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HOW LEADER AND FOLLOWER MINDFULNESS RELATE TO PERFORMANCE AND OCB THROUGH CONVERSATION QUALITY AND EMPATHY: A MODERATED MEDIATION MODEL

by

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Old Dominion University in Partial Fulfillment of the
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PSYCHOLOGY

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ABSTRACT

HOW LEADER AND FOLLOWER MINDFULNESS RELATE TO PERFORMANCE AND OCB THROUGH CONVERSATION QUALITY AND EMPATHY: A MODERATED MEDIATION STUDY

Arianna C. White-Levatich
Old Dominion University, 2021
Director: Dr. Debra Major

Interest within the organizational research community regarding mindfulness has recently surged. Little research, however, has examined how employees' mindfulness may influence interactions between leaders and followers. This study examined how followers' trait mindfulness related to two specific aspects of dyadic interactions: leader – member conversational quality (LMCQ) and follower empathy toward a leader. Further, the study examined how this influence extended (via LMCQ and leader-oriented empathy) to task performance and organizational citizenship behavior (OCB), two important workplace outcomes for followers. Leader mindfulness was also expected to have a significant influence on the relationships, in that it was expected to strengthen the expected positive relationships between follower mindfulness and outcomes. Survey data were collected from 105 white-collar employees and 40 leaders (N = 105). Path-analytic results indicated a positive relation between follower trait mindfulness and both LMCQ and empathy for leaders. LMCQ was also significantly related to employee task performance, as was empathy for the leader with OCB. Follower trait mindfulness was significantly indirectly related to task performance and OCB via the mediators, as hypothesized. The moderating influence of leader mindfulness on relationships between follower trait mindfulness and LMCQ/empathy for the leader was not significant. The implications of these results for theory and practice are discussed.

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CHAPTER I

INTRODUCTION

Trait Mindfulness refers to an individual's tendency to self-regulate "attention so that it is maintained on the immediate experience, thereby allowing for increased recognition of mental events in the present moment", and to be oriented "toward one's experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance" (Bishop et al., 2004, p. 232). The concept of mindfulness at work has been given progressively more attention among organizational leaders, practitioners, employees, and researchers in recent years since Jean Kabat-Zinn first introduced mindfulness meditation to the field of psychology in 1990. For example, a Google Scholar search for "mindfulness at work" returns over 128,000 results (100 pages) of books and articles addressing how and why mindfulness can be applied to a workplace setting. Numerous studies have been conducted examining how mindfulness can influence important outcome variables, ranging from employee well-being (Chiesa & Serretti, 2009) to job satisfaction (Hülsheger, Alberts, Feinholdt, & Lang, 2013) and job performance (Dane, 2010). Many studies have also progressed to addressing the antecedents and unpacking the underlying mechanisms for these relationships. Further, and per a recent review, several large companies have also begun to offer mindfulness programs to their workers, including Aetna, General Mills, and Google (Hyland, Lee, & Mills, 2015). However, despite its surge in popularity, there are still many questions that remain to be answered regarding mindfulness and the influence it has on employees and workplace outcomes.

For example, little research has examined how mindfulness may influence the interactions between employees and their leaders and what the workplace implications of this influence might be. There is a growing body of research supporting the positive influence of trait

mindfulness on leader-member exchange (Auten, 2017), though this research focuses on the long-term relationships between supervisors and subordinates rather than on day-to-day interactions. Further, recent research also indicates that leader mindfulness may influence follower job satisfaction (Arendt et al., 2019) and that employees of more mindful leaders feel treated with greater respect and experience less stress (Reb et al., 2019), though these studies do not address how follower mindfulness in the context of leader mindfulness may influence workplace outcomes.

As such, the main goal of the current study was to fill this gap by examining how mindfulness influences leader-follower interactions. Interactions between a leader and a follower are important, and directly impact employees' work experiences. For example, they present opportunities for information to be communicated, face-to-face contact to occur, plans to be made, and problems to be solved. In fact, research has shown that leaders and followers reciprocally influence each other, especially when it comes to self-regulation strategies, goals, and affect (Dinh & Lord, 2012). As such, this study is one of the first to examine how leader and follower mindfulness influence leader-follower interactions. In order to do so, the study examines how mindfulness influences two specific aspects of such interactions at work: leader – member conversational quality (LMCQ: Jian et al., 2014) and follower empathy toward a leader.

A secondary goal of the study was to examine whether the influence of mindfulness on leader-follower interactions also has implications for follower performance outcomes. Prior research has suggested that mindfulness positively influences follower task performance and organizational citizenship behavior (Glomb, Duffy, Bono, & Yang, 2011) but has not examined performance implications from an interaction-based perspective. The influence mindfulness has on leader-follower interactions may be evident in changes to perceived conversation quality and

levels of follower empathy, and as such may also have implications that extend to follower performance.

As seen in Figure 1, the study thus examines the mediating roles of LMCQ and empathy toward the leader for the relationships between employee trait mindfulness and task performance and organizational citizenship behavior (respectively). The conceptual model presented in Figure 1 also depicts the moderating influence of leader trait mindfulness on the relationships between employee trait mindfulness and LMCQ/empathy toward the leader. In other words, the study examines how follower trait mindfulness relates to LMCQ and empathy toward the leader in the context of leader trait mindfulness. The study also examines how these relations extend to the employee outcome variables (i.e., whether leader trait mindfulness influences the indirect effects of employee trait mindfulness on performance outcomes via LMCQ or empathy toward the leader).

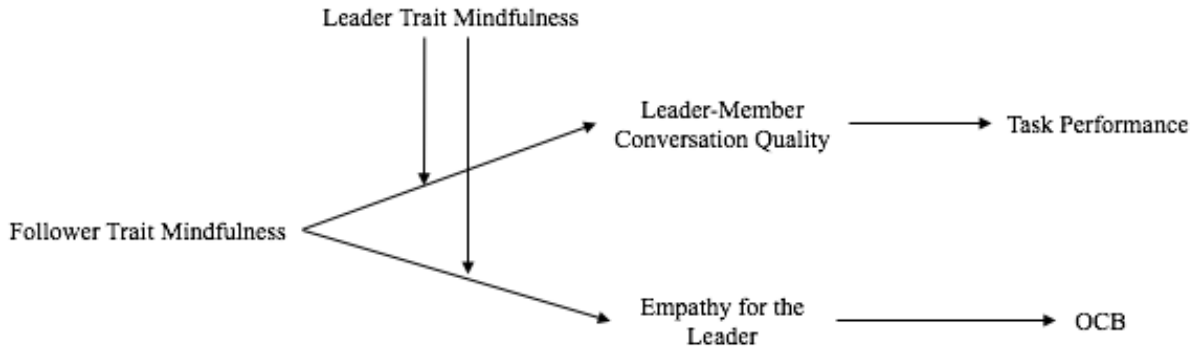

Figure 1. The Hypothesized Model.

The following manuscript delves into a thorough review of the literature regarding these variables, the relationships among them, and the hypothesized pathways. The review begins with an overview of literature regarding mindfulness and how it may influence LMCQ and is followed by a discussion regarding the potential moderating influence of leader trait mindfulness may have on the link between follower mindfulness and LMCQ. The manuscript then proceeds to a parallel examination of the relationship between employee trait mindfulness and follower empathy, followed by a discussion of the moderating influence leader mindfulness might have for this relationship. The performance implications of LMCQ and empathy are then discussed. Taking all the hypothesized relationships together, moderated mediation hypotheses are proposed.

The manuscript then details the study method and results before discussing study theoretical and practical implications. Finally, a discussion of study limitations closes the paper.

CHAPTER II

LITERATURE REVIEW

The Mindfulness Construct

Workplace mindfulness, or the degree to which people are mindful in their work settings (Dane & Brummel, 2013), has risen from a long history of spiritual tradition dating back at least 2550 years. The practice of Mindfulness originated from Buddhism but has been applied to and developed within a Western framework, which does not rely on a spiritual framework (Keng, Smoski, & Robins, 2011). The Western conceptualization of mindfulness encompasses both an internal awareness regarding one's physiological and psychological processes or experiences as well as an external awareness to one's surroundings (including the external influences of others). Taking together many existing definitions, Bishop and colleagues (2004) created an operational definition of mindfulness that emphasizes "the self-regulation of attention so that it is maintained on the immediate experience, thereby allowing for increased recognition of mental events in the present moment", and "a particular orientation toward one's experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance" (p. 232). At the trait level, mindfulness is a stable, cross-situational propensity for exhibiting such tendencies or characteristics (Reb, Narayanan, & Chaturvedi, 2014).

Mindfulness can be considered as an individual difference variable, meaning that the natural level of mindfulness a person possesses varies between individuals before any formal mindfulness training has occurred. In other words, mindfulness can be considered an inherent characteristic for all human beings (Kabat-Zinn, 2003). Based on these individual differences, people may think and behave in mindful ways even without knowing they are doing so and without formal mindfulness meditation training (though training has been shown to improve

mindfulness skills; Brown & Ryan 2003). As such, mindfulness can be considered to function as a trait, with individuals exhibiting different levels of inherent mindfulness regardless of whether they have received formal training, as well as a state, in that one can purposefully enter a mindfulness mode (Bishop et al., 2004).

Mindful psychological states do not necessitate meditation (Brown & Ryan, 2003), and are therefore within the reach of many individuals including those who do not meditate as long as they focus their attention on events and occurrences in the present moment in a nonjudgmental manner (Giluk, 2009; Narayanan & Moynihan, 2006; Weik & Sutcliffe, 2006). Further, research also shows that, compared to those with low trait mindfulness, those with higher trait or dispositional mindfulness will be more likely to exhibit more frequent states of mindfulness on a day-to-day basis, meaning that the cognitive and affective benefits linked to mindfulness are more likely to occur throughout a workday for individuals high in trait mindfulness (Brown & Ryan, 2003). As such, employees come to a workplace setting with differing levels of mindful tendencies. Without training, these tendencies or inclinations are stable across time and situations. As summarized in a recent meta-analysis of trait mindfulness on a variety of workplace outcomes, "although there is some disagreement over the exact characterization of the mindfulness construct, the extant literature tends to agree that (a) mindfulness can be achieved without meditation (K. W. Brown & Ryan,2003), (b) attaining a mindful state is an inherent human capability (Kabat-Zinn, 1994), (c) mindfulness is both a state and a trait; anyone can attain a state of mindfulness but there are individual differences in tendency toward mindfulness (K. W. Brown & Ryan, 2003; Giluk, 2009), and (d) mindfulness is not always deliberate; sometimes it can occur subconsciously (Grossman et al., 2004)" (Mesmer-Magnus et al., 2017, p. 81).

Finally, mindfulness can also be conceptualized as an ability. Such research tends to characterize individuals as 'mindful' if they have the ability to "witness events, thoughts, or emotions as they occur" (Good et al., 2016, p. 117), or to "nonjudgmentally observe and stay with arising thoughts and emotions" (Malinowski & Lim, 2015, p. 3). Some researchers also identify mindfulness as the ability to focus one's attention on the present moment, maintain awareness of one's experience, and be nonjudgmental of the experience (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007). Conceptualizing mindfulness as an ability variable indicates that a person *can* be mindful, though not necessarily that a person *will* be mindful. As such, mindfulness as an ability refers to a person's relatively enduring capacity to be mindful rather than one's tendency to be mindful. There is very little research characterizing mindfulness as an ability, though studies have shown that individual differences exist in mindfulness abilities to, for example, remain focused and to "allow thoughts and feelings to come and go, without getting caught up in or carried away by them" (Baer et al., 2008, p. 333). Experimental research indicates that individuals who demonstrate the ability to be mindful are less likely to suffer from inattentiveness (Frewen, Hargraves, DePierro, D'Andrea, & Flodrowski, 2016), depression, anxiety, and stress-related symptomology (Cash & Whittingham, 2010) and more likely to have heightened emotional well-being (e.g., Splevins, Smith, & Simpson, 2008).

Regardless of how it is conceptualized, however, mindfulness does call forth or involve certain abilities, such as the ability to regulate attention; in other words, an individual with a high level of dispositional mindfulness is likely to also have a strong ability to maintain his or her attention on the present moment. A person with a high ability or capacity for attention regulation, for example, may or may not also have a high level of dispositional mindfulness. In other words, the ability to exhibit mindfulness characteristics does not necessitate a high level of dispositional

mindfulness. Overall, the scientific literature defines mindfulness as a trait, a state, and an ability variable simultaneously. This literature regarding mindfulness has grown significantly since its introduction in the early 1990s but is still young and as such the conceptualizations are relatively unclear. Given that many definitions and conceptualizations exist, this study elects to utilize the trait perspective.

Mindfulness and LMCQ

The primary goal of the current study is to bring to the growing literature one of the first examinations regarding how mindfulness may influence interactions between leaders and followers, and how these interactions may influence follower outcomes. This study uses the concept of Leader Member Conversational Quality (LMCQ; Jian et al., 2014) to measure the degree to which leaders and followers communicate effectively within their dyads. LMCQ represents the extent to which leaders and followers cognitively experience successful and high-quality communication.

LMCQ is based on the interactional richness construct, which consists of three parts:

a) Communication efficiency: saying and meaning more, with more accurate reception and comprehension, using fewer words and symbols. High in informational and symbolic content
b) Coordination: interactional synchrony as a result of shared systems of meaning through prior experience, communication behavior, and the development of appropriate social-cognitive structures
c) Accuracy: the extent to which meanings are correctly shared and interpreted

Though the link between follower mindfulness and LMCQ has not yet been examined, there is theoretical rationale within the communication literature that supports a positive

relationship. Perhaps most relevant to a workplace setting is functional communication competence, or the ability to produce messages and interpret messages of others in ways that enable one to accomplish goals (Burleson, 2007). According to the constructivist theory, individuals differ in the ability to communicate skillfully, and therefore differ in the ability to a) "generate verbal and nonverbal messages that efficiently and effectively accomplish various personal and social goals" (message production), and b) "fully comprehend the meaning of others' messages and, when appropriate, go beyond those messages to understand the source's intentions and motives" (message reception; Burleson, p. 109).

Researchers commonly describe mindfulness as a combination of attention regulation, present-moment orientation, awareness of experience, and an attitude of acceptance and non-judgment toward one's experience (Feldman et al., 2007). Previous scholars have also characterized the curious, open, and accepting orientation of mindfulness as "the self-regulation of attention so that it is maintained on the immediate experience, thereby allowing for increased recognition of mental events in the present moment," (Bishop et al. 2004, p. 232). Given that individuals differ in their relative tendencies toward being mindful (and therefore in their levels of trait/dispositional mindfulness), some individuals may be more naturally proficient in such self-regulation of attention than others. In the context of constructivism and functional communication competence, some individuals may, to the extent that they are mindfully aware of their internal states, be able to produce messages more effectively than others. Similarly, those high in trait mindfulness may also be more skilled in message reception given their hallmark perspective of openness, curiosity, and acceptance. Within the framework of constructivism and functional communication competence, higher trait mindfulness is likely to lead to higher LMCQ

given that individuals with high trait mindfulness are more receptive to their internal states and to the input from others.

There are some potential mechanisms through which LMCQ may be realized through mindfulness. Glomb, Duffy, Bono, and Yang (2012) note a progression of core and secondary processes that link mindfulness to self-regulation, which is a key part of engaging in quality conversations with a dyadic partner. First, mindfulness leads to the decoupling of the self from experiences and emotions, a decreased use of automatic mental processes, and an awareness of physiological regulation. From there, response flexibility, affective regulation, self-determination and persistence, and working memory are increased while rumination decreases and affective forecasting becomes more accurate. These steps culminate in an improved self-regulation of thoughts, emotions, and behaviors (Glomb et al., 2012). These heightened abilities parallel those outlined in constructivist theory and are also likely to lead to increased communication accuracy (and therefore stronger LMCQ) among dyadic partners.

In addition, mindfulness has been shown to be negatively associated with negative thought frequency and the inability to 'let things go,' (Frewen, Evans, Maraj, Dozois, & Partridge, 2008), meaning that individuals high in trait mindfulness are more likely to experience fewer negative thoughts and to be more cognitive flexible. Similarly, Keng, Smoski, and Robins (2011) note that mindfulness has also been linked to reduced emotional reactivity, which in turn leads to more efficient and effective communication. More specifically, it is likely that the suppression effect mindfulness has on factors that would preclude accurate message production and reception allows for increased functional communication competence and, therefore, an increased potential for stronger LMCQ.

Finally, mindfulness may promote cognitive strategies associated with adaptive communication (Huston, Garland, & Farb, 2011). Adaptive communication has two components: 1) positive reappraisal, and 2) the ability to refrain from blaming others for communication difficulty. Mindfulness may suspend blame-laden appraisals of challenging situations, allowing individuals the cognitive flexibility to more easily attend to the benign or benevolent features of the relationship and the ability to reappraise the interaction as meaningful or even beneficial. This allows for more positive experiences to arise during communication as a result (Huston et al., 2011). Overall, this is also likely to lead to more efficient and coordinated communication and therefore stronger LMCQ.

As such, follower mindfulness was expected to positively influence LMCQ:

Hypothesis 1: Follower trait mindfulness will be positively related to LMCQ.

The Moderating Effect of Leader Mindfulness on the Follower Mindfulness – LMCQ Relationship

Leader trait mindfulness refers to the level of dispositional mindfulness a leader possesses. High leader trait mindfulness indicates a greater tendency to experience mindfulness, and as such leaders with high levels of trait mindfulness are likely to behave in a mindful manner more frequently compared to leaders with low levels of trait mindfulness.

Being able to communicate more effectively in either a leadership or subordinate role is no doubt of premiere importance. Effective communication in a workplace is key, for without it confusion and errors are liable to increase in frequency and severity. The key argument for why leader mindfulness matters in the workplace revolves around the idea that mindfulness promotes healthy and more effective ways of relating to others (Giluk, 2009). In essence, the fundamental aspects of mindfulness may reduce the likelihood that individuals will react automatically and in

a dysfunctional or inflammatory way, thereby allowing for more open and accepting communication. Prior research also indicates that mindfulness leads to less self-referential or ego-focused processing, which fosters greater focus on others and on interpersonal rather than self-oriented concerns (Good et al., 2015). Further, mindfulness has been shown to relate to improved communication processes between interaction partners, including listening with heightened awareness and lowered evaluative judgment of others (Beckman et al., 2012). It is likely that a heightened capacity for mindfulness in either a leader or a follower will increase the likelihood for high quality conversations, thereby lowering the likelihood that miscommunications or misunderstandings will occur.

Having one member within a leader-follower dyad with high levels of mindfulness is therefore likely to reflect positively on several aspects of leader-follower interactions. When *both* parties possess high levels of mindfulness, however, the positive effects are liable to be amplified. In other words, when the leader and the follower are both high in mindfulness, the quality of the interactions between the two is expected to be exponentially higher. Follower mindfulness is expected to relate positively to LMCQ and therefore increase the likelihood that efficient, coordinated, and accurate conversations will occur. This relationship is expected to increase in strength when the leader (i.e., the other conversational partner) also has high levels of mindfulness. This is because both partners will be more likely to simultaneously exhibit helpful facets of mindfulness (i.e., nonjudgmental attitude, internal awareness, consideration of one's external environment, present-moment awareness) during each conversation and/or interaction.

High leader mindfulness was therefore expected to bolster and strengthen the positive relationship between follower mindfulness and LMCQ:

Hypothesis 2: Leader trait mindfulness moderates the effect of follower mindfulness on LMCQ such that the positive association between follower mindfulness and LMCQ is strengthened when leaders possess high levels of trait mindfulness.

Mindfulness and Empathy for Leaders

The broadest and most generally accepted definition treats empathy as an emotional state that stems from the comprehension of another's affective state (Eisenberg & Strayer, 1987). Empathy concerns prosocial thoughts and feelings and can be generally understood as the tendency to feel responsibility and concern about the well-being of others (Riox & Penner, 2001; Penner, Midili, & Kegelmeyer, 1977). Cozolino (2006) also defines empathetic people as being more in tune with others and able to resonate with them. In order to act with empathy, one must be able to simultaneously "hold one's own perspective in mind while imagining what it is like to be the other" (Cozolino, 2006, p. 203). It is also true that it is difficult for individuals to be aware of or sensitive to others' perspectives and experiences if they are unable to be aware of their own. Thus, De Vignemont and Singer (2006) propose that empathy only exists when: "(i) one is in an affective state, (ii) this state is isomorphic to another person's affective state, (iii) this state is elicited by the observation or imagination of another person's affective state, and (iv) one knows that the other person is the source of one's own affective state" (De Vignemont & Singer, 2006, p. 435). This specific definition is particularly helpful because it allows for empathy to be distinguished from other related psychological constructs including cognitive perspective taking, emotional contagion, sympathy, and compassion (Gilbert, 2005) as well as emotional mimicry (Hoffman, 2002).

Prior research supports the positive relationship between mindfulness and empathy. For example, the hallmark characteristics of mindfulness (nonjudgmental and present-moment-

focused attention and awareness) have been linked to empathetic responding (Block-Lerner, Adair, Plumb, Rhatigan, & Orsillo, 2007). Further, the ability to perceive the self as it is without the constrains of automaticity is one of the key features of mindfulness (Glomb et al., 2011). Mindfulness fosters the capacity for individuals to understand their own emotional processes, which then in turn helps them better understand the emotional processes of others (Teasdale et al., 2002). In other words, being mindful necessitates an awareness and understanding of one's own thoughts, emotions, and behaviors. It is this attention to and understanding of one's own self that, combined with the nonjudgmental nature of mindfulness, allows for heightened empathic concern for another. Mindfulness therefore bolsters the likelihood that two individuals will engage in an empathetic interaction, manifested as a cycle of mutual reinforcement in which *intra*personal attunement promotes *inter*personal attunement (Siegel, 2007).

Mindfulness may enhance employees' empathy during their interactions with leaders for several reasons. As Siegel (2007) suggests, an "intrapersonal resonance" aspect of mindfulness is used when we have compassion and empathy for others. First, mindful awareness fosters self-empathy that emerges from attention tuned toward one's internal state. Resonating with our own affective states generates a powerful capacity to enhance our connection to ourselves and others, especially when self-observation and labeling reflective skills are also present. Siegel considers mindfulness to have the potential to influence emotional balance within the self as well as empathy and moral behavior, meaning that mindfulness enables us to be more understanding of ourselves and therefore more sensitive to the thoughts, feelings, and behaviors of others. Without the strong connection to the self, in other words, empathy is precluded.

As such, follower mindfulness was hypothesized to positively influence employees' empathy in leader-follower interactions:

Hypothesis 3: Follower trait mindfulness will be positively related to employees' empathy in leader-follower interactions.

The Moderating Effect of Leader Mindfulness on the Follower Mindfulness – Empathy Relationship

As with the moderation relationship described for the follower mindfulness – LMCQ relationship above, it may also be that the relationship between follower mindfulness and empathy becomes stronger in the context of high leader mindfulness. Having a greater tendency toward mindful observation has been associated with more engagement in empathy and with the ability to express oneself in various social situations (Dekeyster, Raes, Leijssen, Leysen, & Dewulf, 2008). Similarly, mindfulness has been linked to leaders' and their followers' heightened abilities to understand their own and each other's feelings, have less anxiety about engaging with the other in a social (work) context, and be not only less likely to experience negative emotions such as distress but also less likely to ruminate on them (Dekeyster et al., 2008; Baer et al., 2004). Mindfulness may also improve the ability and capacity to communicate emotional information (Wachs & Cordova, 2007), and has been shown to promote reduced conflict and greater expression of compassion (Good et al., 2015). Further, individuals higher in trait mindfulness have been shown to be more able to maintain a positive tenor and have reduced emotional reactivity (Barnes et al. 2007), as well as lowered hostility and anger (Saavedra et al., 2010; Wachs & Cordova, 2007).

As such, when *both* parties possess high levels of mindfulness, the positive effects illustrated above are liable to be amplified. When both the leader and the follower possess high levels of trait mindfulness, it is likely that more expression of emotional information will be communicated between the two, while at the same time emotional reactivity and conflict will

decrease. As such, it is likely that the addition of high leader mindfulness will result in an exponentially stronger relationship between follower mindfulness and follower empathy. Therefore, high leader mindfulness was expected to bolster and strengthen the positive relationship between follower mindfulness and empathy:

> Hypothesis 4: Leader trait mindfulness moderates the effect of follower mindfulness on empathy such that the positive association between follower mindfulness and empathy is strengthened when leaders possess high levels of trait mindfulness.

Follower Performance Outcomes

Task Performance. Recent research indicates that communication quality has an important influence on follower task performance. For example, communication quality has been found to be a mediator linking organizational climate and emotional skills with task performance (Gonzáles-Romá & Hernández, 2014; Troth et al., 2011). Further, performance has been linked to successful goal-setting (Conzemius & O'Neill, 2011), and communication constitutes an important aspect of both the goal-setting and goal-achieving process. SMART goals (O'Neill, 2000), or goals that are specific, measurable, achievable, realistic, and timely, are a perfect example. Many individuals at work interact with supervisors or work within teams to accomplish work goals or tasks. In order to perform well, information regarding evaluation criteria, objectives, methodology, and many other aspects related to the task must be conveyed amongst team members before work on the task can begin. Being able to accurately and efficiently convey information as well as to receive and respond to information correctly are important aspects of the goal-setting and task performance processes. Without these abilities, information regarding the intended outcome of a certain task, methods with which the task will be accomplished, or even overall goals of a venture may be miscommunicated.

At the heart of this argument is the idea that without accurate, efficient, and functional communication between employees and their leaders there will be less successful performance. Significant positive relationships have been demonstrated between communication satisfaction and job performance (Pincus, 1986), as well as between communication competence and job performance (Payne, 2005).

Evidence for this effect may be seen in Campbell and colleagues' (1990) job performance framework. The model indicates that job performance depends on an individual's declarative knowledge (DK), procedural knowledge and skill (PKS) and motivation. DK in a work context is knowledge about facts, principles, goals, and oneself. PKS in a work context consists of cognitive, psychomotor, physical, self-management, and interpersonal skills, while motivation refers to variables such as individual's need satisfaction, autonomy, and goal-setting. As such, individuals with high DK and PKS and strong motivation are likely to also exhibit high performance. While LMCQ may not be a specific component of performance, it may act as a predictor. Within a dyadic leader-subordinate context, for example, high quality communication may lead to better understanding regarding rules, policies, goals, and how to perform certain tasks, and bolster employees' motivation. Subsequently, subordinates are likely to make fewer mistakes and, in general, perform better. Therefore, the likelihood for joint-venture success and for goals to be accomplished efficiently increases. As such, employees with higher LMCQ are likely to also exhibit good job performance.

Given the expected effects of mindfulness on the quality of conversations at work between a leader and a follower, and based on the literature that supports the positive link between communication quality and task performance, it was expected that LMCQ serves as a mediator that connects follower mindfulness and task performance. In addition, the hypothesized

relationships among follower and leader trait mindfulness, LMCQ, and task performance indicate potential moderated mediation relationships.

Hypothesis 5: LMCQ will mediate the relationship between follower mindfulness and task performance.

Hypothesis 7: Leader mindfulness will moderate the follower mindfulness–LMCQ–task performance relationship, such that high levels of leader mindfulness will lead to a stronger indirect relationship between follower mindfulness and task performance via LMCQ.

Organizational Citizenship Behavior (OCB). OCB consists of five dimensions: altruism, compliance, civic virtue, sportsmanship, and courtesy, and can be defined as "the maintenance and enhancement of the social and psychological context that supports performance" (Organ, 1997). OCB is critical for the development of a cohesive and supportive workplace environment, which in turn supports a productive organizational climate and culture and organizational performance overall (Hartnell, Ou, & Kinicki, 2011).

According to a wealth of literature, empathy is one of the main correlates identified to date for organizational citizenship behavior (Nedelko & Brzozowski, 2017; Spector & Fox, 2002; Borman, Penner, Allen, & Mortowidlo, 2001; Kamdar, McAllister, & Turban, 2006). One key study cites social and helping behaviors as the main interpersonal outcomes for empathy (Davis, 2006), and indeed, affective or other-oriented empathy has been shown to be correlated with altruism, courtesy, conscientiousness, and civic virtue, all which constitute several components of OCB (Riox & Penner, 2001). Further, individuals with a heightened orientation toward the needs of others are more inclined to behave prosocially and view altruism and

courtesy as in-role forms of contextual performance. In other words, those higher in empathy are likely to view citizenship behavior as a crucial and important part of their jobs.

Indeed, it is for these reasons that the current study examines empathy for one's leader. Given that leaders are often considered to be representative of their organizations, empathy toward one's leader can also be considered empathy toward one's organization. Overall, it does not seem surprising that individuals who easily or readily access their own and in turn others' emotions are more likely to go out of their way to help others, and in this case, help their leader. This could be due to an increased understanding of the leader's emotions and needs and to an increased tendency to feel compassion toward the leader and the organization. Given that mindfulness may enhance a follower's empathy toward a leader, it may also be true that mindfulness leads to increased OCB and the cultivation of a healthy organizational climate via this leader-oriented empathy.

Given the expected effects of mindfulness on empathy and the link between empathy and OCB, it was expected that empathy for one's leader serves as a mediator that connects follower mindfulness and OCB. In addition, the hypothesized relationships among follower and leader trait mindfulness, empathy for the leader, and OCB indicate potential moderated mediation relationships.

Hypothesis 6: Empathy for one's leader will mediate the relationship between follower mindfulness and OCB.

Hypothesis 8: Leader mindfulness will moderate the follower mindfulness–empathy–OCB relationship, such that high levels of leader mindfulness will lead to a stronger indirect relationship between follower mindfulness and OCB via empathy.

CHAPTER III

METHOD

Participants and Procedure

Participants were 105 employees and their 40 supervisors from a construction and development organization in China. Age data were collected from employees only: sixty-eight employees were under 30, thirty-two employees were between 30 and 40, and three employees were over 40 (two employees had missing age data). All subordinates and supervisors were male. Each supervisor had between one and four subordinates; most supervisors had two subordinates each. Thus, the data were nested in nature, with employees nested within leaders. During the study, employees were asked to provide demographic information and complete measures for trait mindfulness, LMCQ, and empathy for the leader. Their supervisors were instructed to rate their own trait mindfulness as well as employees' task performance and OCB. Data from employees and their supervisors were collected online at a single time point. Participation was voluntary and participants' responses were kept confidential.

Measures

Trait mindfulness. Individual differences in trait-level mindfulness were measured using the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R; Feldman et al., 2007). This measure is designed to capture a broad conceptualization of mindfulness, and reflects the assumption that mindfulness can be conceptualized as a response tendency that "tends to be stable across situations yet is modifiable by life experience including mindfulness training" (Feldman et al. 2007, p. 188). The scale consists of 12 items (see Appendix A) assessing attention regulation, orientation to the present/immediate experience, and a non-judgmental attitude of acceptance towards experience ($\alpha_{LeaderTraitMindfulness}$ = .59,

$\alpha_{FollowerTraitMindfulness}$ = .71), and has been validated in a Chinese setting (Chan, Lo, Lin, & Thompson, 2015). Participants responded using a 5-point Likert scale ranging from 1 (*rarely/not at all*) to 5 (*almost always*); note that this scale is usually assessed on a 1 – 4 scale and was adapted by the organization during data collection. The scale has demonstrated convergent validity with concurrent measures of mindfulness, such as the Mindful Attention Awareness Scale (Brown & Ryan, 2003) and the Freiburg Mindfulness Inventory (Walach et al. 2001). Further, discriminant validity has been demonstrated with less theoretically consistent measures of emotion regulation and problem-solving styles, such as rumination (Response Style Questionnaire; Nolen-Hoeksema, 1991), and stagnant deliberation (Measure of Mental Anticipatory Processes; Feldman & Hayes, 2005).

LMCQ. The degree to which supervisors and subordinates communicate effectively was assessed using the LMCQ survey (Jian et al., 2014). The LMCQ consists of 9 items (see Appendix B) assessed using a 7-point Likert scale with responses ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Sample items include "when talking about how to get things done at work, my supervisor and I usually align our ideas pretty easily," and "my supervisor and I interpret each other's ideas accurately when discussing work-related matters" (α = .96).

The scale has demonstrated convergent validity with LMSX (leader-member social exchange), a conceptually distinct construct that also taps into the common broader construct of LMX (leader-member exchange). Jian, Shi, and Dalisay (2014) found that LMCQ was substantially correlated with LMSX (r = .78, p < .001), demonstrating construct validity. In order to test for discriminant validity, Jian et al. (2014) also conducted a Chi-square difference test between an unconstrained CFA model and a nested CFA model in which the correlation between LMCQ and LMX was constrained to 1.00. The test of Chi-square difference ($\Delta\chi^2(1) = 13.29$, $p <$

.001) showed that the unconstrained model had a significantly lower Chi-square value, which offers evidence of discriminant validity for LMCQ from LMX (Jian et al., 2014). In addition, LMCQ has been found to predict organizational commitment and job-related anxiety, supporting its criterion-related validity (Jian & Dalisay, 2017).

Empathy for the Leader. Empathy for the leader was assessed using an 8-item scale (Appendix D) retrieved from the International Personality Item Pool (IPIP: Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger, et al., 2006). The scale was re-formatted for the subordinate and items were adjusted to measure subordinates' empathy for the leader. Responses were rated on a scale ranging from 1 (*very inaccurate*) to 5 (*very accurate*) (α = .91). Sample items include, "in general, I feel my leader's emotions," and "in general, I anticipate the needs of my leader."

Items in this assessment are constructed based off constructs similar to those in Cloninger's Temperament and Character Inventory (TCI; Cloninger, Przybeck, & Svrakc, 1994). According to the creators of the IPIP, a primary form of validity is the correlation between the IPIP scale and the scale on which it was based. The correlation between Empathy and the TCI is .88 (Goldberg & Saucier, 2016). The creators of the IPIP encourage translation of items into foreign languages, and several studies have utilized translated IPIP items similar to the scale utilized in the current study in a Chinese setting (e.g., Yang, Allen, Shi, Zhang, & Lou, 2011).

Task Performance. Task performance was measured using the 4 items from the in-role behavior scale from Williams and Anderson (1991) (Appendix C). The scale was assessed on a Likert scale ranging from 1 (*never*) to 5 (*always*) (α = .40). This scale is also usually assessed on a 7-point scale and was adapted during data collection by the organization. Sample items include "[my subordinate] adequately completes assigned duties," and "[my subordinate] performs tasks that are expected of him/her." These items were selected by the organization based on factor

loadings; only the highest-loading four items were included in the study. It should also be noted that the scale reliability estimate for this measure was quite low, and that results must be interpreted with caution.

OCB. Organizational citizenship behavior was measured with 8 items from the extra-role behavior scale from Williams and Anderson (1991) (Appendix C). The scale was assessed on a Likert scale ranging from 1 (*never*) to 5 (*always*) ($\alpha = .73$). This scale is traditionally assessed on a 7-point scale and was adapted during data collection by the organization. The extra-role scale is comprised of two subscales: organizational citizenship behavior toward the organization (OCB-O) and toward an individual (OCB-I). Sample items include "[my subordinate] adheres to informal rules devised to maintain order" (OCB-O) and "[my subordinate] assists the supervisor with his/her work (when not asked)" (OCB-I). These items were selected by the organization based on factor loadings; only the highest-loading eight items (four from OCB-O, four from OCB-I) were included in the study.

Discriminant validity for the in-role behavior and organizational citizenship behavior scales was established during construction of the scales, indicating that IRBs (in-role behaviors), OCBIs (organizational citizenship behaviors toward individuals), and OCBOs (organizational citizenship behaviors toward the organization) are distinct forms of performance (Williams & Anderson, 1991). The current study treated OCB as a single construct, a common approach that has been validated by high meta-analytic correlations between OCB-O and OCB-I (LePine, Erez, & Johnson, 2002). This and other recent research indicating strong fit for a one-factor model (Hoffman, Blair, Meriac, & Woehr, 2007) indicates that that these two dimensions may be treated as a single latent construct.

Control Variable. Age is included only as a control variable, as there is some evidence that age can influence organizational citizenship behavior and core task performance (Ng & Feldman, 2008). Though results do not significantly change when age is removed as a control variable, it is retained in the model due to its theoretical importance and to account for any variance it explains.

CHAPTER IV

RESULTS

Data Analyses

The data were inspected for outliers and cleaned using SPSS before analysis was begun. No extreme outliers were found. Only two participants had missing data, so expectation maximization imputation was not necessary. The assumptions for regression were also tested prior to analyzing the hypothesized model. First, scatterplots were created to test the assumption that the predictors are linearly related to the dependent variables. The relationships between follower trait mindfulness and each outcome (LMCQ, empathy, task performance, and OCB) were linear. Second, errors were checked to ensure they were normally distributed (using Q-Q plots and histograms), and homoscedastic (using individual scatterplots and Levene's test). Finally, descriptive statistics, intercorrelations among variables, and reliability estimates were calculated for all variables using IBM SPSS Statistics (Version 26) software.

Table 1
Means, Standard Deviations, and Intercorrelations of Variables

Variable	1	2	3	4	5	6	7
1. Leader TM	(.59)	.61**	.58**	.59**	.40**	.40*	-.01
2. Follower TM	.41**	(.71)	.62**	.70**	.34*	.42**	.17
3. LMCQ	.37**	.49**	(.96)	.83**	.54**	.42**	.06
4. Empathy	.38**	.58**	.78**	(.91)	.50**	.53**	.09
5. Task Performance	.32**	.15	.39**	.30**	(.40)	.68**	.14
6. OCB	.32**	.25**	.24*	.35**	.55**	(.73)	.12
7. Age	.03	-.04	.18	.06	.12	.05	1.0
Mean $_{\text{Individual level}}$	3.54	3.40	5.74	3.82	3.95	4.06	1.37
Mean $_{\text{Leader level}}$	3.55	3.42	5.80	3.85	3.97	4.07	.34
SD $_{\textit{Individual}\text{ level}}$	.33	.45	.93	.62	.49	.40	.54
SD $_{\textit{Leader level}}$	.34	.33	.68	.44	.38	.31	.31
Possible Range	1 – 5	1 – 5	1 – 7	1 – 5	1 – 5	1 – 5	
Actual Range	1 – 5	1 – 5	2 – 7	1 – 5	1 – 5	1 – 5	

Note. *N* = 145 (105 employees, 40 supervisors). Values above the diagonal are correlations at the leader level; values below the diagonal are correlations at the individual level. Values in parentheses are coefficient alphas. Age data were interval, coded 1 (*under 30*), 2 (*30 – 40*), and 3 (*over 40*).
** indicates correlation is significant at the .01 level.
* indicates significance at the .05 level.

Two scales had low reliabilities: leader trait mindfulness ($\alpha_{LeaderTraitMindfulness}$ = .59) and follower task performance (α = .40). The alpha for task performance may have been low due to the manner in which the scale was adapted (i.e., shortened, assessed on a different scale) for use in the organization; not all items within the validated scale were included when the survey was administered to participants. Though reducing the number of items in a scale results in lower reliability estimates (Streiner, 2003; Nunnaly & Bernstein, 1994), this is a common practice within organizations and is often employed to reduce participant response burden. However, results derived from data collected via an inconsistent or unreliable scale must be interpreted with extreme caution.

Path analysis was conducted using the MLMED add-on procedure for SPSS 26 (Rockwood, 2017). This procedure allows for the estimation of direct and indirect effects as well as conditional indirect effects for two-level (nested) moderated mediation models, and, importantly, allows for the estimation of Monte-Carlo Confidence Intervals, which are considered the most appropriate method for assessing mediation in a multilevel context (Preacher & Selig, 2012). The analysis package automatically mean-centers the moderator variable, and uses this centered variable to create cross-level interaction terms.

Finally, before conducting analyses on nested data, it must first be determined whether observations are dependent and thus whether random coefficients are necessary. In other words, because groups of employees are nested within leaders, it can be said that employees within groups are likely to be very similar to each other but different from other employees nested within different leaders. When observations within groups may be dependent, the nesting effect is measured by the unconditional intraclass correlation (ICC) (Bickel, 2007). The $ICC_{Task\ Performance} = 0.28$, indicating that about 28% of the variance in Task Performance occurs between groups, with the remaining 72% of the variance occurring within groups. The $ICC_{OCB} = .23$, indicating that about 23% of the variance in Organizational Citizenship Behavior occurs between groups, while 77% of the variance in OCB occurs within groups. These numbers (an ICC greater or equal to 0.2) indicate a moderate level of dependence (Cohen et al., 2003), and that utilizing random coefficient variability may help reduce the standard errors for the analyses.

Level One Analyses

Follower trait mindfulness, LMCQ, empathy for the leader (empathy), and both task performance and Organizational Citizenship Behavior (OCB) were measured at the employee

level, referred to as level 1. Leader trait mindfulness was measured at the leader level, referred to as level 2, given that employees were nested within leaders.

In order to address Hypotheses 1 and 3, path analysis was conducted using the MLMED add-on procedure for SPSS (version 26). Hypothesis 1 stated that follower trait mindfulness would be positively related to LMCQ. Analyses indicate that follower trait mindfulness is significantly related to LMCQ ($b = .85$, $p = .010$). As such, Hypothesis 1 is supported. Hypothesis 3 stated that follower trait mindfulness would be positively related to employees' empathy in leader-follower interactions. Analyses indicate that follower trait mindfulness is significantly related to empathy ($b = .62$, $p = .004$). As such, hypothesis 3 is also supported.

Table 2
Fixed Effects for LMCQ and Task Performance

	Estimate	*SE*	*t*	*p*	95% CI Lower	95% CI Upper
Within Effects						
LMCQ						
Intercept	2.92	1.06	2.77	.009	.79	5.05
on Age	.54	.17	3.17	.002	.20	.88
on FTM	1.0	.23	4.32	<.001	.54	1.46
on LTM × FTM	.64	.67	.97	.336	-.68	1.97
Task Performance						
Intercept	2.05	.55	3.69	<.001	.93	3.18
on Age	-.02	.10	-.22	.825	-.23	.18
on LMCQ	.13	.07	1.87	.066	-.009	.27
on FTM	-.14	.15	-.91	.364	-.43	.16
Between Effects						
LMCQ						
on Age	-.004	.25	-.02	.986	-.50	.49
on LTM	3.15	1.72	1.83	.073	-.30	6.59
on FTM	.85	.31	2.71	.010	.22	1.48
on LTM × FTM	-.74	.50	-1.49	.144	-1.75	.26
Task Performance						
on Age	.13	.15	.87	.390	-.17	.43
on LMCQ	.32	.09	3.47	.001	.13	.51
on FTM	-.04	.19	-.19	.854	-.42	.35

Note. FTM = follower trait mindfulness. LTM = leader trait mindfulness. LMCQ = leader – member conversational quality.

Table 3
Random Effects for LMCQ and Task Performance

	Estimate	*SE*	*p*	95% CI -2.5%	95% CI +2.5%
Task Performance					
Level-1 Residual	.17	.03	<.001	.12	.24
Intercept	.03	.03	.343	-.003	.20
LMCQ					
Level-1 Residual	.52	.12	<.001	.33	.80
Intercept	.07	.07	.337	-.01	.55

Note. LMCQ = leader – member conversational quality.

Table 4
Fixed Effects for Empathy and OCB

	Estimate	*SE*	*t*	*p*	95% CI Lower	95% CI Upper
Within Effects						
Empathy						
Intercept	1.66	.69	2.40	.021	.27	3.06
on Age	.17	.11	1.58	.118	-.05	.39
on FTM	.76	.15	5.13	<.001	.46	1.05
on LTM × FTM	.62	.43	1.46	.149	-.23	1.47
OCB						
Intercept	2.40	.45	5.38	<.001	1.50	3.30
on Age	-.03	.08	-.40	.691	-.19	.13
on Empathy	.10	.09	1.11	.274	-.08	.27
on FTM	-.01	.13	-.09	.926	-.27	.24
Between Effects						
Empathy						
on Age	.04	.16	.27	.792	-.28	.37
on LTM	.30	1.12	.26	.793	-1.95	2.55
on FTM	.62	.21	3.02	.004	.21	1.04
on LTM × Empathy	.02	.33	.07	.946	-.63	.68
OCB						
on Age	.07	.12	.61	.546	-.17	.32
on Empathy	.33	.12	2.65	.013	.08	.58
on FTM	.09	.16	.56	.581	-.24	.43

Note. FTM = follower trait mindfulness. LTM = leader trait mindfulness. Empathy is follower empathy for the leader. OCB = follower organizational citizenship behavior.

Table 5
Random Effects for Empathy and OCB

	Estimate	*SE*	*p*	95% CI -2.5%	95% CI +2.5%
OCB					
Level-1 Residual	.11	.02	<.001	.08	.16
Intercept	.02	.02	.332	-.002	.12
Empathy					
Level-1 Residual	.20	.04	<.001	.14	.30
Intercept	.03	.03	.204	-.007	.15

Note. Empathy is follower empathy for the leader. OCB = follower organizational citizenship behavior.

Mediation analyses were conducted in order to determine whether LMCQ and empathy mediate the relations between follower trait mindfulness and – respectively – task performance and OCB. First, hypothesis 5 stated that LMCQ would mediate the relationship between follower trait mindfulness and task performance. Follower trait mindfulness was significantly indirectly related to task performance via LMCQ (b = .38, p = .007, MCCI [.14, .68]), supporting hypothesis 5.

Hypothesis 6 stated that empathy for one's leader would mediate the relationship between follower mindfulness and OCB. Follower trait mindfulness was significantly indirectly related to OCB via empathy (b = .28, p = .020, MCCI [.07, .54]), supporting hypothesis 6.

Table 6
Indirect Effects with no Moderated Mediation

Indirect Effect	Estimate (β)	SE	*p*	MCLL	MCUL
Within					
FTM → LMCQ → Task Performance	.14	.08	.092	-.007	.32
FTM → Empathy → OCB	.08	.07	.291	-.06	.23
Between					
FTM → LMCQ → Task Performance	.38	.14	.007	.14	.68
FTM → Empathy → OCB	.28	.12	.020	.07	.54

Note. FTM = follower trait mindfulness. LMCQ = leader – member conversational quality. Empathy is follower empathy for the leader. OCB = follower organizational citizenship behavior.
MCLL = Monte Carlo Lower Limit, MCUL = Monte Carlo Upper Limit.

Level Two Analyses

Moderation analyses were conducted in order to address hypotheses 2 and 4. Hypothesis 2 stated that leader trait mindfulness would moderate the effect of follower trait mindfulness on LMCQ. Leader trait mindfulness was not found to be a significant moderator of the follower trait mindfulness – LMCQ relationship (b_{within} = .64, p = .336, 95% CI [-.68, 1.97], $b_{between}$ = -.74, p = .144, 95% CI [-1.75, .26]). Thus, Hypothesis 2 was not supported.

Hypothesis 4 stated that leader trait mindfulness would moderate the effect of follower mindfulness on empathy. Leader trait mindfulness was not found to be a significant moderator of the follower trait mindfulness – empathy relationship (b_{within} = .62, p = .149, 95% CI [-.23, 1.47], $b_{between}$ = -.02, p = .946, 95% CI [-.63, .68]). Thus, Hypothesis 4 is not supported.

In order to address hypotheses 7 and 8, moderated mediation analyses were conducted. Hypothesis 7 stated that leader trait mindfulness would moderate the follower trait mindfulness – LMCQ – task performance relationship. The moderated mediation effect of leader trait mindfulness on the follower trait mindfulness – LMCQ – task performance path was not significant (b_{within} = .08, MCCI [-.09, .35], $b_{between}$ = -.24, MCCI [-.63, .07]). As such hypothesis 7 is not supported.

Hypothesis 8 stated that leader trait mindfulness would moderate the follower trait mindfulness – empathy – OCB relationship. The moderated mediation effect of leader trait mindfulness on the follower trait mindfulness – empathy – OCB path was not significant (b_{within} = .06, MCCI [-.06, .25], $b_{between}$ = -.007, MCCI [-.22, .25]). As such, hypothesis 8 is not supported.

Table 7
Indirect Effects with Moderated Mediation

Indirect Effect	Estimate (β)	SE	*p*	MCLL	MCUL
Task Performance					
Within					
FTM → LMCQ → Task Performance	.13	.08	.093	-.006	.30
Moderated Mediation (LTM)	.08	–	–	-.09	.35
Between					
FTM → LMCQ → Task Performance	.27	.13	.037	.06	.57
Moderated Mediation (LTM)	-.24	–	–	-.63	.07
Organizational Citizenship Behavior					
Within					
FTM → Empathy → OCB	.07	.07	.289	-.06	.22
Moderated Mediation (LTM)	.06	–	–	-.06	.25
Between					
FTM → Empathy → OCB	.20	.11	.048	.03	.44
Moderated Mediation (LTM)	.007	–	–	-.22	.25

Note. First indirect effects are conditional on a moderator value of 3.54. FTM = follower trait mindfulness. LTM = leader trait mindfulness. LMCQ = leader – member conversational quality. Empathy is follower empathy for the leader. OCB = follower organizational citizenship behavior. MCLL = Monte Carlo Lower Limit, MCUL = Monte Carlo Upper Limit.

CHAPTER V

DISCUSSION

The current study aimed to extend prior research by examining a) whether LMCQ and empathy mediated the relationship between follower trait mindfulness and – respectively – task performance or OCB, and b) whether these mediated pathways were moderated by leader trait mindfulness. While mindfulness has been studied in a workplace setting, there has been limited research on how employee and leader trait mindfulness may interact to influence employee outcomes.

Results demonstrated that the direct relationships between follower trait mindfulness and task performance and OCB were not significant, though the relationships between follower trait mindfulness and both of the mediators (LMCQ and empathy) were significant. The indirect effects for both the pathways between follower trait mindfulness and the outcome variables via the mediators were significant. The moderation of leader trait mindfulness was not significant for either of the simple moderation relationships (on the path between follower trait mindfulness and LMCQ or empathy) or the moderated mediation relationships (on the follower trait mindfulness – LMCQ – task performance path or the follower trait mindfulness – empathy – OCB path).

An important goal of the study was to address how leader trait mindfulness might influence the strength of both the relationship between follower trait mindfulness and the two mediators and also the mediated pathways from follower trait mindfulness to the outcome variables via the mediators. The moderating influence of follower trait mindfulness was not significant, though this is not a surprise given that level-2 moderation effects are generally difficult to detect and, when found, are of small to moderate size (Aguinis, Edwards, & Bradley, 2017). It is possible that, in this sample, leaders and followers did not actually interact very

much, and thus, that leader trait mindfulness was not very important for follower-level outcomes. Data on frequency or quantity of interaction between leaders and followers were not collected. The less employees and leaders interact, the less likely it is that leader personality traits would have a significant influence on the relationship between followers' traits and perceptions (e.g., empathy toward the leader, ratings of LMCQ).

Theoretical Implications

A primary goal of this study was to address a gap in the research literature regarding the influence of mindfulness on interactions between employees and their leaders, and regarding the potential performance implications of this influence. Thus, this study adds to the growing body of research that examines such outcomes (e.g., task and contextual performance) as well as mechanisms within the "black box" between mindfulness and outcomes. Overall, the findings contribute empirical evidence toward the advancement of theories of trait mindfulness at work, especially in terms of *how* mindfulness at work may contribute to task and contextual performance via specific mediators.

Specifically, one unique aspect of the current study was the inclusion of both LMCQ and empathy toward the leader variables as mediators. First, as a relatively new construct, LMCQ presents a promising avenue for investigation complementary to research that has been conducted examining mindfulness and Leader – Member Exchange (LMX). The central premise of LMX is that relationships develop between leaders and subordinates and are characterized by the amount of effort, resources, information, and/or emotional support exchanged between the two parties (Liden et al., 1997). LMX theory posits that, over time, the quality of social exchanges between a supervisor and subordinate develops into relationships characterized by levels of mutual support, trust, and respect within supervisor-subordinate relationships (Gerstner

& Day, 1997). Prior research on mindfulness and LMX has found a positive association between leader trait mindfulness and LMX as mediated by elevated empathic concern and response flexibility (Auten, 2017).

LMCQ, on the other hand, refers to the quality of communication between a supervisor and subordinate, and has been shown to be theoretically distinct from (though related to) LMX (Jian & Dalisay, 2017). The LMCQ construct measures the "quality of conversation between leaders and members in the workplace" (Jian et al., 2014, p. 376) and "provides a more in-depth conceptualization and assessment of leader-member *communicative* exchange" (Jian & Dalisay, 2017, p. 181). Operationalizations of LMX, on the other hand, have focused more on overall cognitive and affective perceptions of dyadic leader-member relationships (Bernerth et al., 2007; Jian & Dalisay, 2017). Thus, rather than focusing on the nature of the relationship between a leader and a follower as in LMX, LMCQ focuses on the quality of communication between a leader and a follower. Further, while conversations may be conceptually – and qualitatively – understood to be a foundation of organizational discourse, few studies have quantitatively measured and studied conversational quality or how conversation quality may influence employee behavioral outcomes. The findings thus contribute to the ongoing theoretical development of this emerging construct's validity and its relation to other important workplace constructs (i.e., task performance).

In addition, the current study framed empathy in terms of how subordinates felt toward their leaders. Rather than conceptualizing empathy as a broad, theoretical construct, empathy was instead targeted to be supervisor-specific. The results reveal that employees who were more mindful were also more empathetic toward their leaders. Further, employees who felt more

empathetic toward their leaders were also rated as having higher levels of OCB. Thus, the findings add to the existing literature regarding empathy in the workplace.

Practical Implications

Despite the null findings for the moderation effect of leader trait mindfulness on the level-1 pathways, the current findings provide implications to the practical workplace setting. First, accounting for the nested effect of followers within leaders, follower trait mindfulness was significantly related to both empathy toward the leader and LMCQ. These findings may be taken directly to the workplace, as they indicate that stronger trait mindfulness goes hand-in-hand with greater levels of empathy and perceptions of better-quality conversations and, indirectly, with task performance and citizenship behavior. Interestingly, a recent meta-analysis on trait mindfulness in the workplace found trait mindfulness to be predictive over and above traditional predictors of variables such as employee burnout and work performance (Mesmer-Magnus et al., 2017). This indicates that employers may benefit from considering trait mindfulness in their selection process, as individuals with high trait mindfulness are likely to be productive (Langer, 2014) and have higher levels of satisfaction (Glomb et al., 2011) in their jobs once hired. Extending this line of research, the current results showed that trait mindfulness was positively related to communication quality between a leader and follower and employees' empathy toward their leaders. While the findings cannot speak to a causative effect as the study design was cross-sectional, they indicate that these are important correlations within this sample. Future research may aim to replicate and further probe these patterns, especially in other settings and with other samples.

Interestingly, empathy for one's leader was not found to relate to task performance (b = .15, p = .251, 95% CI [-.11, .42]), nor was LMCQ found to relate to OCB (b = .01, p = .904, 95%

CI [-.10, .12]). This indicates that the hypothesized relations were in the expected direction, and speaks to a potential mechanism for potential future interventions. For example, with the goal of increasing workers' OCB, interventions may be more successful if they focus on supporting feelings of empathy in the workplace, while the goal of increasing task performance might necessitate a stronger emphasis on LMCQ. Taken together, these findings contribute to the empirical research that has been done on workplace outcomes and suggest that the two mediators utilized in the current study may be important to consider when studying real-world employee outcomes.

Limitations and Future Directions

Several limitations existed in the current study. First, the current sample size is relatively small, so there might not be enough power to detect small existing effects with the two-level moderated mediation analysis. This is an issue commonly experienced with moderated mediation analyses (Aguinis et al., 2017). Second, the reliability (coefficient alpha) of the trait mindfulness and task performance scales was very low. This indicates that participants may not have responded to the items consistently, and that the results involving these variables may not be reliable. Third, the sample was comprised completely of men, limiting the generalizability of the current results to the general population. Fourth, the data of this study are cross-sectional, and causality cannot be inferred from the results. Adopting a longitudinal approach may allow for a more in-depth investigation of how mindfulness at work changes and influences important variables over time.

Future research may aim to examine how trait mindfulness functions in a dyadic context. The current study did not find evidence for the influence of leader mindfulness on follower variables. Future research could examine employee-supervisor dyads and use polynomial

regression analysis to study how mindfulness fit between employees and supervisors may influence employee outcomes. In addition, based on the relational demography literature, the gender within dyads may influence interpersonal interactions (Loi & Ngo, 2009). Thus, it may be important to examine how the gender composition of dyads may moderate the relation between trait mindfulness and workplace outcomes. Further, other moderating variables may be considered. For example, mindfulness may be a particularly adaptive trait for workplaces that are complex and dynamic rather than simple and static (Dane, 2011). A mindful state characterized by a high present-moment focus and wide attentional breadth has been shown to be associated with an increase in working memory, which may assist employees with utilizing numerous details within a given situation to make informed, contextualized decisions (Glomb et al., 2011).

Conclusion

Overall, the current study contributes to the literature on mindfulness in the workplace via its examination of the role follower trait mindfulness plays in fostering LMCQ, empathy toward a leader, follower task performance, and OCB. Importantly, follower mindfulness was found to be significantly related to two variables: LMCQ and empathy toward the leader. In addition, mediation via these variables to follower task performance and organizational citizenship behavior were established. This study adds to the growing body of literature examining when, how, and why trait mindfulness may be an important variable to consider in a workplace environment.

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APPENDIX A

COGNITIVE AND AFFECTIVE MINDFULNESS SCALE – REVISED

1. It is easy for me to concentrate on what I am doing.
2. I am preoccupied by the future.
3. I can tolerate emotional pain.
4. I can accept things I cannot change.
5. I can usually describe how I feel at the moment in considerable detail.
6. I am easily distracted.
7. I am preoccupied by the past.
8. It's easy for me to keep track of my thoughts and feelings.
9. I try to notice my thoughts without judging them.
10. I am able to accept the thoughts and feelings I have.
11. I am able to focus on the present moment.
12. I am able to pay close attention to one thing for a long period of time.

Note. From Feldman, Hayes, Kumar, Greeson, & Laurenceau (2007). Response scale anchors are 1 (*Rarely/Not at all*) to 4 (*Almost always*).

APPENDIX B

LEADER – MEMBER CONVERSATIONAL QUALITY SCALE

1. With regard to getting things done, the conversations between my supervisor and me are efficient.
2. When discussing work-related matters, my supervisor and I can convey a lot to each other even in a short conversation.
3. When talking about work tasks, the conversations between my supervisor and me are often smooth.
4. When talking about how to get things done, the conversations between my supervisor and me usually flow nicely.
5. When talking about how to get things done at work, my supervisor and I usually align our ideas pretty easily.
6. When talking about how to get things done at work, my supervisor and I are usually in sync with each other.
7. My supervisor and I usually have accurate understanding of what the other is saying when trying to get things done at work.
8. When we discuss how to get things done at work, my supervisor and I have no problem correctly understanding each other's ideas.
9. My supervisor and I interpret each other's ideas accurately when discussing work-related matters.

Note. From Jian, Shi, & Dalisay (2014). Response scale anchors are 1 (*Strongly disagree*) to 7 (*Strongly agree*).

APPENDIX C

TASK PERFORMANCE AND OCB SCALE

Scale Items	IRB	OCBI	OCBO
1. Adequately completes assigned duties	.83		
2. Fulfills responsibilities specified in job description	.88		
3. Performs tasks that are expected of him/her	.87		
4. Meets formal performance requirements of the job	.83		
5. Helps others who have been absent.		.75	
6. Takes time to listen to co-workers' problems and worries.		.75	
7. Goes out of way to help new employees.		.82	
8. Takes a personal interest in other employees.		.77	
9. Attendance at work is above the norm.			.58
10. Gives advance notice when unable to come to work.			.80
11. Takes undeserved work breaks (R).			.57
12. Great deal of time spent with personal phone conversations (R).			.36

Note. From Williams & Anderson (1991). Response scale anchors are 1 (*Strongly disagree*) to 5 (*Strongly agree*).

APPENDIX D

EMPATHY FOR THE LEADER SCALE

In general, I…

1. …Feel my leader's emotions.
2. …Anticipate the needs of my leader.
3. …Reassure my leader.
4. …Make my leader feel good.
5. …Am concerned about my leader.
6. …Have a good word for my leader.
7. …Make my leader feel welcome.
8. …Take time out for my leader.

Note. From the C2: Empathy scale in the IPIP (International Personality Item Pool), Goldberg, Johnson, Eber, Hogan, Ashton, Cloninger, et al. (2006). Response scale anchors are 1 (*Very Inaccurate*) to 5 (*Very Accurate*).

VITA

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