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**The Regulating Role of Mindfulness in Enacted Workplace Incivility:  
An Experience Sampling Study**

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# THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

## **The regulating role of mindfulness in enacted workplace incivility:**

### **An experience sampling study**

Incivility at work poses a problem, both for individuals who are the targets of incivility and for organizations. However, relatively little is known about what drives or hinders individuals to engage in incivility, and how they respond to their own uncivil behavior. Adopting a self-regulation perspective, we link theories explaining enacted incivility as self-regulatory failure with research about the self-regulatory benefits of mindfulness. We develop and investigate a conceptual model on the role of trait mindfulness in antecedent- and consequent-based processes of enacted workplace incivility. Data from an experience-sampling study across 5 work days provided support for the majority of our hypotheses. Individuals high in trait mindfulness not only showed generally low levels of enacted incivility, but they also displayed less variability in enacted incivility over time. Specifically, while enacted incivility was entrained to the work week and systematically decreased from Monday to Friday for individuals low in mindfulness, enacted incivility remained stable over the course of the work week for individuals high in mindfulness. Furthermore, employees high in trait mindfulness reacted in a more morally mature manner and experienced guilt when having engaged in uncivil behavior compared to their low mindful counterparts. However, increases in guilt for high mindful individuals did not translate into lower levels of enacted incivility the following work day.

Keywords: incivility; mindfulness; guilt; variability; entrainment

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Using a condescending tone, ignoring a colleague, or making a demeaning remark -- most employees not only experience being on the receiving end of such behavior, but also display this kind of behavior at work themselves from time to time. This type of behavior is referred to as “workplace incivility”, and has been defined as “low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect” (p. 457; Andersson & Pearson, 1999). Workplace incivility describes rude and discourteous behavior, characterized by a lack of regard for others (Andersson & Pearson, 1999). It includes rude, condescending, or ostracizing behavior (Cortina, Kabat-Farr, Magley, & Nelson, 2017; Rosen, Koopman, Gabriel, & Johnson, 2016; Schilpzand, De Pater, & Erez, 2016). Although enacted incivility is a low base-rate phenomenon, it does occur on a regular basis and it has far-reaching consequences for both targets and organizations. For instance, incivility has been associated with decreases in motivation and job satisfaction, as well as increased levels of emotional exhaustion, depression, work-family conflict, and counterproductive work behavior (Schilpzand et al., 2016).

To date, the vast majority of research on workplace incivility has focused on victims of incivility and on the consequences of experienced incivility for those victims (for an overview see Schilpzand et al., 2016). With the present study we therefore seek to add to the emerging literature on the perpetrator side of workplace incivility (Meier & Gross, 2015; Rosen et al., 2016). Specifically, we shed light on the role of trait mindfulness in order to elucidate the processes underlying enacted incivility. Our research builds upon previous work highlighting the role of self-regulation in enacted incivility and demonstrating that enacted incivility is often the result of self-regulatory failures (Meier & Gross, 2015; Rosen et al., 2016), and combines this with the mindfulness literature. Trait mindfulness, i.e. individuals’ propensity to bring attention and awareness to present-moment experiences, has been argued to facilitate superior self-regulation of behavior (Good et al., 2016; Hölzl et al., 2011; Leyland et al., 2019;

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Shapiro, Carlson, Astin, & Freedman, 2006; Sutcliffe, Vogus, & Dane, 2016). Considering the self-regulatory functions of trait mindfulness may therefore further our theoretical knowledge about the dynamic day-to-day processes involved in enacted civility. For a comprehensive understanding of enacted incivility, it is important not only to understand what drives employees to engage in incivility in the first place, but also to learn more about perpetrators' reactions to their own acts of incivility. We therefore focus on trait mindfulness as an antecedent to enacted incivility, as well as on the role of trait mindfulness in perpetrators' own affective and behavioral reactions to their enacted incivility. Importantly, we consider incivility as a dynamic phenomenon that unfolds on a day-to-day basis. By investigating incivility from a dynamic within-person perspective, we add to an incipient line of research that has moved beyond static between-person approaches to acknowledge and scrutinize interpersonal deviance as a fleeting phenomenon that fluctuates within individuals over time (Liao et al., 2018; Meier & Gross, 2015; Rosen et al., 2016).

Building on research relating mindfulness to stronger self-regulatory abilities (e.g. Good et al., 2016; Shapiro et al., 2006), we propose that individuals high on trait mindfulness show lower daily levels of enacted incivility on average, compared to their low mindful counterparts. Fully embracing the idea of incivility as a dynamic phenomenon (Rosen et al., 2016), we further posit that due to their higher self-regulatory abilities, individuals high on trait mindfulness display less within-person *variability* in incivility. Considering the intraindividual variability of incivility over time (as a function of mindfulness) may provide novel insights into the temporal characteristics of workplace incivility (Ostroff & Fulmer, 2014). The merits of considering within-person variability over time have been documented in other fields of research. For instance, variability in negative emotions has been associated with depressive symptoms (Peeters, Berkhof, Delespaul, Rettenberg, & Nicolson, 2006), variability in positive affect has been shown to predict psychological health above and beyond average

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

levels of positive affect (Gruber, Kogan, Quoidbach, & Mauss, 2013), and increased intraindividual variability in behavioral performance has been associated with age-related cognitive decline and observed in disorders such as schizophrenia and dementia (MacDonald, Li, & Bäckman, 2009). It is therefore of theoretical interest to learn more about the dynamic characteristics of incivility and about the factors that explain why some individuals show more stable levels of incivility while others show more variable behavior patterns over time. By investigating how trait mindfulness influences within-person variability in enacted incivility we directly respond to calls to explicitly consider temporality in dynamic phenomena and to consider time-related issues in theory building to promote a richer understanding of psychological phenomena (George & Jones, 2000; Mitchell & James, 2001; Ployhart & Kim, 2013).

As outlined above, a self-regulation perspective of enacted incivility suggests that incivility results from self-regulatory failures (Rosen et al., 2016). Here, we extend this self-regulation perspective to investigate the consequence-based processes *following* acts of incivility. We argue that successful self-regulation following the enactment of incivility manifests itself in the acknowledgement of one's own wrongdoing and in the engagement in self-sanctioning (the experience of guilt). Indeed, social psychological theories of morality and guilt suggest that the extent to which individuals acknowledge responsibility and experience guilt after committing moral transgressions is vital for long-term regulation and maintenance of moral integrity (Bandura, 1999; Baumeister, Stillwell, & Heatherton, 1994). Understanding these consequence-based processes is thus vitally important, because distancing the self from moral self-sanctioning to avoid the experience of guilt may lead to gradual increases in immoral behavior (Bandura, 1999). Strikingly however, knowledge about perpetrators' short-term affective reactions to enacted incivility and their subsequent behaviors is scarce (cf. Ferris, Chen, & Lim, 2017; Schilpzand et al., 2016). We therefore decided to investigate the

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

role of mindfulness in perpetrators' affective and behavioral reactions to enacted incivility.

Mindfulness theory maintains that attention and awareness of present-moment experiences serves important self-regulatory functions that increase individuals' willingness to acknowledge ego-threatening information and experience negative emotions as a result of it (Carlson, 2013; Niemiec et al., 2010). Bearing this in mind, we argue that trait mindfulness shapes employees' moral reactions to their own acts of incivility. Specifically, we expect mindful individuals to be more likely to experience guilt in response to their own transgressions than low mindful individuals. The experience of guilt is, in turn, likely to reduce future transgressions.

In addressing this issue, our study responds to calls to further current knowledge about the effects of incivility on perpetrators (Ferris et al., 2017; Schilpzand et al., 2016). Furthermore, it complements perpetrator-centric studies focusing on other forms of workplace mistreatment, such as abusive leader behavior or supervisor-directed aggression (Foulek, Lanaj, Tu, Erez, & Archambeau, 2018; Liang, Brown, Ferris, Hanig, Lian, & Keeping, 2018; Liao, Yam, Johnson, Liu, & Song, 2018). Incivility is qualitatively different from these other, more aggressive forms of workplace mistreatment. First, it does not necessarily involve interactions between individuals holding different degrees of power, which may influence how targets and perpetrators perceive and react to acts of incivility (Meier & Gross, 2015; Rosen et al., 2016). Second, incivility is lower in intensity, and ambiguous in terms of intent to harm (Ferris et al., 2017). This ambiguity makes it easy for perpetrators to deny harmful intent, or to attribute a negative or emotional reaction of the target to a misunderstanding or sensitivity on the part of the target (Rosen et al., 2016). Perpetrator-specific processes such as affective and behavioral reactions to uncivil behavior may therefore differ from those underlying more severe forms of mistreatment. In this regard, our study allows comparison with findings from a recent study revealing that supervisors engaging in abusive behavior were more likely to engage in

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

constructive leadership behavior the next day (Liao et al., 2018). This effect was, in part, driven by the experience of guilt. We took a similar perpetrator-centric approach in studying enacted incivility. Importantly, rather than focusing on guilt as a means to motivate compensatory behavior (like Liao et al. 2018), we investigate the role of guilt in preventing repeated engagement in mistreatment. In this way, we can further current understanding of the processes involved in the regulation and maintenance of moral integrity. Furthermore, by investigating the moderating role of trait mindfulness, we extend knowledge about the boundary conditions of the relationship between enacted mistreatment and its affective consequences.

Finally, the present study also contributes to the mindfulness literature. While the predominant focus of the mindfulness at work literature has been on well-being-related outcomes, less is known about the role of mindfulness in interpersonal relationships (Mesmer-Magnus, Manapragada, Viswesvaran, & Allen, 2017). Recently however, several studies have investigated the role of mindfulness in relation to different forms of aggressive interpersonal work behavior, including retaliation for injustice, abusive supervision, and aggression towards supervisors (Liang et al., 2016; 2018; Long & Christian, 2015). These studies have focused on mindfulness as a moderator, and have yielded important insights into the role of mindfulness as a buffer of employees' tendencies to show aggressive behavior in response to experienced injustice or hostility. Our study adds to these findings in several ways. First, we explore trait mindfulness as an antecedent to the level and variability of enacted incivility over time, shedding light on the dynamic characteristics of enacted incivility--an aspect of deviant work behavior that has been largely overlooked in previous research. Second, we draw attention to the role of mindfulness in perpetrator's affective reactions to their own wrongdoing. Existing research on the role of mindfulness in ethical (interpersonal) behavior has focused exclusively on the extent to which mindfulness precludes such behavior (Liang et al., 2016; 2018; Long &

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Christian, 2015), leaving the role of mindfulness in moral reactions to unethical interpersonal behavior unclear. Taken together, the present work contributes to a more holistic understanding of the role of mindfulness in the day-to-day processes involved in deviant interpersonal work behavior.

### **Mindfulness and Enacted Incivility**

Mindfulness refers to a “receptive attention to and awareness of present events and experiences” (Brown, Ryan, & Creswell, 2007; p. 212; see also Brown & Ryan, 2003). When mindful, individuals consciously register external and internal stimuli including sensory and kinesthetic experiences, emotions and thoughts. Importantly, a mindful way of processing information is open and receptive in nature and refers to the bare registering of experiences without evaluating the experiences, trying to derive meaning from them, or reacting upon them (Brown et al., 2007; Good et al., 2016). Describing the extent to which attention is paid to moment-to-moment experiences, mindfulness is inherently an internal state (Brown & Ryan, 2003; Hülshager, Alberts, Feinholdt, & Lang, 2013). However, there are also rather stable interindividual differences in the frequency, duration and intensity with which individuals engage in mindful states (Brown & Ryan, 2003; Hülshager et al., 2013; Jamieson & Tuckey, 2017). Mindfulness therefore also has trait-like properties, describing individuals’ propensities to be mindful on different occasions (Fleeson, 2004; Liang et al., 2018). In the present study, we focus on these between-person differences in the tendency to bring awareness to present-moment experiences in everyday situations.

Mindfulness theory maintains that mindful attention and awareness facilitate self-regulation (Brown, et al., 2007; Leyland et al., 2019; Tang, Hölzel, & Posner, 2015) and therefore positively affect interpersonal relationships (Glomb, Duffy, Bono, & Yang, 2011; Good et al., 2016). A key way in which mindfulness fosters self-regulation is via attention regulation (Good et al., 2016; Tang et al., 2015). Attending to current-moment experiences by

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

simply observing and registering external and internal stimuli (e.g. thoughts, emotions, bodily sensations) in a pure way -- without evaluation or judgement -- creates a distance between the self (i.e. the ego) and the experience (Glomb et al., 2011). This aspect of mindfulness has also been referred to as *reperceiving* (Shapiro et al., 2006), or *unconditional presence* (Brown et al., 2007). Reperceiving is a fundamental aspect of mindfulness that involves a shift in perspective so that individuals are able to mentally step back and simply witness experiences without getting caught up in them and reacting to them (Shapiro et al., 2006). Accordingly, individuals high in mindfulness have been shown to be less reactive to emotional stressors, environmental events and conditions, and less impulsive (Arch & Craske, 2006; Brown, Weinstein, & Creswell, 2012; Erismann & Roemer, 2010; Keng & Tong, 2016; Peters, Erismann, Upton, Baer, & Roemer, 2011; Weinstein, Brown, & Ryan, 2009). The better individuals are able to regulate their emotions and impulses, the less they are inclined to engage in transgressive or deviant behavior (Bandura, Apra, Barbaranelli, Pastorelli, & Regalia, 2001). Supporting these arguments, research has documented that mindfulness is negatively related to other forms of immoral or deviant behavior. For example, mindfulness has been shown to be negatively related to counterproductive behavior (Schwager, Hülshager, & Lang, 2016) and to aggressive behavior (Liang et al., 2018). Furthermore, it has been shown to buffer retaliatory responses to injustice (Long & Christian, 2015).

Research suggests that enacted incivility at work can be triggered by negative emotions such as anger as well as negative work events such as being the target of incivility (Meier & Gross, 2015; Meier & Semmer, 2013; Rosen et al., 2016). A mindful individual experiencing such negative events or emotions would be able to simply witness the event -- along with the thoughts and negative emotions it triggers -- in a pure way, without evaluating it with reference to the self or their self-worth. As a result, they would be better able to self-regulate and refrain from reacting upon these experiences and emotions by engaging in uncivil

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

behavior themselves. In the present study, we therefore expect that individuals high in trait mindfulness will display lower average daily enacted incivility levels than their low mindful counterparts.

*Hypothesis 1: Trait mindfulness is negatively related to persons' average daily levels of enacted incivility.*

### **Mindfulness and Intraindividual Variability of Enacted Incivility over Time**

As outlined above, mindful attention regulation facilitates *unconditional presence* or *reperceiving*, creating a mental gap between the stimulus and the behavioral response. This reduces the automaticity of thoughts, emotions, and reactions, and allows people to respond more thoughtfully to distressing events and to regulate their own negative impulses (Good et al., 2016). Mindfulness and mindfulness practice have therefore been argued to cultivate equanimity, a Buddhist concept describing an evenness of mind “a balanced reaction to joy and misery, which protects one from emotional agitation” (p. 154; Bodhi, 2005; Desbordes et al., 2015). Mindfulness thereby promotes an “even-keeled emotional life” (p. 839; Brown & Ryan, 2003) that is well-regulated and characterized by balanced emotional and behavioral reactions *over time*. Supporting this notion, previous research has demonstrated that trait mindfulness is negatively related to the within-person variability of negative affect over time (Keng & Tong, 2016). Moreover, trait mindfulness has been shown to predict more stable levels of psychological detachment over the course of a work week (Hülsheger et al., 2014). The self-regulatory skills of mindful individuals thus not only manifest in low levels of maladaptive emotions and concomitant behavioral reactions but also in a lower variability of emotions and behavioral reactions over time. We therefore expect that the ability of mindful individuals to reperceive and to regulate their own impulses in the face of internal and external events and conditions results in more behavioral balance in terms of less within-person variability of enacted incivility over time.

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

For a comprehensive understanding of the dynamic temporal characteristics of enacted incivility, we consider two forms of intraindividual variability as outcomes of mindfulness. First, we consider within-person fluctuations that are the result of momentary external (e.g. workplace events) or internal (e.g. negative mood) events occurring at random moments in time, as captured by the intraindividual standard deviation (net intraindividual variability; Ram & Gerstorf, 2009). Net intraindividual variability is unstructured in relation to time. Second, we consider time-structured intraindividual variability in enacted incivility, referring to within-person fluctuations that are a function of time (Ram & Gerstorf, 2009). The day of the work week is an important time unit that determines the rhythm of life for people who work. Research has demonstrated that, in work populations, affect and affect-related experiences such as psychological detachment are entrained to the weekly calendar and vary systematically over the course of the week (Beal & Ghandour, 2011; Hülshager et al., 2014; Ouweneel, Le Blanc, Schaufeli, & van Wijhe, 2012). On average, positive experiences were lowest on Mondays and linearly increased over the course of the work week, but there were also considerable between-person differences in these change trajectories (Hülshager et al., 2014; Ouweneel et al., 2012).

In the present study, the idea that mindfulness promotes balanced behavioral patterns of enacted incivility over time will be tested in relation to these two forms of intraindividual variability over the course of a work week. Due to their self-regulatory abilities, mindful individuals can be expected to be less susceptible to momentary external and internal events that occur at random moments in time have the potential to lead to net intraindividual variability. They can also be expected to be less susceptible to influences that are systematically ordered in time (such as the day of the week) and that might lead to time-structured variability. We therefore expect that, due to their lower self-regulatory abilities,

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

individuals low (as compared to high) in mindfulness display more variable behavioral patterns of enacted incivility as indicated by a) a higher intraindividual standard deviation and b) systematic changes in enacted incivility over the course of the week (i.e., time-structured intraindividual variability).

*Hypothesis 2a: Trait mindfulness is negatively related to the intraindividual standard deviation in enacted incivility.<sup>1</sup>*

*Hypothesis 2b: Trait mindfulness moderates patterns of enacted incivility over the course of the work week such that enacted incivility is more stable for individuals high in mindfulness while it systematically changes over the course of the week for individuals low in trait mindfulness.<sup>1</sup>*

### **Mindfulness Shapes Affective and Behavioral Reactions to Enacted Incivility**

While the hypotheses presented above concern the role of trait mindfulness in antecedent-based processes, our focus now shifts to the self-regulatory functions of mindfulness in processes succeeding acts of incivility from the perspective of the perpetrator. We suggest that mindfulness fulfills important self-regulatory functions that enable individuals to learn from past transgressions and reduce future transgressions through experienced guilt. Guilt is a social emotion that is characterized by unpleasant arousal and emotional distress (Baumeister, Stillwell, & Heatherton, 1994). It serves important interpersonal relationship-enhancing functions, including the motivation to treat others well and to avoid transgressions, but also to engage in reparatory behavior once a transgression has occurred (Baumeister et al., 1994, 1995; see also Ilies, Peng, Savani, & Dimotakis, 2013; Liao et al., 2018).

According to Bandura's social cognitive theory (Bandura, 1999), people develop moral standards through socialization and engage in moral self-regulation in order to act in accordance with these moral standards. Although social cognitive theory posits that

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<sup>1</sup> Note that these hypotheses refer to differences between persons in their intraindividual variability. Conceptually, these hypotheses therefore reside at the between-person level of analysis as depicted in Figure 1.

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

anticipation of guilt often helps to keep conduct in line with moral standards, the theory also acknowledges that the system of anticipatory self-censure sometimes fails and that uncivil behavior can result (Bandura et al., 2001). When this happens, and uncivil behavior has occurred, an adaptive self-regulatory response is to feel guilty, a form of moral self-sanction, which, in turn, may prevent future engagement in uncivil behavior. The experience of guilt thus serves a restorative function and helps to promote behavioral change (Sherman & Cohen, 2006). Such self-sanctioning is critical for the long-term self-regulation and maintenance of moral behavior. Importantly, when self-regulation fails, resulting in uncivil behavior, individuals may not always engage in moral self-sanctions. A moral transgression is a threat to self-integrity and individuals respond differently to such threats (Bandura et al., 2001; Shnabel & Nadler, 2008). Depending on an individual's awareness and acknowledgement of transgressions, s/he may thus experience more or less guilt having enacted uncivil behavior on a particular day at work.

We argue that trait mindfulness channels the degree to which individuals experience moral self-sanctions and feel guilty on days that they have transgressed. A key way in which mindfulness fosters self-regulation of behavior is via attention regulation (Good et al., 2016; Tang et al., 2015). It plays a key role in shaping employees' moral reactions to their own enacted incivility *if* they have transgressed their moral standards on a particular day. By regulating attention and bringing awareness to external events, mindful individuals are more likely to notice how an uncivil remark hurts a colleague's feelings, because of their awareness of his/her reactions and verbal or non-verbal emotional cues. In contrast, individuals low in mindfulness may not notice these reactions and cues, and may therefore be unaware of the consequences of their actions. Awareness of the consequences of one's uncivil actions may, in turn, stimulate self-sanctioning and the experience of guilt. In addition, and as outlined above, attending to present-moment experiences in a pure and receptive way fosters unconditional

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

presence (Brown et al., 2007), the ability to adopt a meta-perspective creating a distance between the self and the experience. The separation between the self and the experience has been argued to reduce defensiveness to ego-threatening information, because the pure experience (without self-referential processing) is less threatening (Carlson, 2013). As Brown and colleagues (2007) put it: “When mindful awareness begins to predominate, ego-driven thought begins to lose its kingly power to dominate the conscious mind” (p. 275). In the mindfully observant state, thoughts are just thoughts and experiences are just experiences. Mindful individuals can therefore be expected to objectively acknowledge their transgression, accept responsibility for it, and be willing to experience guilt as a result of it. In contrast, their less mindful counterparts are more likely to deny such ego-threatening information and avoid or suppress feelings of guilt. Supporting this notion, a number of studies have shown that mindfulness is associated with greater willingness to experience uncomfortable and negative emotions (Arch & Craske, 2006; Eifert & Heffner, 2003). Notably, this line of argumentation refers to contextualized forms of guilt, i.e. the experience of guilt in response to transgressions as an adaptive, normative guilt response. Such contextualized guilt needs to be distinguished from trait guilt, a person’s chronic disposition to experience guilt irrespective of context, which is maladaptive (Tignor, & Colvin, in press).<sup>2</sup>

*Hypothesis 3: There is a cross-level interaction between daily enacted incivility at work and trait mindfulness on the experience of guilt in the evening, such that the within-person relationship is more positive for individuals high on trait mindfulness than for individuals low on trait mindfulness.*

Following social-cognitive theory (Bandura, 1999), the ultimate goal of self-censure and the experience of guilt following occasional transgressions is to bring conduct back in line

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<sup>2</sup> Instead of experiencing more *contextualized* guilt as a response to transgressions, individuals high on trait mindfulness can be expected to experience less *trait* guilt, because they are generally better able to regulate emotions and generally less prone to experience negative affective states (Brown & Ryan, 2003).

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

with moral standards, assuring long-term maintenance of moral behavior. As argued above, we expected individuals high in trait mindfulness to be more likely to experience guilt as a result of their transgressions. As a consequence, they should be less inclined to engage in uncivil behavior over the course of the next work day. The experience of having done something “bad” motivates people to restore their moral self-image and compensate for their immoral behavior (Haidt, 2001; Jordan, Mullen, & Murnighan, 2011). One recent study investigating negative affective work events has highlighted the role of guilt in the prevention of uncivil behavior, providing empirical support for this notion. Specifically, the authors found that recognizing the events as personally controllable, thus acknowledging one’s own responsibility, motivated feelings of guilt and subsequently led to a reduction in uncivil behavior (Harvey, Martinko, & Borkowski, 2017). Similarly, in a different study, employees who were made aware of counterproductive work behavior experienced increased levels of guilt and subsequently engaged in more organizational citizenship behavior (Ilies et al., 2013). The experience of guilt for those high in trait mindfulness may thus counter the spiraling effect in which repeated disengagement from self-sanctions leads to gradual increases in immoral behavior (Bandura, 1999). We therefore expect that enacted incivility on a particular workday is related to lower levels of enacted incivility on the next work day, via the experience of guilt, especially for individuals high as opposed to low in trait mindfulness.

*Hypothesis 4: There is a negative indirect relationship between enacted incivility and next-day enacted incivility via experienced guilt, which is moderated by trait mindfulness such that the indirect relationship is stronger for individuals high as opposed to low in trait mindfulness.*

### **Method**

#### **Sample and procedure**

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Data were collected in Germany from a variety of organizations and occupations using the snowballing technique. Potential participants were approached by the recruitment team in person and via e-mail (approx. 415 individuals) or via social network sites including Facebook and Xing, a German professional network site. They were also asked to forward the study invitation and descriptions to people they knew. No monetary or quasi-monetary incentives were offered in return for participation. The study was approved by the Ethical Review Committee Psychology and Neuroscience of Maastricht University under research line “Employee well-being and psychological health” (#ERCPN-166-07-04-2016).

Initially, a total of 173 individuals expressed interest in the study. They received an email with further information about the study and a link to the general questionnaire. Of these, 159 participated in the study resulting in a response rate of 91.1% of interested participants. A total of seven participants only answered the general questionnaire and did not participate in any of the daily surveys. These participants were omitted from analyses, resulting in a final sample of 152. One of the advantages of the analytical approach we used is the possibility to handle missing data (Raudenbush & Bryk, 2002; Hox, 2002; Ployhart, Holtz, & Bliese, 2002; Singer & Willett, 2003). Following recommendations in the literature, no participants were excluded due to missingness in the experience-sampling part of the survey, i.e. every person with at least one experience-sampling entry was included in the analyses (Hox, 2002; Singer & Willett, 2003)<sup>3,4</sup>. The final sample therefore comprised 152 participants

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<sup>3</sup> As missing data can rarely be assumed to be missing at random, statisticians recommend the retention of participants even with extreme forms of missingness for multilevel and growth curve analyses in combination with maximum likelihood estimation (Hox, 2002; Raudenbush & Bryk, 2002; Singer & Willett, 2003; Wang et al., 2017).

<sup>4</sup> As one may wonder whether the same results would have been obtained if we had removed participants with extreme forms of missingness, we reran all analyses excluding participants with only 1 or with only 1 or 2 daily entries. The pattern of results and significance values of all tested hypotheses remained the same.

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

at the person-level and 564 observations for enacted incivility, and 443 observations for guilt at the within-person level.<sup>5</sup>

Participants were predominantly male (46.1%; 43.3% female, 10.5% did not provide information on gender) and had a mean age of 36.8 ( $SD = 12.4$ ). The highest educational degree obtained was a high school diploma for 28.2% of participants, a bachelor degree for 19.1%, a master degree for 16.4% and a doctorate for 1.3%. Participants had an average organizational tenure of 8.8 years ( $SD = 9.2$ ). The sample comprised a broad range of occupations, including insurance clerks, merchants, teachers, accountants, engineers, pharmacists, medical practitioners, social workers, HRM professionals, and lawyers.

### Measures

Data collection was conducted electronically using smartphone friendly online questionnaires. It consisted of a general questionnaire and an experience-sampling part. After participants had filled in the general questionnaire assessing demographics and trait mindfulness, the 5-day experience-sampling started on the following Monday. The schedule of data collection was interval-contingent (Fisher & To, 2012); participants received three survey links per day via email, at 11:00, 15:00 and 20:00. To prevent backfilling or the filling in of consecutive surveys in batches, survey access was time restricted. On average, 4.6 hours ( $SD = 1.4$  hours) elapsed between filling in the lunch break survey and the end of work survey, and 4.5 hours ( $SD = 1.4$  hours) elapsed between filling in the end of work survey and the bedtime survey. Data collection took place over an 8-week time window, during which participants could take part in the 5-day experience-sampling phase. This ensured that data was not systematically biased by specific events (e.g. political or environmental events; see e.g. Beal & Ghandour, 2011) which may have occurred during data collection.

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<sup>5</sup> An analysis of the amount of missing data revealed that for enacted incivility, 124 participants (81.5%) had 3 or more daily entries, 23 (15.1%) had 2 entries and 5 (3.3%) had 1 or no entries; for the guilt measure, 96 participants (63.2%) had at least 3 daily entries, 25 (16.4%) had 2 entries and 31 (20.4%) had one or no entries.

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

The set-up of our ESM study allowed for a temporal separation of the assessment of variables included in our conceptual model (see Figure 1). While trait mindfulness was assessed in the general questionnaire, enacted incivility was calculated by aggregating assessment scores from the daily lunch break and end-of work surveys (to allow for reliable assessments of enacted incivility during working hours while minimizing retrospection bias, scores from the two assessments were averaged), and guilt was assessed in the daily bedtime survey. This time-lagged ESM design was chosen to reduce concerns about common method bias and in order to adequately capture the temporal sequence between predictor, mediator and outcome variables (cf. Liao et al., 2018).

All items were answered on 5-point Likert-type agreement scales. To reduce response burden and ensure that questionnaires were filled in on a daily basis, we shortened existing scales, in line with other experience-sampling studies (Fisher & To, 2012). An overview of the exact items used in these shortened scales is provided in the Appendix.

**Enacted incivility.** We used German translations of five items<sup>6</sup> of Cortina et al.'s (Cortina, Kabat-Farr, Leskinen, Huerta, & Magley, 2013) widely used 12-item measure to assess enacted incivility in the lunch break and in the end-of-work surveys. The measure was comprised of four items chosen by Matthews and Ritter (2016), in addition to the item "gave you hostile looks, stares, or sneers"<sup>7</sup>. Since Cortina et al.'s items focus on received incivility, they were slightly adapted to reflect the enactment as opposed to the experience of incivility. In the lunch break survey, participants were instructed to refer to the time period since they had started work, in the end-of-work survey they were instructed to refer to the time period since filling in the lunch break survey.

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<sup>6</sup> A complete list of the 5 items is provided in the Appendix.

<sup>7</sup> We chose a fifth item to ensure reliable assessment of enacted incivility. The item was chosen on theoretical grounds as it was in line with the definition of incivility as low intensity deviant behavior with ambiguous intent to harm.

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

**Guilt.** To assess guilt, we chose 3 items (guilty, ashamed, dissatisfied with self) from the German version of the PANAS-X that captured the content domain well without overlap in item wording (Grühn, Kotter-Grühn, & Röcke, 2010). We chose to assess guilt in the bedtime survey. This choice was informed by previous research assessing guilt in response to mistreatment in relative proximity to the event but before any measure of reparatory behavior (Burmeister, Fasbender, & Gerpott, 2019; Ilies et al., 2013; Liao et al., 2018). Items referred to how participants felt at the moment of filling in the survey.

**Trait mindfulness.** The German version of the 15-item Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003; Michalak, Heidenreich, Ströhle, & Nachtigall, 2008) was used to assess trait mindfulness. Sample items include: “I find it difficult to stay focused on what’s happening in the present”; “I find myself doing things without paying attention”.

**Control variable - Received incivility.** In order to be able to control for received incivility as a potentially confounding variable, we included a measure of received incivility in the lunch break and in the end-of-work surveys, using the same items and procedures as for enacted incivility but this time reflecting the experience of incivility rather than the enactment.

### Analyses

Hypothesis 1 was tested with multilevel modeling using a random coefficient modeling approach with the nlme package (Pinheiro & Bates, 2000) in R. Specifically, we tested a model using trait mindfulness as a level 2 predictor of level 1 enacted incivility. As the predictor variable resides at level 2, this corresponds to a “means as outcome” model in which person means of daily levels of enacted incivility are predicted (Bliese, Maltarich, & Hendricks, 2018). Hypothesis 2a about the role trait mindfulness plays in between-person differences in people’s intraindividual variability was tested by inspecting the between-person correlation of trait mindfulness with the intraindividual standard deviation of enacted incivility. To test Hypothesis 2b, we conducted growth curve analyses following procedures

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

recommended in the literature (Bliese & Ployhart, 2002) using the nlme package. We first modelled the basic growth model, i.e. changes in enacted incivility over time (here day-of-the-week). Monday was coded as 0. We tested for linear and quadratic forms of change with orthogonal polynomials. Advantages of orthogonal polynomials over non-orthogonal polynomials are that linear and quadratic time trends are uncorrelated, alleviating concerns of multicollinearity and allowing them to be interpreted independently (Ployhart et al., 2002). When using power polynomials, the intercept does not refer to the first time period that was coded as 0 (in our study, Monday) but rather refers to the point midway between the first and last measurement occasion, in our study Wednesday (cf. Ployhart et al., 2002). Furthermore, we tested whether accounting for autoregressive structure improved model fit. We specified a series of growth models using day of the week and trait mindfulness as predictors of enacted incivility. Day-of-the-week effects inform us about average individual-level change trajectories, i.e. within-person change over time across individuals. In the next step, cross-level interactions between trait mindfulness (level 2) and day-of-the-week (level 1) on enacted incivility were tested. This model informs us about the extent to which between-person variation in individuals' change trajectories is explained by trait mindfulness, testing Hypothesis 2b. To provide an indication of the strength of effects, we calculated pseudo- $R^2$  statistics (Raudenbush & Bryk, 2002; Singer & Willett, 2003; see also Thoresen, Bradley, Bliese, & Thoresen, 2004).

To test Hypotheses 3 and 4, we used path analysis in a multilevel structural equation modeling (MSEM) framework in Mplus 8 (Muthen & Muthen, 2017). Doing so allowed us to account for the nested nature of the data while testing a model including mediation at the within-person level and simultaneously testing trait mindfulness as a cross-level moderator of the relationship between enacted incivility and guilt. Level 1 predictor variables were person-mean centered thereby removing between-person variation and ensuring the estimation of pure

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

within-person effects (Enders & Tofghi, 2007). Trait mindfulness, the cross-level moderator, was z-standardized prior to analyses, thereby easing interpretability of interaction effects. To test Hypothesis 3, i.e. a cross-level moderation effect of trait mindfulness on the within-person relationship between enacted incivility and guilt, we specified a random within-person slope between day  $t$ 's enacted incivility during work and day  $t$ 's experienced guilt in the evening. Hypothesis 4, positing an indirect effect of day  $t$ 's enacted incivility on day  $t+1$ 's enacted incivility via day  $t$ 's guilt that is moderated by trait mindfulness (moderated a-path), was tested by specifying a model including a random within-person slope between day  $t$  enacted incivility and day  $t$  guilt, a fixed within-person effect from day  $t$  guilt on day  $t+1$  enacted incivility, and a fixed within-person effect from day  $t$  enacted incivility on day  $t+1$  enacted incivility. At the between-person level, a path from trait mindfulness on the random enacted incivility-guilt slope was specified as well as a correlation between trait mindfulness and day  $t+1$  enacted incivility. Using the model constraints function in Mplus we then estimated the relative size of the indirect effect of day  $t$  enacted incivility on day  $t+1$  enacted incivility via day  $t$  guilt at high (1 *SD* above the mean) and low (1 *SD* below the mean) levels of trait mindfulness (for a similar approach see Chen, Kirkman, Kim, Farh, & Fangirala, 2010). To test the indirect effect at the within-person level, we followed Preacher and colleagues' recommendations (Preacher, Zyphur, & Zhang, 2010), and used the parametric bootstrap procedure that produces 95% confidence intervals around indirect effects that account for the asymmetric nature of the sampling distribution of an indirect effect. As Mplus does not provide  $R^2$  statistics when random slopes are included in the model, we calculated pseudo  $R^2$  statistics (Raudenbush & Bryk, 2002; Singer & Willett, 2003). In all our analyses, we used maximum likelihood estimation.

### Results

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Before testing our hypotheses, we inspected within- and between-person variance components. As can be seen from the ICC values reported in Table 1, within-person variability was 32% for guilt and 48% for enacted incivility, suggesting that both constructs varied substantially between as well as within persons.

Hypothesis 1 predicted that individuals high in trait mindfulness display lower levels of enacted incivility than their low mindful counterparts. This hypothesis was tested in Model 1 (Table 2) of a series of random coefficient models that specified a main effect of trait mindfulness on daily levels of enacted incivility. As trait mindfulness is a person-level variable, this Model tests the effect of trait mindfulness on the person-means of enacted incivility across days (cf. Bliese, et al., 2018). Results revealed a significant negative effect of trait mindfulness on enacted incivility (estimate =  $-.08$ ,  $p < .05$ ), supporting Hypothesis 1. Hypothesis 2a was also confirmed, as indicated by a significant negative correlation between trait mindfulness and the intraindividual standard deviation of enacted incivility ( $r = -.23$ ,  $p < .01$ ; Table 1)<sup>8</sup>. To test Hypothesis 2b, we conducted a series of growth curve models that are depicted in Table 2. First, we tested a basic growth model in order to establish whether and how enacted incivility systematically changed over the course of the week (Model 2). Results revealed significant effects for linear and quadratic time trends. The significant negative linear time trend (estimate =  $-1.59$ ,  $p < .01$ ) indicates the direction and magnitude of change: on average, i.e., across individuals, enacted incivility decreased over the course of the week (from Monday to Friday). The significant positive quadratic time trend (estimate =  $1.05$ ,  $p < .05$ ) specifies the form and acceleration of change (Ployhart et al., 2002): decreases in incivility were most pronounced from Monday until Wednesday and then levelled out (see Figure 2a).

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<sup>8</sup> The iSD is often strongly correlated with the mean (Barnes & Morgeson, 2007; Lindell & Brandt, 2000). This was also the case in the present study. As a supplementary analysis we therefore also analyzed the relationship between trait mindfulness and the intraindividual coefficient of variation (ICV), i.e. the ratio of the standard deviation to the mean (Barnes & Morgeson, 2007). With a correlation of  $-.26$  ( $p < .01$ ) between trait mindfulness and the ICV, the relationship was highly similar to the relationship of trait mindfulness with the iSD of enacted incivility.

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

In Model 3, trait mindfulness was introduced as a predictor of interindividual differences in change trajectories of enacted incivility over the course of the week. Trait mindfulness significantly interacted with the linear time trend (estimate = 1.0,  $p < .05$ ). Decreases in enacted incivility over the course of the week were thus moderated by trait mindfulness, supporting Hypothesis 2b. Simple slope analyses revealed that while individuals high on trait mindfulness showed more stable (low) levels of enacted incivility over the course of the work week (estimate =  $-.58$ ,  $p = .38$ ), enacted incivility systematically decreased over the course of the week for individuals low on trait mindfulness (estimate =  $-2.59$ ,  $p < .001$ ; for an illustration see Figure 2b). Trait mindfulness did not significantly interact with the quadratic time trend (estimate =  $-.13$ ,  $p = .75$ ). The specific pattern of change (stronger decreases in the first half of the week that then level out) did therefore not differ between low vs. high mindful individuals.

As stated in Hypothesis 3, we expected a cross-level interaction between trait mindfulness and enacted incivility during the work day on guilt in the evening. As can be seen in Table 3, Hypothesis 3 was supported (estimate =  $.28$ ,  $p < .01$ ). Simple slope analyses, testing the within-person relationship of enacted incivility and guilt at 1 standard deviation above and below the mean of trait mindfulness, showed that the relationship was positive for individuals high in trait mindfulness (estimate =  $.32$ ,  $p < .05$ ), while it was negative for individuals low in trait mindfulness (estimate =  $-.24$ ,  $p < .05$ ; see also Figure 3).

As stated in Hypothesis 4, we expected an indirect effect of enacted incivility on next-day enacted incivility via experienced guilt in the evening that is moderated by trait mindfulness. There was, however, no evidence for a moderated indirect effect. The indirect effect of enacted incivility via guilt on next day enacted incivility was not significant at 1 *SD* below the mean of trait mindfulness (estimate =  $-.01$ ; 95% CI [ $-.07$ ,  $.04$ ]), nor at 1 *SD* above the mean of trait mindfulness (estimate =  $.02$ ; 95% CI [ $-.06$ ,  $.10$ ]). The difference between the

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

indirect effect at low vs. high levels of trait mindfulness was also not statistically significant ( $estimate = .03; p = .65$ ).

### **Supplementary Analyses**

**Controlling for received incivility.** Previous research has shown that received incivility is a proximal predictor of enacted incivility (Rosen et al., 2016; Meier and Gross, 2015) and that received incivility has affective consequences for the receivers (Schilpzand et al., 2016). Recent research has even suggested that targets of incivility may blame themselves for experiencing incivility (Tong, Chong, & Johnson, 2019). Received incivility may therefore function as a third variable, causing spurious correlations between enacted incivility and guilt. To rule out this alternative explanation of our findings, we re-ran analyses testing Hypotheses 3 and 4, controlling for received incivility. Analyses yielded the same pattern of results.

**Distinguishing Guilt from Shame.** A comprehensive review of the guilt literature has shown that a central area of disagreement is the degree to which guilt is thought to involve denigration of the self (Tilghman-Osborne, Cole, & Felton, 2010). While half of the 23 definitions included in this review view impugment of the self as central to guilt, the other half maintain that self-denigration is what differentiates guilt from shame (Tilghman-Osborne et al., 2010). The latter group of theorists maintain that guilt pertains to the transgression itself and is tied to a negative evaluation of the specific behavior, while shame leads to a negative self-evaluation of the global self (e.g. Tangney, Stuewig, & Mashek, 2007). Accordingly, they argue that guilt motivates restorative behavior, while shame merely leads to tendencies to hide the self (Tangney et al., 2007). As the measure we used pertains to the first group of theories and includes two items referring to self-denigration and shame (i.e., “shame” and “dissatisfied with self”), we re-ran the analyses without these two items. Overall, the pattern of results remained the same. Hypothesis 3 was supported with a significant cross-level interaction between enacted incivility and trait mindfulness on guilt ( $estimate = .31, p < .05$ ). Simple

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

slope analyses revealed that the relationship was positive (but not significant) for individuals high on trait mindfulness (estimate = .24,  $p = .24$ ), while it was negative and significant for individuals low on trait mindfulness (estimate =  $-.38$ ,  $p < .05$ ). The moderated indirect effect of enacted incivility on next day enacted incivility via guilt remained insignificant.

### Discussion

Adopting a self-regulation perspective, we integrated literature on workplace mistreatment and mindfulness to develop and investigate a conceptual model of the role of mindfulness in enacted workplace incivility. In doing so, we considered the dynamic nature of enacted incivility as it unfolds on a day-to-day basis, and examined how trait mindfulness shapes antecedent- and consequent-based processes of enacted workplace incivility from the perspective of the perpetrator. Researchers studying incivility have demonstrated that the adoption of a self-regulation framework describing how individuals regulate behavior furthers our understanding of why and when employees enact incivility (Meier & Gross, 2015; Rosen et al., 2016). Our findings add to this research by showing that mindfulness--a trait that has been argued to confer superior self-regulation of affect, cognition and behavior (Glomb et al., 2011; Good et al., 2016; Leyland et al., 2019)—may help curtail the incidence of enacted incivility at work. Largely confirming our hypotheses, we found that individuals high in trait mindfulness not only tend to show lower average daily levels of enacted incivility but they also display less variability in enacted incivility over time. Trait mindfulness also appears to shape how employees react -- in a moral sense -- to their own uncivil behavior: high mindful individuals experienced guilt on days that they transgressed their moral boundaries by showing more incivility than they usually do, while low mindful individuals did not. Contrary to expectations, however, such increases in guilt for high mindful individuals did not translate into lower levels of enacted incivility the following working day.

### Theoretical Implications

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Our study offers several contributions to the incivility literature, the broader interpersonal deviance literature, as well as the mindfulness literature. First, research on perpetrator characteristics has predominantly focused on negative characteristics and has documented, for instance, that individuals high in trait anger or with poor conflict-management abilities are more likely to show uncivil work behavior (Schilpzand et al., 2016). By revealing that individuals high in mindfulness generally show low levels of incivility as well as low variability, our study shifts the focus to a positive psychological characteristic that has the potential to lower incivility at work. This is in line with a positive psychological approach to organizational behavior in which the focus is on promoting psychological strengths rather than managing weaknesses (Luthans & Youssef, 2007). As mindfulness has been shown to be trainable with targeted workplace mindfulness programs (Bartlett et al., 2019), this finding is of high practical relevance to organizations.

While uncivil behavior at work has traditionally been studied from a between-person perspective, scholars have increasingly highlighted the need to consider within-person variability in enacted incivility and other forms of workplace mistreatment (Fouk et al., 2018; Liao et al., 2018; Lim, Ilies, Koopman, Christoforou, & Arvey, 2018; Meier & Gross, 2015; Rosen et al., 2016). These studies have adopted a differential approach (cf. Navarro, Roe, & Artiles, 2015), unraveling short-term within-person relationships *at a particular point in time*<sup>9</sup> (e.g. the within-person relationship between self-control and enacted incivility; Rosen et al., 2016) and focusing on *explaining* within-person variability in incivility. In the present study, we go one step further and adopt a temporal lens to study *the variability of enacted incivility over time*. Findings supported our prediction that individuals high in trait mindfulness show more stable patterns of incivility over time, both when considering net intraindividual variability (i.e. the intraindividual standard deviation) and time-structured intraindividual

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<sup>9</sup> studied concurrently, i.e. at the same time point during the day, or lagged, i.e. from one time point to the next

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

variability (i.e. systematic changes over the course of the week). As predicted, individuals high in trait mindfulness showed rather stable (low) levels of enacted incivility over the course of the work week. In contrast, daily incivility levels of low mindful individuals were entrained to the work week, being highest on Mondays and declining systematically until Friday. These findings inform incivility and mindfulness theory alike; they illustrate that variability in enacted incivility is a substantial outcome of interest and that between-person factors influencing the level of incivility may also affect the variability of incivility over time. Future research should consider such intraindividual variability of incivility (or other mistreatment variables) as a predictor of organizational outcomes such as interpersonal collaboration, performance evaluations, or promotions. Our findings also add to research documenting the self-regulatory benefits of mindfulness (Leyland et al., 2019) that has largely overlooked behavior variability over time as an important indicator of (a lack of) self-regulation.

Furthermore, our findings advance the literature on interpersonal mistreatment by explicitly considering the role of time in our investigation of enacted incivility. Scholars have repeatedly argued that time should be considered as a variable of interest in organizational theory building, as knowledge about when and how phenomena change over time, or when effects are strongest, is still scarce (Cole, Shipp, & Taylor, 2016; George & Jones, 2000; Mitchell & James, 2001; Navarro et al., 2015; Sonnentag, 2012). By investigating time-structured variability in enacted incivility, our results revealed that enacted incivility systematically declines over the course of the work week for the average employee (as illustrated in Figure 2a). This time-based descriptive pattern (Shipp & Cole, 2015) adds to previous research showing that affect and affect-related phenomena such as psychological detachment and sleep quality are entrained (i.e., synchronized) with the temporal organization of the 7-day week (Beal & Ghandour, 2011; Hülshager et al., 2014). For instance, positive psychological states such as psychological detachment, sleep quality, vigor, and dedication

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

have been found to be lowest at the start of the work week and to increase as the week progresses (Hülshager et al., 2014; Ouweneel et al., 2012), while negative psychological states, such as fatigue, have been shown to be highest at the start of the week and to decline over the course of the work week (Rook & Zijlstra, 2006). Our finding that, on average (i.e. irrespective of employees' trait mindfulness levels), incivility was highest at the start of the week and then declined over the course of the week is in line with the notion that undesirable states are highest -- while desirable states are lowest -- at the start of the week. Researchers have suggested that this pattern may be explained by the fact that anticipation and worry about upcoming work demands are strongest at the start of the work week and decline as the week progresses (Farber, 1985; Hülshager et al., 2014; Rook & Zijlstra, 2006). This hypothesis, however, awaits empirical confirmation. Our finding makes an important contribution to this literature, as it shows that entrainment effects may not be limited to affect-related experiences such as psychological detachment, fatigue, and vigor, but extend to actual work behavior.

Furthermore, our temporal analysis associated with Hypothesis 2b provided important information on the timing of the effects of trait mindfulness on enacted incivility (Ployhart & Kim, 2013). As can be seen from Figure 2b, the effect of trait mindfulness on enacted incivility was strongest at the start of the week. In fact, supplementary analyses, testing the effect of mindfulness on enacted incivility per day-of-the-week<sup>10</sup>, showed that the effect of trait mindfulness was significant on Monday (estimate =  $-.13$ ,  $p < .01$ ), Tuesday (estimate =  $-.10$ ,  $p < .05$ ), marginally significant on Wednesday (estimate =  $-.07$ ,  $p = .09$ ), and not significant on either Thursday (estimate =  $-.04$ ,  $p = .40$ ) or Friday (estimate =  $-.01$ ,  $p = .89$ ). The main effect of trait mindfulness across the entire work week was thus mainly driven by differences on Monday and Tuesday. These findings also suggest that uncivil behavior is

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<sup>10</sup> We reran analyses depicted in Table 2, Model 3, using non-orthogonal polynomials and recoding the day-of-the-week variable such that the intercept corresponds to the respective day-of-the-week of interest.

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

neither a function of the person or the situation alone, but the result of person-situation interactions. Although some individuals may be more inclined than others to show uncivil behavior due to personality characteristics, actual behavior is also driven by situational factors, including the day of the week. It is likely that effects of other between-person variables on enacted incivility and workplace mistreatment that have been studied previously also show similar time-sensitivity.

Considering enacted incivility as part of a constant stream of (im-)moral workplace behavior, we not only studied the role of mindfulness in antecedent-based but also in consequence-based processes involved in enacted incivility. In doing so, we sought to shed light on the processes through which current enacted incivility relates to future levels of enacted incivility in order to find constructive ways to prevent and limit incivility at work. Specifically, we focused on the functional, non-judgemental processing of guilt as a way to restore or maintain morality. As hypothesized, we found that the within-person relationship between daily enacted incivility and guilt was dependent on trait mindfulness. Not only the strength, but also the nature of the relationship was a function of trait mindfulness. As expected, individuals high in mindfulness experienced more guilt than usual having shown incivility at work. Interestingly, the direction of the relationship was even reversed under conditions of low mindfulness: Individuals low on mindfulness experienced significantly less guilt than usual having enacted incivility. This finding is in line with predictions based on social-cognitive theory (Bandura, 1999) or self-affirmation theory (Sherman & Cohen, 2006), which view moral transgressions as a threat to self-integrity. Individuals may respond to this threat with self-defense strategies -- for example, by dismissing or denying the event, or changing the construal of the event -- even though such a response is maladaptive as it forestalls learning from important experiences and may threaten the perpetrator's relationships with others (Sherman & Cohen, 2006). The experience of reduced levels of guilt following

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

transgressions for those low in mindfulness may be indicative of an over-engagement in moral disengagement strategies triggered by the transgression.

We did not, however, find statistical support for our hypothesis that enacted incivility on a given day would lead to lower levels of enacted incivility the next day (via the experience of guilt) for those high but not low in trait mindfulness. The fact that Hypothesis 4 was not supported may be explained by a floor effect. Individuals low on trait mindfulness already displayed a low level of incivility on average. Supporting our hypothesis would have required finding a negative deviation from the mean for individuals with already low average levels of enacted incivility. An alternative or an additional explanation may be that, in an effort to compensate and make up for previous enacted incivility, individuals high in trait mindfulness respond with an increase in civil behavior rather than with a reduction in uncivil behavior. Indeed, a few recent studies suggest that when moral values are made salient, individuals who have shown immoral behavior tend to subsequently engage in “moral compensation” behavior by engaging in forms of constructive behavior (Ilies et al., 2013; Joosten, van Dijke, Van Hiel, & De Cremer, 2013; Liao et al., 2018).

Finally, our findings add to the growing literature on mindfulness in general and mindfulness in the context of work in particular. Ethics and morality, central to Buddhist traditions, are inherently tied to mindfulness and mindfulness practice (Grabovac, Lau, & Willett, 2011; Kabat-Zinn, 2011). Yet, in contrast to well-being related outcomes, moral behavior has received little attention in the mindfulness literature (a few exceptions are Liang et al. 2016; Long & Christian, 2015; Shapiro, Jazaieri, & Goldin, 2012). By shedding light on how trait mindfulness shapes the way enacted incivility unfolds on a day-to-day basis, our study makes an important step in that direction, and adds to the incipient body of research on the potential of mindfulness for reducing hostile or abusive behavior at work (Liang et al., 2016; Long & Christian, 2015). Liang and colleagues (2018) have demonstrated that the

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

awareness rather than the acceptance dimension of mindfulness plays a role in buffering aggressive behavior in response to feelings of hostility. While it was not the purpose of the present study to differentiate between different components of mindfulness, our operationalization of trait mindfulness corresponded to their assessment of the awareness component. Our study therefore adds to their findings by showing that the role of mindful awareness in deviant behavior is even more far-reaching and goes beyond its function as a buffer of aggressive responses to hostility. Specifically, our findings show that mindfulness was associated not only with low, but also with stable levels of deviant behavior over time. Furthermore, in the present study, mindfulness shaped perpetrator's affective reactions to their own wrongdoing. These findings shed light on the role of mindfulness in processes following acts of incivility. This is important because ethical virtue not only involves behaving ethically and treating others well; it also entails the acknowledgement of one's own wrongdoing which is key to being able to behave more ethically in the future.

### **Practical Implications**

Workplace interventions focusing on incivility and mistreatment need to target not only the victims (e.g. Song et al., 2018) but also the perpetrators of incivility. Our findings may inform such interventions by showing that mindfulness can help to reduce incivility at work. Individuals high in mindfulness had a low overall tendency to engage in incivility. Furthermore, their incivility levels were less variable and they were less susceptible to day-of-the-week effects. These findings are of practical interest as organizations may wish to promote low but also stable levels of enacted incivility among their workforce. Less predictable employees with moderate average levels but a lot of day-to-day variability in enacted incivility may require as much attention as more predictable employees with high but stable levels of enacted incivility. Although we investigated mindfulness as a trait that naturally varies between individuals, there is ample evidence that mindfulness is malleable. In fact, evidence is

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

abundant that mindfulness can be increased through mindfulness-based interventions (Eberth & Sedlmeier, 2012). Since mindfulness has been ascribed well-being-, health- and performance- enhancing functions, many organizations, including Google, AETNA, IBM, or SAP, have started offering mindfulness programs to their workforce (Hyland, Lee, & Mills, 2015). Our findings suggest that the implementation of such programs could enhance relationships within organizations and reduce incivility at work. Bearing in mind that work circumstances have also been shown to contribute to the experience of mindfulness at work (Hülshager, Walkowiak, & Thommes, 2018; Lawrie, Tuckey, & Dollard, 2018), organizations may also wish to make sure that their work environment fosters mindful behavior.

Finally, our findings may also inform existing intervention programs aiming to reduce incivility and foster civility directly (Oore et al., 2010). Participants in such programs -- or employees in general -- could be made aware of general patterns of behavior (for example, the finding that instances of incivility are more likely to occur at the start of the week) and how this can affect their interpersonal behavior.

### **Limitations and Future directions**

As with any research, there are some limitations to the present study. Most constructs were assessed with self-report scales, which may have led to biases due to common method variance. In an effort to alleviate this concern, however, predictor, moderator, and criterion measures were assessed at different times, i.e. trait mindfulness was assessed in the general questionnaire, incivility in the daily lunch break and end-of-work surveys, and guilt in the bedtime survey (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Day-of-the-week was objectively measured, i.e. via automatically recorded time-stamps in the online surveys. It is also worth noting that, as our analytical focus was on relationships between variables at the within-person level, response tendencies are less likely to have influenced our results (Raudenbush & Bryk, 2002).

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Second, the repeated assessment of enacted incivility and guilt may have stimulated participants to reflect upon or even change their behavior. This is a shortcoming that is common to all self-report ESM studies, which could perhaps be overcome in the future by using other-ratings of enacted incivility or unobtrusive measures of guilt.

Another limitation is that we failed to find support for an indirect effect of enacted incivility on next day enacted incivility (via experienced guilt) that is moderated by trait mindfulness. As argued above, one explanation may be that endeavors to restore justice and moral self-image following uncivil transgressions may not be limited to the reduction of uncivil behavior itself. Values violated by the offense may also be restored by an increase in helping behavior or other relationship-enhancing activities. Future research could test this idea by assessing a wider range of outcome variables than we did. It may also be interesting to investigate whether such restorative behavior is targeted at the former victim exclusively, or whether it extends to other individuals.

As is common in studies using measures of variability (e.g. Barnes & Morgeson, 2007; Lindell & Brandt, 2000), we observed a strong correlation between the mean and the intraindividual standard deviation of enacted incivility. This positive correlation points to a range restriction caused by missing levels of high enacted incivility (Lindell & Brandt, 2000). We therefore conducted a supplementary analysis using the intraindividual coefficient of variation that considers the ratio of the intraindividual standard deviation to the mean to confirm our results with this alternative measure (Barnes & Morgeson, 2007). Nevertheless, the strong correlation between the intraindividual standard deviation and the mean of enacted incivility found in the present study suggests that future research, using the variability of enacted incivility as a predictor of work-related outcomes, should control for mean levels of enacted incivility in order to ensure that the variability provides a statistical increment over the mean in predicting these outcomes (Lindell & Brandt, 2000).

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Finally, although our study was carefully designed, and based on experience-sampling methodology, including multiple measurements per day, it was mostly based on self-reports, making it difficult to ultimately establish causality (Podsakoff, MacKenzie, & Podsakoff, 2012). While ethical concerns rule out directly manipulating enacted incivility in the workplace, there are opportunities to adapt and build upon the present research. Future research may benefit from using a mindfulness-based intervention rather than relying on self-reported trait mindfulness to replicate our findings concerning the role of mindfulness in enacted incivility.

### **Conclusion**

In this study, we adopted a self-regulation perspective and studied how trait mindfulness shapes the day-to-day processes involved in enacted workplace incivility. Findings revealed that, compared to their low-mindful counterparts, individuals high in trait mindfulness displayed lower levels of incivility, less variability in incivility over time, and reacted in a more morally mature manner to their own transgressions by experiencing guilt. However, these elevated experiences of guilt did not then translate into a reduction in uncivil behavior the following day.

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## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

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THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Table 1. *Correlations Among Study Variables*

	Cronb. Alpha	<i>M</i>	<i>SD</i>	ICC	1	2	3	4	5	Day of the week <sup>1</sup>
1 iSD of enacted incivility	-	.28	.30	-						
2 Trait mindfulness	.82	3.56	.59	-	-.23**					
3 Enacted incivility	.74	1.35	.40	.52	.76***	-.20*		.54***	.05	-.15***
4 Received incivility	.74	1.28	.35	.48	.62***	-.26**	.83***		.12*	-.21***
5 Guilt	.76	1.42	.60	.68	.36***	-.29**	.33**	.46***		-.08

*Note.* iSD = intraindividual standard deviation; <sup>1</sup>coded as 0 = Monday to 4 = Friday. Within-person level, *N* = 760; Between-person level, *N* = 152; Correlations at the between-person level are indicated below the diagonal; correlations at the within-person level are indicated above the diagonal; Cronbach’s Alpha was calculated individually for every day and then averaged.

\*\*\* *p* < .001; \*\* *p* < .01; \* *p* < .05 (two-tailed).

THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Table 2. *Growth Curve Models Predicting Enacted Workplace Incivility over the Course of the Work Week*

	Model 1		Model 2		Model 3	
	Estimate (SE)	SD	Estimate (SE)	SD	Estimate (SE)	SD
Fixed effects						
Intercept	1.40*** (.04)		1.40*** (.04)		1.40*** (.04)	
Day of the week			-1.59** (.46)		-1.59** (.47)	
Day of the week <sup>2</sup>			1.05* (.44)		.72 <sup>†</sup> (.42)	
Trait mindfulness	-.08* (.04)				-.08 <sup>†</sup> (.04)	
Day of the week X mindfulness					1.00* (.48)	
Day of the week <sup>2</sup> X mindfulness					-.13 (.42)	
Random effects						
Intercept		.37		.44		.43
Day of the week				3.03		2.87
Day of the week <sup>2</sup>				3.09		2.13
Residual		.45		.33		.36
<i>Pseudo R</i> <sup>2</sup> ; percentage variance explained						
Intercept variance	.04		-		.05	
Slope variance (Day of the week)	-		-		.10	
Slope variance (Day of the week <sup>2</sup> )	-		-		.52	
Residual variance	-		.42		.34	

Note. *n* = 509-564 observations, 136-151 persons; SE = standard error; Models allowed for autocorrelation because they fit the data significantly better than models assuming no autocorrelation.

\*\*\* *p* < .001; \*\* *p* < .01; \* *p* < .05; <sup>†</sup> *p* < .10. (two-tailed)

THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Table 3. *Multilevel Models predicting guilt in the evening and enacted incivility the following work day*

	Guilt in the evening	Enacted incivility next work day
	Estimate (SE)	Estimate (SE)
<i>Fixed effects</i>		
Level 1 main effects		
Day of week linear <sup>1</sup>	-.05*** (.02)	-.03 (.02)
Enacted incivility	.04 (.09)	-.11 (.06)
Guilt in the evening		.05 (.11)
Enacted incivility → guilt		.04 (.09)
Level 2 main effects		
Intercept	1.50*** (.06)	1.37*** (.05)
Trait mindfulness	-.17** (.05)	-.07 <sup>†</sup> (.04)
Cross-level interactions		
Enacted incivility x Trait mindfulness	.28** (.10)	
Enacted incivility x Trait mindfulness → guilt		.25** (.10)
<i>Random effects</i>		
Intercept	.29*** (.04)	.14*** (.03)
Enacted incivility slope	.08 (.06)	.13 (.09)
Residual	.14*** (.01)	.15*** (.01)
<i>Indirect effects<sup>2</sup></i>		
Trait mindfulness high (+1 SD)		.02 (.03)
Trait mindfulness low (-1 SD)		-.01 (.02)
<i>Pseudo R<sup>2</sup>; percentage variance explained</i>		
Intercept variance	.20	.35
Slope variance (enacted incivility → guilt)	.00	.00
Residual variance	.19	.00

## THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Note.  $n = 352$ - $439$  observations,  $117$ - $131$  persons; SE = standard error; <sup>1</sup>We also tested for a quadratic day of the week effect; since it was not significant, it was omitted. <sup>2</sup>Enacted incivility on next day enacted incivility via guilt; Unlike traditional measures of  $R^2$  obtained from OLS regression, pseudo  $R^2$  statistics are approximations and can have negative values. In such cases, we set the Pseudo  $R^2$  value to zero (see also Thoresen et al., 2004).

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; †  $p < .10$ . (two-tailed)

# THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

## Figure Captions

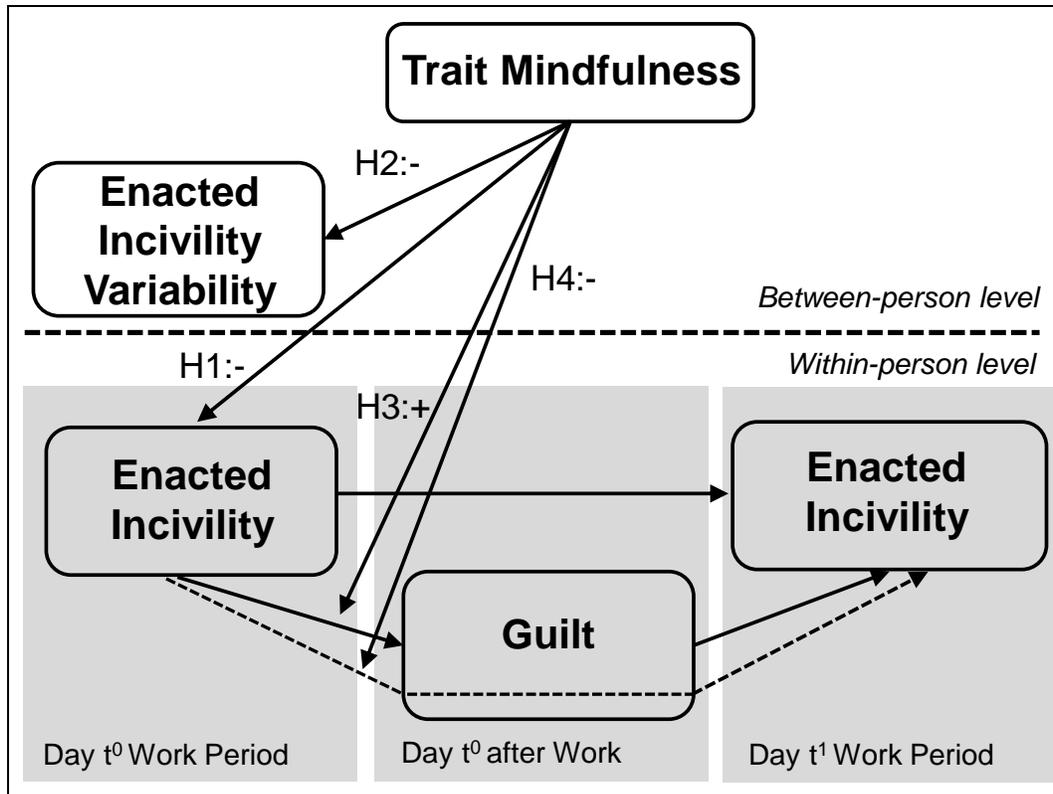
*Figure 1.* Conceptual model depicting study hypotheses

*Figure 2.* Changes in enacted workplace incivility over the course of the work week

*Figure 3.* Cross-level interaction between trait mindfulness and enacted incivility in predicting guilt in the evening

THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

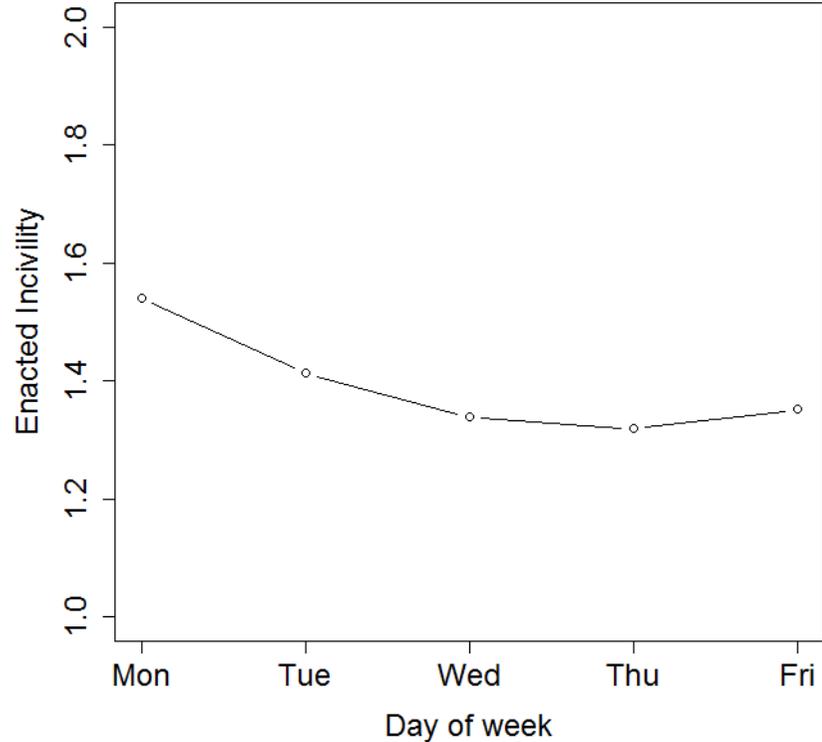
Figure 1



THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

Figure 2

(a)



(b)

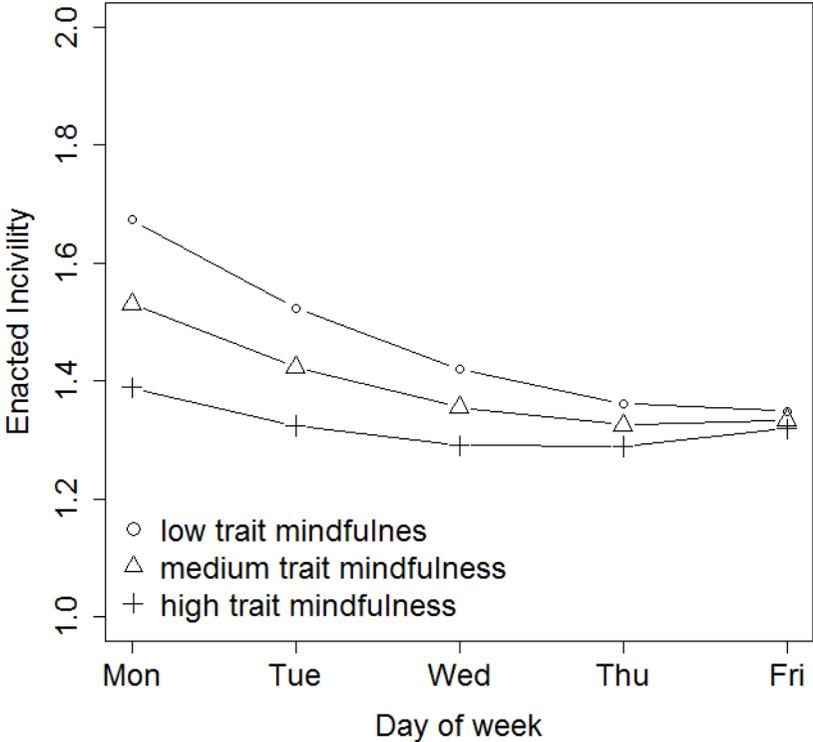
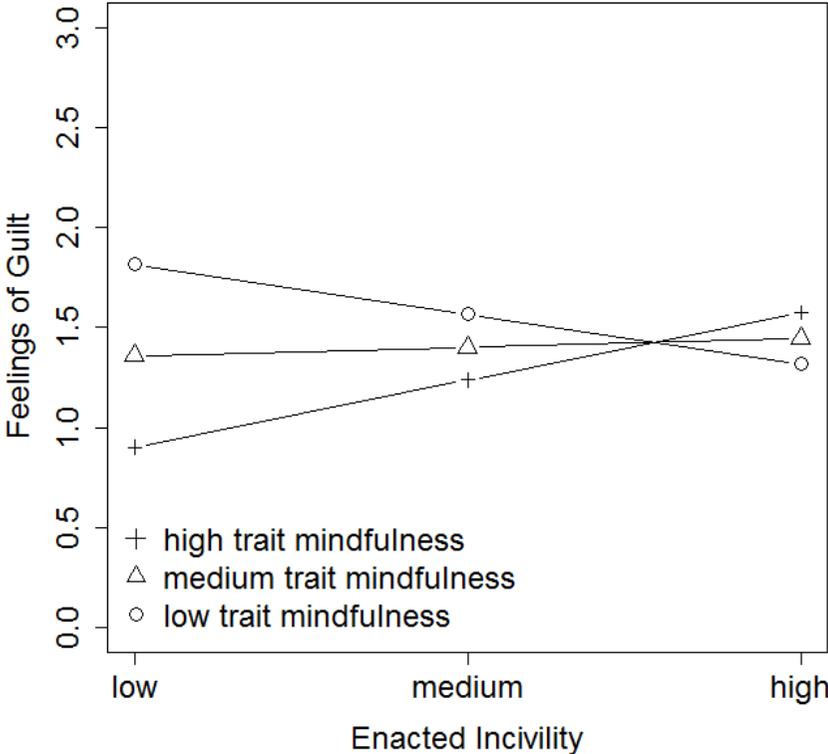


Figure 3

(a)



# THE REGULATING ROLE OF TRAIT MINDFULNESS IN ENACTED WORKPLACE INCIVILITY

## **Appendix 1: English version of the shortened scales**

### **Enacted incivility** (Cortina et al., 2013; Matthews & Ritter, 2016)

To what extent did you ...

1. pay little attention to someone's statement or show little interest in his/her opinion.
2. interrupt or "speak over" someone.
3. ignore or fail to speak to someone.
4. make jokes at someone's expense.
5. give someone hostile looks, stares, or sneers.

### **Received incivility** (Cortina et al., 2013; Matthews & Ritter, 2016)

To what extent did your colleagues or supervisors ...

1. pay little attention to your statement or show little interest in your opinion.
2. interrupt or "speak over" you.
3. ignore or fail to speak to you.
4. make jokes at your expense.
5. give you hostile looks, stares, or sneers.

All items were answered on 5-point agreement scales.