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LEADERS' EMOTIONAL LABOUR AND ABUSIVE SUPERVISION: THE MODERATING ROLE OF MINDFULNESS (ACCEPTED VERSION)

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Abstract:

In this study we examine how leaders' emotional labour strategies (surface acting and deep acting) deplete leaders' self-control resources to predict abusive supervision, in addition to the moderating role of leader mindfulness. Integrating ego-depletion theory and emotion regulation theory, we hypothesize that deep acting and surface acting predict higher levels of abusive supervision, which is mediated by reduced self-control. Furthermore, we predict that leaders' trait mindfulness moderates the relationship between emotional labour and self-control on abusive supervision. Results from a three-wave study of leader-follower dyads supported mediation hypotheses; both deep and surface acting predicted abusive supervision, which as mediated by reduced self-control. Our moderated mediation hypotheses were supported for deep acting but not surface acting. This research contributes to the literature by demonstrating the depleting nature of emotional labour in leadership and the importance of leader mindfulness as a boundary condition that can make deep acting less harmful for leader behaviour.

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Abusive supervision affects approximately one-third of employees and is estimated to cost organizations up to 23.8 billion dollars per year (Aasland et al., 2010; Tepper et al., 2006). Defined as “subordinates’ perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact,” abusive supervision predicts a wide array of deleterious outcomes such as follower stress and reduced performance (Tepper, 2000, p. 178). To mitigate this destructive behaviour, there has been a growing interest in understanding antecedents of abusive supervision and boundary conditions (i.e., mindfulness) that might mitigate this behaviour (Liang et al., 2016; Zhang & Bednall, 2016). This literature has offered rich insights into the dispositional and organizational factors that predict abusive supervision. A key finding from this research has been that leadership demands (e.g., managing poorly performing subordinates) predict abuse toward followers, as leaders’ self-control resources are depleted under these conditions (Liang et al., 2016). Indeed, recent reviews of abusive supervision suggest this dysfunctional leader behaviour often arises from self-regulation impairment (Tepper et al., 2017).

While we are beginning to understand more about how external demands such as situational stress can impair self-control and lead to abusive supervision, there is still little known about how factors within a leaders’ own control (i.e. resource-depleting behaviours) might contribute to abusive supervision, and how leaders can better manage these behaviours. An area of growing interest in relation to leaders’ resource depleting behaviours has centered on the emotional labour inherently required in leadership roles (Arnold et al., 2015). Emotional labour is defined as “the management of feelings to create a publicly observable facial and bodily display” (Hochschild, 1983, p. 7). Conceptual work has highlighted the centrality of emotional labour to leadership; leaders must use and express emotions strategically to motivate followers

and reach organizational goals (Humphrey et al., 2008). However, very little empirical research has investigated emotional labour beyond front-line service roles. This is an important oversight given the potential for emotional labour to impair self-control and predict counterproductive work behaviours. However, the extent to which this relationship occurs for leaders is not yet fully established.

Only recently have scholars begun to consider how the emotional labour strategy of surface acting (i.e., faking emotions required in a given situation) can be detrimental for leader well-being (e.g., Arnold et al., 2015). In relation to leader behaviour and self-control, one empirical study found a link between leaders' surface acting, self-control, and abusive supervision (Yam et al., 2016). Thus, emotional labour has not been fully considered in the literature, as theory suggests there are other emotional labour strategies (namely, deep acting; proactive regulation one's internal emotions to align with what is required in the situation; Burch et al., 2013) that may predict leader behaviour. In addition, there remain important questions about how to mitigate the potentially damaging role of emotional labour on leader behaviour, making a search for boundary conditions critical.

These gaps in the literature are significant for several theoretical and practical reasons. First, leaders are likely to engage in a broad range of emotional labour strategies given the variety of interactions they have with followers (e.g., disciplining, motivating, rewarding; Humphrey, 2012; Humphrey et al., 2008). In comparison to customer service, where emotional expressions are likely to be more repetitive and lend themselves to surface acting (e.g., 'service with a smile'), leaders may rely on both deep and surface acting strategies. Second, deep acting is often assumed to be positive, as it has been linked to positive outcomes in the customer service literature such as increased job performance (Hülshager & Schewe, 2011). However, deep acting

has mixed effects when considering its relationship to strain outcomes (e.g., Grandey, 2003; Nguyen et al. 2022). Thus, it is plausible that deep acting could be harmful in leadership roles, due to the effort it takes to create the emotional displays needed in these contexts (Humphrey et al., 2008). Third, the single published study of deep acting in leadership did not find deep acting to be significant predictor of leader well-being (Arnold et al., 2015), which suggests that deep acting may not have the resource-building potential for leaders that has been assumed in past research and may have important boundary conditions to consider.

Specifically, it is important to investigate a boundary condition (i.e., mindfulness) that might limit abusive supervision and ultimately reduce this overt form of mistreatment in organizations. Mindfulness is defined as an individuals' tendency to have a heightened "attention to and awareness of present events and experience" (Brown et al., 2007, p. 212). Theory suggests that mindfulness plays a central role in helping leaders avoid negative behaviour, primarily through moderating individuals' self-regulatory processes in response to demands (Glomb et al., 2011). Considering the role of mindfulness in moderating emotion regulation strategies and their outcomes (Lyddy et al., 2021), it is an appropriate boundary condition to investigate in relation to emotional labour in leadership (Baron et al., 2018). Thus, the purpose of our study is to examine the moderating effect of mindfulness in relation to deep acting, surface acting, self-control, and abusive supervision.

In this paper, we integrate ego-depletion theory and emotional regulation theory to test the moderating role of leader mindfulness as a key boundary condition that may curtail abusive supervision. We respond to the calls of scholars to investigate how leaders' resource depletion may be an antecedent to abusive supervision (Harms et al., 2017). In turn, we contribute to the literature by demonstrating 1) the role of emotional labour in predicting abusive supervision; 2)

the importance of leader mindfulness as a boundary condition that can make emotional labour less harmful for leader behaviour; and 3) the relevance of emotional labour and its boundary conditions in the specific context of leadership roles. A summary of our model is presented in Figure 1. We test this model using leader-follower dyads from a variety of different backgrounds, thus offering insight into the literature on leadership, emotional labour, and abusive supervision.

Insert Figure 1 about here

Emotional labour and leader self-control depletion

Emotional labour is part of the broader theory of emotion regulation (Gross, 1998). Emotional regulation theory considers “the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998, p. 275). Emotional labour, as defined earlier, occurs when an individual engages in various strategies to display the emotions required in a given situation (Brotheridge & Grandey, 2002; Erks et al., 2017). Various factors influence the display of emotions, such as social norms and explicit emotional display rules (i.e., in an organizational context; Gardner et al., 2009). The vast majority of research on emotional labour has focused on customer service employees, as it has been suggested that the requirement for service employees to give “service with a smile” is one of the most common expressions of emotional labour (Humphrey et al., 2008, p. 152). Emotional labour is also prevalent in settings other than customer service, as most organizations have some type of unwritten display rules for both employees and leaders alike (Humphrey et al., 2008). For instance, many sales jobs encourage salespeople to have a cheerful disposition to

create a bond with the customer (Gosserand & Diefendorff, 2005). While emotional labour is important in the service industry, Brotheridge and Grandey (2002) found that leaders were just as likely as front-line workers to engage in both deep acting and surface acting. These findings suggest that emotional labour is associated with leadership and thus is a potential demand for leaders.

Considering that leaders are responsible for both their own emotional displays and influencing the emotions of others, this is perhaps not surprising. In fact, it has been suggested that “creating and nourishing positive relationships is essential to managerial work” (Brotheridge & Lee, 2008, p. 109). This is highlighted further when considering the variety of situations managers may need to deal with on a regular basis. The diverse emotional displays needed in leadership is echoed by Humphrey et al. (2008), who posit that leaders need to display a wide range of emotions, from happiness and compassion to pride or anger. To give a motivating speech, for instance, a leader may engage in a considerable amount of emotional labour to ensure the message is perceived positively by followers. A much different instance would be a situation where a leader must terminate an employee. Depending on the situation, they may engage in emotional labour to empathize with the employee.

Given the centrality of emotional labour to leadership, it is critical to consider how it may impact behaviours unique to leadership roles, such as abusive supervision. Ego-depletion theory has been valuable in highlighting how dysfunctional work behaviours often stem from self-control depletion. Self-control is defined as “the ability to override or change one’s inner responses, as well as to interrupt undesired behavioral tendencies and refrain from acting on them” (Tangney et al., 2004, p. 275). This theory posits that self-control is a finite mental resource that requires willpower to maintain (Baumeister et al., 1998). Repeatedly engaging in

resource-depleting behaviours, such as emotional labour, contributes to ego-depletion by expending one's mental resources (Yam et al., 2016). Individuals in an ego-depleted state are more likely to have low self-control resources and inhibitions (Baumeister, 2014; Hagger et al., 2010). As a result, they are more likely to express inappropriate behaviours such as abusive supervision (Baumeister et al., 1998; Yam et al., 2016).

According to emotion regulation theory, there are different types of emotional labour strategies that can deplete individual self-control. The two most widely studied types of emotional labour are surface acting (experiencing a difference between felt and experienced emotion) and deep acting (regulating one's emotions to align with the appropriate emotions in a given situation; Hochschild, 1983). Surface acting has been found to negatively impact psychological well-being across three decades of emotion regulation research (Hülshager & Schewe, 2011). There are virtually no positive outcomes from surface acting; not only does it lead to burnout for individuals who use it, it also leads to negative outcomes such as perceptions of poor work performance ratings (Hülshager et al., 2010). Thus, the internal effort needed for surface acting and its related outcomes has the potential to reduce individual self-control. Indeed, studies from the employee perspective have confirmed that surface acting depletes individual self-control (Grandey et al., 2019).

Research has shown that surface acting is similarly draining for leaders. Recent studies have shown that leader surface acting predicts leader burnout in a variety of industries (Arnold et al., Yao & Zhang, 2020). Other studies have shown that leader surface acting reduces leader creativity (Shao et al., 2022) and reduces leaders' positive affect (Lennard et al., 2019), which further highlights the depleting nature of surface acting in leadership roles. In addition, Yam et

al. (2016) have shown that leader surface acting in a customer service context depleted leaders' self-control resources. Thus, we hypothesize:

Hypothesis 1: Leader surface acting is negatively associated with leader's self-control.

Given the vast array of negative outcomes associated with surface acting for both leaders and front-line employees, it is often assumed that deep acting is a contrasting positive strategy in positions requiring emotional labour. Indeed, the use of deep acting has been shown to be positively associated with performance (Hülshager & Schewe, 2011) and personal accomplishment (Brotheridge & Grandey, 2002). It also has been associated with high performance ratings from supervisors (Hülshager et al., 2010). Thus, deep acting is often put forward as the preferred strategy recommended to employees who must engage in emotional labour as part of their work roles. In fact, emotion regulation training programs often focus on reframing situations to engage in deep acting given these positive outcomes found in past research (Whetten & Cameron, 2011).

However, despite having positive outcomes for performance in customer service, deep acting has also been shown to have mixed or null effects in relation to well-being. Grandey (2003) found that surface acting affected performance delivery via increased emotional exhaustion, whereas deep acting has a direct effect with performance delivery and was not related to emotional exhaustion. These findings suggest that although deep acting improved performance, it did not have strong relationships with strain outcomes. A meta-analytic review similarly showed surface acting consistently and strongly predicts impaired well-being and job attitudes and has small negative relationships with performance outcomes (Hülshager & Schewe, 2011). In contrast, deep acting has strong positive relationships with performance outcomes, but often has small, insignificant, and inconsistent relationships with well-being outcomes. Taken

together, the literature suggests deep acting is most beneficial for *performance* in occupations requiring emotional labour, while its benefit for well-being (e.g., psychological strain, burnout) remains unclear.

More recently, Nguyen and colleagues (2022) found across three studies that deep acting reduces employees' perception that they are being dehumanized by their organization. Thus, while deep acting may lead to positive factors relating to performance (e.g., positive feedback), it can also lead employees to perceive the organization more favorably than it actually is. In turn, this can lead employees to remain in situations where they are "treated as a means to an end" (Nguyen et al., 2022, p. 191), which of course can have longer-term effects of reducing well-being. In addition, Alabak et al. (2019) found in a 5-day diary study that specific aspects of deep acting (e.g., positive reappraisal) predicted mental fatigue and perceptions of stress, suggesting that deep acting can be demanding on a daily basis. Finally, Huppertz et al. (2020) tested three mechanisms relating to deep acting and strain: psychological effort, feelings of authenticity and rewarding interactions. They found null results for all three mechanisms, suggesting that further mechanisms need to be explored. Taken together, there has been considerable debate about the benefits and drawbacks of deep acting, in addition to its processes and boundary conditions.

In relation to leadership specifically, it is also important to consider how leadership differs from customer service (where most emotional labour research has been conducted) and how this could make deep acting even more harmful for leaders. Drawing on emotion regulation theory and the leadership literature, Humphrey et al. (2008) outlined various factors that make leaders' experiences of emotional labour unique. In customer service, display rules typically call for "service with a smile" in repeated interactions throughout the day, which can be categorized as emotional displays with low variety, short duration, low intensity and high frequency. In turn,

many customer service roles have a low need for deep acting, a high need for surface acting (again due to repeated, similar interactions) and require low to moderate identification with one's role to be effective.

Leadership roles, in contrast, require much more variety in emotional expression. In addition to needing to act happy and friendly to motivate others, leaders may need to express pride, frustration, sympathy, compassion, and satisfaction with a range of targets (followers, peers, their own superiors, clients). For example, leaders might express frustration to correct behaviour, and compassion for followers with particularly challenging circumstances. Durations of emotional expressions are likely to vary as well, as leaders may have to express more positive emotions during a team meeting in contrast to more negative emotions in a one-on-one disciplinary meeting with a follower. In contrast to service encounters, leaders may have varying frequency of interactions with others (e.g., very busy days with many emotional displays required versus less busy days). Thus, leaders theoretically need to engage in higher levels of deep acting than customer service employees, and more likely to identify with their work role (Humphrey et al., 2008). Thus, they are likely to engage in significant levels of deep acting, which requires cognitive effort and thus reduces leaders' self-control resources (Ashforth & Humphrey, 1993). Therefore, we hypothesize:

Hypothesis 2: Leader deep acting is negatively associated with leaders' self-control.

Abusive Supervision: Implications of emotional labour and self-control

The depletion of leaders' self-control resources has important implications for leadership behaviour. Drawing on ego-depletion theory, we propose that the reduced self-control from engaging in both surface and deep acting will predict increases in abusive supervision. Several empirical studies support the notion that reduced self-control resources predict negative

behaviour at work. When self-control resources are depleted, employees are likely to become hostile and engage in deviant behaviours such as unethical behaviour, deception and retaliation against others (e.g., Barnes et al., 2011; Christian & Ellis, 2011; Long & Christian, 2015). Others have found that when self-control capacity is limited, employees become more likely to engage in counterproductive work behaviours and maladaptive coping behaviours after work, such as impulsive buying and mobile phone overuse (Bolton et al., 2012; Zhang et al., 2022). Overall, there is strong evidence to suggest that self-control depletion is critical in explaining negative behaviours.

While studies have yet to link deep acting to self-control and abusive supervision, ego-depletion theory and past research suggest that deep acting would similarly affect leadership behaviour through the mediating mechanism of reduced self-control. When leaders are ego-depleted, they are more likely to engage in unethical or deviant behaviour (Joosten et al., 2014; Lin et al., 2016). For instance, Lin et al. (2016) found that ego-depletion mediated unethical behaviour in leaders, such that leaders increased abusive behaviour (e.g., misdirecting anger at an employee) following a mentally depleting day. Likewise, Joosten et al. (2014) found that ego-depletion can sometimes lead to self-serving or abusive leadership behaviours (e.g., saying something hurtful, publicly embarrassing someone). Surface acting is known to have similarly negative relationships with self-control (Yam et al., 2016).

Related to abusive supervision specifically, there is also evidence to suggest that negative leader behaviours such as abusive supervision arise when self-control resources are depleted. Studies have shown that leaders become more abusive when self-control resources are depleted due to factors such as burnout, lack of sleep and poorly performing subordinates (Barnes et al. 2015; Liang et al., 2016; Walsh & Arnold, 2018). Without a high level of self-control resources

to override automatic negative reactions to workplace challenges, leaders experiencing resource depletion become more likely to respond to followers in increasingly hostile and negative ways (Liang et al., 2016). Related to emotional labour specifically, Yam et al. (2016) found surface acting during leaders' customer interactions predicted abusive supervision through reduced self-control. Taken together, this evidence suggests that the emotional labour required in leadership create internal resource depletion for leaders to the extent that they become more susceptible to impulsive behaviour such as lashing out against followers.

As we discussed in the previous section, the emotional labour strategies of deep acting and surface acting are significant resource-depleting behaviours for leaders. Emotional labour is an effortful emotional regulation strategy (Alabak et al., 2020), and leaders likely experience greater ego-depletion after engaging in it and thus may have lower self-control for dealing with subordinates in a positive way. They may be more prone to lashing out or embarrassing a subordinate. Therefore, we conceptualize emotional labour (i.e., deep acting and surface acting) as a resource-depleting behaviour within ego-depletion theory that reduces self-control to predict subsequent abusive supervision. In addition, we aim to extend Yam et al.'s (2016) finding for surface acting (i.e., that surface acting predicts abusive supervision through reduced self-control) beyond a customer service setting. Thus, we hypothesize:

Hypothesis 3: The positive relationship between surface acting and abusive supervision will be mediated by reduced self-control.

Hypothesis 4: The positive relationship between deep acting and abusive supervision will be mediated by reduced self-control.

The Moderating Role of Mindfulness

Given the depleting nature of emotional labour for leaders, it is important to understand factors that can buffer these relationships to reduce the likelihood of abusive supervision occurring. Mindfulness plays an important role in both leadership and self-regulation (e.g., Glomb et al., 2011), which makes it a fruitful boundary condition to investigate in relation to emotional labour strategies for leaders. Considering workplace behaviour as an outcome, self-regulatory models of mindfulness have been robust in explaining how individuals control behaviour in relation to workplace challenges (Glomb et al., 2011). Thus, we conceptualize mindfulness within ego-depletion theory as a moderating variable that changes the relationship between emotional labour strategies, self-control and subsequent behaviour (i.e., abusive supervision).

Mindfulness involves the internal process of observing and accepting one's feelings in the present moment (Brown & Ryan, 2003). Mindfulness can be further categorized as either state or trait, with state mindfulness serving as a temporary state of consciousness (Hülshager et al., 2013). Meanwhile, trait mindfulness is defined as an individuals' tendency to have a heightened "attention to and awareness of present events and experience" (Brown et al., 2007, p. 212). In the present study, our focus is on leaders' trait mindfulness and integrating it within ego-depletion theory. Ego-depletion theory suggests that individual differences (such as trait mindfulness) have important effect on self-control capacity (Yam et al., 2016); thus, we aim to understand how the relationship between resource-depleting behaviours (i.e., emotional labour), self-control and behavioural outcomes (i.e., abusive supervision) can change based on trait mindfulness.

Mindfulness is associated with many positive outcomes in the workplace. Workers high in mindfulness often demonstrate greater productivity and job satisfaction compared to those low

in mindfulness (Hülshager et al., 2013). Similarly, worker productivity and satisfaction are positively associated with leaders' mindfulness levels (Arendt et al., 2019; Reb et al., 2014). Mindfulness extends to other elements of workers' well-being, such as workplace relationships. For example, both workers (Hawkes & Neale, 2020) and leaders (Arendt et al., 2019; Baron et al., 2018) high in mindfulness are found to be better at behavioural flexibility and communicating with team members.

Glomb et al. (2011) suggest that the positive impacts of mindfulness are largely due to its ability to bolster individual self-regulation capacity. Mindfulness strengthens self-control in relation to workplace demands through three core processes: 1) separation of one's ego; 2) lower mental automaticity; and 3) greater physiological awareness, that bolster self-regulation (Glomb et al., 2011). Empirically supporting Glomb et al.'s (2011) model of mindfulness at work, Walsh and Arnold (2018) found that higher leader mindfulness weakened the relationship between emotional exhaustion and negative affect to ultimately reduce abusive supervision. In addition, Liang et al. (2016) found that mindfulness helped leaders retain self-control and avoid abusive supervision when subordinates were performing poorly. While these studies did not examine emotional labour specifically, they highlight how mindful leaders are able to decouple from negative experiences and reduce their automatic behavioural reactions by maintaining self-control (Glomb et al., 2011).

However, whether self-control is maintained by mindfulness may depend on the specific emotional labour strategy being considered. According to Glomb et al.'s (2011) model, mindful individuals are less likely to rely on 'automatic' mental processes and are instead able to fully experience and adapt to the present moment experience. Given that deep acting is a proactive, intentional strategy, mindfulness should help to reduce the level of depletion that stems from this

behaviour. In other words, deep acting should become mentally 'easier' for mindful leaders to engage in because of their ability to fully absorb, understand, and enact the emotional requirements in each situation.

In addition, mindfulness promotes empathy towards others (Birnie et al., 2010), which should make deep acting less depleting for leaders. Deep acting can often involve taking the perspective of those you need to display emotions toward (Grandey, 2000; Gross, 2014), so being mindful should reduce the effort needed to deep act in the wide variety of situations leaders must deal with. Aligned with Glomb et al.'s (2011) framework, being more mindful and thus less reactive would enable leaders to empathize with their followers without evoking a physiologically and mentally draining response. Thus, self-control would become less depleted from deep acting when leaders are more mindful than when they are less mindful. Highly mindful leaders will have a better ability to self-regulate, and thus deep acting has less of an impact on self-control and subsequent behavioural outcomes, such as abusive supervision. Deep acting overall becomes less depleting and becomes a more flexible emotion regulation strategy.

Regarding surface acting, however, mindfulness may have a dark side. Lyddy et al. (2021) examined the relationship between surface acting, self-control, and employee performance using trait mindfulness as a moderator. They found a positive association between surface acting and self-control depletion that was strengthened by mindfulness, such that workers higher in mindfulness experienced greater self-control depletion when surface acting. The authors speculated that it is plausible that the superficial nature of surface acting goes against some of the emotional tenets of mindfulness (e.g., attending to and being aware of experiences; Brown & Ryan, 2003), which is why surface acting is draining. Indeed, more mindful employees will be more aware that they are not genuinely engaging with their displayed emotions and are

likely to experience greater loss of self-control resources (Hochschild, 1983; Lyddy et al., 2021). On the other hand, deep acting may be less incongruent for mindful workers, resulting in less self-control depletion. For leaders engaging in deep acting, higher trait mindfulness may help to buffer the negative effects of deep acting on abusive supervision. Thus, we hypothesize opposite moderating effects for surface acting and deep acting:

Hypothesis 5: Mindfulness will moderate the mediated relationship between surface acting, self-control, and abusive supervision such that the relationship will be stronger for those higher in mindfulness.

Hypothesis 6: Mindfulness will moderate the mediated relationship between deep acting, self-control, and abusive supervision such that the relationship will be weaker for those higher in mindfulness.

Method

Participants and Procedure

A three-wave study was conducted using online recruitment service *Prolific* (<https://app.prolific.co>) in which a sample of leaders from diverse industries were invited to complete three surveys approximately 2 weeks apart. Eligibility criteria included being in a leadership role, working full-time hours (i.e., greater than 35 hours per week), and fluency in English. Followers were recruited to participate in a single survey at Time 3. We oversampled at Time 1 to achieve the highest number of leader-follower dyads possible at Time 3. Leaders were compensated £3.50 for each survey completed and followers who took part at time 3 were entered in a gift card draw. Ethics approval for the study was obtained by the researchers' ethics board.

A sample of 1,000 leaders were recruited at Time 1 to participate in the study. We assessed careless responding through an attention check question (“Please select strongly agree to this question”) and survey durations that were too fast (less than 40% of the median completion time). Based on these criteria, 973 leaders were invited again at Time 2. At Time 2 885 leaders responded, and of those 857 leaders were retained using the same criteria for data quality as at Time 1. At Time 3, 819 leaders completed the survey and sent invitations to followers to complete the follower survey. Using the same criteria for careless responding, 789 leader responses were retained at Time 3. Of the 789 leaders at Time 3, 123 had one follower who completed the follower survey, leaving a final sample of 123 leader-follower dyads for our analysis.

The mean age of leaders was 36.1 years ($SD = 8.5$ years) and mean organizational tenure of 7.8 years ($SD = 6.5$ years). The average number of years of supervisory experience was 7.5 years ($SD = 6.8$ years) while, on average, participants had 9.8 direct reports ($SD = 18.2$ direct reports). 65 percent of the leaders were male, and 35 percent were female. The mean age of followers was 34.3 years ($SD = 8.9$ years) and mean organizational tenure was 6.8 years ($SD = 5.9$ years). On average, followers worked with their direct supervisor for 3.5 years ($SD = 3.0$ years). 61 percent of the participants were male while 32 percent were female. 8 percent of follower participants did not indicate their gender.

38 percent of participants reported that they were single (never married), 32 percent reported that they were married, 20 percent reported they were living with their partner as a married couple (i.e., common law), and 6 percent noted that they were separated or divorced. 4 percent of participants preferred not to disclose their marital status or reported other. 44 percent

of participants identified as a parent while 57 percent did not. The average number of children parents reported having was 1.8 children ($SD= 1.0$ children).

Participants worked in a variety of different industries. Top industries reported were education (14 percent), healthcare and pharmaceuticals (12 percent), technology and telecommunications (11 percent), manufacturing (9 percent), financial services (9 percent), and retail services (7 percent). Other industries participants reported working in include government (5 percent), non-profit (5 percent), construction (3 percent), and transportation (3 percent). 22 percent worked in other industries.

Measures

Deep Acting (TI) was measured using three items of the self-report Emotional Labour Scale (ELS; Brotheridge & Lee, 2003). Participants were asked to indicate how frequently they experienced a set of statements over the last two weeks at work using a five-point Likert scale with response options ranging from Never (1) to Always (5). A sample item included is “Really try to feel the emotions I have to show as part of my job.”

Surface Acting (TI). We also measured surface acting using three items of the self-report Emotional Labour Scale (ELS; Brotheridge & Lee, 2003). Participants were asked to indicate how frequently they experienced a set of statements over the last two weeks at work using a five-point Likert scale (1= Never; 5= Always). An example of an item include is “Hide my true feelings about a situation.”

Trait Mindfulness (TI) was measured using 15 items from Baer et al., (2008). Participants were asked to indicate how true a set of statements are of them with responses ranging from 1 (Never or very rarely true) to 5 (Very often or always true). Sample items are

“I’m good at finding words to describe my feelings” and “When I have distressing thoughts or images, I just notice them and let them go.”

Self-Control (T2) was measured using 5 items from Christian and Ellis (2011).

Participants were asked to what extent a set of statements described how they felt over the past two weeks. Responses ranged from 1 (Very slightly or not at all) to 5 (Extremely). Sample items are “I have felt drained” and “My mental energy was running low.” All items were reverse coded to indicate higher levels of self-control.

Abusive Supervision (T3) was measured using fifteen items from Tepper et al. (2000)’s abusive supervision scale. Followers were instructed to rate the frequency with which they experienced non-physical abusive acts from their direct supervisor. An example item is “makes negative comments about me to others”. These items were rated on a five-point Likert scale from “I cannot remember him/her ever using this behavior with me” (1) to “He/she uses this behavior very often with me” (5).

Results

Means, standard deviations, Cronbach’s alphas, and correlations of all variables are included in Table 1. The data were tested using standard OLS regression procedures as implemented through Hayes’ (2018) PROCESS 4.0 and leader gender was used as a control in all analyses. Hypothesis 1 and Hypothesis 2 were tested using standard ordinary least squares (OLS) regression procedure. Hypothesis 3 and Hypothesis 4 were tested using Model 4 (mediation and direct effects). For Hypotheses 5 and 6 we employed Model 7 in Hayes’ (2018) PROCESS. Model 7 is a moderated mediation analysis in which the moderation is tested on the first stage of the model (i.e., predictor to mediator) and tests if the moderator changes the strength of the indirect effect on the whole model (Hayes, 2018). Following Hayes’ (2018)

recommendations, unstandardized regression coefficients are reported throughout. Statistical significance of the indirect effects was evaluated using bias-corrected 95% confidence intervals (CI), which each analysis based upon 5,000 bootstrapped resamples. We also followed Hayes' (2018) recommendations in assessing the magnitude of the indirect effects. We used the completely standardized effect which is the direct and indirect effect in terms of the difference in the standard deviations in Y between two cases that differ by one standard deviation in X to assess the effect size of the indirect effects in the initial mediation models (Hypotheses 2 and 3).

Hypothesis 1 was supported as leader surface acting was negatively associated with leader self-control ($b = -.42$, $SE = .11$, $p < .001$). Hypothesis 2 was also supported as deep acting was negatively associated with self-control ($b = -.22$, $SE = .10$; $p = .02$). In support of Hypothesis 3, self-control mediated the relationship between leader surface acting and abusive supervision (indirect effect = $.07$, $SE = .03$, $CI [.02, .14]$; Table 2). The effect size, as reported by the completely standardized effect, was $.102$. Thus, if a leader is one standard deviation higher in surface acting, they will be $.102$ standard deviations higher in abusive supervision as a result of surface acting on self-control. Likewise, self-control mediated the relationship between leader deep acting and abusive supervision, thus supporting Hypothesis 4 (indirect effect = $.04$, $SE = .02$, $CI [.01, .10]$; Table 3). The effect size, as reported by the completely standardized effect, was $.102$. Thus, if a leader is one standard deviation higher in deep acting, they will be $.072$ standard deviations higher in abusive supervision.

Insert Table 2 and 3 about here

Null results occurred regarding Hypotheses 5, as leader trait mindfulness did not moderate the relationship between surface acting and self-control on abusive supervision ($b = -.06$, $SE = .16$, $p = .71$, $CI [-.38, .26]$; Table 4 and 5). Results supported Hypothesis 6 as leader mindfulness moderated the mediated relationship between deep acting, self-control, and abusive supervision, such that the relationship was weaker for those higher in mindfulness (low mindfulness: indirect effect = $.06$, $SE = .03$, $CI [.01, .13]$, average mindfulness: indirect effect = $.04$, $SE = .02$, $CI [.01, .08]$, high mindfulness: indirect effect = $.003$, $SE = .02$, $CI [-.04, .04]$; Tables 6 and 7).

Probing the interaction, leaders who were higher in mindfulness reported higher self-control across varying levels of deep acting. Whereas leaders who reported average or lower mindfulness engaged in lower self-control especially when there are higher levels of deep acting (see Figure 2). We conducted a simple slopes test demonstrating that this effect was significant for lower levels of mindfulness ($b = -.33$, $t[119] = -2.99$, $p = .003$) and average mindfulness ($b = -.20$, $t[119] = -2.63$, $p = .01$), meanwhile the effect was not significant for high levels of mindfulness ($b = -.021$, $t[119] = -.21$, $p = .834$).

 Insert Table 4, 5, 6, and 7 and Figure 2 about here

Discussion

In this research, we integrated emotion regulation theory and ego-depletion theory to develop and test a model that explains the role of leaders' emotional labour on leader self-control and abusive supervision, in addition to the moderating role of mindfulness. As predicted, both leaders' surface and deep acting at Time 1 was related to reduced self-control at Time 2, which

subsequently increased abusive supervision in Time 3 as rated by leaders' followers.

Furthermore, we investigated the boundary condition of mindfulness in this relationship. We found that trait mindfulness buffered the negative effects of deep acting emotional labour on self-control. Specifically, leader mindfulness moderated the mediated relationship such that the mediated relationship between deep acting, self-control, and abusive supervision became weaker. However, leader mindfulness did not moderate the mediated relationship for leader's surface acting, self-control, and abusive supervision. The findings of our study raise several theoretical and practical implications regarding emotional labour in a leadership context.

Theoretical Implications

Our study contributes to the emotional labour literature. Deep acting has long been the 'preferred' type of emotional labour for individuals since it encourages one to genuinely experience desired emotions (Grandey, 2000; Hochschild, 1983). Several studies have suggested that deep acting does not have as much, if any, depleting effects on individuals' resources or self-control compared to surface acting (e.g., Uy et al., 2017), while more recent work has shown potential negative effects of deep acting (Nguyen et al., 2022). Overall, there is considerable debate about the potential downsides of deep acting, making a focus on specific roles (e.g., leadership) and boundary conditions essential. In addition, most studies suggest that one may benefit from deep acting have been conducted in a customer service context. Our study is the first to investigate how deep acting results in depleting effects in a leadership context, and one of the first to investigate the outcomes of leaders' surface acting (e.g., Arnold et al., 2015).

In turn, our findings have several implications for emotional labour, leadership, and abusive supervision research. First, context matters when investigating emotional labour. Namely, leaders may have distinct emotional labour requirements compared to their followers or

front-line staff. For example, leaders must express a much wider variety of emotions, are more likely to identify with their work roles, and are likely to have more variation in the durations of emotional displays (Humphrey et al., 2008). We contribute to the literature suggesting that deep acting may not benefit leaders as much as their followers, and in turn can predict abusive behaviours due to self-control impairment. As called upon by Grandey and Gabriel (2015), we move away from ‘low status’ employees that typically have one-time interactions with customers to leaders that have long-lasting, more intimate relationships with their subordinates. In contrast to studies in the customer service context, we find that leaders are uniquely affected by the emotional demands of their position and occupational requirements.

Second, a bulk of emotional labour research suggests deep acting may not be as harmful to workers compared to surface acting (e.g., Deng et al., 2017; Xanthopoulou et al., 2018). However, our findings suggest that deep acting also has deleterious consequences for leaders’ self-control and subsequent leadership behaviour. This finding provides a unique implication for leadership and well-being research; while deep acting may be beneficial in a customer service context where surface acting is likely the most common strategy, for leaders who require a greater variety of emotional displays with followers, the effort required for deep acting can drain self-control resources to the extent that it leads to abusive behaviours. In addition, we extend and complement previous research finding harmful effects of surface acting for leaders. Arnold et al. (2015) found that surface acting predicted leader burnout, while Yam et al. (2016) found that leaders who surface act in customer service contexts are likely to abuse followers due to reductions in self-control. In our study, we similarly find surface acting to predict reduced self-control and increased supervision for leaders in a broader range of industries. Taken together, our study demonstrates the value of investigating emotional labour in leadership by showing the

draining nature of both emotional labour strategies and the implications this has for leader behaviour. While deep acting may be recommended in customer service roles to maintain well-being and high performance, our study suggests that alternative strategies (such as genuine emotional expression) should be considered in future research on emotional labour in leadership.

Third, regarding abusive supervision, previous research has primarily focused on external antecedents of abusive supervision such as situational stress, without fully considering leaders own resource-depleting behaviours (such as emotional labour; Zhang & Bednall, 2016). Our research provides further insight into the antecedents of leaders' abusive supervisory behaviour. Recent reviews of predictors of abusive supervision indicate that studies have primarily investigated organizational-, subordinate-, and demographic-related antecedents of abusive supervision (Zhang & Bednall, 2016). Our study complements past research by identifying depleted self-control stemming from emotional labour strategies as a mechanism that contributes to leaders' abusive supervision and builds upon our understanding of self-regulation related antecedents (Yam et al., 2016). Indeed, Tepper et al.'s (2017) review of abusive supervision categorizes mechanisms leading to abusive supervision into three categories—social learning, identity threat, and self-regulation impairment—and called upon research to understand these mechanisms. Our research indicates that the emotional labour strategies of surface acting and deep acting required in leadership roles contributes to leaders losing self-control and subsequently engaging in abusive supervisory behaviours. With regards to deep acting, considering that deep acting is intentional and likely part of a leaders' desire to be effective in their role, its potential to lead to abusive behaviours is counterintuitive and raises questions about whether deep acting is indeed a preferred emotion regulation strategy within leadership.

Fourth, we contribute to both the mindfulness and emotional labour literatures by demonstrating leaders' mindfulness as an important boundary condition to consider in relation to emotional labour, self-control and abusive supervision. Lyddy et al. (2021) recently found that mindfulness had a 'dark side' in relation to surface acting, self-control and performance outcomes for employees; in their study more mindful individuals had more drastic decreases in self-control and subsequent impairments in performance following surface acting. However, in our study we found a null result in relation to the interaction between surface acting and mindfulness. One potential explanation of this null model could be the case that deep acting is more relevant in leadership than surface acting, making the moderating role of mindfulness significant and meaningful for deep and not surface acting. Indeed, early conceptual work on this topic has highlighted the broader range of emotions, varying frequency and durations of emotional displays required by leaders in comparison to customer service employees (Humphrey et al., 2008). It would be fruitful for future research to continue to search for factors that might buffer the relationship between surface acting, self-control, and abusive supervision to further understand how leaders could mitigate the effects of this resource-depleting behaviour.

In contrast, for deep acting (particularly in the context of leadership) our study shows that higher levels of mindfulness may alleviate this demand to ultimately improve leader behaviour. Given that deep acting is a more effective emotional labour strategy in general and especially in leadership roles (Grandey, 2003), the role of mindfulness is promising in allowing leaders to maintain this strategy while lowering the potential frequency of abusive behaviour. According to Glomb et al.'s (2011) framework, mindfulness allows for decoupling of the self from the immediate situation and for greater empathy toward others. Considering our findings in relation to Glomb et al.'s (2011) framework, we suggest that mindful leaders are better able to detach

from challenges in their immediate environment and can more easily put themselves in the shoes of others (i.e., greater empathy), making deep acting less demanding and resource-draining. In turn, mindful leaders are able to engage in deep acting without experiencing decreases in self-control and increases in abusive supervision to the same extent as less mindful leaders. Overall, our findings indicate that mindfulness can replenish depleted resources when leaders are depleted from engaging in deep acting. We suggest this is due to the congruence between deep acting and mindfulness such that, leaders high in trait mindfulness more fully detach themselves from the situation to maintain self-control and less abusive behaviour.

Finally, we suggest the limited focus on leaders' mental health (see Barling & Cloutier, 2017) along with the pointed focus of emotional labour's impact on front line workers (see Grandey & Gabriel, 2015) has created a blind spot in management literature. Barling and Cloutier's (2017) review of leaders and mental health called upon researchers to better understand the impact of leaders' well-being in relation to leader behaviour. While previous studies have shown the positive effect high quality leadership has on subordinates (e.g., Arnold, 2017), limited studies have investigated leaders' own well-being and its relationship to leader behaviours. Our results find that by engaging in the emotional labour required in leadership, leaders' self-control may be depleted to the extent that they engage in abusive supervision.

Practical Implications

Our study offers two practical implications. First, organizations should be aware of the consequences of leaders engaging in both surface and deep acting. Though leaders are often required to manage subordinates' emotions and create passion and enthusiasm among followers (Ashkanasy & Daus, 2002), the findings of this research indicate that this requirement can ultimately translate to abusive behaviour. For deep acting, trait mindfulness moderates the

relationship between decreased self-control and abusive supervision. Thus, organizations may want to consider implementing mindfulness training programs such as Mindfulness Based Stress Reduction (MBSR), as previous research indicates that mindfulness meditation (state mindfulness) can increase trait mindfulness over time (Kiken & Shook, 2014). As discussed earlier, deep acting is potentially more relevant to leadership than surface acting (Humphrey et al., 2008), so the buffering role of mindfulness may help to decrease the frequency of abusive behaviours for leaders who must deep act as part of their work roles.

Second, findings from our research offer guidance for organizational interventions of a depleted leader. In a revised model of emotional labour, Grandey and Melloy (2017) suggest that emotional labour antecedents can be attributed to three levels: work context, person, and event. While more research is required, previous studies have pointed to display rules as a current dominant factor in workers engaging in emotional labour (e.g., Allen et al., 2010; Gosserand & Diefendorff, 2005). Hence, organizations may want to revisit their culture, policies, and values to ensure there are no direct or indirect calls for surface or deep acting. Organizations should encourage an organizational culture and environment (i.e., psychologically safe) that encourages and allows authentic display of emotions among leaders.

Finally, organizations may want to consider integrating mindfulness practices in leadership development programs. Many studies have found that effective leadership requires adequate self-regulatory capacity (e.g., Collins & Jackson, 2015; Yeow & Martin, 2013) and increasing mindfulness can play a significant role in aiding in enhancing those self-regulatory resources (e.g., Grover et al., 2017; Roche et al., 2014; Walsh & Arnold, 2018). Mindfulness interventions have been found to reduce leaders' burnout (Ceravolo & Raines, 2019) and stress, while also boosting their team's productivity and performance (Kersemakers et al., 2018). Thus,

integrating mindfulness training in leadership development programs can be advantageous to ensure leaders are well-equipped for potentially depleting demands, such as engaging in emotional labour (Bartlett et al., 2019; Burton et al., 2016; Manigault et al., 2021; Roche et al., 2020).

Study Limitations

While this research had many strengths such as, longitudinal design, and leader-follower dyad participants, it is not without limitations. First, data from all time-points were obtained by an online panel provider (Prolific.co). While using a panel service had an important advantage of allowing us to access a large sample of leaders, some critics question the attentiveness and representativeness of such samples (Porter et al., 2019). However, studies investigating the data quality of panel services, like Prolific, found that online panels tend to be similar in representativeness (Walter et al., 2019) and that data quality meets or exceeds those from traditional sources (Behrend et al., 2011). In addition, we followed best practices outlined by Porter and colleagues (2019) including temporally separating our independent and dependent variables, use of built-in qualification features, and use of attention check questions. Overall, we found the benefits of accessing a large number of leaders to outweigh potential limitations of this recruitment strategy.

This study also contains some methodological limitations. Although we used two data sources—leaders and their followers—most items like, deep acting, self-control, and trait mindfulness, were self-reported, which could contribute to common method variance (Podsakoff et al., 2003). However, the presence of significant moderating outcomes does lessen this concern, as does collecting these variables at different time points (Siemsen et al., 2010; Lyubykh et al., 2022).

Future Research Directions

The findings of our research raise some interesting directions for new investigations. First, the focus of our research was to investigate how the emotional labour required in leadership may influence leader behaviour. Our study found that emotional labour contributes to low quality leadership behaviours. Future studies may want to investigate if emotional labour has a harmful impact of other areas for leaders, such as work-family conflict (e.g., Carlson et al., 2011; 2012) or leader's own mental health outcomes, such as depression or anxiety levels (e.g., Byrne et al., 2014). In addition, our research found that trait mindfulness buffered the effects of deep acting on leadership behaviours. Thus, future research should take an experimental approach to test the efficacy of mindfulness meditation training to increase trait mindfulness of leaders. While mindfulness was an important moderator in this relationship there might also be other important boundary conditions related to self-control resources, such as sleep. Baumeister et al. (2000) speculated that sleep is essential for replenishing depleted self-control resources and thus sleep might be another way leaders can mitigate the negative effects of deep acting on abusive supervision. Given that we obtained null results regarding the moderating effect of leader trait mindfulness on surface acting, self-control, and abusive supervision, it is important to for future research to further investigate the role of mindfulness for leaders who need to surface act. Other methods may be beneficial to further understand the role of mindfulness in relation to surface acting; for example, an intensive longitudinal design (such as a daily diary methodology) may allow researchers to better capture the fluctuations of both strategies in relation to mindfulness, self-control, and behavioural outcomes.

Conclusion

In this study, we highlight the depleting role of emotional labour in a leadership context and demonstrate that trait mindfulness can be a useful resource to mitigate the harmful effects of deep acting on leaders. Through this study we highlight that surface acting and deep acting reduce leader self-control and predict abusive supervision. However, trait mindfulness can buffer these effects for leaders' deep acting. While this study was multi-wave, only multi-source data was collected at one time point. To continue this avenue of research, we suggest that scholars conduct experimental and intensive longitudinal studies to continue to capture the nuances of mindfulness in relation to emotional labour, self-control and abusive supervision.

References

- Aasland, M. S., Skogstad, A., Notelaers, G., Nielsen, M. B., & Einarsen, S. (2010). The prevalence of destructive leadership behaviour. *British Journal of Management*, *21*(2), 438-452. Doi: 10.1111/j.1467-8551.2009.00672.x
- Alabak, M., Hülshager, U. R., Zijlstra, F. R. H., & Verduyn, P. (2020). More than one strategy: A closer examination of the relationship between deep acting and key employee outcomes. *Journal of Occupational Health Psychology*, *25*(1), 32–45. Doi: 10.1037/ocp0000152
- Allen, J. A., Pugh, S. D., Grandey, A. A., & Groth, M. (2010). Following display rules in good or bad faith?: Customer orientation as a moderator of the display rule-emotional labor relationship. *Human Performance*, *23*(2), 101-115. Doi: 10.1080/08959281003621695
- Arendt, J. F. W., Pircher Verdorfer, A., & Kugler, K. G. (2019). Mindfulness and leadership: communication as a behavioral correlate of leader mindfulness and its effect on follower satisfaction. *Frontiers in Psychology*, *10*, 667–667. Doi: 10.3389/fpsyg.2019.00667
- Arnold, K. A., Connelly, C. E., Walsh, M. M., & Martin Ginis, K. A. (2015). Leadership styles, emotion regulation, and burnout. *Journal of Occupational Health Psychology*, *20*(4), 481-490. Doi: 10.1037/a0039045
- Arnold, K. A. (2017). Transformational leadership and employee psychological well-being: A review and directions for future research. *Journal of Occupational Health Psychology*, *22*(3), 381-393. Doi: 10.1037/ocp0000062
- Ashforth, B. E., & Humphrey, R. H. (1993). Emotional labor in service roles: The influence of identity. *Academy of Management Review*, *18*(1), 88-115.
- Ashkanasy, N. M., & Daus, C. S. (2002). Emotion in the workplace: The new challenge for managers. *Academy of Management Perspectives*, *16*(1), 76-86. Doi: 10.5465/ame.2002.6640191
- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., ... & Williams, J. M. G. (2008). Construct validity of the five-facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment*, *15*(3), 329-342. doi: 10.1177/1073191107313003
- Bartlett, L., Martin, A., Neil, A. L., Memish, K., Otahal, P., Kilpatrick, M., & Sanderson, K. (2019). A systematic review and meta-analysis of workplace mindfulness training randomized controlled trials. *Journal of Occupational Health Psychology*, *24*(1), 108-126. doi: [10.1037/ocp0000146](https://doi.org/10.1037/ocp0000146)

- Barling, J., & Cloutier, A. (2017). Leaders' mental health at work: Empirical, methodological, and policy directions. *Journal of Occupational Health Psychology, 22*(3), 394-406. Doi: 10.1037/ocp0000055
- Barnes, C. M., Lucianetti, L., Bhave, D. P., & Christian, M. S. (2015). "You wouldn't like me when I'm sleepy": Leaders' sleep, daily abusive supervision, and work unit engagement. *Academy of Management Journal, 58*(5), 1419-1437. Doi: 10.5465/amj.2013.1063
- Barnes, C. M., Schaubroeck, J., Huth, M., & Ghumman, S. (2011). Lack of sleep and unethical conduct. *Organizational Behavior and Human Decision Processes, 115*(2), 169-180. <https://doi.org/10.1016/j.obhdp.2011.01.009>
- Baron, L., Rouleau, V., Grégoire, S., & Baron, C. (2018). Mindfulness and leadership flexibility. *The Journal of Management Development, 37*(2), 165–177. Doi: 10.1108/JMD-06-2017-0213
- Baumeister, R. F. (2014). Self-regulation, ego depletion, and inhibition. *Neuropsychologia, 65*, 313-319. Doi: 10.1016/j.neuropsychologia.2014.08.012
- Baumeister, R. F., Bratslavsky, E., Muraven, M., & Tice, D. M. (1998). Ego depletion. *Journal of Personality and Social Psychology, 74*(5), 1252–1265. Doi: 10.1037/0022-3514.74.5.1252
- Baumeister, R. F., Muraven, M., & Tice, D. M. (2000). Ego depletion: A resource model of volition, self-regulation, and controlled processing. *Social Cognition, 18*, 130-150.
- Behrend, T. S., Sharek, D. J., Meade, A. W., & Wiebe, E. N. (2011). The viability of crowdsourcing for survey research. *Behavior Research Methods, 43*(3), 800-813. Doi: 10.3758/s13428-011-0081-0
- Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self-compassion and empathy in the context of mindfulness-based stress reduction (MBSR). *Stress and Health, 26*(5), 359-371. doi: 10.1002/smi.1305
- Bolton, L. R., Harvey, R. D., Grawitch, M. J., & Barber, L. K. (2012). Counterproductive work behaviours in response to emotional exhaustion: A moderated mediational approach. *Stress and Health, 28*(3), 222-233. Doi: 10.1002/smi.1425
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work". *Journal of Vocational Behavior, 60*(1), 17–39. Doi: 10.1006/jvbe.2001.1815

- Brotheridge, C. M., & Lee, R. T. (2003). Development and validation of the emotional labour scale. *Journal of Occupational and Organizational Psychology*, *76*(3), 365-379. Doi: 10.1348/096317903769647229
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822-848. Doi: 10.1037/0022-3514.84.4.822
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, *18*(4), 211-237. doi: 10.1080/10478400701598298
- Burch, G. F., Batchelor, J. H., & Humphrey, R. H. (2013). Emotional labor for entrepreneurs: A natural and necessary extension. *Entrepreneurship Research Journal*, *3*(3), 331-366. Doi: 10.1515/erj-2012-0022
- Burton, A., Burgess, C., Dean, S., Koutsopoulou, G. Z., & Hugh-Jones, S. (2017). How effective are mindfulness-based interventions for reducing stress among healthcare professionals? A systematic review and meta-analysis. *Stress and Health*, *33*(1), 3-13. doi: [10.1002/smi.2673](https://doi.org/10.1002/smi.2673)
- Byrne, A., Dionisi, A. M., Barling, J., Akers, A., Robertson, J., Lys, R., ... & Dupré, K. (2014). The depleted leader: The influence of leaders' diminished psychological resources on leadership behaviors. *The Leadership Quarterly*, *25*(2), 344-357. doi: 10.1016/j.leaqua.2013.09.003.
- Carlson, D. S., Ferguson, M., Perrewé, P. L., & Whitten, D. (2011). The fallout from abusive supervision: An examination of subordinates and their partners. *Personnel Psychology*, *64*(4), 937-961. doi: 10.1111/j.1744-6570.2011.01232.x
- Carlson, D., Ferguson, M., Hunter, E., & Whitten, D. (2012). Abusive supervision and work-family conflict: The path through emotional labor and burnout. *The Leadership Quarterly*, *23*(5), 849-859. doi: 10.1016/j.leaqua.2012.05.003
- Ceravolo, D., & Raines, D. A. (2019). The impact of a mindfulness intervention for nurse managers. *Journal of Holistic Nursing*, *37*(1), 47-55. doi: 10.1177/0898010118781620
- Christian, M. S., & Ellis, A. P. (2011). Examining the effects of sleep deprivation on workplace deviance: A self-regulatory perspective. *Academy of Management Journal*, *54*(5), 913-934. doi:10.5465/amj.2010.0179

- Collins, M. D., & Jackson, C. J. (2015). A process model of self-regulation and leadership: How attentional resource capacity and negative emotions influence constructive and destructive leadership. *The Leadership Quarterly*, 26(3), 386-401. doi: 10.1016/j.leaqua.2015.02.005
- Dang, J., Xiao, S., Liu, Y., Jiang, Y., & Mao, L. (2016). Individual differences in dopamine level modulate the ego depletion effect. *International Journal of Psychophysiology*, 99, 121–124. doi: 10.1016/j.ijpsycho.2015.11.013
- Deng, H., Walter, F., Lam, C. K., & Zhao, H. H. (2017). Spillover effects of emotional labor in customer service encounters toward coworker harming: A resource depletion perspective. *Personnel Psychology*, 70(2), 469-502. doi: 10.1111/peps.12156
- Erks, R., Nyquist, E., Allen, J., & Rogelberg, S. (2017). Regulating emotions in response to power distance in meetings. *The Journal of Management Development*, 36(10), 1247–1259. doi: 10.1108/JMD-10-2016-0213
- Gardner, W. L., Fischer, D., & Hunt, J. G. J. (2009). Emotional labor and leadership: A threat to authenticity?. *The Leadership Quarterly*, 20(3), 466-482. doi: 10.1016/j.leaqua.2009.03.011
- Glomb, T. M., Duffy, M. K., Bono, J. E., & Yang, T. (2011). Mindfulness at Work. In Joshi, A., Liao, H. and Martocchio, J. J. (Eds.), *Research in Personnel and Human Resources Management* (pp. 115-157), Emerald Group Publishing Limited. doi: 10.1108/S0742-7301(2011)0000030005
- Gosserand, R. H., & Diefendorff, J. M. (2005). Emotional display rules and emotional labor: the moderating role of commitment. *Journal of Applied Psychology*, 90(6), 1256-1264. doi: 10.1037/0021-9010.90.6.1256
- Grandey, A. A. (2000). Emotional regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5(1), 95-110. doi: 10.1037/1076-8998.5.1.95
- Grandey, A. A. (2003). When “the show must go on”: Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46(1), 86–96. doi: 10.2307/30040678
- Grandey, A. A., Frone, M. R., Melloy, R. C., & Sayre, G. M. (2019). *Journal of Occupational Health Psychology*, 24(4), 482-497. doi: [10.1037/ocp0000147](https://doi.org/10.1037/ocp0000147)

- Grandey, A. A., & Gabriel, A. S. (2015). Emotional labor at a crossroads: Where do we go from here? *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 323-349. doi: 10.1146/annurev-orgpsych-032414-111400
- Grandey, A. A., & Melloy, R. C. (2017). The state of the heart: Emotional labor as emotion regulation reviewed and revised. *Journal of Occupational Health Psychology*, 22(3), 407. doi: 10.1037/ocp0000147
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271-299. doi: 10.1037/0022-3514.74.1.224
- Gross, J. J. (2014). Emotion regulation: Conceptual and empirical foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (2nd ed., pp. 3–20). Guilford Press.
- Grover, S. L., Teo, S. T., Pick, D., & Roche, M. (2017). Mindfulness as a personal resource to reduce work stress in the job demands-resources model. *Stress and Health*, 33(4), 426-436. doi: [10.1002/smi.2726](https://doi.org/10.1002/smi.2726)
- Hagger, M. S., Wood, C., Stiff, C., & Chatzisarantis, N. L. D. (2010). Ego depletion and the strength model of self-control: A meta-analysis. *Psychological Bulletin*, 136(4), 495–525. doi: 10.1037/a0019486
- Harms, P. D., Credé, M., Tynan, M., Leon, M., & Jeung, W. (2017). Leadership and stress: A meta-analytic review. *The Leadership Quarterly*, 28(1), 178-194. doi: 10.1016/j.leaqua.2016.10.006
- Hawkes, A. J., & Neale, C. M. (2020). Mindfulness beyond wellbeing: Emotion regulation and team-member exchange in the workplace. *Australian Journal of Psychology*, 72(1), 20–30. doi: 10.1111/ajpy.12255
- Hayes, A. F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4-40. doi: 10.1080/03637751.2017.1352100
- Hochschild, A. (1983). *The managed heart: Commercialization of human feeling*. University of California Press.
- Humphrey, R. H. (2012). How do leaders use emotional labor? *Journal of Organizational Behavior*, 33(5), 740–744. doi: 10.1002/job.1791
- Humphrey, R. H., Pollack, J. M., & Hawver, T. (2008). Leading with emotional labor. *Journal of Managerial Psychology*, 23(2), 151–168. doi: 10.1108/02683940810850790

- Hülshager, U. R., Alberts, H. J. E. M., Feinholdt, A., & Lang, J. W. B. (2013). Benefits of mindfulness at work: The role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. *Journal of Applied Psychology, 98*(2), 310–325. doi: 10.1037/a0031313
- Hülshager, U. R., Lang, J. W., & Maier, G. W. (2010). Emotional labor, strain, and performance: Testing reciprocal relationships in a longitudinal panel study. *Journal of Occupational Health Psychology, 15*(4), 505-521. doi: 10.1037/a0021003
- Hülshager, U. R., & Schewe, A. F. (2011). On the costs and benefits of emotional labor: A meta-analysis of three decades of research. *Journal of Occupational Health Psychology, 16*(3), 361–389. doi: 10.1037/a0022876
- Huppertz, A. V., Hülshager, U. R., De Calheiros Velozo, J., & Schreurs, B. H. (2020). Why do emotional labor strategies differentially predict exhaustion? Comparing psychological effort, authenticity, and relational mechanisms. *Journal of Occupational Health Psychology, 25*(3), 214-226. doi: 10.1037/ocp0000179
- Joosten, A., van Dijke, M., Van Hiel, A., & De Cremer, D. (2014). Being "in control" may make you lose control: The role of self-regulation in unethical leadership behavior. *Journal of Business Ethics, 121*(1), 1–14. doi: 10.1007/s10551-013-1686-2
- Kersemaekers, W. M., Rupperecht, S., Wittmann, M., Tamdjidi, C., Falke, P., Donders, A. R. T., Speckens, A. E. M., & Kohls, N. (2018). A workplace mindfulness intervention may be associated with improved psychological well-being and productivity. A preliminary field study in a company setting. *Frontiers in Psychology, 9*, 195–195. doi: 10.3389/fpsyg.2018.00195
- Kiken, L. G., & Shook, N. J. (2014). Does mindfulness attenuate thoughts emphasizing negativity, but not positivity?. *Journal of Research in Personality, 53*, 22-30. doi: 10.1016/j.jrp.2014.08.002
- Lennard, A. C., Scott, B. A., & Johnson, R. E. (2019). Turning frowns (and smiles) upside down: A multilevel examination of surface acting positive and negative emotions on well-being. *Journal of Applied Psychology, 104*(9), 1164 -1180. doi: 10.1037/apl0000400

- Liang, L. H., Lian, H., Brown, D., Ferris, D. L., Hanig, S., & Keeping, L. (2016). Why are abusive supervisors abusive? A dual-system self-control model. *Academy of Management Journal*, *59*(4), 1385–1406. doi: 10.5465/amj.2014.0651
- Lin, S. H. J., Ma, J., & Johnson, R. E. (2016). When ethical leader behavior breaks bad: How ethical leader behavior can turn abusive via ego depletion and moral licensing. *Journal of Applied Psychology*, *101*(6), 815-830. doi: 10.1037/apl0000098
- Long, E. C., & Christian, M. S. (2015). Mindfulness buffers retaliatory responses to injustice: A regulatory approach. *Journal of Applied Psychology*, *100*(5), 1409-1422. doi: 10.1037/apl0000019
- Lyddy, C. J., Good, D. J., Bolino, M. C., Thompson, P. S., & Stephens, J. P. (2021). The costs of mindfulness at work: The moderating role of mindfulness in surface acting, self-control depletion, and performance outcomes. *Journal of Applied Psychology*. Advance online publication. doi: 10.1037/apl0000863
- Lyubkykh, Z., Gulseren, D., Turner, N., Barling, J., & Seifert, M. (2022). Shared transformational leadership and safety behaviours of employees, leaders, and teams: A multilevel investigation. *Journal of Occupational and Organizational Psychology*, *95*(2), 431-458. doi: 10.1111/joop.1238
- Mackey, J. D., Frieder, R. E., Brees, J. R., & Martinko, M. J. (2017). Abusive supervision: A meta-analysis and empirical review. *Journal of Management*, *43*(6), 1940-1965. doi: 10.1177/0149206315573997
- Manigault, A. W., Slutsky, J., Raye, J., & Creswell, J. D. (2021). Examining practice effects in a randomized controlled trial: Daily life mindfulness practice predicts stress buffering effects of mindfulness meditation training. *Mindfulness*, *12*(10), 2487-2497. doi: 10.1007/s12671-021-01718-1
- Martinko, M. J., Harvey, P., Brees, J. R., & Mackey, J. (2013). A review of abusive supervision research. *Journal of Organizational Behavior*, *34*(S1), S120-S137. doi: 10.1002/job.1888
- Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle?. *Psychological bulletin*, *126*(2), 247-259. doi: 10.1037//0033-2909.126.2.247

- Nguyen, N., Besson, T., & Stinglhamber, F. (2022). Emotional labor: The role of organizational dehumanization. *Journal of Occupational Health Psychology, 27*(2), 179-194. doi: 10.1037/ocp0000289
- Porter, C. O., Outlaw, R., Gale, J. P., & Cho, T. S. (2019). The use of online panel data in management research: A review and recommendations. *Journal of Management, 45*(1), 319-344. doi: 10.1177/0149206318811569
- Reb, J., Narayanan, J., & Chaturvedi, S. (2014). Leading mindfully: Two studies on the influence of supervisor trait mindfulness on employee well-being and performance. *Mindfulness, 5*(1), 36–45. doi: 10.1007/s12671-012-0144-z
- Roche, M., Good, D., Lyddy, C., Tuckey, M. R., Grazier, M., Leroy, H., & Hülsheger, U. (2020). A Swiss army knife? How science challenges our understanding of mindfulness in the workplace. *Organizational Dynamics, 49*(4), 100766. doi: 10.1016/j.orgdyn.2020.100766
- Roche, M., Haar, J. M., & Luthans, F. (2014). The role of mindfulness and psychological capital on the well-being of leaders. *Journal of Occupational Health Psychology, 19*(4), 476-489. doi: [10.1037/a0037183](https://doi.org/10.1037/a0037183)
- Sato, T., Harman, B. A., Donohoe, W. M., Weaver, A., & Hall, W. A. (2010). Individual differences in ego depletion: The role of sociotropy-autonomy. *Motivation and Emotion, 34*(2), 205–213. doi: 10.1007/s11031-010-9166-9
- Shao, B., Lin, X., & Duan, J. (2022). How leader emotional labour is associated with creativity: A self-determination theory perspective. *Applied Psychology*. <https://doi.org/10.1111/apps.12418>
- Siemens, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods, 13*(3), 456-476. doi: 10.1177/1094428109351241
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality, 72*(2), 271-324. doi: 10.1111/j.0022-3506.2004.00263.x
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43*(2), 178-190. doi:10.5465/1556375

- Tepper, B. J., Duffy, M. K., Henle, C. A., & Lambert, L. S. (2006). Procedural injustice, victim precipitation, and abusive supervision. *Personnel Psychology, 59*(1), 101–123. doi: 10.1111/j.1744-6570.2006.00725.x
- Tepper, B. J., Simon, L., & Park, H. M. (2017). Abusive supervision. *Annual Review of Organizational Psychology and Organizational Behavior, 4*, 123-152. doi: 10.1146/annurev-orgpsych-041015-062539
- Uy, M. A., Lin, K. J., & Ilies, R. (2017). Is it better to give or receive? The role of help in buffering the depleting effects of surface acting. *Academy of Management Journal, 60*(4), 1442-1461. doi: 10.5465/amj.2015.0611
- Walsh, M. M., & Arnold, K. A. (2018). Mindfulness as a buffer of leaders' self-rated behavioral responses to emotional exhaustion: A dual process model of self-regulation. *Frontiers in Psychology, 9*, 2498–2498. doi: 10.3389/fpsyg.2018.02498
- Walter, S. L., Seibert, S. E., Goering, D., & O'Boyle, E. H. (2019). A tale of two sample sources: Do results from online panel data and conventional data converge?. *Journal of Business and Psychology, 34*(4), 425-452. doi: 10.1007/s10869-018-9552-y
- Whetten, D. A., & Cameron, K. S. (2011). *Developing Management Skills*. Prentice Hall.
- Xanthopoulou, D., Bakker, A. B., Oerlemans, W. G., & Koszucka, M. (2018). Need for recovery after emotional labor: Differential effects of daily deep and surface acting. *Journal of Organizational Behavior, 39*(4), 481-494. doi: 10.1002/job.2245
- Yam, K. C., Fehr, R., Keng-Highberger, F. T., Klotz, A. C., & Reynolds, S. J. (2016). Out of control: A self-control perspective on the link between surface acting and abusive supervision. *Journal of Applied Psychology, 101*(2), 292-301. doi:10.1037/apl0000043
- Yao, Y., & Zhang, L. (2020, November). Emotional Labor and Job Burnout of the Construction Project Managers: The Mediating Effect of Work-to-Family Conflict. In *Construction Research Congress 2020: Safety, Workforce, and Education* (pp. 356-365). Reston, VA: American Society of Civil Engineers.
- Yeow, J., & Martin, R. (2013). The role of self-regulation in developing leaders: A longitudinal field experiment. *The Leadership Quarterly, 24*(5), 625-637. doi: 10.1016/j.leaqua.2013.04.004
- Zhang, Y., & Bednall, T. C. (2016). Antecedents of abusive supervision: A meta-analytic review. *Journal of Business Ethics, 139*(3), 455-471. doi: 10.1007/s10551-015-2657-6

Zhang, H., Zhou, Z. E., Liu, Y., Shi, Y., & Xiao, J. (2022). Too depleted to control yourself? Effect of customer mistreatment on after-work maladaptive behaviours through self-control capacity impairment. *Applied Psychology, 71*(1), 27-48. doi: 10.1111/apps.12310

Table 1: Descriptive Statistics and Correlations

| Measures | <i>M</i> | <i>SD</i> | α | 1 | 2 | 3 | 4 | 5 |
|-----------------------------|----------|-----------|----------|-------|--------|-------|--------|--------|
| 1. Gender (T1) ^a | 1.35 | .48 | - | - | | | | |
| 2. Surface Acting (T1) | 2.60 | .88 | .79 | .01 | - | | | |
| 3. Deep Acting (T1) | 2.64 | 1.04 | .80 | 0.15 | .40** | - | | |
| 4. Mindfulness (T1) | 3.38 | .59 | .83 | 0.11 | -.37** | -.09 | - | |
| 5. Self-control (T2) | 3.53 | 1.10 | .94 | -0.11 | -.34** | -.22* | .61** | - |
| 6. Abusive Supervision (T3) | 1.41 | .59 | .95 | -0.16 | .21* | .12 | -.35** | -.34** |

Note: $N=123$

^a Sixty-five percent of leaders were male and 35 percent were female.

**correlation is significant at .01 (2-tailed);

*correlation is significant at .05 (2-tailed)

Table 2: Direct and indirect effects model coefficients for effects of surface acting on abusive supervision

| Antecedent | Consequent | | | | | | | | | |
|---------------------------|--|-----------|----------|------|------|--|-----------|----------|------|------|
| | Self-control, T2 (M) | | | | | Abusive supervision, T3 (Y) | | | | |
| | Coeff | <i>SE</i> | <i>p</i> | LLCI | ULCI | Coeff | <i>SE</i> | <i>p</i> | LLCI | ULCI |
| Surface Acting, T1 (X) | -.43 | .11 | <.01 | -.64 | -.22 | .07 | .06 | .23 | -.05 | .19 |
| Self-control T2 (M) | - | - | - | - | - | -.17 | .05 | <.01 | -.27 | -.08 |
| Indirect effect of X on Y | - | - | - | - | - | .07 | .03 | - | .02 | .14 |
| | $R^2 = .12$ $F(1, 121) = 16.1, p = <.001$ | | | | | $R^2 = .12$ $F(2, 120) = 8.50, p = <.001$ | | | | |

Note: X = independent variable (surface acting T1); Y = outcome (abusive supervision T3); M = mediator (self-control T2); LLCI = lower level of confidence interval; ULCI = upper limit of confidence interval.

Table 3: Direct and indirect effects model coefficients for effects of deep acting on abusive supervision

| Antecedent | Consequent | | | | | | | | | |
|---------------------------|---|-----|----------|------|------|--|-----|----------|------|------|
| | Self-control, T2 (M) | | | | | Abusive supervision, T3 (Y) | | | | |
| | Coeff | SE | <i>p</i> | LLCI | ULCI | Coeff | SE | <i>p</i> | LLCI | ULCI |
| Deep Acting, T1 (X) | -.23 | .09 | .01 | -.42 | -.05 | .03 | .05 | .60 | -.07 | .13 |
| Self-control T2 (M) | - | - | - | - | - | -.17 | .05 | <.01 | -.27 | -.08 |
| Indirect effect of X on Y | - | - | - | - | - | .04 | .02 | - | .01 | .09 |
| | $R^2 = .22$ $F(1, 121) = 6.18, p = .014$ | | | | | $R^2 = .12$ $F(2, 120) = 7.84, p = <.001$ | | | | |

Note: X = independent variable (deep acting T1); Y = outcome (abusive supervision T3); M = mediator (self-control T2); LLCI = lower level of confidence interval; ULCI = upper limit of confidence interval.

Table 4: Regression results (moderated mediation) of surface acting on abusive supervision

| Antecedent | Consequent | | | | | | | | | |
|------------------------------|---|-----|----------|-------|------|--|-----|----------|------|------|
| | Self-control, T2 (M) | | | | | Abusive supervision, T3 (Y) | | | | |
| | Coeff | SE | <i>p</i> | LLCI | ULCI | Coeff | SE | <i>p</i> | LLCI | ULCI |
| Surface acting T1 (X) | .04 | .54 | .94 | -1.03 | 1.11 | .07 | .06 | .26 | -.05 | .19 |
| Mindfulness T1 (W) | 1.24 | .40 | <.01 | .46 | 2.02 | - | - | - | - | - |
| Surface acting x Mindfulness | -.06 | .16 | .71 | -.38 | .26 | - | - | - | - | - |
| Self-control T2 (M) | - | - | - | - | - | -.17 | .05 | <.01 | -.27 | -.08 |
| Gender T1 (C) | -.41 | .16 | .01 | -.74 | -.09 | -.25 | .10 | .02 | -.46 | -.04 |
| | $R^2 = .42$ $F(4, 118) = 21.64, p = .00$ | | | | | $R^2 = .16$ $F(3, 119) = 7.76, p = <.001$ | | | | |

Note: X = independent variable (surface acting T1); Y = outcome (abusive supervision T3); M = mediator (self-control T2); W= moderator (mindfulness T1); C = covariate (leader gender); LLCI = lower level of confidence interval; ULCI = upper limit of confidence interval.

Table 5: Conditional indirect effects of surface acting on abusive supervision (moderated mediation)

| Consequent: Abusive supervision | | | | |
|---------------------------------|-----------------|-----|------|------|
| Mediator: Self-control | | | | |
| | Indirect effect | SE | LLCI | UCLI |
| Low mindfulness | .02 | .03 | -.03 | .09 |
| Average mindfulness | .03 | .02 | -.01 | .08 |
| High mindfulness | .04 | .03 | -.02 | .10 |

Note: LLCI = lower level of confidence interval; ULCI = upper limit of confidence interval.

Table 6: Regression results (moderated mediation) of deep acting on abusive supervision

| Antecedent | Consequent | | | | | | | | | |
|---------------------------|---|-----|-----|-------|------|--|-----|------|------|------|
| | Self-control, T2 (M) | | | | | Abusive Supervision, T3 (Y) | | | | |
| | Coeff | SE | p | LLCI | ULCI | Coeff | SE | p | LLCI | ULCI |
| Deep acting, T1 (X) | -1.10 | .46 | .02 | -2.01 | -.19 | .04 | .05 | .41 | -.06 | .14 |
| Mindfulness T1 (W) | .43 | .37 | .24 | -.30 | 1.18 | - | - | - | - | - |
| Deep acting x Mindfulness | .27 | .13 | .04 | .01 | .52 | - | - | - | - | - |
| Self-control T2 (M) | - | - | - | - | - | -.18 | .05 | <.01 | -.28 | -.09 |
| Gender T1 (C) | -.37 | .16 | .02 | -.69 | -.05 | -.26 | .11 | .01 | -.47 | -.05 |
| | $R^2 = .45$ $F(4, 118) = 24.14, p = .00$ | | | | | $R^2 = .16$ $F(3, 119) = 7.52, p = <.001$ | | | | |

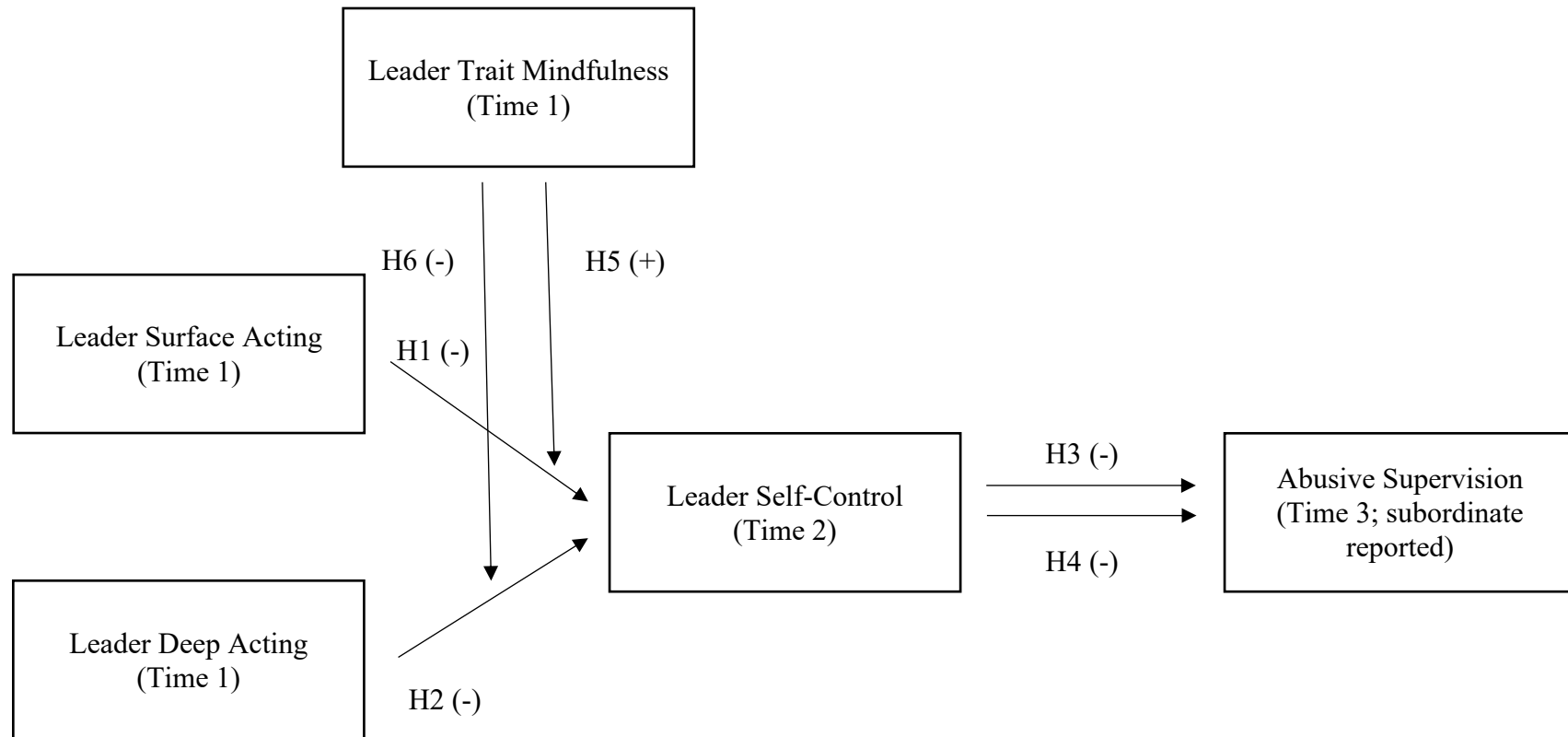
Note: X = independent variable (deep acting T1); Y = outcome (abusive supervision T3); M = mediator (Self-control T2); W= Mindfulness (T1); C = covariate (leader gender); LLCI = lower level of confidence interval; ULCI = upper limit of confidence interval.

Table 7: Conditional indirect effects of deep acting on abusive supervision (moderated mediation)

| Consequent: Abusive supervision | | | | |
|---------------------------------|-----------------|-----|------|------|
| Mediator: Self-control | | | | |
| | Indirect effect | SE | LLCI | UCLI |
| Low mindfulness | .06 | .03 | .01 | .13 |
| Average mindfulness | .04 | .02 | .01 | .08 |
| High mindfulness | .004 | .03 | -.04 | .04 |

Note: LLCI = lower level of confidence interval; ULCI = upper limit of confidence interval.

Figure 1. Visual summary of hypotheses



Notes. H= Hypothesis for brevity.

Figure 2. The interactive effect between leader deep acting and leader trait mindfulness on self-control resources.

