to evaluate the two variables separately.

The first hypothesis predicted that supervisor mindfulness impacts direct report overall performance. The unconditional model had an ICC of .30, suggesting that there is considerable variance between supervisors, and thus justifying the use of multi-level modeling. The secondary model included the composite mindfulness variable (grand-mean centered) as the predictor variable. The fixed effect of mindfulness was not statistically significant ($\beta = .03$, $t = 1.27$, $p = .21$), and an ANOVA comparing the two models suggested that supervisor mindfulness did not significantly affect direct report performance ($\chi^2(1) = 1.65$, $p = .1985$).

The same analysis was conducted for the second hypothesis, but with OCB-I as the dependent variable in place of overall performance. The intercept model had an ICC of .34, again suggesting considerable variance across supervisors and justifying the use of multi-level modeling. Fixed effects for mindfulness in the secondary model approached significance ($\beta = .03$, $t = 1.91$, $p = .06$), and results from the ANOVA suggested that the two models were not significantly different ($\chi^2(1) = 3.67$, $p = .0553$).

Hypothesis 3 examined whether the five facets of supervisor mindfulness would individually predict direct report overall performance in a multiple-predictor model. The intercept model used for Hypothesis 1 above was used again here since they concern the same dependent variable, and there are no predictors in the intercept model. The five facets were each selected as predictors for the secondary model. One facet, describing,

had a significant effect ($\beta = .14$, $t = 2.34$, $p = .02$), suggesting that as levels of a supervisor's ability to describe their internal experiences increases, so does the overall performance of their direct reports.

The fourth hypothesis tested whether the five facets individually predicted OCB-I, and the results suggested two significant predictors: describing ($\beta = .10$, $t = 2.14$, $p = .04$) and acting with awareness ($\beta = -.09$, $t = -2.28$, $p = .02$). This suggests that, as a supervisor's ability to describe their internal experiences increases, the organizational citizenship behavior of their direct reports also increases. It is also worth noting that the negative relationship between acting with awareness and OCB-I is likely due to the covariance among the five mindfulness facets, as this relationship becomes insignificant when conducting simple regression. Comparing the models demonstrated that adding the five facets did significantly affect OCB-I ($\chi^2(5) = 15.534$, $p = .0083$), such that OCB-I is increased when scores on the five facets increase.

Discussion

Consistent with study 1, the second study found no significant relationship between overall supervisor mindfulness and direct report performance. Even with an improved measure, these repeated null findings are worth noting when looking at the relationship between these variables. Furthermore, the results also demonstrated that OCBs were not significantly predicted by overall mindfulness.

On the other hand, a single dimension of mindfulness came out as a significant predictor for both outcome variables: describing. While this specific facet was expected to be a strong predictor of OCB-I, the fact that it is the only significant predictor of

overall performance is somewhat unexpected. However, since describing is highly correlated with emotional intelligence (Baer et al., 2006), and emotional intelligence is linked to employee performance (Higgs, 2004), it is possible that there is additional interplay between these variables.

Implications for Research and Practice

With several different measures of mindfulness circulating in the literature (and more likely to be developed), it will become increasingly important that researchers measure it appropriately and accurately. Important considerations will need to be taken when examining the relationship between mindfulness and other constructs, and whether it would be more valuable to examine mindfulness at the facet-level. I would argue that measuring mindfulness as an overall score may potentially be misleading, since the different facets could each tell a unique story.

In applied settings, this research may have implications regarding how mindfulness-based interventions are utilized. Mindfulness interventions are already a relatively cost-effective way of addressing certain issues within the workplace (e.g., stress, burnout) (Kabat-Zinn, 2003). However, by understanding which mindfulness facets may (or may not) be more important regarding a leader's impact, organizations can more effectively tailor these interventions or workshops to better improve employee outcomes. As mentioned above, MBSR is a commonly used mindfulness-based intervention, but we may not understand which facets of mindfulness the intervention is predicting, if any.

It is also worth acknowledging the relatively small coefficient as the facet of *describing* significantly predicted OCBs. Typically, a coefficient of this size may be criticized for having a small effect. However, when discussing critical work outcomes such as job performance, any contribution, even small effect sizes, can have a considerable impact.

Limitations and Future Directions of Research

One limitation of the second study is that the majority of respondents came from the SONA student sample. Since past research has demonstrated that differences may exist between student samples and non-student samples (Roulin, 2015), it is worth acknowledging that the data quality presented in study 2 may suffer from this convenience sample. Future studies may account for this drawback by targeting samples within specific organizations.

A second limitation of study 2 pertains to common rater bias (Podsakoff et al., 2003). Since supervisors provided ratings for their own mindfulness as well as the performance ratings of their direct reports, it is possible that any significant relationships found were attributed to the raters themselves and not true associations. Future studies would benefit from collecting data from both supervisors and their direct reports to account for this potential bias.

A third limitation is the high covariance between the two outcome variables: overall performance and OCBs. OCBs are often conceptualized as one component of job performance, and thus the two measures were expected to be correlated. However,

considering the strong correlation between the two, it is possible that the significant relationships between *describing* and these outcomes are largely redundant.

Another limitation of the current studies is that only supervisory leadership was examined. In order to generalize the results to mindfulness among all types of leaders, future studies should examine the mindfulness of leaders across all levels of the organization (e.g., front-line managers to CEOs).

Finally, research examining the relationship between leader mindfulness and employee outcomes would benefit greatly from testing potential moderators. In an increasingly virtual world where we appear to be interacting less and less with our colleagues in face-to-face environments (Kniffin et al., 2021) the relationship between leader mindfulness and direct report outcomes may become less prominent. If the theory behind this relationship is accurate, that these effects are a manifestation of a leader's ability to be present with their followers, then a more physically separated workplace would severely diminish these effects. To account for this, future studies should evaluate the degree of interaction between supervisors and their direct reports. It is possible that a leader's mindfulness will have stronger effects if they are able to interact more frequently with their direct reports, more so than leaders who interact very infrequently with their directs.

CONCLUSION

Mindfulness is growing in popularity within organizations. The literature is rich with studies demonstrating the intrapersonal effects of mindfulness for individuals at work, and now research is beginning to reveal that mindfulness can have an interpersonal influence in the workplace as well.

The studies presented in this paper sought to replicate previous findings that leader mindfulness was related to employee performance, as well as build on these findings by examining mindfulness from a multidimensional lens. Across both studies, overall mindfulness was not able to predict overall performance nor OCBs. However, at the facet-level, *describe* came out as a significant predictor of both outcome variables.

With the popularity of mindfulness at work continuing to rise and not showing any signs of slowing down, it is paramount that we continue to measure it as accurately as possible. Organizational scientists should use a measure that captures all relevant aspects of this elusive construct in order fully grasp its relationships to other variables. Future studies need to evaluate the individual dimensions of mindfulness in a more fine-tuned manner, further examining *why* and *when* these elements are most important at work. As demonstrated by previous studies, it may no longer be enough to measure mindfulness as a composite for risk that it does not fully encapsulate the relationship of interest. Rather, future research must evaluate this construct and subsequent relationships under a more refined, multidimensional lens.

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BIOGRAPHY

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