RUDENESS AND RECOVERY: THE EFFECT OF MICRO-BREAKS IN REDUCING NEGATIVE CONSEQUENCES OF WORKPLACE INCIVILITY

by

Nicole Thurmond Harrington

A dissertation submitted to the faculty of The University of North Carolina at Charlotte in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Organizational Science

Charlotte

2020

Approved by:

Dr. Enrica Ruggs

Dr. George Banks

Dr. Alyssa McGonagle

Dr. Linda Shanock

©2020 Nicole Thurmond Harrington ALL RIGHTS RESERVED

ABSTRACT

NICOLE THURMOND HARRINGTON. Rudeness and Recovery: The Effect of Micro-Breaks in Reducing Negative Consequences of Workplace Incivility. (Under the direction of DR. ENRICA RUGGS)

Workplace incivility leads to negative outcomes for employees and organizations (Schilpzand, De Pater, & Erez, 2016). It is difficult to completely eradicate due to the ambiguity and subtlety of many uncivil behaviors; however, it is important to seek ways to reduce the negative outcomes. In the current dissertation, I examine the role of microbreaks on employees who experience incivility. Although previous research has considered work breaks as a counterproductive response to incivility (Reio & Ghosh, 2009), the current study proposes that short, micro-breaks taken while at work may instead serve as a resource that provides employees momentary recovery from experienced incivility at work. In addition, by using a within-person, experience sampling approach, the current study considers the more immediate influence of short-term fluctuations in incivility which may differ from those associated with past or prolonged exposure. Data were collected from 75 working adults who responded to three surveys a day over two work weeks (10 days). Findings support previous research showing negative consequences of incivility on emotions and well-being. Furthermore, mixed findings suggest that the effectiveness of micro-breaks on different outcomes is influenced by the type of activity pursued (i.e., relaxation, cognitive, social, or nutrition). Although not all micro-break activities as defined in this study were effective on their own, when considered as a whole, micro-break activity was a significant moderator in the relationship between incivility and anger such that the relationship between incivility and

anger was lower on days in which employees engaged in more micro-break activities. In turn, anger mediated the day-level relationship between incivility and well-being. These results suggest that employees should consider activities that are most effective in helping them to cope with incivility-induced feelings of anger (e.g., irritation or frustration) when trying to make the most out of their micro-break experience.

ACKNOWLEDGEMENTS

I would like to acknowledge everyone who played a role from the start of my academic journey until now. First and foremost, I owe a huge debt of gratitude to my advisor and dissertation chair, Dr. Enrica Ruggs. This milestone would not have been possible without her guidance, support, and extreme patience over the past 7 years. I would also like to thank my committee members, Dr. George Banks, Dr. Alyssa McGonagle, and Dr. Linda Shanock for their feedback and direction throughout this process.

I would also like to thank my family and friends for not only their continued love and support but also for the crucial role they played in helping me complete this dissertation. I have no doubt that they are relieved that I will no longer be trying to squeeze every acquaintance out of them, but I am truly grateful for all the time and effort they contributed to help me recruit participants. I also owe extreme thanks to my husband who has stuck with me throughout the ups and downs of my graduate career.

Finally, I would like to again thank Dr. Enrica Ruggs for providing the financial support used to compensate participants for this work. I might still be collecting data if it weren't for this incentive. I truly cannot thank her enough for making this possible from across the country.

TABLE OF CONTENTS

LIST OF TABLES	iv
LIST OF FIGURES	v
INTRODUCTION	1
Overview of Workplace Incivility	4
A Within-Person Approach to Studying Workplace Incivility	6
Consequences of Workplace Incivility	8
Emotions and Affective Outcomes	8
Well-being and Performance Outcomes	12
Micro-breaks	14
Cognitive Activities	18
Relaxation Activities	19
Nutrition Activities	20
Social Activities	21
METHOD	26
Participants	26
Procedure	27
Measures	28
RESULTS	33
Pilot Test	33
Preliminary Analysis	33
Analytic Approach	34

Hypothesis Testing	36
Direct effects: Hypotheses 1-3	36
Moderation analyses: Hypotheses 4-5	37
Quadratic moderation analyses: Hypothesis 6	40
Exploratory Analyses	42
DISCUSSION	47
Theoretical Implications	48
Practical Implications	52
Limitations and Future Directions	54
Conclusion	60
REFERENCES	62
TABLES	78
FIGURES	89
APPENDIX A: RECRUITMENT MATERIALS	101
APPENDIX B: TRAINING MATERIAL	103
APPENDIX C: SURVEY ITEMS	106

LIST OF TABLES

Table 1. Overview of Micro-break Activities	78
<i>Table 2.</i> Means, Standard Deviations, and Intercorrelations of Study Variables	79
<i>Table 3.</i> Hypothesis 1-3: Direct Effects of Daily Incivility on Time 3 Outcome Variables	80
<i>Table 4.</i> Hypothesis 4: Direct and Interaction Effects of Micro-break Activities on Discrete Negative Emotions	81
<i>Table 5.</i> Hypothesis 5: Direct and Interaction Effects of Micro-break Activities on Well-being	82
<i>Table 6.</i> Hypothesis 6: Direct and Moderating effects of Micro-break Activities on Performance	83
<i>Table 7.</i> Direct and Interaction Effects of Composite Micro-break Activities on Negative Discrete Emotions	84
<i>Table</i> 8. Direct and Interaction Effects of Composite Micro-break Activities on Well-being	85
<i>Table 9.</i> Direct and Moderating effects of Composite Micro-break Activities on Performance	86
<i>Table 10.</i> Means, Standard Deviations, and Intercorrelations of Time 2 and Time 3 Study Variables	87
<i>Table 11</i> . Mediation Analysis for the Effect of Incivility on Well-being and Performance through Negative Emotions	88

LIST OF FIGURES

Figure 1. Conceptual model.	89
<i>Figure 2.</i> Plot of the interaction between social micro-break activity and daily incivility on anger.	90
<i>Figure 3</i> . Plot of the interaction between social micro-break activity and daily incivility on shame.	91
<i>Figure 4</i> . Plot of the interaction between cognitive micro-break activity and daily incivility on exhaustion.	92
<i>Figure 5</i> . Plot of the quadratic effect of cognitive micro-break activity on performance.	93
<i>Figure 6</i> . Plot of the interaction between nutrition micro-break activity and daily incivility on performance.	94
<i>Figure 7.</i> Plot of the interaction between social micro-break activity and daily incivility on performance.	95
<i>Figure 8.</i> Plot of the interaction between daily micro-break activity and daily incivility on anger.	96
<i>Figure 9.</i> Plot of the interaction between micro-break activity and daily incivility on performance.	97
<i>Figure 10.</i> Plot of the interaction between micro-break activity and daily incivility on performance.	98
<i>Figure 11</i> . Plot of the interaction between afternoon nutrition micro-break activity and morning incivility on shame.	99
<i>Figure 12.</i> Plot of the interaction between non-caffeinated micro-break activity and daily incivility on anger.	100

INTRODUCTION

Despite the laws and regulations that protect workers from more overt forms of workplace discrimination and harassment, employees increasingly report having experienced less intense forms of mistreatment that can put a damper on the day (Akella & Lewis, 2019). Workplace incivility refers to uncivil behavior that is both low in intensity and ambiguous in its intent to harm (Andersson & Pearson, 1999). These behaviors, such as eye rolls, stereotypical comments, or simple disregard are often unintentional but can be demoting towards others in the workplace (Andersson & Pearson, 1999). Unfortunately, as today's work environment becomes more diverse, demanding, and complex, it is unlikely that reports of incivility will go away (Pearson, Andersson, & Porath, 2000). Studies estimate that as many as 98% of U.S. employees have experienced some form of workplace incivility with up to 79% describing this as a regular occurrence and 10% reporting experiencing incivility on a daily basis (Cortina, 2008; Porath & Pearson, 2012; Zhou, Yan, Che, & Meier, 2015). Moreover, it is estimated that each year incivility costs organizations up to \$14,000 per employee from employee distractions, turnover, and project delays (Pearson & Porath, 2009). Therefore, while it is important to consider how to reduce the occurrence of incivility at work, researchers and practitioners alike must also consider the different strategies or resources that can help employees mitigate or cope with this conflict.

Although incivility research has cited increased work-breaks as a deviant outcome of experiencing uncivil behavior (Reio & Ghosh, 2009), recovery literature suggests that work breaks may help employees to bounce back from the negative emotions elicited by workplace stressors (Fritz, Ellis, Demsky, Lin, & Guros, 2013; Krischer, Penny, &

1

Hunter, 2010; Trougakos & Hideg, 2009). To date, the majority of this literature has focused on recovery during breaks that are either medium in length, lasting a sizeable chunk of time away from work during the day (e.g., lunch; after work) or those that are longer, lasting over a matter of days (e.g., weekend; vacation). However, at work microbreaks, characterized as short and typically unscheduled may represent a more-timely opportunity for recovery from daily stressors, such as incivility at work (Kim, Park, & Niu, 2017).

The goal of the current study is to examine the extent to which daily micro-breaks help employees recover from the negative outcomes of workplace incivility. Despite the mild nature of incivility, this form of interpersonal mistreatment can be harmful to employees and organizations. Individuals who experience incivility report both job and health related consequences including decreased job satisfaction and lower levels of physical and psychological well-being (Beattie & Griffin, 2014a; Cortina, Kabat-Farr, Magley, & Nelson, 2017). For the organization, incivility can be costly as victims are more likely to quit their jobs, decrease their work effort, and show lower organizational commitment (Pearson & Porath, 2005; Reio & Trudel, 2013). Most of these findings come from either longitudinal or cross-sectional studies that treat incivility as a chronic stressor with long-term consequences (Cortina et al., 2017; Schilpzand, De Pater, & Erez, 2016). Given the mild and ambiguous nature of incivility, it is possible such approaches overlook the more immediate or short-term outcomes of experiencing uncivil behavior. By using a within-person experience sampling study (ESM), the current study allows for a more in-depth examination of employees' reactions to day-specific incivility, with emotional experiences and micro-break behaviors that might be more difficult to recall on more retrospective cross-sectional studies (McCormick, Reeves, Downes, Li, & Ilies, 2018). For instance, low levels of anger such as frustration or irritation in response to incivility may influence daily behaviors but may be easily forgotten as time goes by and be overlooked in studies that treat incivility as a chronic stressor.

Additionally, the current study introduces at-work micro-breaks, defined as short, informal respite activities taken voluntarily between tasks, as a potential boundary condition that can explain differences in why incivility may be depleting on some days more than others (Kim et al., 2017; Trougakos & Hideg, 2009). As seen in Figure 1, I will examine whether micro-breaks, and more specifically different types of micro-break activities (those related to relaxation, social, nutrition, or cognitive activities), can mitigate the negative relationship between incivility and employee outcomes such as end of day well-being and subjective performance at work. By doing so, this research may provide different strategies that employees can engage in while at work to help cope with daily experiences of incivility.

I will begin with a brief broad overview of the workplace incivility literature and provide a rationale for why it is important to consider an ESM approach to the study of incivility. Following this, I will discuss some of the consequences of workplace incivility, focusing on the affective, well-being, and performance related costs to experiencing such mistreatment. After setting the stage for understanding the prevalence and outcomes of incivility, I will introduce an individual-level strategy that may help mitigate the shortterm negative consequences experienced incivility. Using Effort Recovery (ER) Theory (Meijman & Mulder, 1998) as a framework, I will discuss how taking micro-breaks at work could serve to help buffer targets of incivility against negative outcomes.

Overview of Workplace Incivility

Andersson and Pearson (1999) defined incivility as deviant acts that include rude verbal and non-verbal behaviors targeted towards another organizational member with ambiguous intent to harm. Such behaviors include making condescending or demeaning remarks, using sarcasm, and talking over others (Porath & Pearson, 2012). More subtly incivility may also take the form of withholding information, texting while a coworker is talking, or avoiding eye contact. These behaviors may be unintended (although they can be also intentional) or seem inconsequential, however, incivility can have severe consequences on psychological, physical, and work-related outcomes (Cortina, et al., 2017).

As with other forms of workplace mistreatment, defined as negative interpersonal behaviors directed at another person in the workplace, individuals who experience, or even witness incivility report negative job-related consequences. For instance, incivility has been related to increased burnout and turnover intentions (Taylor, Bedeian, Cole, & Zhang, 2017) as well as reduced job satisfaction, creativity, cooperation, and commitment (Cortina et al., 2017; Pearson & Porath, 2009). In addition, victims of workplace incivility report higher rates of distraction, anxiety, and withdrawal behavior (Cortina, Kabat-Farr, Leskinen, Huerta, & Magley, 2013; Taylor et al., 2017). These negative outcomes are also seen for other forms of workplace mistreatment such as bullying (Hershcovis, 2011) and social undermining (Duffy, Ganster, Shaw, Johnson & Pagon 2006; Hershcovis, 2011).

While other forms of workplace mistreatment such as social undermining or bullying are similar to incivility in that they violate organizational norms for mutual respect and display a general lack of regard for others, incivility has two definitional components that set it apart from the others. First, incivility is described as "lowintensity." Although uncivil behaviors may be irritating or offensive, they are not often perceived as being threatening (Glomb, Steel, & Arvey, 2002). Whereas bullying is also offensive, it is assumed to be more overt and of higher intensity than incivility because it, by definition, refers to a frequent occurrence of mistreatment (Hershcovis, 2011). Incivility researchers, however, contend that more subtle, isolated forms of mistreatment can also significantly affect employee attitudes and behaviors. Second, incivility is often ambiguous in its attempt to harm the target. Unlike other forms of workplace mistreatment, the ambiguous and subtle nature of incivility can be hard to discern or perceive such that the perpetrator, target and/or witness may or may not recognize the act as being purposeful, offensive, or rude. For example, a coworker might think that they are being ignored when, in reality, they were just not heard, or they may write off a rude comment assuming that their coworker is just having a bad day when indeed the coworker was purposefully being rude to them.

It is both the indistinguishable intent and subtle nature of incivility that presents a challenge for human resources, as these behaviors can often go unnoticed and unchecked by upper level managers and human resources (Cortina, 2008). As a result, incivility can easily run rampant within organizations as perpetrators, even if intentionally engaging in these behaviors, go unpunished. Unfortunately, incivility has the potential to affect the organization as a whole as these behaviors affect not only the target but others who witness the behavior (i.e., bystanders) as well. Research suggests that over 98 percent of employees report uncivil behavior at work (Schilpzand et al., 2016). Observing incivility

toward coworkers has been shown to be related to negative emotions and job attitudes in the witness (Lim, Cortina, & Magley, 2008; Miner & Eischeid, 2012). Furthermore, Pearson and Porath (2009) estimated that each year incivility costs organizations up to \$14,000 per employee from employee distractions, turnover, and project delays.

Although workplace incivility is subtle in nature, Andersson and Pearson (1999) described it as an escalating exchange of behaviors that can lead to those more overt forms of workplace mistreatment such as bullying or deviance. Because workplace incivility involves at least two people (i.e., the instigator and the target and/or witness) there is the chance that the uncivil behavior will be reciprocated, and the negative interchange will grow as the desire to retaliate strengthens. Research has supported the notion that experiencing incivility at work are more likely to engage in uncivil behavior toward others (Meier & Gross, 2015). For example, Woolum, Foulk, Lanaj, and Erez (2017) found that participants who witnessed rudeness in the morning were not only more likely to perceive subsequent behavior as rude but were also more likely to be rude towards others throughout the day. Furthermore, workplace incivility may also lead to subtle forms of discrimination or harassment as uncivil behaviors are more frequently directed towards women and racial minority groups (Cortina, 2008; Cortina et al., 2013).

A Within-Person Approach to Studying Workplace Incivility

Much of the previous research on incivility has largely relied on cross-sectional and retrospective data. These studies have viewed incivility as a chronic stressor, asking respondents to recall their experiences of incivility over a prolonged or unspecified time (e.g., in the last 1 year; in the last 5 years; Cortina et al., 2017; Lim, Cortina & Magley, 2008). This research is useful for assessing the between-person consequences of chronically experiencing workplace incivility. For instance, findings from these studies show that repeated exposure to these low-intensity behaviors results in outcomes that are just as detrimental as those that are more overt (Hershcovis, 2011; Schilpzand et al., 2016). However, this approach towards interpersonal mistreatment masks any considerable or meaningful fluctuations in the "experiences of, responses to, and consequences of such behavior" that occur within persons (Cole, Shipp, & Taylor, 2016, p. 297).

A recent meta-analytic review found that 63% of the variance found in interpersonal conflict was attributable to within-person variation (McCormick et al., 2018). As such there may be differences in how employees experience short-term, dayto-day, exposure to workplace incivility as compared to their experience over a prolonged period (e.g., over six months or five years). Because workplace incivility is subtle and ambiguous in nature, these behaviors may not be immediately recognizable as problematic at the time or even within the day of their occurrence as it may take more time or repeated incidents to interpret an event or future events as uncivil (Cortina et al., 2017). On the other hand, uncivil behavior may affect daily attitudes and behaviors that day but because of their low-intensity or rare occurrence may be brushed off or forgotten later on. Therefore, fluctuations in short-term job behaviors and attitudes may differ in important ways that are not captured by between-person studies that take a more retrospective approach (Schilpzand et al., 2016).

Recent evidence suggests that incivility affects employees on shorter time cycles (e.g., Meier & Gross, 2015; Tremmel & Sonnentag, 2018; Zhou et al., 2015). Within-

person research has noted changes in state-like attitudes including well-being, psychological detachment, stress, and anger on days when employees experience uncivil behavior at work (Beattie & Griffin, 2014a; Nicholson & Griffin, 2015; Taylor et al., 2017). Furthermore, employees may be more likely to retaliate and engage in fewer helping behaviors on days when incivility is high, suggesting that state-level changes can influence not only momentary attitudes but behaviors as well (Meier & Gross, 2015).

Consequences of Workplace Incivility

Emotions and Affective Outcomes

It is well documented that workplace incivility can trigger negative emotions and affect (Bunk & Magley, 2013; Cortina & Magley, 2009; Zhou et al., 2015). Targets of incivility often report feeling annoyed, frustrated, and offended (Cortina & Magley, 2009). Recently, ESM and diary research has started to extend this relationship to a shorter time cycle, finding that employees report higher levels of negative affect on days on which they experience incivility (Kim et al., 2017; Nicholson & Griffin, 2015; Zhou et al., 2015). For instance, Zhou and colleagues (2015) surveyed participants over a 10-day period and found that incivility was positively related to negative affect at the end of the day, while Tremmel and Sonnentag (2018) found that this negative affect can carry over into the morning after the uncivil experience occurred. However, these studies tend to lump all negative emotional states together into more general positive or negative affect. That is negative affect is treated as a higher order factor that encompasses more specific negative feelings (e.g., discrete emotions) such as fear or anger (Tellegan, Watson, and Clark, 1999).

According to Affective Events Theory (AET), employees experience discrete emotional states in response to specific events in the work environment (Weiss & Cropanzano, 1996). This is important because appraisal patterns and their behavioral responses have been found to differ by discrete emotion (Bunk & Magley, 2013; Roseman, Wiest, & Swartz, 1994). Hence, although two emotions may both be considered negative, they should not be expected to elicit the same responses. By combining emotional states into general positive or negative affect, researchers may be overlooking conceptual differences in the relationships that different emotions have with the outcome of interest.

The small amount of research examining discrete emotions and incivility has primarily focused on anger as it has long been considered as a key affective response to aggressive experiences in organizations (Glomb et al., 2002). Empirical findings, indeed, support the positive correlation of incivility frequency and anger (Bunk & Magley, 2013; Porath & Pearson, 2012). On the other hand, some research suggests that less intense, self-conscious emotions such as guilt, shame, or embarrassment may last longer than anger or even strengthen over time because they are more likely to result in rumination and therefore also deserve consideration (Rispens & Demerouti, 2016).

Other empirical investigations support the notion that the different emotions that comprise global affect measures differentially affect employees' behaviors and attitudes. For example, Kabat-Farr, Cortina, and Marchiondo (2018) found that targets of workplace incivility respond with a variety of emotions - namely those that are externalizing such as anger and those that are internalizing such as guilt - and that these emotions were further associated with different outcomes. For instance, they found that employees who experienced incivility-driven anger reported increased job withdrawal and decreased empowerment whereas those who experienced incivility-driven guilt suffered from decreased self-esteem and performance.

Such findings highlight the importance of blame or accountability, whether inwards towards the self or outwards towards others, in determining how employees will react to experiencing incivility. This is in line with appraisal theory which argues it is how the person interprets the event rather than the event itself that determines which emotion will be felt (Lazarus, 1991). However, the majority of these findings overlook the momentary nature of emotional reactions despite evidence to suggest that negative emotions show high levels of within person variation with more immediate affective states that may similarly or differently impact work related outcomes compared to those of more retrospective natures (McCormick et al., 2018). That is, negative emotions may fluctuate as events occur but do not necessarily remain over increased lengths of time or vice-versa. It is therefore possible that although the source of the emotion remains an important factor in the appraisal process (Roseman, 1996) the original placement of blame may resemble a "fight-or-flight" reaction to incivility that may begin shift over time as employees have more time to process or ruminate over the situation.

Following this logic, the current dissertation focuses on anger and a less intense self-conscious emotion (shame) rather than general negative affect. Both discrete emotions have been found as important in predicting organizational behavior and have frequently been cited as a response to workplace incivility (Porath & Pearson, 2012). In addition, a focus on shame and anger will allow for a comparison of an outward-facing

10

emotion (anger) and an inward-facing emotion (shame) and their relationships with incivility and job-related activities (micro-break activities).

Shame reflects an internal attribution of responsibility as a result of a failure to live up to some ego ideal (Lazarus, 1991). Feelings of shame occur when individuals evaluate themselves negatively or when they feel others are making negative judgements about them (Barclay, Skarlicki, & Pugh, 2005). At work, the ambiguous nature of incivility may result in feelings of shame such as embarrassment and inadequacy, as employees turn to themselves to try to explain the reason for why they have been subjected to uncivil behavior. For example, they may wonder if they were subjected to incivility because they do not deserve the respect due to something lacking within themselves (e.g., initiative, intelligence) or to their belonging to a lower status or stigmatized group.

Anger, on the other hand, places the blame on an external culprit as a result of a threat to "mine or my own" (Lazarus, 1991, pg. 148). Anger often occurs when individuals feel that there has been some type of injustice enacted against them. Uncivil behaviors, such as a demeaning offense or personal slight, can result in anger towards coworkers, supervisors, or even the organization as a whole if the target believes that this source has control over the behavior. Regardless of intentionality, feelings of frustration, irritation, and even more intense feelings of rage may result from perceived incivility especially if the target believes an act to be inherently unfair.

Because of the ambiguous nature of incivility, it is likely that both emotions may be experienced from the same behavior. For instance, after being ignored in a meeting an employee may experience anger if they attribute the cause to some unfair bias or intentionality, while they may experience shame if they attribute it to the belief that their opinions were not of consequence. Therefore, it is expected that both negative emotions will be positively associated with workplace incivility.

Hypothesis 1: Within individuals, day-specific incivility will be positively associated with day-specific *a*) anger and *b*) shame such that greater experiences of incivility will be related to heightened levels of both negative emotions.

Well-being and Performance Outcomes

Two of the main outcomes of incivility that have been studied, given their importance to employees and to organizations, are well-being and performance (Cho, Bonn, Han, & Lee, 2016; Lim et al., 2008; Porath & Erez, 2007; Porath & Pearson, 2012). Therefore, these outcomes will also be used in the current study. Well-being can be defined in a number of ways, but generally is considered to include both emotional experiences and subjective evaluations of one's work and life circumstances (Deiner, 1984). The negative relationship between workplace incivility and well-being has been well-established using several well-being indicators. For instance, incivility has been linked to psychological well-being including increased strain and anxiety as well as decreased workplace affect and mental health (Lim et al., 2008; Paulin & Griffin, 2016; Reio & Ghosh, 2009). Further studies have found a relationship between workplace incivility and physical well-being such as heightened health complaints and illness related absences from work and lower health satisfaction (Lim et al., 2008; Miner, Settles, Pratt-Hyatt, & Brady, 2012).

In terms of daily well-being, energy has commonly been used as a reliable shortterm indicator as it is known to correlate with daily fluctuations of workplace stressors

12

such as incivility (Parker, Zacher, de Bloom, Verton, & Lentink, 2017; Rivkin, Diestel, & Schmidt, 2018; Viotti, Essenmacher, Hamblin, & Arnetz, 2018). Studies show that experiencing workplace incivility can lead to depleted emotional, mental, and social energy (Giumetti, et al. 2013; Porath & Erez, 2007; Porath, Foulk, & Erez, 2015). Emotional exhaustion, defined as feelings of being emotionally overextended and depleted of one's emotional resources, is one of the most frequently discovered negative outcome of workplace incivility (Fida, Laschinger, & Leiter, 2018; Hur, Kim, & Park, 2015; Maslach, Jackson, & Leiter, 1996). At work, the stress associated with dealing with uncivil behavior can add up, becoming increasingly taxing on one's time and energy (Hur et al., 2015). Furthermore, an additional cognitive burden may result as employees try to make sense of these ambiguous behaviors (Lim et al., 2008). Consequently, the energy needed to deal with incivility can leave employees feeling burned out or cognitively drained at the end of the day.

In addition, performance can be hampered by incivility (Porath & Erez, 2007; Schilpzand et al., 2016; Sliter, Sliter, & Jex, 2012). Findings show that targets of workplace incivility suffer from decrements in task performance, creativity, and citizenship behavior (Chen et al., 2013; Mao, Chang, Johnson, & Sun, 2019; Porath & Erez, 2007; Porath et al., 2015; Taylor, Bedeian, & Kluemper 2012). One reason performance is negatively affected by incivility is because incivility leads to work disengagement (Chen et al., 2013). Indeed, Spreitzer and Porath (2012) discovered that half of the employees surveyed who had experienced some form of workplace incivility reported intentionally reducing their effort. *Hypothesis 2:* Within individuals, day-specific incivility will be negatively associated with day-specific subjective well-being such that greater experiences of incivility will be related to lower levels of well-being.

Hypothesis 3: Within individuals, day-specific incivility will be negatively associated with day-specific subjective performance such that greater experiences of incivility will be related to lower levels of performance.

Micro-breaks

As discussed, the negative consequences of incivility on a number or workplace outcomes including well-being and performance have been well documented (Hershcovis, Ogunfowora, Reich, & Christie 2017; Kabat-Farr et al., 2018; Meier, Gross, Spector, & Semmer, 2013). However, when it comes to affective responses to stressors, researchers have largely focused on affective reactivity rather than reactive recovery (Leger, Charles, & Almeida, 2018). An examination of reactive recovery is important because opportunities to recover from stressors, which includes incivility, can allow people to positively cope with the experienced stress, which can potentially reduce some of the negative consequences of the stressor (Kim, Park, & Headrick, 2018). In fact, according to ER Theory, the timing of recovery from stressors is critical as prolonged exposure to stress without respites will continue to draw more and more from employees' cognitive, emotional, and physical resources making it more difficult to recover later on (Meijman & Mulder, 1998). As such, as the workday continues without a chance for resource recovery, employees will experience greater strain in response to uncivil behaviors, making it harder to return to earlier levels of any particular resource (e.g.,

energy). In the current dissertation I propose that daily micro-breaks may serve as a type of momentary recovery that can help employees to deal with experienced incivility.

As the process by which individuals recharge resources that have been depleted, recovery has been recognized for its potential to mitigate the negative effects of strain at work (Kim et al., 2018; Meijman & Mulder, 1998; Sonnentag, 2001). Previous research indicates that breaks away from work, including after-work, weekend, and vacation breaks, can help employees maintain positive job attitudes and well-being (Fritz et al., 2013). Growing research on breaks during the workday suggests that recovery from work stressors can occur on the job as well. For example, research on lunch breaks shows that relaxing lunch break activities, lunch break autonomy, and choice of lunch companion can affect afternoon fatigue and performance (Trougakos, Hideg, Cheng, & Beal, 2014). However, less is known about whether shorter breaks taken throughout the day have similar benefits and whether some break activities are more beneficial than others.

In the recovery literature, such shorter breaks are referred to as micro-breaks. Micro-breaks represent short, informal respite activities taken voluntarily between tasks (Kim et al., 2017; Trougakos, & Hideg, 2009). These breaks are different from other types of breaks in that they are unscheduled, can be taken at a time of need, and are much shorter than other forms of breaks, lasting from only a few seconds to several minutes. Examples include break activities such as stretching, checking social media, grabbing a snack, or chatting with a coworker. There is increasing evidence that these types of breaks may be related to workers' emotional states and job relevant outcomes. For example, previous research has found that on days in which employees take more microbreaks, they are more likely to report higher work engagement, positive emotions, and well-being as well as lower stress, negative emotion, and even fewer health-related complaints at the end of the workday (Hunter & Wu, 2016; Kim et al., 2017; Kühnel, Bledow, & Feuerhahn 2016).

This small but growing body on short, at-work breaks suggests that what is done during the break matters. For instance, in one of the first studies examining at-work recovery Trougakos, Beal, Green, and Weiss (2008) found that employees who engaged in respite (e.g., napping; socializing) but not chore (e.g., running errands; prepping material) related activities during their breaks experienced improved positive emotions and performance after their work breaks. More specifically cheerleading instructors showed improved affective delivery, considered a core aspect of performance in this sample, after taking respite break activities but that break activities that included chores had no effect on positive affect.

In another study, Zacher, Brailsford, and Parker (2014) compared work (e.g., switching to another task, checking email, making a to-do list) and non-work micro-break strategies (e.g., having a snack, listening to music, day dreaming) and found that non-work related strategies had positive short-term effects on momentary occupational wellbeing but that work-related activities had no such effect. This finding was in direct contrast to an earlier cross-sectional study in which work-related energy management strategies were positively related to vitality whereas several non-work micro-break activities negatively related to vitality and positively related to fatigue (Fritz, Lam, & Spreitzer, 2011). Findings across these studies suggest that the benefits of work-related strategies may unfold over time whereas non-work-related strategies may serve more as emotion focused coping that result in more momentary benefits to the employee. Further research has focused on other break activities such as short walks, meditation, or social media usage and their effectiveness as break activities. However, most of these studies tend to focus on a single activity as part of an intervention and fail to consider their relationships with more specific job demands and stressors (Lee, Williams, Sargent, Williams, & Johnson, 2015; Zacher et al., 2014).

Given the multitude of activities that can occur at work, it is surprising that so few studies have investigated short work breaks to counteract workplace stressors. However, these few suggest that a deeper understanding of micro-breaks may be beneficial as a means of combating workplace stressors. For instance, one study showed that micro-break activities moderated the effect of job demands on negative affect at the end of the workday, such that the relationship between work demands and negative affect was weaker on days that employees engaged in more micro-break activities (Kim et al., 2017). However, this study lumped all work demands together, which fails to capture whether micro-break activities would be better for employees who experience an interpersonal stressor, such as incivility, as compared to those who experience task stressors, such as high workloads.

Similar to research on longer breaks, studies on micro-breaks suggest that different break activities may have varying effects on the extent to which the breaks lead to positive outcomes (Kim et al., 2017; Zacher et al., 2014). For instance, Kim, and Niu (2014) found that workers who used their smartphones to engage in social media reported higher well-being at the end of the day than did those who used their phones for entertainment or informational reasons. On the other hand, Zacher and colleagues (2014) found that taking a break to talk to someone about common interests or to have a snack were more likely to improve energy levels than were breaks that included shopping or reading something for fun.

Based on previous work on micro-break activities, researchers have differentiated between four categories of micro-break activities: cognitive, nutrition-intake, relaxation, and social activities (Fritz et al., 2011; Kim et al., 2017; Kim et al., 2018; Trougakos et al., 2008; Trougakos et al., 2014). Below, I present more detail about how each type of activity might be beneficial to recovery from incivility experienced at work throughout the day on days when incivility is high.

Cognitive Activities

Cognitive activities are those activities that allow a mental break from work while still requiring some attention and effort. Examples include browsing the internet or reading. These activities may be effective as a temporary escape from job related stress. In fact, psychological detachment has been widely accepted as an important experience to recovery away from work, as the ability to psychologically detach from work at the end of the day has been associated with increased well-being, energy, and next morning recovery (Sonnentag & Fritz, 2007). Other recovery research has found that activities related to learning something new at work are related to increased energy and less fatigue during the day (Fritz et al., 2011). However, some argue that the short nature of microbreaks limits the positive effects or the ability to fully distance oneself from work. For instance, Kim et al. (2017) found that cognitive activities actually increased employees' end of day negative affect. However, on days when employees experience incivility, being able to momentarily remove oneself from the threat to self may help employees to cope with the discrete emotions of anger and shame. Because employees gain the most benefits from engaging in break activities they prefer, non-work cognitive breaks such as completing a puzzle or online shopping should be enjoyable to employees (Hunter & Wu, 2016; Moller, Deci, & Ryan, 2006; Zacher et al., 2014). Thus, preferred cognitive break activities may allow workers to momentarily escape and recover from daily experiences of incivility.

Relaxation Activities

Relaxation activities refer to physical and psychological activities that require little to no effort, allowing the mind and body to relax. Some relaxing activities might include taking a short walk, daydreaming, or meditating. Like psychological detachment, relaxation is also considered to be one of the core recovery experiences from work stressor (Sonnentag & Fritz, 2007). In fact, engaging in relaxation has been consistently linked to employee well-being no matter the break length (Fritz et al., 2013). Research suggests activities that are restful and enjoyable provide better recovery than do those that require continued effort, which may also explain the mixed findings of cognitive micro-break activities (Trougakos et al., 2008). For instance, short breaks including simple strength routines, stretching, and meditation can increase mood and decrease fatigue, anger, and depression (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008; Fritz et al., 2011; Pronk, Crouse, & Rohack, 1995). Moreover, even daydreaming and simply staring at a greenspace have been found to restore psychological resources through decreased negative emotions (Game, 2007; Lee et al., 2015). As such it is expected that relaxation activities may help reduce the additional negative load from reactions to experienced daily incivility.

Nutrition Activities

Nutrition-intake activities are simply those activities, outside of the formal lunch break that refer to snacking and drinking at work (e.g., drinking coffee). Despite being one of the most common non-work break-activities according to a study on energy management by Fritz and colleagues (2011), there is little research that has considered nutrition-intake in the context of day-to-day work-related outcomes. Outside of lunch breaks, nutrition intake breaks can help employees to maintain energy and basic physiological functioning (Trougakos & Hideg, 2009). For instance, previous research has found higher glucose levels to be positively related to the suppression of negative emotions, more helping behavior, and even reduced stereotyping (Gailliot et al., 2007; Gailliot, Peruche, Plant, & Baumeister, 2009). Other research suggests that ego-threats and interpersonal hassles are associated with increased snacking, especially among women (O'Connor, Jones, Conner, McMilan, & Ferguson, 2008). This is in line with evidence that suggests employees will snack more on days in which they feel the need to reduce negative affect and boost energy (Sonnentag, Pundt, & Venz, 2017).

In addition to snacking, caffeine intake has been studied for its benefits at work. For example, caffeine can help alleviate some of the depletion of sleep deprivation thus allowing employees to feel more energized at work (Welsh, Ellis, Christian, & Mai, 2014). Further, although Kim and colleagues (2018) did not find nutrition-related microbreaks to predict positive affect and performance, their earlier study found that caffeine consumption minimized the effects of daily demands on end of work negative affect (Kim et al., 2017). While nutrition-based activities may not be beneficial for building positive emotions or for health in the long run, these activities may help employees to cope with negative emotions on days when they experience heightened incivility especially when the activity is related to caffeine intake.

Social Activities

Social activities are those that involve socializing with coworkers or others on non-work-related matters and include both face-to-face and electronic forms of communication. Fritz et al. (2013) suggests that activities that build social relationships at work may be one of the most advantageous break strategies for energy management at work. Social interactions can provide relational energy which can increase engagement and productivity (Owens, Baker, Sumpter, & Cameron, 2016). Outside of work, social activities are also cited as an important component of the recovery process, with positive implications on employee well-being (Sonnentag, 2001). In terms of at work recovery, social activities may also serve as a source of social support. For example, Kim and colleagues (2017) found that voluntary social activities weakened the effect of work demands on end of the day negative affect, suggesting that on days with heightened incivility, social activities may act as a resource that can improve employee emotions. However, Kim et al. (2017) focused on work demands, particularly workload as the workplace stressor. It could be that social activities may not be the best option for recovering from interpersonal stressors such as incivility.

Trougakos et al. (2014) found that socializing during lunch breaks reduced end of day fatigue only for those who were able to choose their lunch break companions. Those who did not get to choose were more fatigued at the end of day. Unwanted social interactions may be a source of incivility or may interrupt work leaving one feeling more frustrated than they were before (Beehr, Bowling, & Bennett, 2010). In fact, contrary to what might be expected, taking time to vent about a problem has been associated with decreased vitality and increased fatigue when studied cross-sectionally (Fritz et al., 2011).

Cortina and Magley (2009) demonstrated that the most common coping responses to incivility can be categorized by avoidance or minimization of the situation, suggesting that further interaction with coworkers may be more harmful or taxing than they are helpful for recovery. For example, the effort needed to regulate negative emotions in social interactions may add to the existing negative load (Gross, 1998). Nevertheless, the same study indicated that talking to someone who you trusted was also a common coping response. Thus, the benefits of social activities likely depend on both the content of the experience as well as the relationship with the interaction partners as checking in with friends, family, and trusted coworkers through interaction, social media, or short phone calls may help to mitigate the negative effect of workplace incivility on negative emotions.

Overall, although the effectiveness of different micro-break activities on recovery appears to vary within the literature, the research suggests that there may be positive affective benefits to each of the four commonly studied micro-breaks. For instance, although Zacher and colleagues (2014) eventually aggregated the specific break activities they examined into micro-break activities and work-related strategies, they found that all but one type of break activity was positively (though not necessarily significantly) related to occupational well-being. Further, Hunter and Wu (2016) found that employees showed increased job satisfaction and decreased exhaustion if they participated in activities that they preferred. Therefore, I posit that taking any type of micro-break should lead to at least momentary relief for employees who have recently experienced incivility at work as long as the break activity is one that is preferred by the individual.

Hypothesis 4: Within individuals, day-specific micro-break activities will moderate the relationship of incivility with emotion such that the association between incivility and negative discrete emotions will be weaker when day-specific micro-break activity is high.

Like their mitigating effect on negative emotions, micro-break activities will likely be beneficial for end of the day well-being. For instance, different micro-activities may improve positive affect and restore energy which could also improve well-being and performance at the end of the day (Kim et al., 2018; Zacher et al., 2014). Conversely, micro-break activities may have a differential relationship with performance. Taking extended or frequent breaks could also be counted as a counterproductive work-behavior in response to experienced incivility at work (Reio & Ghosh, 2009; Spector et al., 2006). Following the "too-much-of-a good-thing effect" (Pierce & Aguinis, 2013, p. 315), there could be a curvilinear effect of micro-break activity on performance. While taking some micro-breaks at work may energize or motivate employees to stay on focus and keep up their performance, it also stands that during these breaks, work is not getting done. For example, one study found that taking time to leisurely browse the internet had a positive effect on worker productivity as long as browsing did not exceed 12 percent of the workday (Coker, 2011). If employees are taking too many breaks, it is also possible that productivity will decrease as the number of breaks increases.

Hypothesis 5: Within individuals, day-specific micro-break activities will moderate the relationship of incivility with subjective well-being such that the

negative association between incivility and subjective well-being will be weaker when day specific micro-break activity is high.

Hypothesis 6: Within individuals, day-specific micro-break activities will moderate the relationship of incivility with subjective performance such that the negative association between incivility and subjective performance will be weaker on days where employees engage in some micro-break activities as compared to very few or none but that this relationship will reverse at some point as the number of daily micro-breaks increases.

While it is expected that micro-break activities will be related to lower levels of the negative outcomes, the exact break activities pursued may share different patterns with daily experiences of incivility. For instance, Beattie and Griffin (2014b) followed participants across a month and found that individuals do not consistently respond to mistreatment. They further found that the only variable that significantly accounted for this within-person variation in response type was perceived severity of the incident. This suggests that the way in which the situation is appraised may influence the type of break activity pursued (Lazarus & Folkman, 1984).

As previously alluded to, appraisal theories suggest that different emotions have distinct response profiles with different feelings, thoughts, and behaviors (Beattie & Griffin, 2014b;Roseman et al., 1994). That is, although both anger and shame may be common responses to experienced incivility, they are associated with different motivational tendencies that may explain subsequent behavior (Priesemuth, Mitchell, & Folger, 2017). For instance, anger often elicits feelings of injustice or unease that at an extreme have been associated with more explosive behavioral needs to lash out or seek revenge and at its lower intensities (e.g., frustration) the need to exert effort or overcome (Roseman, 2013). Shame, however, often elicits feelings of being unworthy and is associated with the need to withdraw or move the self away from the situation. Guilt, although sometimes considered as a dimension of shame may alternatively motivate employees to correct the situation and to repair interpersonal relationships (Tangney, Miller, Flicker, & Barlow, 1996).

As noted earlier, the effectiveness of different micro-break activities may vary across different outcomes. Given the relatively small amount of literature and results showing that the outcomes of certain micro-breaks may be dependent on other factors (such as motivation for taking the break or other participants included in the break activity), there is not clear evidence to predict differential relationships in the effectiveness of different break activities on recovery from incivility. Although I believe that each strategy will be helpful in reducing negative outcomes, it is possible that some breaks are more effective than others. As such, I propose the following research question rather than a specific hypothesis:

Research Question 1: Will different micro-break activities have different relationships with negative emotions, performance, and well-being?

METHOD

Participants

Participants were recruited via a snowball sampling technique. Initial recruits helped to distribute information about the study through an email which included a brief overview of the study in addition to a link to participate in the baseline survey. To reach a broader audience, social media posts to both Facebook and LinkedIn were also used to recruit participants in the later waves (3-5) of the study. To be eligible for the current study, participants had to work at least 30 hours a week, have access to an electronic device (i.e., computer or smartphone) throughout the workday, and work in an environment where they interacted with coworkers. Recruitment took place over five waves.

A total of 113 participants responded to the baseline survey over the 5-wave process. Of these, 21 were removed due to red flags, which included possible bot responding and multiple participation attempts by the same person as indicated by repeated use of the same IP address, false emails or mailing addresses, and questionable responses to affect questions (i.e., reporting very high levels of both positive and negative state affect). Another 7 did not respond to any of the daily surveys, and 10 were removed for completing less than 30% of the daily surveys. The final sample consisted of 75 working adults including 46 females (61.3%) and 29 males (38.7%). The average age was 37.22 years (SD=12.72). The majority of participants identified as White (79%) with only 16 of the 75 identifying as Black (12%), Native American (4%), Asian (1.3%), Latino/a or Hispanic (1.3%), Middle Eastern (1.3%), or Other (3.3%). The sample was relatively educated with 60% indicating having received a 4-year degree and 30.7% having

received an advanced degree. Job tenure averaged 6.36 years (*SD*=8.19) across a broad range of career functions. The most frequent job types reported were Administration (17.3%), Engineering (13.3%), and Sales (10.7%). Finally, the majority of participants identified their job level as analyst/associate (37.3%), manager (25.3%), or entry-level (13.3%).

Procedure

The current study used experience sampling methodology (ESM) with web-based diary surveys administered through Qualtrics. During the study, participants were prompted to respond to three surveys per day over two work weeks. Because many within-person processes, such as discrete emotions, may not last for the duration of the workday, ESM is better suited to capture these within-person fluctuations (Maxwell & Cole, 2007). Furthermore, by capturing experiences closer to the moment, this approach may reduce recall bias on low intensity behaviors such as incivility and micro-break activity.

Participants were first invited to complete a baseline survey. This survey began with eligibility requirements to screen out ineligible participants. Eligible participants were then asked for their informed consent before collecting demographic, individual trait measures, and organizational information. At the conclusion of this survey, participants were asked to provide an email address if they were still interested in participating. I then followed up with the participants (n=113) via email with more indepth information, including a training document (see Appendix B). This document provided participants with their unique participant identification number, outlined what to expect during the data collection process, and provided some general definitions and

examples of workplace incivility and the different types of micro-break activities. Participants were also reminded that they could opt-out at any time if they no longer wished to participate or receive future emails with the daily survey links.

Beginning the Monday indicated on the training material, participants began the main portion of the current study. Each workday, for a two-week (10-day) period, participants received an email three times a day based on the time-zone they reside in (unless atypical work hours were indicated). Each email included a reminder of their unique identification code along with an embedded link to the online survey. The first survey was sent about an hour before the participant's workday began (~7 am) with instructions to complete the survey when they are just arriving at work. The second survey was sent around midday (~11 am) and the third survey was sent about an hour before the articipant's to catch participants before leaving that day.

As an incentive to participate in this study, participants were rewarded with a \$10 gift card to Starbucks, Walmart, or Target with an additional \$20 gift card reward for completing both weeks. Participants who completed at least 70% of the surveys were also entered into a random drawing for 1 of 10 \$50 Starbucks gift cards. In all, 75 participants completed at least 70% of the time points. From these 75 participants, 75.23% of all time points (1693 of 2250) were completed including 80.8% (606) of all morning surveys, 77.2% (579) of the midday surveys, and 67.73% (508) of all evening surveys.

Measures

All survey measures and scales are included in Appendix C. Below are the measures used in the current study. Internal reliabilities for all day-level measures were

computed using person-centered variables in order to remove between-person influence (Nezlek, 2011).

Daily Workplace Incivility. Incivility was measured daily at midday (Time 2) and evening (Time 3) using the 7-item Workplace Incivility Scale (WIS) created by Cortina and colleagues (2001). The scale was adjusted to reflect the day-level experiences on a 5-point Likert scale (1 = never to 5 = frequently). This scale was recoded (0 = never to 4 = frequently) to make 'never' more interpretable in the analyses. Sample items include, "This morning (afternoon) how often-were you in a situation where someone made mean or derogatory remarks about you," "paid little attention to your statement or showed little interest in your opinion", and "ignored or excluded you from professional camaraderie." Internal consistency for these items was $\alpha = .62$ across all midday times points and $\alpha = .66$ across evening time points. The two timepoints were averaged to reflect a day-level measure.

Discrete Emotions. Shame and anger were measured on the morning, midday, and evening surveys using the shame and anger components developed by Diener, Smith, and Fujita (1995). Participants were asked to indicate the extent that each emotion adjective describes their feelings on a 5-point Likert scale (1 = not at all to 5 = very *much*). The four items that represented Shame include shame, embarrassment, guilt, and regret. Across tine points, the internal consistency for these items was $\alpha = .72$ at Time 1, $\alpha = .69$ at Time 2, and $\alpha = .60$ at Time 3. Anger was represented by anger, irritation, disgust, and rage. These items had an internal consistency of $\alpha = .63$ at Time 1, $\alpha = .59$ at Time 2, and $\alpha = .63$ at Time 3. Shame and Anger at Time 1 and Time 2 were included as

control variables as baseline affective state may influence subsequent affect and affective reactions (Weiss & Cropanzano, 1996).

Micro-break Activities. Micro-break activities were measured daily at the midday (Time 2) and evening (Time 3) time points using the 9 items developed by Kim et al. (2017) to capture common respite activities across four categories of break activities (cognitive, nutrition, social, and relaxation). Participants were asked to recall the frequency of short, informal respites taken voluntarily during the previous work period (morning or afternoon) on a 5-point Likert scale (1 = never to 5 = very frequently). This scale was also recoded to 0 = never to 4 = very frequently. Indicators for each type of micro-break activity were computed as the average score of the activities from each category. These items are listed in Table 1.

Daily well-being. Daily well-being was measured at Time 3 and was indicated by two measures gauging participant energy at the end of the workday, Emotional Exhaustion and Vigor. Both measures asked participants to indicate their current agreement with the items on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Emotional Exhaustion was measured using 3 items adapted from the emotional exhaustion scale created by Maslach and Jackson (1981). Items include "I feel emotionally drained from my work," "I feel burned out from my work," and "I feel used up." Vigor was measured using the 2-item vigor subscale from Shortened version of Utrecht Work Engagement Scale (UWES-9; Schaufeli & Bakker, 2003). Items include "I feel bursting with energy" and "I feel strong and vigorous." Both measures had an internal consistency of $\alpha = .82$ across time points.

Subjective Performance. Performance was measured at Time 3 using the 3-item Daily Goal Progress Scale Adapted by Qanberg, Zhu, and Van Hooft (2010). Participants were asked to indicate their agreement on a 5-point Likert scale (1= *strongly disagree* to 5 = strongly agree). Items include: "From the beginning of the workday till now: "I have been productive in relation to my work goals," "I have made good progress on my work goals", and "I have moved forward with my work goals." Internal consistency for the items was $\alpha = .91$.

General Incivility. Because I person-centered all Level 1 variables, the betweenperson differences in average levels of experienced incivility were controlled for in subsequent analysis. However, previous levels of exposure to acts of workplace incivility may affect how employees perceive and react to similar behaviors in the future (Matthews & Ritter, 2019). For instance, previous research found that employees who have reported previous exposure to social undermining – a similar form of subtle workplace misconduct – do not react as strongly to this behavior compared to those employees who have not previously experienced such behavior at work (Duffy et al., 2006). Hence, employees may differ in both their perception of when they have been a target of incivility as well as in the severity of their reaction when they have. Therefore, general incivility was also measured as a control in the baseline survey using the 12-item revised version of the Workplace Incivility Scale (WIS; Cortina et al., 2013). The response scale ranged from 0 = never to 4 = many times and asked participants to describe the frequency of which they have experienced each form of uncivil conduct from a coworker or supervisor during the last 6 months of work. Example items include "gave

you." The internal consistency for these items was $\alpha = .93$.

RESULTS

Pilot Test

Prior to the main data collection, I pilot tested a similar procedure using 9 working undergraduate students at UNCC for extra-credit incentive. The primary purpose was to test the process (e.g., automated email prompts and mail merge functions) and to catch any misunderstandings in the content. As students were unlikely to work full-time, they were only prompted to complete a survey at the beginning and the end of their workshifts over a two-week period. I also offered a text prompt that could be sent around set times throughout the day, reminding students to complete the surveys. However, this option was no longer available free of charge for the main study. Because many working adults receive email notifications directly to their phones, the cost to offer this option did not seem warranted. Although the data were not included in the subsequent analyses, this trial was informative. Student participants repeatedly failed to recall their exact 4-digit identification number given to them in the training document. This subsequently caused issues when matching data across time points to the correct participant. To help prevent this from becoming a concern when it came time to aggregate data from a larger number of participants over more time points, a mail merge function was added so that participants would receive their unique identification code along with the embedded survey link with each of the 3 daily emails received.

Preliminary Analysis

Table 1 presents the means, standard deviations, and intercorrelations for both the within and between variables used in the study. As expected, at the within-person level, the four types of micro-break activities were moderately correlated with each other (rs =

.16 to .31, ps < .01). Furthermore, incivility was correlated with all outcome variables except performance in the expected direction.

Analytic Approach

I approached data analysis from a multilevel modeling (MLM) perspective to account for the hierarchical structure of the data as daily surveys were nested within individuals (Beal, 2015; Ohly, Sonnentag, Niessen, & Zapf, 2010). That is, each participant was prompted to respond to a survey assessing the variables in question three times a day, allowing for up to 30 possible data points per person across the 10-day period. MLM is advantageous over ordinary least squares regression as it does not assume independence of residuals (Beal, 2015). This is important because repeated responses by the same individual cannot be treated as independent from each other as each data point is inherently dependent on the person. For example, reports of daily wellbeing over the 10-day period may be more similar when they come from the same person as compared to those of another. Furthermore, multilevel modeling can disentangle the variability of the Level 1, within-person daily measures (e.g., emotions; micro-break activities) from that of the Level 2, between-person measures (e.g., general workplace incivility) taken during the baseline survey. Finally, MLM is best suited for handling unbalanced data which is important as ESM studies often exhibit missing data upward of 20 to 30 percent, as reflected by the 19% to 32% range across the three time points in the current study (Beal, 2015).

Using the multilevel and lme4 packages in R, I conducted multilevel path analysis to test my hypotheses (Kleiman, 2017). To be sure that a multilevel approach was appropriate, I first computed the intraclass correlation (ICC[1]) values for the key daily measures. This value indicates how much of the variation in the Level 1 focal outcomes (e.g., well-being and performance) is due to between person differences such as general workplace incivility compared to the variation due to differences within persons such as experienced incivility. Null models estimated the ICC(1) for end of day anger and end of day shame to be .45 and .41 respectively, suggesting that between-person factors account for 45% of the variance in anger and 41% of the variance of shame at the end of the workday, subsequently leaving 55% and 59% of the variance of anger and shame to be predicted by Level 1, within-person factors. The ICC(1) values for vigor, exhaustion, and performance were .42, .54, and .35, which also imply substantial variance at both the between-person (Level 2) and within-person over time (Level 1). This indicates that the hierarchical nature of the data seems to matter and confirms that MLM is appropriate.

Because multilevel modeling essentially computes an individual regression line for each participant, individuals are allowed to have different intercepts (averages) and slopes based on their data points. As the focus of my hypotheses is on the relationships between variables within the individual, I chose to person center the Level 1 predictor variables (e.g., daily incivility and micro-break activities) at each participant's respective mean scores in order to remove between-person variance in these scores (Ohly et al., 2010). This means that the intercept can be interpreted as the expected value of the outcome variables (e.g., performance) based off the mean for each participant. To account for additional variance across participants, I also compared models for each focal outcome using daily incivility as fixed versus random to determine better fit. Loglikelihood and chi square tests indicated a significantly better fit when daily incivility was allowed to be random across all outcome variables.

Hypothesis Testing

Direct effects: Hypotheses 1-3

I tested Hypotheses 1-3 using intercepts as outcome models to estimate the within-individual averages of the Level 1 outcomes from the predictors. I also computed pseudo r-squared values to account for the amount of incremental within-person variance that each model contributed over the null (Snijders & Bosker, 2011). These results are illustrated in Table 3. Hypothesis 1 predicted that daily incivility would be positively related to both anger (Hypothesis 1a) and shame (Hypothesis 1b). To test this relationship, I regressed each discrete emotion at Time 3 onto daily incivility, controlling for general incivility as well as the measures of anger and shame reported at Time 1 and Time 2.¹ After accounting for control variables, pseudo r-squared values suggest that incivility explained about 16% of the observed incremental within-person variance in anger and 7% for shame. In support of Hypothesis 1a, daily incivility was positively related to anger, b = .79, SE = .26, p = .005. In contrast, daily incivility was not significantly related to shame, b = 0.11, SE = .20, p = .59, failing to support Hypothesis 1b.²

Hypothesis 2 predicted daily level incivility would be associated with lower wellbeing. More specifically, employees were expected to report lower levels of energy on days when they experience higher levels of workplace incivility. I tested this relationship by regressing both vigor (Hypothesis 2a) and exhaustion (Hypothesis 2b) onto average

¹ There were no differences in the statistical significance of the model coefficients when only Time 1 emotions were controlled for.

² Although internal reliability was acceptable for anger, the singular scale item irritation was the main driver in this relationship.

daily incivility also controlling for general workplace incivility. Although not quite significant, the relationship between experienced workplace incivility and vigor (Hypothesis 2a) at the end of the workday trended in the right direction, pseudo r-squared = .007; b = -0.63, SE = .24, p = .06. Results support Hypothesis 2b as daily incivility was positively and significantly related to exhaustion at the end of the workday, b = .96, SE = .27, p = .003, accounting for about 10% of incremental within-person variance (pseudo r-squared =.10).

Hypothesis 3 predicted that daily incivility would be associated with lower levels of subjective performance. After regressing the performance measure onto average daily incivility and controlling for general workplace incivility, the results were not significant, pseudo r-squared = .07; b = .30, SE = .24, p = .21. As such, Hypothesis 3 was not supported.

Moderation analyses: Hypotheses 4-5

To test the moderating properties of the different micro-break activities on the within-person relationship between incivility and focal outcomes (Hypotheses 4-6), I ran multiple slopes as outcomes models. For each outcome variable, I ran two models to test first the direct effects of the micro-break activities and second to include the interaction effects of the micro-break activities and incivility. Following recommendations for dealing with multiple predictor variables, the four different micro-activities and subsequent interaction terms were entered simultaneously based on the likelihood of collinearity amongst the predictor variables (Trougakos et al, 2014). Results are in Tables 4-6.

Hypothesis 4 predicted that micro-break activities would moderate the relationship between day-specific incivility and the negative discrete emotions of anger (Hypothesis 4a) and shame (Hypothesis 4b). That is, the relationship between incivility and negative emotions would be weaker when day-specific micro-break activity is higher. Controlling for anger and shame at Time 1 and Time 2 in addition to general incivility, I tested these relationships by regressing each discrete emotion at Time 3 onto average daily incivility, examining first the different micro-break activities and next including their interaction terms.

With the micro-break activities included, daily incivility continued to have a significant main effect on anger at the end of the workday, b = 0.82, SE = .26, p = .003. Of the micro-break activities, only relaxation micro-breaks had a significant direct effect on anger, b = -.09, SE = .04, p = .01, as employees reported lower levels of anger on days when relaxation microbreak activities were high. There were no direct effects of microbreak activities on shame at the end of the workday (see Table 4).

Next, I added the interaction terms to the model. Of the four micro-break activities, only social micro-breaks had a significant interaction with daily incivility for both anger, b = -1.03, SE = .47, p = .03, and shame, b = 0.97, SE = .45, p = .03. Surprisingly, the moderating effect on shame was not in the expected direction. To interpret these interactions, I plotted the effects of social micro-break activities at high and low levels of daily incivility for its effects on both anger and shame (Figures 2 & 3). Simple slopes tests revealed a significant slope for low levels of social micro-break activities, b = 1.18, t = 3.87, p < .001, but not high levels of social micro-break activities, b = 0.50, t = 1.64, p = .11. As illustrated in Figure 2, as incivility increased, anger increased to a greater extent when social microbreak activity was low compared to when it was high. Though not quite significant, the simple slope for high social break activities suggests that increased social micro-break activity may begin to weaken the relationship between incivility and anger when incivility is high. These findings suggest that not taking social breaks can be harmful on days when incivility is high partially supporting Hypothesis 4a.

In contrast, social micro-break activities had the opposite moderating effect on shame at the end of the workday. The relationship between incivility and shame was significant and positive for days when employees reported high levels of social micro-break activities, b = 0.48, SE = .24, p = .05; whereas, this relationship was negative but not significant on days when they reported low levels of social micro-break activities, b = -0.17, SE = .25, p = .49. High social micro-break activity strengthened the relationship between incivility and shame as experiences of daily incivility increased. However, taking few to no social breaks did not appear make a difference in the relationship between incivility and shame. Taken together, Hypothesis 4b was not supported.

Micro-break activities were further hypothesized to moderate the within person relationship between incivility and well-being as measured by vigor (Hypothesis 5a) and exhaustion (Hypothesis 5b). That is, micro-break activities were predicted to weaken the relationship between daily incivility and decreased energy at the end of the workday. I tested these relationships by regressing each well-being measure onto average daily incivility, with two models to include the different microbreak activities alone then include the interaction terms. Results are in Table 5. Controlling for general incivility, relaxation micro-break activities were positively related to vigor, b = 0.02, SE = .09, p = .02. No other significant direct or moderating effects of micro-break activities were found for vigor, failing to support Hypothesis 5a. Though there were no direct effects of micro-break activities on exhaustion, cognitive micro-breaks showed a significant interaction effect with incivility, b = 1.73, SE = .85, p = .04. To interpret the nature of this effect, I plotted the effects of cognitive micro-break activities at high and low levels of daily incivility for its effects on exhaustion. As illustrated in Figure 4, simple slopes analyses showed that the relationship between daily incivility and exhaustion is significant and positive at high levels of cognitive microbreaks, b = 1.76, SE = .44, p < .01, but not at low levels of cognitive breaks, b = 0.51, SE = .38, p = .19.

As daily incivility increases so does exhaustion, however instead of buffering the effects of incivility on exhaustion, cognitive micro-breaks exacerbated the relationship such that employees reported higher levels of exhaustion on days when they engaged in more cognitive micro-break activities and incivility was high. Thus, hypothesis 5b was not supported.

Quadratic moderation analyses: Hypothesis 6

Finally, Hypothesis 6 predicted that micro-break activities would act as a quadratic moderator in the relationship between incivility and performance. That is, micro-break activities would initially weaken the relationship of incivility and performance but that this relationship would reverse at some point as the number of daily micro-breaks increased. As with Hypotheses 4 and 5, I tested this relationship by regressing the performance measure onto daily incivility, controlling for general

incivility. However, to capture the hypothesized quadratic moderation of micro-break activities, I also included the quadratic term for each type of micro-break activity before estimating the interaction effects. Results are shown in Table 6.

There were no direct effects of micro-break activities on performance. However, there was a significant direct effect of the quadratic term for cognitive micro-breaks such that the initial positive relationship between cognitive microbreaks and performance reversed as the number of cognitive micro-breaks increased, b = -.44, SE = .17, p = .01 (Figure 5). There was also a significant interaction effect of nutrition microbreaks (linear) and incivility, b = 3.48, SE = 1.18, p = .003. Simple slopes analysis show that the relationship between incivility and performance was significant and positive for high levels of nutrition micro-break activities, b = 0.93, SE = .45, p = .04, but that this relationship was significant and negative when nutrition micro-break activity was low, b = -1.03, SE = .46, p = .03. As seen in Figure 6, on days when incivility was low, employees reported lower performance when they engaged in more compared to fewer nutrition micro-breaks, but as daily incivility increased higher nutrition micro-break activities were associated with improved performance.

Social micro-breaks were the only type of micro-break activities that showed a significant quadratic interaction with incivility as hypothesized, b = 2.90, SE = 1.03, p = .007. To better understand this relationship, I plotted simple slopes for the interaction between incivility and the quadratic term for social micro-break activities at high, medium, and low values of the variables. As illustrated in Figure 7, the relationship between high social micro-break activity and incivility is negative, though relatively flat. However, as social micro-break activity decreases to average levels, this relationship

becomes more negative. Finally, as social micro-break activity decreases to low levels, the relationship, though slightly positive, begins to flatten out again, closer to the relationship at high levels of micro-break activity. Although taking few to no social breaks may have been less harmful to performance despite the level of incivility, it appears that taking a moderate amount of social micro-breaks may have been helpful when incivility was low but as incivility increased the utility of these social micro-breaks began to have a negative effect on performance. Therefore, hypothesis 6 was partially supported.

Exploratory Analyses

Exploratory analyses were performed to further examine the effects of microbreak activities and the research question. First, I examined whether the combination of micro-breaks in general were associated with negative emotion, well-being, or performance. I computed the composite micro-break score as the mean of the four person-centered micro-break activities. Like before, I used this measure as a day-level predictor and regressed it on the outcome variables controlling for Level-2 general incivility in addition to Time 1 and Time 2 anger and shame for the end of day anger and shame models. Results are shown in Table 7. Analyses found no direct effects of daily micro-break activities for negative emotions, well-being, or performance. A significant interaction effect of micro-break activities with incivility was found for anger (b = -1.37, SE = .60, p = .02).

Simple slope analyses indicated that taken together, the interaction of micro-break activities with incivility on anger reflects a similar pattern as the singular interaction effect of social micro-break activity. Incivility and anger had a significant and positive

relationship on days when individuals reported low levels of micro-break activities (b = 1.15, SE = .30, t = 3.81, p = < .001) whereas this relationship was positive but not significant on days when they reported high levels of micro-break activities (b = 0.47, SE = .29, t = 1.67, p = .10). As illustrated in Figure 8, when incivility was low, the relationship between incivility and anger was stronger when participants reported more micro-breaks, however as incivility increases, the relationship between incivility and anger becomes stronger when fewer micro-breaks were taken suggesting that micro-breaks may begin to serve as a buffer between incivility and increased anger on days when incivility is high.

Neither micro-break activities in its linear (b = -3.84, SE = 2.18, t = -1.61, p = .08) or quadratic (b = 1.79, SE = 0.96, t = 1.86, p = .06) form had a significant moderating effect on incivility for performance. However, I plotted simple slopes to better understand the general direction of the relationships. Figure 9 illustrates the significant and positive relationship between incivility and performance when microbreak activity was low (b =1.18, SE = .51, t = 2.31, p = .00) and the negative but nonsignificant relationship when micro-break activity was high (b = -.72, SE=.68, t = -1.06, p = .29). As seen in Figure 9, the linear pattern of the combined microbreak activities suggests that when incivility was low, employees reported lower performance when they engaged in fewer, compared to more, micro-break activities, however as daily incivility increased taking fewer microbreak activities was associated with improved performance whereas high micro-break activity was related to lower performance.

As can be seen in Figure 10, the quadratic moderation of micro-break activities did not reflect the same relationship of the quadratic interaction of social breaks and

incivility. At high levels of incivility, performance was better when there was low microbreak activity compared to high micro-break activity; however, this pattern was reversed at low levels of incivility.

Because the emotions elicited by affective events can influence subsequent behaviors (Weiss & Cropanzo, 1996), I also examined the indirect effect of incivility (Time 2) on end of day exhaustion, vigor, and subjective performance through negative emotion (Time 3).³ The significance of the multilevel mediations were tested using a parametric Monte Carlo web-based utility to compute confidence intervals (CIs) based off of 20,000 replications (Preacher & Selig, 2010). The significance of the indirect effect was assumed to be at or below $\alpha = .05$ if the resulting 95% CIs did not contain 0. After controlling for general incivility and Time 1 anger and shame, there were no significant indirect effects of incivility through shame. However, the indirect effects of incivility on well-being via anger were significant. The indirect effect of incivility on exhaustion via anger was .34 (95% CI[.10, .80]). Incivility also indirectly affected vigor via anger (-.42, 95% CI [-.76, -.19]).

I also reran analyses using incivility at Time 2 with micro-break activities at Time 3 to explore the temporal influence of incivility and micro-break activities on the outcome variables. These results mirrored the previously tested relationships with the exception of nutrition micro-break activities which, along with social micro-breaks (b = 1.16, SE = 0.29, t = 4.00, p < .001), now had a significant moderating effect on end of day shame (b = -0.62, SE = 0.28, t = -2.34, p = .03). However, simple slope analysis revealed that the relationship between incivility (Time 2) and shame (Time 3) was

³ Means, Standard Deviations, and Intercorrelations of Time 1 and Time 2 Variables are in Table 10.

insignificant at both high (b = -0.28, SE = .19, t = -1.48, p = .15) and low (b = 0.19, SE = .19, t = 1.00, p = .32) levels of nutrition micro-break activities (Time 3).

Finally, although nutrition micro-breaks were not significant outside of performance for mitigating the consequences of daily incivility, many participants indicated that their social and nutrition breaks were taken simultaneously (n = 126), suggesting that the effects of nutrition micro-breaks might have been obscured from co-occurrence. Furthermore, previous research suggests that nutrition micro-break activities may have a different influence on the different outcomes based on whether or not the break entailed caffeine consumption (Kim et al., 2017). For instance, non-caffeinated snack related micro-breaks may be more beneficial for helping to reduce negative emotions (Gailliot et al., 2009) whereas caffeinated micro-breaks may better influence energy related well-being (Kim et al., 2017; Welsh et al., 2014). To explore this option, I ran the above analyses using Time 2 incivility with Time 3 micro-breaks but broke nutrition micro-breaks into caffeinated and non-caffeinated categories.

Significant interactions were found for both discrete negative emotions. Noncaffeinated micro-break activity moderated the relationship between end of day anger (b = -0.38, SE = 0.18, t = -2.08, p = .04) and shame (b = -0.36, SE = 0.16, t = -2.28, p = .03). However, micro-breaks used to consume caffeine did not moderate this relationship for end of day anger (b = 0.31, SE = 0.26, t = 1.21, p = .23) or shame (b = -0.25, SE = 0.22, t = -1.16, p = .25). Simple slopes analyses found that there was a significant and positive relationship with incivility (Time 2) and anger (Time 3) for low non-caffeinated microbreak activity (b = 0.79, SE = 0.27, t = 2.95, p = .01) but not high non-caffeinated microbreak activity (b = 0.36, SE = 0.27, t = 1.35, p = .19). As seen in Figure 12, on days when participants engaged in fewer non-caffeine related micro-breaks, the relationship between incivility and anger was stronger. The relationship between incivility (Time 2) and shame (Time 3) was insignificant at both high (b = -0.18, SE = .18, t = -1.04, p = .31) and low (b = 0.22, SE = .18, t = 1.22, p = .23) levels of non-caffeinated micro-break activity (Time 3).

DISCUSSION

Previous research has cited breaks as counterproductive or deviant behaviors in response to workplace incivility (Reio & Ghosh, 2009). Building on the ER model (Meijman & Mulder, 1998), the current study instead proposed that short, micro-breaks at work may serve as an opportunity for momentary recovery from recent exposure to incivility at work. Unlike evening, weekend, or vacation breaks away from work, the short duration of micro-breaks and the subtle nature of incivility may make these behaviors difficult to recall in retrospective cross-sectional studies, overlooking potential short-term or momentary benefits. While repeated exposure to incivility has been associated with a variety of negative, more long-term consequences, results suggest that daily exposure to even singular acts of incivility can leave employees feeling angrier and more exhausted at the end of the workday.

Though many of the micro-break activities themselves failed to support the moderated predictions, results suggest that the different micro-break activities have different influences on different outcomes. In particular, in the presence of incivility, social micro-breaks may help to improve well-being and decrease anger whereas they may actually increase feelings of shame. It is possible that social micro-breaks may be better suited for facilitating the emotional and behavioral tendencies associated with anger than they are for those associated with shame. That is, while continued engagement in social activities can meet the need to exert effort and overcome that is common to low level feelings of anger (e.g., irritation), these activities are in contrast to the need to withdrawal or remove oneself from the situation which accompany feelings of shame (Roseman, 2013). Results further suggest that nutrition micro-breaks can benefit

performance on days when employees experience incivility. Tasks that require selfcontrol (e.g., emotion regulation in response to experiencing incivility) can lead to significant drops in blood glucose which in turn result in reduced self-control on subsequent tasks (Galliot et al., 2007). Nutrition related micro-breaks may therefore help restore these lost resources, allowing employees to remain focused on their tasks throughout the day. However, contrary to expectations, some micro-break activities may actually exacerbate the negative effects of daily exposure to incivility. Similar to social micro-break activities' enhancing effect on incivility-induced shame, cognitive microbreaks may be more harmful to employee well-being and performance after exposure to uncivil behavior at work.

Finally, micro-break activities as a whole appear to mitigate incivility's effect on anger at the end of the workday. Consistent with ER theory, on days when employees engage in more micro-breaks, they are more likely to recover from and offset the adverse effects of incivility on anger at the end of the workday. This is important because results suggest that feelings of anger, and not shame, are the more immediate emotional response to workplace incivility. Exploratory analyses further found that incivility's influence on end of day well-being is largely mediated through anger. Therefore, micro-break activities at work that are targeted at reducing anger may be the most beneficial immediate strategies to helping employees recover from momentary exposure to incivility.

Theoretical Implications

The current study contributes to the literature in several ways. First, by treating incivility as a dynamic process, this study affirms evidence that people experience day to

day fluctuations in incivility (McCormick et al., 2018; Tremmel & Sonnentag, 2017). While people's experiences with incivility may be relatively stable in their work environment, within-person variation still exists. In fact, the ICC(1) values for incivility was .68 across daily averages and .64 over Time 2 and Time 3 time points, suggesting that about 32-36% of the variance in experienced incivility was attributed to withinperson differences. This is important because these fluctuations can influence day to day attitudes and behaviors that may differ from those associated with prolonged or past exposure captured by between-person studies (Schilpzand et al., 2016).

For instance, although both anger and shame were positively associated with the general between-person reports of workplace incivility, day-level incivility was only associated with heightened end of work anger. While previous studies have made the connection between incivility and end of day and even next morning general negative affect (Kim et al., 2017; Nicholson & Griffin, 2015; Zhou et al., 2015), this finding suggests that not all negative emotions act the same. Outward-facing feelings of anger such as irritation and frustration, in which the blame is put on others, appear to be the more immediate emotional response to experienced incivility. The negative emotions attributed to shame may instead take time to manifest as employees ruminate over an uncivil experience. Others argue that while single events can cause shame, it is more often the result of more pervasive experiences (Rispens & Demerouti, 2016). As such, the documented link between shame and incivility may be more attributed to repeated exposure or continued rumination whereas the relationship with incivility and anger may also fluctuate with day-to-day experiences.

This is pertinent to the current study as exploratory analyses found incivilitydriven anger to be an important mediator in the relationship between daily incivility and end of work well-being. While not all of the micro-break activities included in this study reduced anger on their own, results suggest that on days when incivility is high, engaging in chosen micro-breaks can mitigate some of incivility's adverse effects on anger, which in turn may improve other daily outcomes (e.g., vigor and exhaustion). This finding is in line with past research that has suggested that emotions serve as an important factor in more short-term recovery processes. For instance, Zacher et al. (2014) proposed that while the benefits of work-related strategies unfold over time, non-work related strategies, such as the those used in the current study, are better suited for more immediate recovery from day to day experiences through emotion-focused coping. These findings coincide with affective events theory which suggests that emotional reactions are momentary changes in response to some event (Weiss & Cropanzano, 1996). If sustained, incivility-induced emotions may require self-regulatory behaviors that can leave individuals feeling cognitively, physically and mentally drained which can result in more selective processing, lower self-control, and a reduced ability to comprehend and use prior information (Baumeister, Zell, & Tice, 2007; Meier & Gross, 2015; Porath & Erez, 2007). When employees are able to engage in micro-break activities that are effective in helping them deal with the more immediate emotional responses to uncivil interactions, they may be able to also offset incivility's negative effect on other daily outcomes.

This also provides evidence that the recovery process does not solely occur outside of work hours. ER theory proposes that the timing of recovery is important as the negative loads associated with experiencing stressors continue to build up over time (Meijman & Mulder, 1998). Without recovery, the additional compensatory effort needed to continue working can result in short-term load effects, such as strain and fatigue. Current findings suggest that micro-break activities taken throughout the day can serve as opportunities for momentary recovery, helping to ease the need for recovery at the end of the workday. Though the effectiveness of specific micro-break activities may vary, these results are fairly similar to others such that in general, employees report increased well-being and job satisfaction on days when they participate in more chosen or preferred micro-breaks at work (Hunter & Wu 2016; Zacher et al., 2014).

Finally, the current study extends ER theory to consider the content of recovery processes at work specific to interpersonal stressors such as workplace incivility. By doing so, this study sheds light on some of the specific types of micro-break activities best suited to helping employees recover from day to day experiences with uncivil workplace behavior. This is important because employees often choose breaks that do not work to their benefit (Fritz et al., 2011). Moreover, different break activities may share different patterns with daily experiences and stressors (Fritz et al., 2011). For instance, after breaking down nutrition micro-break activities, Kim et al. (2017) found that caffeinated (but not non-caffeinated) micro-break activities helped employees recover from daily work demands such as task stressors or high workloads. In contrast, the current study suggests that non-caffeinated micro-break activities (i.e., snacking) may be better suited than caffeinated breaks for helping employees to bounce back from negative interpersonal stressors at work. This finding aligns with previously mentioned studies that have found that increases in glucose levels, a benefit of snacking, can help individuals to suppress negative emotions and engage in more helping behaviors (Gailliot et al., 2007;

2009). On the other hand, while caffeine consumption may improve attention and alertness (Welsh et al., 2014), which may be helpful in the face of high workload, it can also accentuate emotions of tension, anxiety, and anger in negative situations (Giles, Mahoney, Brunyé, Taylor, & Kanarek, 2016). Thus, though certain types of breaks and break activities have previously been cited as beneficial, the utility of such breaks may differ in the presence of incivility.

Practical Implications

By examining different micro-break activities as moderators to the relationship between daily incivility and end of work discrete emotions and well-being, the current study offers insight on the effectiveness of different types of break activities in helping employees to deal with daily experiences of workplace incivility. Current findings suggest that voluntary social micro-break activities may have the greatest potential for helping to offset some of the adverse short-term effects of workplace incivility. This is not surprising as building social relationships with co-workers has been cited as one of the most powerful predictors of well-being at work (Geldart et al., 2018; Kinnunen, Feldt, de Bloom, & Korpela, 2015; Zacher et al., 2014). However, social micro-breaks may also serve as the facilitator of uncivil experiences and can have negative consequences when social interactions are unwanted (Beehr et al., 2010; Trougakos et al., 2014). According to the ER model, recovery can only fully occur when job demands and stressors are no longer present (Meijman & Mulder, 1998). In the absence of positive co-worker relationships, social micro-break activities may instead exacerbate the negative effects of experiencing incivility as could be evidenced by its exacerbating effects on end of day shame and decreased performance.

While relaxation micro-break activities were associated with increased vigor at the end of the workday on their own, they did not show any mitigating effects for the consequences of incivility. Moreover, contrary to hypotheses, cognitive micro-break activities increased exhaustion when incivility was high. So, while employees may engage in these types of activities, possibly in response to incivility, they may be making the situation worse and hence this type of break actually may be counterproductive. Furthermore, cognitive micro-break activities may be closer to resembling "chores" (Trougakous et al., 2009) or "work-related strategies" (Zacher et al., 2014) previously found to be ineffective for improving more momentary daily well-being. For example, cognitive micro-breaks could include checking personal emails, paying bills, or reading the news. While these breaks were voluntarily chosen, they may not be enjoyable or may reflect work-related duties which do not provide any momentary benefits to the employee.

The findings also did not show any positive benefits of relaxation micro-breaks. It is possible that in the presence of incivility, the short duration of relaxation micro-break activities is insufficient for allowing a mental time out from work (Bennett, Gabriel, & Calderwood, 2020). On the other hand, when information is not consistent or clear, more cognitive resources are needed in order to form an impression of the situation (Carter, Peery, Richeson, & Murphy, 2015). Hence, it is also possible that the ambiguous nature of incivility may prevent the ability to fully detach from a situation as employees try to make sense of a situation.

According to coping literature, coping processes should be evaluated in the specific stressful context in which they occur as what is successful in one context or

situation might not be in another (Folkman & Moskowitz, 2004). Likewise, the effectiveness of different micro-break activities must take into account not only the source of the stressor but also the individual and organizational context as well. With this in mind, organizations should consider strategies that allow for autonomy when advocating the use of short-micro-breaks at work (Trougakos & Hideg, 2009). For example, providing breakrooms or access to outdoor areas. Furthermore, the current study suggests that social resources may play one of the largest roles in helping employees to recover from uncivil experiences at work. Building positive co-worker relations (e.g., civility training; coworker support groups) can not only decrease the occurrence of incivility throughout the organization but may also provide more resources for momentary recovery when it does occur. Finally, organizations may advocate for problem-focused coping by offering opportunities to help improve employee's emotional resilience skills. By providing trainings on mindfulness, recovery from work, and emotional and social intelligence, organizations may be able to help employees to make more conscious decisions about what types of break activities are best suited for themselves when faced with uncivil behaviors at work.

Limitations and Future Directions

The current study is not without its limitations. First, by lumping together different activities into four micro-break activities I may have overlooked differential effects of specific micro-breaks within each category. As observed with caffeinated and non-caffeinated nutrition micro-breaks, there may have been variations in the relationship between the specific activities in each category and incivility. Though beyond the power of this study, a glance at the data suggests that chatting with coworkers about non-workrelated topics had the most influence within the social micro-break category (over texting/calling non-co-workers or checking social media). Likewise, in the presence of incivility, meditation-related activities may show more promise for relaxation than do those associated with stretching or taking a short walk.

By using pre-defined and broad activities, the current study may have also overlooked other micro-break characteristics that could explain their effectiveness. For instance, the current study did not take into account factors such as the content of a cognitive break (e.g., watching a news clip versus a humorous video clip), social interaction partners, or proximity to uncivil behavior which may help to explain when micro-breaks are more likely to be harmful versus effective. For instance, recent at-work recovery research suggests that breaks taken earlier in the day may be more effective in boosting energy (Hunter & Wu, 2016) whereas those taken later in the day are more likely to improve daily work engagement (Kühnel et al., 2017). However, this research did not consider the proximity of breaks to workplace stressors nor the differential influence of specific break activities over the course of the day. Future research taking a more episodic, event-contingent approach may help to disentangle the exact relationships and timing between incivility, micro-break activities, and affective responses (Maxwell & Cole, 2007; Schilpzand et al., 2016). On a similar note, the most effective micro-break activities for dealing with uncivil behavior may not be universal. The utility of different micro-break activities may depend on a number of factors such as personal preference, organizational climate, or available resources which should be further explored.

While the current study suggests that micro-break activities that can help employees reduce feelings of anger should be most effective for coping with uncivil experiences, research that considers other more immediate emotional responses to incivility may also warrant further exploration. For instance, although daily incivility was associated with heightened anger, the observed relationships were largely driven by the scale item irritation (in contrast to anger, disgust, and rage). Unlike more overt forms of workplace mistreatment such as blatant harassment or discrimination, day to day experiences with incivility are less likely to elicit high-intensity emotional reactions. Future research may consider using scales more suited to capturing less intensive emotions such as frustration or sadness. By doing so, researchers may be able to better understand the short-term relationships between incivility and affective responses not captured in this study.

For instance, in contrast to the current study, Hershcovis and colleagues (2017) found that daily incivility was positively associated with embarrassment, a similar inward-facing emotion to shame. In turn daily embarrassment mediated the relationship between daily incivility and daily job security and daily somatic symptoms. This is in line with cross-sectional studies that have also found that the placement of blame to be associated with different work- related outcomes (Kabat-Farr, et al., 2017). Future work may also benefit from considering the differential pathways that discrete emotional responses to incivility have to both long and short-term outcomes. In turn this may shed light on strategies that can best mitigate the negative outcomes. For example, while social activities may exacerbate inward-focused feelings of embarrassment or shame on a daily level, increased co-worker interactions (e.g., support groups; relationship building exercises) may actually be beneficial in the long run for helping to reduce incivility's positive relationship with shame.

Furthermore, like uncivil interactions at work, micro-breaks are affective events that can elicit a multitude of different emotions based on how the employee experiences the break (Chong, Kim, Lee, Johnson & Lin, 2020; Sonnentag, Venz, & Casper. 2017). Indeed, general positive affect has been shown to mediate the link between micro-breaks and performance (Kim et al., 2018; Trougakos & Hideg, 2009). Moreover, Cheng and Wang (2015) found a positive relationship between a micro-break induced discrete emotion (amusement) and task persistence. From this perspective, cognitive micro-breaks may have been beneficial if they resulted in a positive experience (e.g., watching a humorous clip compared to checking personal email). On the other hand, previous research has found mixed outcomes in how employees respond to humor after uncivil experiences (Yoon, Markoca, & Choi, 2019). It is possible that different positive, or even negative, emotions elicited by micro-breaks may also help predict which activities will be helpful or harmful on days when employees experience incivility.

Despite studies that estimate that as many as 98% of people report having experienced workplace incivility, the average of number of day to day experiences with incivility reported in the current study was relatively low (M = 1.21, SD = 0.50).⁴ This finding is consistent with previous research that suggests only 10% of employees report that it happens on a daily basis. Moreover, the current findings are not far from those of others who have investigated incivility on a daily basis with average scores ranging from 1.10 to 1.99 (Foulk, Lanaj, Tu, Erez, & Archambeau, 2018; Lim, Ilies, Koopman, Christoforou, & Arvey, 2018; Zhou et al., 2015). Given this low base rate, the lack of

⁴ This reflects the mean score on the original Likert 1 to 5 scale before it was recoded to 0 to 4 (M=0.21, SD=0.50)

more significant results in the current study may be a result of simply having too few actual reports of incivility to truly capture their short-term relationships with micro-break activities.

On the other hand, the day-to-day frequency of incivility may be under-reported. Akin to the difficulties of accurately capturing the less intensive emotional outcomes of incivility, Cortina et al.'s (2013) WIS may fail to measure incivility in its true definition. Although this scale has been used as a predominant measure of incivility in organizational research, the scale items do not necessarily reflect behaviors that are both low in intensity and subtle in nature. For instance, some example items on this scale include how often someone "yelled, shouted, or swore at you" or "made insulting or disrespectful remarks about you," which may be more indicative of the more overt and aggressive behaviors that are argued to occur less frequently than are those that are truly low-intensity and ambiguous (Andersson & Pearson 1999).

Furthermore, the formative nature of the WIS consists of a series of specific behaviors that are not necessarily correlated or considered as equal in severity in all contexts (Miner et al., 2018). In fact, if participants indicate that they experience a certain behavior, this scale fails to assess whether they perceive the behavior as uncivil. Thus, even if a participant acknowledges that they were ignored, they may not necessarily think that they were treated uncivilly or that the behavior was intended. Future research should take advantage of more reflective measures such as Leiter and Day's (2012) Straightforward Incivility Scale which not only asks about the frequency of perceived uncivil treatment (i.e., "spoke rudely to you" or "behaved rudely to you") as opposed to the frequency of specific behaviors, but also considers the source of the incivility (i.e., coworker, supervisor, and self; Portoghese, Galletta, Leiter, & Campagna, 2015). These measures that instead ask participants whether they thought they may have been treated rudely may be better suited for capturing the ambiguous and low-intensity experiences which can result from a number of behaviors not listed on the WIS.

Future research would also benefit from having not only a larger sample size but also a sample that includes a more diverse participant pool. Although the current sample of 75 participants surpasses previously recommended 30 as the minimum for adequate power, a more recent review recommends a Level 2 sample size of 83 and Level 1 sample size of 835 (Gabriel et al., 2019). By including multiple predictors in the current models, the Level 1 samples size ranging from 508-579 across the three time points, may lead to some ambiguity as to whether significant and non-significant results were due to true differences or to power concerns from overfitting (Babyak, 2004; Subramanian & Simon, 2013). However, model coefficients and significance levels remained similar when I ran multilevel models to estimate the effect of each micro-break category on its own (not simultaneously) thereby reducing model parameters. In addition, while the current sample was relatively diverse across the organizations and occupations represented, the majority of participants were white. This raises concerns to the generalizability of the results as women and people of color may be more sensitive to incivility and may differ in their responses (Cortina, Magley, Williams, & Langhout, 2001; Escartín, Salin, & Rodríguez-Carballeira, 2011; Montgomery, Kane, & Vance, 2004). While there were no substantive differences in reports of incivility between gender in the current study, racial or other minority status may influence the effectiveness microbreaks activities on daily outcomes that were overlooked in the current study.

Finally, like most ESM and recovery research, the current study relied upon selfreport measures causing concern for common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). On a similar note, self-report measures make it difficult to discern the influence that the study variables had on perception as opposed to an actual outcome (Sonnentag et al., 2017). However, social psychology has shown the power of perception in shaping one's reality; therefore, the results of the current study provide a good representation of the relationship between one's personal experiences with incivility and personal feels of emotions and perceptions of performance. Nonetheless, future research should consider outside or multiple sources of measurement to attain more tangible performance outcomes. For instance, studies that collect actual performance-driven results (e.g., call center data) or that also consider manager or co-worker ratings are more likely to capture true fluctuations in performance than are subjective measures which may also reflect state-like attitudes and emotions.

Conclusion

The current study examined short, at-work, micro-breaks as a source of recovery from daily experiences of incivility. Per ER theory, findings suggest that on days when employees engage in more micro-breaks, they are more likely to recover from and offset the adverse effects of incivility on anger and well-being at the end of the workday. The current study also found that the effectiveness of micro-breaks may be influenced by the type of activity pursued. In particular, on days employees experience uncivil behavior at work, social micro-break activities can help to improve well-being and decrease anger, whereas nutrition micro-break activities can help to improve performance and keep employees on task. Exploratory analyses found that incivility's influence on end of day well-being is largely mediated through anger. In sum, micro-break activities that can help employees reduce low level feelings of anger (e.g., irritation, frustration) should be most effective for providing momentary recovery from daily experiences of workplace incivility.

REFERENCES

- Akella, D., & Lewis, V. J. (2019). The Modern Face of Workplace Incivility. Organization Management Journal, 16(2), 55-60.
- Andersson, L. M., & Pearson, C. M. (1999). Tit for Tat? The Spiraling Effect of Incivility in the Workplace. *Academy of Management Review*, *24*(3), 452–471.
- Babyak, M. A. (2004). What you see may not be what you get: a brief, nontechnical introduction to overfitting in regression-type models. *Psychosomatic medicine*, *66*(3), 411-421.
- Barclay, L. J., Skarlicki, D. P., & Pugh, S. D. (2005). Exploring the role of emotions in injustice perceptions and retaliation. *Journal of applied psychology*, *90*(4), 629.
- Baumeister, R. F., Zell, A. L., & Tice, D. M. (2007). How Emotions Facilitate and Impair
 Self-Regulation. In J. J. Gross (Ed.), *Handbook of emotion regulation*. (pp. 408–426). New York, NY: Guilford Press.
- Beal, D. J. (2015). ESM 20: State of the art and future potential of experience sampling methods in organizational research. *Annual Review of Organizational Psychology* and Organizational Behavior, 2(1), 383–407.
- Beattie, L., & Griffin, B. (2014a). Day-level fluctuations in stress and engagement in response to workplace incivility: A diary study. *Work & Stress*, 28(2), 124-142.
- Beattie, L., & Griffin, B. (2014b). Accounting for within-person differences in how people respond to daily incivility at work. *Journal of Occupational and Organizational Psychology*, 87(3), 625–644.
- Beehr, T. A., Bowling, N. A., & Bennett, M. M. (2010). Occupational stress and failures of social support: when helping hurts. Journal of occupational health psychology,

15(1), 45.

- Bennett, A. A., Gabriel, A. S., & Calderwood, C. (2020). Examining the interplay of micro-break durations and activities for employee recovery: A mixed-methods investigation. *Journal of Occupational Health Psychology*, 25(2), 126–142.
- Bunk, J. A., & Magley, V. J. (2013). The role of appraisals and emotions in understanding experiences of workplace incivility. *Journal of Occupational Health Psychology*, 18(1), 87–105.
- Carter, E. R., Peery, D., Richeson, J. A., & Murphy, M. C. (2015). Does cognitive depletion shape bias detection for minority group members? *Social Cognition*, 33(3), 241-254.
- Chen, Y., Ferris, D. L., Kwan, H. K., Yan, M., Zhou, M., & Hong, Y. (2013). Self-Love's Lost Labor: A Self-Enhancement Model of Workplace Incivility. *Academy of Management Journal*, 56(4), 1199–1219.
- Cheng, D., & Wang, L. (2015). Examining the energizing effects of humor: The influence of humor on persistence behavior. *Journal of Business and Psychology*, 30(4), 759-772.
- Cho, M., Bonn, M. A., Han, S. J., & Lee, K. H. (2016). Workplace incivility and its effect upon restaurant frontline service employee emotions and service performance. *International Journal of Contemporary Hospitality Management*, 28(12), 2888–2912.
- Chong, S., Kim, Y. J., Lee, H. W., Johnson, R. E., & Lin, S. H. J. (2020). Mind your own break! The interactive effect of workday respite activities and mindfulness on employee outcomes via affective linkages. *Organizational Behavior and Human*

Decision Processes, 159, 64-77.

- Coker, B. L. (2011). Freedom to surf: the positive effects of workplace Internet leisure browsing. *New Technology, Work and Employment*, *26*(3), 238-247.
- Cole, M. S., Shipp, A. J., & Taylor, S. G. (2016). Viewing the interpersonal mistreatment literature through a temporal lens. *Organizational Psychology Review*, 6(3), 273–302.
- Cortina, L. M. (2008). Unseen Injustice: Incivility as Modern Discrimination in Organizations. *Academy of Management Review*, *33*(1), 55–75.
- Cortina, L. M., Kabat-Farr, D., Leskinen, E. A., Huerta, M., & Magley, V. J. (2013). Selective Incivility as Modern Discrimination in Organizations. *Journal of Management*, 39(6), 1579–1605.
- Cortina, L. M., Kabat-Farr, D., Magley, V. J., & Nelson, K. (2017). Researching rudeness: The past, present, and future of the science of incivility. *Journal of Occupational Health Psychology*, 22(3), 299–313.
- Cortina, L. M., & Magley, V. J. (2009). Patterns and profiles of response to incivility in the workplace. *Journal of Occupational Health Psychology*, *14*(3), 272–288.
- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: incidence and impact. *Journal of Occupational Health Psychology*, 6(1), 64–80.
- Diener, E. (1984). Subjective well-being. Psychological Bulletin, 95(3), 542–575.
- Diener, E., Smith, H., & Fujita, F. (1995). The personality structure of affect. *Journal of personality and social psychology*, 69(1), 130.
- Duffy, M. K., Ganster, D. C., Shaw, J. D., Johnson, J. L., & Pagon, M. (2006). The social

context of undermining behavior at work. *Organizational behavior and human decision processes*, *101*(1), 105-126.

- Escartín, J., Salin, D., & Rodríguez-Carballeira, Á. (2011). Conceptualizations of Workplace Bullying. *Journal of Personnel Psychology*, *10*(4), 157–165.
- Fida, R., Laschinger, H. K. S., & Leiter, M. P. (2018). The protective role of self-efficacy against workplace incivility and burnout in nursing. *Health Care Management Review*, 43(1), 21–29.
- Folkman, S., & Moskowitz, J. T. (2004). Coping: Pitfalls and promise. Annu. Rev. Psychol., 55, 745-774.
- Foulk, T. A., Lanaj, K., Tu, M. H., Erez, A., & Archambeau, L. (2018). Heavy is the head that wears the crown: An actor-centric approach to daily psychological power, abusive leader behavior, and perceived incivility. *Academy of Management Journal*, 61(2), 661-684.
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95(5), 1045–1062.
- Fritz, C., Ellis, A. M., Demsky, C. A., Lin, B. C., & Guros, F. (2013). Embracing work breaks: Recovering from work stress ScienceDirect. *Organizational Dynamics*, 42, 274–280.
- Fritz, C., Lam, C. F., & Spreitzer, G. M. (2011). It's the Little Things That Matter: An Examination of Knowledge Workers' Energy Management. Academy of Management Perspectives, 25(3), 28–39.

- Gabriel, A. S., Podsakoff, N. P., Beal, D. J., Scott, B. A., Sonnentag, S., Trougakos, J. P., & Butts, M. M. (2019). Experience sampling methods: A discussion of critical trends and considerations for scholarly advancement. *Organizational Research Methods*, 22(4), 969-1006.
- Gailliot, M. T., Baumeister, R. F., DeWall, C. N., Maner, J. K., Plant, E. A., Tice, D. M., & Schmeichel, B. J. (2007). Self-control relies on glucose as a limited energy source: Willpower is more than a metaphor. *Journal of Personality and Social Psychology*, 92(2), 325–336.
- Gailliot, M. T., Peruche, B. M., Plant, E. A., & Baumeister, R. F. (2009). Stereotypes and prejudice in the blood: Sucrose drinks reduce prejudice and stereotyping. *Journal of Experimental Social Psychology*, 45(1), 288-290.
- Game, A. M. (2007). Workplace boredom coping: health, safety, and HR implications. *Personnel Review*, *36*(5), 701–721.
- Geldart, S., Langlois, L., Shannon, H. S., Cortina, L. M., Griffith, L., & Haines, T.
 (2018). Workplace incivility, psychological distress, and the protective effect of coworker support. *International Journal of Workplace Health Management*, *11*(2), 96– 110.
- Giles, G. E., Mahoney, C. R., Brunyé, T. T., Taylor, H. A., & Kanarek, R. B. (2017).Caffeine and theanine exert opposite effects on attention under emotional arousal.*Canadian journal of physiology and pharmacology*, 95(1), 93-100.
- Giumetti, G. W., Hatfield, A. L., Scisco, J. L., Schroeder, A. N., Muth, E. R., &Kowalski, R. M. (2013). What a rude e-mail! Examining the differential effects of incivility versus support on mood, energy, engagement, and performance in an

online context. Journal of Occupational Health Psychology, 18(3), 297–309.

- Glomb, T. M., Steel, P. D. G., & Arvey, R. D. (2002). Office sneers, snipes, and stab wounds: Antecedents, consequence, and implications of workplace violence and aggression. In R. G. Lord, R. J. Klimoski, & R. Kanfer (Eds.), Emotions in the workplace: Understanding the structure and role of emotions in organizational behavior (pp. 227–259). New York: Wiley.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271–299.
- Hershcovis, M. S. (2011). "Incivility, social undermining, bullying...oh my!": A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, 32(3), 499–519.
- Hershcovis, M. S., Ogunfowora, B., Reich, T. C., & Christie, A. M. (2017). Targeted workplace incivility: The roles of belongingness, embarrassment, and power. *Journal of Organizational Behavior*, 38(7), 1057–1075.
- Hunter, E. M., & Wu, C. (2016). Give me a better break: Choosing workday break activities to maximize resource recovery. *Journal of Applied Psychology*, 101(2), 302–311.
- Hur, W.-M., Kim, B.-S., & Park, S.-J. (2015). The Relationship between Coworker Incivility, Emotional Exhaustion, and Organizational Outcomes: The Mediating Role of Emotional Exhaustion. *Human Factors and Ergonomics in Manufacturing* & Service Industries, 25(6), 701–712.
- Kabat-Farr, D., Cortina, L. M., & Marchiondo, L. A. (2018). The emotional aftermath of incivility: Anger, guilt, and the role of organizational commitment. *International*

Journal of Stress Management, 25(2), 109–128.

- Kim, S., & Niu, Q. (2014). Smartphone: It can do more than you think. Paper presented at the 29th Annual Society for Industrial and Organizational Psychology (SIOP) Conference, Honolulu, HI.
- Kim, S., Park, Y., & Headrick, L. (2018). Daily micro-breaks and job performance: General work engagement as a cross-level moderator. *Journal of Applied Psychology*, 103(7), 772–786.
- Kim, S., Park, Y., & Niu, Q. (2017). Micro-break activities at work to recover from daily work demands. *Journal of Organizational Behavior*, 38(1), 28–44.
- Kinnunen, U., Feldt, T., de Bloom, J., & Korpela, K. (2015). Patterns of daily energy management at work: relations to employee well-being and job characteristics. *International Archives of Occupational and Environmental Health*, 88(8), 1077–1086.
- Kleiman, E. (2017). Understanding and analyzing multilevel data from real-time monitoring studies: An easily- accessible tutorial using R. https://doi.org/10.31234/osf.io/xf2pw
- Krischer, M. M., Penney, L. M., & Hunter, E. M. (2010). Can counterproductive work behaviors be productive? CWB as emotion-focused coping. *Journal of Occupational Health Psychology*, 15(2), 154–166.
- Kühnel, J., Bledow, R., & Feuerhahn, N. (2016). When do you procrastinate? Sleep quality and social sleep lag jointly predict self-regulatory failure at work. *Journal of Organizational Behavior*, *37*(7), 983-1002.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York:

Springer.

- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, *46*(8), 819–834.
- Lee, K. E., Williams, K. J. H., Sargent, L. D., Williams, N. S. G., & Johnson, K. A. (2015). 40-second green roof views sustain attention: The role of micro-breaks in attention restoration. *Journal of Environmental Psychology*, 42, 182–189.
- Leger, K. A., Charles, S. T., & Almeida, D. M. (2018). Let It Go: Lingering Negative Affect in Response to Daily Stressors Is Associated with Physical Health Years Later. *Psychological Science*, *29*(8), 1283–1290.
- Leiter, M.P.; Day, A. *The Straightforward Incivility Scale Manual*; Technical Document; Centre for Organizational Research & Development, Acadia University: Wolfville, NS, Canada, 2012.
- Lim, S., Cortina, L. M., & Magley, V. J. (2008). Personal and workgroup incivility:
 Impact on work and health outcomes. *Journal of Applied Psychology*, 93(1), 95–107.
- Lim, S., Ilies, R., Koopman, J., Christoforou, P., & Arvey, R. D. (2018). Emotional mechanisms linking incivility at work to aggression and withdrawal at home: An experience-sampling study. *Journal of Management*, 44(7), 2888-2908.
- Mao, C., Chang, C. H., Johnson, R. E., & Sun, J. (2019). Incivility and employee performance, citizenship, and counterproductive behaviors: Implications of the social context. *Journal of occupational health psychology*, 24(2), 213.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory*. (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.

- Matthews, R. A., & Ritter, K. J. (2019). Applying adaptation theory to understand experienced incivility processes: Testing the repeated exposure hypothesis. *Journal of occupational health psychology*, 24(2), 270.
- Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods*, 12(1), 23–44.
- McCormick, B. W., Reeves, C. J., Downes, P. E., Li, N., & Ilies, R. (2018). Scientific Contributions of Within-Person Research in Management: Making the Juice Worth the Squeeze. *Journal of Management*, 0149206318788435.
- Meier, L. L., & Gross, S. (2015). Episodes of incivility between subordinates and supervisors: examining the role of self-control and time with an interaction-record diary study. *Journal of Organizational Behavior*, 36(8), 1096–1113.
- Meier, L. L., Gross, S., Spector, P. E., & Semmer, N. K. (2013). Relationship and task conflict at work: Interactive short-term effects on angry mood and somatic complaints. *Journal of Occupational Health Psychology*, *18*(2), 144–156.
- Meijman, T. F., Mulder, G., Drenth, P., & Thierry, H. (1998). Psychological aspects of workload. *Handbook of Work and Organizational Psychology. Volume*, 2
- Miner, K. N., Diaz, I., Wooderson, R. L., McDonald, J. N., Smittick, A. L., & Lomeli, L.
 C. (2018). A workplace incivility roadmap: Identifying theoretical speedbumps and alternative routes for future research. *Journal of occupational health psychology*, *23*(3), 320.
- Miner, K. N., & Eischeid, A. (2012). Observing incivility toward coworkers and negative emotions: Do gender of the target and observer matter?. *Sex Roles*, 66(7-8), 492-505.

- Miner, K. N., Settles, I. H., Pratt-Hyatt, J. S., & Brady, C. C. (2012). Experiencing Incivility in Organizations: The Buffering Effects of Emotional and Organizational Support1. *Journal of Applied Social Psychology*, 42(2), 340–372.
- Moller, A. C., Deci, E. L., & Ryan, R. M. (2006). Choice and ego-depletion: The moderating role of autonomy. *Personality and social psychology bulletin*, 32(8), 1024-1036.
- Montgomery, K., Kane, K., & Vance, C. M. (2004). Accounting for Differences in Norms of Respect. *Group & Organization Management*, 29(2), 248–268.
- Nezlek, J. B. (2011). *Multilevel modeling for social and personality psychology*. SAGE Publications Ltd.
- Nicholson, T., & Griffin, B. (2015). Here today but not gone tomorrow: Incivility affects after-work and next-day recovery. *Journal of Occupational Health Psychology*, 20(2), 218–225.
- O'Connor, D. B., Jones, F., Conner, M., McMillan, B., & Ferguson, E. (2008). Effects of daily hassles and eating style on eating behavior. *Health Psychology*, 27(1, Suppl), S20–S31.
- Ohly, S., Sonnentag, S., Niessen, C., & Zapf, D. (2010). Diary studies in organizational research: An introduction and some practical recommendations. *Journal of Personnel Psychology*, 9(2), 79–93.
- Owens, B. P., Baker, W. E., Sumpter, D. M., & Cameron, K. S. (2016). Relational energy at work: Implications for job engagement and job performance. *Journal of Applied Psychology*, 101(1), 35–49.

Parker, S. L., Zacher, H., de Bloom, J., Verton, T. M., & Lentink, C. R. (2017). Daily

Use of Energy Management Strategies and Occupational Well-being: The Moderating Role of Job Demands. *Frontiers in Psychology*, *8*, 1477.

- Paulin, D., & Griffin, B. (2016). The relationships between incivility, team climate for incivility and job-related employee well-being: a multilevel analysis. *Work & Stress*, 30(2), 132–151.
- Pearson, C. M., Andersson, L. M., & Porath, C. L. (2000). Assessing and attacking workplace incivility. *Organizational Dynamics*, 29(2), 123–137.
- Pearson, C. M., & Porath, C. L. (2005). On the nature, consequences and remedies of workplace incivility: No time for "nice"? Think again. Academy of Management Perspectives, 19(1), 7–18.
- Pearson, C., & Porath, C. (2009). *The cost of bad behavior: How incivility is damaging your business and what to do about it.* Penguin.
- Pierce, J. R., & Aguinis, H. (2013). The too-much-of-a-good-thing effect in management. *Journal of Management*, *39*(2), 313-338.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Porath, C. L., & Erez, A. (2007). Does Rudeness Really Matter? The Effects of Rudeness on Task Performance and Helpfulness. *Academy of Management Journal*, 50(5), 1181–1197.
- Porath, C. L., Foulk, T., & Erez, A. (2015). How incivility hijacks performance. *Organizational Dynamics*, 44(4), 258–265.

Porath, C. L., & Pearson, C. M. (2012). Emotional and Behavioral Responses to

Workplace Incivility and the Impact of Hierarchical Status. *Journal of Applied Social Psychology*, *42*, E326–E357.

- Portoghese, I., Galletta, M., Leiter, M. P., & Campagna, M. (2015). Factor structure of the straightforward incivility scale in an Italian sample. *TPM-testing, psychometrics, methodology in applied psychology*, 22(3), 315-325.
- Selig, J. P., & Preacher, K. J. (2010). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Online applet].
- Priesemuth, M., Mitchell, M. S., & Folger, R. (2017). Witness reactions to workplace aggression. In N. A. Bowling & M. S. Hershcovis (Eds.), *Research and theory on workplace aggression* (pp. 156–185). NY, NY: Cambridge University Press.
- Pronk, N. P., Crouse, S. F., & Rohack, J. J. (1995). Maximal exercise and acute mood response in women. *Physiology & Behavior*, 57(1), 1–4.
- Reio, T. G., & Ghosh, R. (2009). Antecedents and outcomes of workplace incivility: Implications for human resource development research and practice. *Human Resource Development Quarterly*, 20(3), 237–264.
- Reio, T. G., & Trudel, J. (2013). Workplace Incivility and Conflict Management Styles:
 Predicting Job Performance, Organizational Commitment and Turnover Intent.
 International Journal of Adult Vocational Education and Technology, 4(4), 15–37.
- Rispens, S., & Demerouti, E. (2016). Conflict at Work, Negative Emotions, and Performance: A Diary Study. *Negotiation and Conflict Management Research*, 9(2), 103–119.
- Rivkin, W., Diestel, S., & Schmidt, K.-H. (2018). Which daily experiences can foster well-being at work? A diary study on the interplay between flow experiences,

affective commitment, and self-control demands. *Journal of Occupational Health Psychology*, 23(1), 99–111.

- Roseman, I. J. (1996). Appraisal Determinants of Emotions: Constructing a More Accurate and Comprehensive Theory. *Cognition & Emotion*, *10*(3), 241–278.
- Roseman, I. J. (2013). Appraisal in the Emotion System: Coherence in Strategies for Coping. *Emotion Review*, 5(2), 141–149.
- Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology*, 67(2), 206–221.
- Schilpzand, P., De Pater, I. E., & Erez, A. (2016). Workplace incivility: A review of the literature and agenda for future research. *Journal of Organizational Behavior*, 37, \$57–\$88.
- Sliter, M., Sliter, K., & Jex, S. (2012). The employee as a punching bag: The effect of multiple sources of incivility on employee withdrawal behavior and sales performance. *Journal of Organizational Behavior*, 33(1), 121–139.
- Snijders, T. A., & Bosker, R. J. (2011). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. Sage.
- Sonnentag, S. (2001). Work, recovery activities, and individual well-being: A diary study. *Journal of Occupational Health Psychology*, 6(3), 196–210.
- Sonnentag, S., & Fritz, C. (2007). The Recovery Experience Questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology*, *12*(3), 204–221.

Sonnentag, S., Pundt, A., & Venz, L. (2017). Distal and proximal predictors of snacking

at work: A daily-survey study. Journal of Applied Psychology, 102(2), 151–162.

- Sonnentag, S., Venz, L., & Casper, A. (2017). Advances in recovery research: What have we learned? What should be done next? *Journal of Occupational Health Psychology*, 22, 365–380.
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, 68(3), 446–460.
- Spreitzer, G., & Porath, C. (2012). Creating sustainable performance. *Harvard Business Review*, 90(1–2), 92–99, 152.
- Subramanian, J., & Simon, R. (2013). Overfitting in prediction models–is it a problem only in high dimensions?. *Contemporary clinical trials*, *36*(2), 636-641.
- Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology*, 70(6), 1256–1269.
- Taylor, S. G., Bedeian, A. G., Cole, M. S., & Zhang, Z. (2017). Developing and testing a dynamic model of workplace incivility change. *Journal of Management*, 43(3), 645-670.
- Taylor, S. G., Bedeian, A. G., & Kluemper, D. H. (2012). Linking workplace incivility to citizenship performance: The combined effects of affective commitment and conscientiousness. *Journal of Organizational Behavior*, 33(7), 878–893.
- Tellegen, A., Watson, D., & Clark, L. A. (1999). On the dimensional and hierarchical structure of affect. *Psychological science*, 10(4), 297-303.

Tremmel, S., & Sonnentag, S. (2018). A sorrow halved? A daily diary study on talking

about experienced workplace incivility and next-morning negative affect. *Journal of Occupational Health Psychology*, 23(4), 568–583.

- Trougakos, J. P., Beal, D. J., Green, S. G., & Weiss, H. M. (2008). Making the Break
 Count: An Episodic Examination of Recovery Activities, Emotional Experiences,
 and Positive Affective Displays. *Academy of Management Journal*, 51(1), 131–146.
- Trougakos, J. P., & Hideg, I. (2009). Momentary work recovery: The role of within-day work breaks. In *Current perspectives on job-stress recovery* (pp. 37-84). Emerald Group Publishing Limited.
- Trougakos, J. P., Hideg, I., Cheng, B. H., & Beal, D. J. (2014). Lunch Breaks Unpacked:
 The Role of Autonomy as a Moderator of Recovery during Lunch. *Academy of Management Journal*, 57(2), 405–421.
- Viotti, S., Essenmacher, L., Hamblin, L. E., & Arnetz, J. E. (2018). Testing the reciprocal associations among co-worker incivility, organisational inefficiency, and workrelated exhaustion: A one-year, cross-lagged study. *Work & Stress*, 32(4), 334–356.
- Weiss, H. M. & Cropanzano, R. (1996). Affective Events Theory: A theoretical discussion of the structure, causes, and consequences of affective experiences at work. In B. M. Staw and L. L. Cummings (Eds.), *Research in Organizational Behavior*, Vol. 18 (pp. 1-74). Greenwich, CT: JAI Press.
- Welsh, D. T., Ellis, A. P. J., Christian, M. S., & Mai, K. M. (2014). Building a selfregulatory model of sleep deprivation and deception: The role of caffeine and social influence. *Journal of Applied Psychology*, 99(6), 1268–1277.
- Woolum, A., Foulk, T., Lanaj, K., & Erez, A. (2017). Rude color glasses: The contaminating effects of witnessed morning rudeness on perceptions and behaviors

throughout the workday. The Journal of Applied Psychology, 102(12), 1658–1672.

- Yoon, D. J., Markova, G. T., & Choi, Y. (2019, July). A Tightrope Act of Supervisor Humor: When Good Humor Goes Bad in Response to Coworker Incivility.
 In Academy of Management Proceedings (Vol. 2019, No. 1, p. 18849). Briarcliff Manor, NY 10510: Academy of Management.
- Zacher, H., Brailsford, H. A., & Parker, S. L. (2014). Micro-breaks matter: A diary study on the effects of energy management strategies on occupational well-being. *Journal of Vocational Behavior*, 85(3), 287-297.
- Zhou, Z. E., Yan, Y., Che, X. X., & Meier, L. L. (2015). Effect of workplace incivility on end-of-work negative affect: Examining individual and organizational moderators in a daily diary study. *Journal of Occupational Health Psychology*, 20(1), 117–130.

Category	Examples
Relaxation Activities	 Stretching, walking around the office, or relaxing briefly Daydreaming, gazing out the office windows, taking quick naps, or any other psychological relaxation
Nutrition-Intake Activities	 Drinking caffeinated beverages (e.g., energy drinks, coffee, black or green tea) Snacking or drinking non-caffeinated beverages (e.g., juice)
Social Activities	 Texting, using instant messenger, or calling friends or family members Chatting with coworkers on non-work-related topics Checking personal social networks (e.g., Facebook, Twitter, and personal blogs)
Cognitive Activities	 Reading non work-related books, newspapers, and magazines for personal learning or entertainment. Surfing the web for non-work purposes or entertainment (e.g., online shopping, banking, checking personal emails, playing a game and watching short news or video clips)

Table 1. Overview of Micro-break Activities

Note: Adapted from micro-break activities proposed by Kim et al., 2017; 2018.

	1	7	3	4	N	9	7	8	6	10	11	12	13	14	15	16
Level-1 Variables	sə															
1. Incivility	I	.14	.13	.07	.47**	.05	.74 **	.55**	.34**	04	30**	.44*	.80**	.30**	.56**	.56**
2. Micro- breaks	$.11^{**}$	ı	.67**	$.92^{**}$.37**	.91**	.12	33^{**}	.03	.01	26	.17	.17	.21	.30**	.01
3. Relaxation	$.16^{**}$.37*	ı	.66**	.44	.50**	.10	.17	01	.19	06	.21	.06	.22	.18	.03
4. Cognitive	.05	.82**	.25**	ı	.17	.72**	.07	$.31^{**}$	04	01	24*	.07	.11	.17	$.29^*$	00.
5. Nutrition	$.14^{**}$.50**	.23**	$.16^{**}$	I	.23*	.46**	.43**	.21	.27*	06	.48**	.45**	.40**	.42**	.25*
6. Social	.08	.72**	$.31^{**}$	$.29^{**}$	$.30^{**}$	ı	.02	.17	.03	07	25*	.10	.06	.10	.14	07
7. EODanger	$.19^{**}$.02	10*	00.	.04	.03	ı	.65**	.45**	05	28*	.76**	.88**	.38**	.57**	.44**
8. EODshame	$.12^{**}$	03	04	05	.03	02	.24**	ı	.18	.03	35**	.49**	.59**	.64	.88**	.35**
9. Exhaustion	$.20^{**}$	05	03	03	04	05	.23**	.13**	ı	35**	06	.33**	.48**	.08	.19	.37**
10. Vigor	11*	.02	*60.	.04	01	00.	17**	20**	40**	ı	.27*	01	06	05	03	16
11. Perform	.02	07	.04	11*	.03	01	00.	06	05	60.	ı	25*	27*	43**	42**	34**
12. T1 Anger	.05	08	04	08	02	03	$.11^*$	00.	$.12^{**}$	13**	90.	ı	.66**	.52**	$.50^{**}$.24*
13. T2 Anger	.14**	.01	.02	.02	.04	01	$.26^{**}$	$.10^{*}$.06	-00	00.	.39**	ı	.28*	.58**	.52**
14. T1 Shame	.07	.03	$.10^{*}$.04	02	.02	04	.07	.05	10*	00.	.39**	.15**	ı	.75**	.24*
15. T2 Shame	$.18^{**}$.02	.02	.03	.02	01	$.17^{**}$	$.30^{**}$	90.	09	03	.20**	.33**	.39**	ı	.46**
Level 2 Variable	e															
16. General Incivility	I	ı	ı	ı	I	ı	I	ı	I	ı	ı	ı	ı	ı	ı	I
Mean ^a	0.21	0.84	0.87	0.71	0.77	1.06	0.26	0.21	2.60	2.67	3.66	0.16	0.15	0.17	0.16	0.76
SD^{a}	0.50	0.52	0.70	0.69	0.45	0.72	0.44	0.38	1.15	0.95	0.99	0.49	0.49	0.53	0.46	0.70
Mean ^b	0.24	0.82	0.86	0.68	0.76	1.04	0.27	0.21	2.67	2.59	3.69	0.22	0.25	0.27	0.23	0.76
SD^b	0.50	0.45	0.57	0.56	0.33	0.63	0.32	0.27	0.95	0.71	0.66	0.28	0.30	0.35	0.32	0.73
All variables are within-person except for general incivility. Correlations below the diagonal represent within-person correlations. ($n = 1693$ total observations). Number of pairwise observations ranged from 448to 629. Correlations above the diagonal represent between-person correlations (represented to the terms of pairwise observations).	e within- Jumber (person e of pairwis	xcept for se observ	general a ations rai	incivility nged fror	. Correlat n 448to 6	al incivility. Correlations below the diagonal represent within-person correlations. ($n = 1693$ total ranged from 448to 629. Correlations above the diagonal represent between-person correlations ($n = 75$)	w the dia	gonal rel bove the	present w diagonal	ithin-per represen	son corre	lations. (r 1-person c	t = 1693 correlatio	total $ns (n = 7)$	5).
Within individual (Level 1) variables reflect within-person centered relationships. Level-1 variables were aggregated to estimate between-individual (Level-	al (Leve	l I) varia	bles refle	ect withir	-person	centered	relationsh	ips. Leve	yl-1 varia	bles wer	e aggreg:	ated to est	imate bet	ween-ind	lividual (Level-
2) correlations. ^a = within-person, ^b = between-p	a = withi	n-person	$b^{b} = betv$	veen-pers	erson. $EOD = End of Day.$	$0 = \mathbf{End} \mathbf{c}$	f Day.									
p < .05, p < .01; p < .001; p < .001.	.01; ***	<i>p</i> < .001.														

Table 2. Means, Standard Deviations, and Intercorrelations of Study Variables

	7	Anger			Shame			Vigor		Ex	Exhaustion	u	Per	Performance	e
	Est	SE	F	Est	SE	Г	Est	SE	F	Est SE	SE	Г	Est	SE	F
Intercept	0.26^{***}	0.03	8.64	0.21^{***}	0.03	6.74	2.61^{***}	0.08 32.35	32.35	2.65^{***} 0.10 26.37	0.10	26.37	3.69^{***}	0.07 51.30	51.30
GenInc ^a	0.22^{***}	0.04	5.20	0.16^{***}	0.04	3.66	-0.22*	0.11	-2.02	0.46^{***}	0.46^{***} 0.14 3.31	3.31	-0.29^{**}	0.10	-2.87
AngerT1 ^a	0.18^{**}	0.06	2.99		0.06	0.86									
ShameT1 ^a	-0.15^{**}	0.05	-3.12	-0.04	0.05	-0.77									
AngerT2 ^a	0.17^{***}	0.05	3.29		0.05	0.36									
ShameT2 ^a	0.09	0.05	1.59	0.23^{***}	0.05	4.41									
DailyInc	0.79^{**}	0.26	2.98	0.11	0.20	0.55	-0.63^{1} 0.24 -2.65	0.24	-2.65	0.96^{**}	0.96^{**} 0.27 3.49	3.49	0.30	0.30 0.24	1.24
Pseudo R^2		0.38			0.11			0.01			0.10			0.06	
LogLiklihood	Ĩ	123.60		- -	-121.45		Ť	-615.64		'	-656.26		Ŧ	-639.50	

5
Ť.
5
ariat
H
~
Ð
Ξ
OC
Õ.
Ħ
ร
0
\mathfrak{c}
d)
ă
Ξ.
Ľ
Ē
0
y on
ij.
>
.2
ĕ
f Daily Incivilit
$\mathbf{\Sigma}$
÷.
Б
\square
0
0
ts o
t Effects o
ts o
ect Effects o
ect Effects o
ect Effects o
ect Effects o
ect Effects o
ts o
ect Effects o
ect Effects o
ect Effects o
ect Effects o
ect Effects o
othesis 1-3: Direct Effects o
othesis 1-3: Direct Effects o
othesis 1-3: Direct Effects o
othesis 1-3: Direct Effects o
othesis 1-3: Direct Effects o
othesis 1-3: Direct Effects o
othesis 1-3: Direct Effects o
pothesis 1-3: Direct Effects o
othesis 1-3: Direct Effects o

			Anger	ger					Sh_{ϵ}	Shame		
	Di	Direct		Inte	Interaction			Direct		Inte	Interaction	
I	Est	SE	Т	Est	SE	Т	Est	SE	Н	Est	SE	Г
Intercept	0.26^{***}	0.03	8.60	0.26^{***}	0.03	8.75	0.21^{***}	0.03	6.68	0.21^{***}	0.03	6.62
GenInc ^a	0.22^{***}	0.04	5.21	0.22^{***}	0.04	4.99	0.16^{***}	0.04	3.70	0.17^{***}	0.05	3.67
AngerT1 ^a	0.17^{**}	0.06	2.82	0.16^{**}	0.06	2.62	0.04	0.06	0.65	0.04	0.06	0.65
ShameT1 ^a	-0.14**	0.05	-2.92	-0.13**	0.05	-2.68	-0.03	0.05	-0.58	-0.03	0.05	-0.67
AngerT2 ^a	0.17^{***}	0.05	3.33	0.18^{***}	0.05	3.47	0.02	0.05	0.37	0.02	0.05	0.34
ShameT2 ^a	0.08	0.05	1.49	0.08	0.05	1.45	0.23^{***}	0.05	4.33	0.23^{***}	0.05	4.43
DailyInc	0.82^{**}	0.26	3.14	0.85^{**}	0.26	3.26	0.13	0.20	0.65	0.14	0.19	0.70
Micro-break Activities												
Relaxation	-0.09*	0.04	-2.52	-0.09*	0.04	-2.34	-0.04	0.04	-1.16	-0.05	0.04	-1.21
Cognitive	0.03	0.04	0.73	0.04	0.04	0.96	-0.04	0.04	-0.96	-0.04	0.04	-1.12
Nutrition	-0.03	0.05	-0.60	-0.02	0.05	-0.36	0.01	0.05	0.27	0.00	0.05	0.08
Social	0.03	0.04	0.58	0.00	0.05	-0.07	-0.01	0.04	-0.33	0.01	0.05	0.19
Interaction Terms												
Relax*Inc				-0.33	0.36	-0.91				0.07	0.35	0.20
Cog*Inc				-0.14	0.43	-0.32				-0.36	0.42	-0.86
Nutri*Inc				0.73	0.49	1.51				-0.64	0.47	-1.36
Social*Inc				-1.03*	0.47	-2.18				0.97*	0.45	2.15
Pseudo R^2	•	.38			.39			.10			.10	
Log liklihood	-11	-119.72		-1	-115.22		Ĩ	-119.77		-	-116.63	
$\Delta \chi^2(\Delta df)$	T.T	7.75 (4)		16.	16.75* (8)		ω	3.35 (4)		9.	9.96 (8)	

Table 4. Hypothesis 4: Direct and Interaction Effects of Micro-break Activities on Discrete Negative Emotions

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Interaction st SE *** 0.08 19 0.11	u						
$ \begin{array}{ccccccccc} & Est & SE & T \\ 2.60*** & 0.08 & 32.32 \\ -0.23* & 0.11 & -2.08 \\ -0.69** & 0.23 & -3.01 \\ 0.69** & 0.23 & -3.01 \\ & 0.08 & 0.10 & 0.80 \\ -0.04 & 0.13 & -0.33 \\ -0.05 & 0.11 & -0.45 \end{array} $			Ц	Direct		Int	Interaction	
$\begin{array}{ccccccc} 2.60^{***} & 0.08 & 32.32\\ -0.23^{*} & 0.11 & -2.08\\ -0.69^{**} & 0.23 & -3.01\\ ak & & & & & & \\ \end{array}$		L	Est	SE	F	Est	SE	F
$ak \begin{array}{cccccccccccccccccccccccccccccccccccc$		32.37	2.65^{***}	0.10	26.39	2.66^{***}		25.93
-0.69** 0.23 -3.01 ak 0.21* 0.09 2.31 0.08 0.10 0.80 -0.04 0.13 -0.33 -0.05 0.11 -0.45		-1.72	0.46^{***}	0.14	3.31	0.49^{***}		3.39
ak n 0.21* 0.09 2.31 0.08 0.10 0.80 -0.04 0.13 -0.33 -0.05 0.11 -0.45		-2.92	1.04^{**}	0.27	3.82	1.13^{***}	0.28	4.06
a 0.21* 0.09 2.31 0.08 0.10 0.80 -0.04 0.13 -0.33 -0.05 0.11 -0.45								
n $0.21*$ 0.09 2.31 0.08 0.10 0.80 -0.04 0.13 -0.33 -0.05 0.11 -0.45								
$\begin{array}{rrrrr} 0.08 & 0.10 & 0.80 \\ -0.04 & 0.13 & -0.33 \\ -0.05 & 0.11 & -0.45 \end{array}$	-	2.37	-0.09	0.10	-0.93	-0.11	0.10	-1.11
-0.04 0.13 $-0.33-0.05$ 0.11 -0.45	0.10	0.84	-0.04	0.11	-0.41	-0.04	0.11	-0.35
-0.05 0.11 -0.45	-	-0.28	-0.13	0.14	-0.92	-0.13	0.14	-0.91
	-	-0.37	-0.02	0.11	-0.16	-0.01	0.11	-0.12
Interaction Terms								
Relax*Inc -0.		-0.25				-0.64	0.58	-1.10
Cog*Inc -0.02	02 0.78	-0.02				1.73*	0.85	2.03
Nutri*Inc 0.0		0.00				-0.72	0.99	-0.72
Social*Inc -0.7		-1.04				-0.34	0.77	-0.45
Pseudo R^2 .01	.01			.10			.10	
Log liklihood -612.19	-610.79		9-	-654.58		Ť	-651.63	
$\Delta \chi^2(\Delta df) \tag{4}$	9.78 (8)		С	3.37 (4)		6	9.26 (8)	
<i>Note</i> . Level 1 $n = 495-498$, Level 2 $n=75$; GenInc = General Incivility; DailyInc=Daily Incivility; ^{a=} control variable; All χ^2	General Inc	ivility; D	ailyInc=Dai	ily Inci	vility; ^{a=}	control va	riable; 1	All χ^2

Table 5. Hypothesis 5: Direct and Interaction Effects of Micro-break Activities on Well-being

				Perf	orman	ce			
]	Direct		Quad	atic Te	erms	Int	eraction	n
	Est	SE	Т	Est	SE	Т	Est	SE	Т
Intercept	3.69***	0.07	51.25	3.72***	0.08	47.56	3.71***	0.08	48.92
GenInc ^a	-0.29**	0.10	-2.91	-0.29**	0.10	-3.10	-0.42***	0.10	-4.38
DailyInc	0.20	0.28	0.71	0.22	0.28	0.80	-0.43	0.45	-0.95
Micro-break	Activities								
Relaxation	0.13	0.12	1.09	0.12	0.12	0.94	0.14	0.13	1.06
Cognitive	-0.19	0.12	-1.57	-0.11	0.13	-0.87	-0.10	0.14	-0.73
Nutrition	0.07	0.16	0.44	0.04	0.16	0.23	0.10	0.16	0.67
Social	-0.09	0.14	-0.63	-0.08	0.15	-0.52	-0.11	0.14	-0.78
Quadratic Te	rms								
RelaxSQ				0.03	0.13	0.26	-0.07	0.14	-0.47
CogSQ				-0.44**	0.17	-2.61	-0.49**	0.17	-2.89
NutriSQ				0.39	0.25	1.54	0.33	0.25	1.33
SocialSQ				-0.12	0.17	-0.71	-0.12	0.17	-0.73
Interaction Te	erms								
Relax*Inc							-0.64	0.88	-0.73
Cog*Inc							-0.11	0.86	-0.13
Nutri*Inc							3.48**	1.18	2.96
Social*Inc							-0.32	0.84	-0.37
RelaxSQ*Inc							0.37	0.70	0.53
CogSQ*Inc							-0.08	1.45	-0.05
NutriSQ*Inc							0.13	1.82	0.07
SocialSQ*Inc							2.90**	1.03	2.80
Pseudo R^2		.07			.08			.11	
Logliklihood	-	635.37		-(532.18		-(522.79	
$\Delta \chi^2(\Delta df)$	8	.27 (4)		6.1	4.641 (8	3)	33.4	13** (1	6)

Table 6. Hypothesis 6: Direct and Moderating effects of Micro-break Activities on Performance

Note. Level 1 *n*=496, Level 2 *n*=75; GenInc = General Incivility; DailyInc=Daily Incivility; ^a= control variable. SQ= quadratic variable; All χ^2 differences reflect model comparisons to those in Table 3.

p*<.05 *p*<.01, ****p*<.001. ¹*p*=.07

			An	Anger					Sh_{5}	Shame		
	1	Direct		Int	Interaction		Π	Direct		Int	Interaction	
	Est	SE	H	Est	SE	L	Est	SE	F	Est	SE	Т
Intercept	0.26^{***}	0.03	8.63	0.27^{***}	0.03	8.81	0.21^{***}	0.03	6.71	0.21^{***}	0.03	6.65
GenInc ^a	0.22^{***}	0.04	5.20	0.24^{***}	0.04	5.59	0.16^{***}	0.04	3.69	0.16^{***}	0.04	3.53
AngerT1 ^a	0.18^{**}	0.06	2.95	0.17^{**}	0.06	2.80	0.04	0.06	0.75	0.04	0.06	0.76
ShameT1 ^a	0.17^{**}	0.05	3.30	0.18^{***}	0.05	3.46	0.02	0.05	0.41	0.02	0.05	0.39
AngerT2 ^a	-0.15**	0.05	-3.10	-0.14**	0.05	-2.91	-0.03	0.05	-0.69	-0.03	0.05	-0.71
ShameT2 ^a	0.08	0.05	1.58	0.09	0.05	1.69	0.23***	0.05	4.35	0.23^{***}	0.05	4.34
DailyInc	0.79^{**}	0.26	2.98	0.82^{**}	0.26	3.17	0.12	0.20	0.60	0.11	0.20	0.57
Micro-breaks	-0.02	0.06	-0.31	-0.02	0.06	-0.37	-0.08	0.06	-1.36	-0.08	0.06	-1.35
Micro-				-1.37*	0.60	66.6-				0,14	0.58	0.24
breaks*Inc				10.1	00.0	1.1				+1.0	0000	
<i>Note</i> . Level 1 n = 441, Level 2 n =75; GenInc = General Incivility; DailyInc=Daily Incivility	<i>n</i> = 441, Le	vel 2 <i>n</i> =	-75; GenIr	nc = General	Incivili	ity; Daily]	Inc=Daily In	civility;				
a = control variable.	able.											
*p<.05 **p<.01. ***p<.001	$11, ***_{p<.0}$	01										
т т	•											

Table 7. Direct and Interaction Effects of Composite Micro-break Activities on Negative Discrete Emotions

				•)			
			Vigor	or					Exhaustion	stion		
	Ι	Direct		Inte	Interaction			Direct		Inte	Interaction	
	Est	SE	Τ	Est	SE	Τ	Est	SE	T	Est	SE	L
Intercept	2.61^{***} 0.08	0.08	32.40	2.61^{***}	0.08	32.60	2.65***	0.10	26.39	2.65***	0.10	26.35
GenInc ^a	-0.23*	0.11	-2.09	-0.19*	0.11	-1.70	0.46^{**}	0.14	3.31	0.45**	0.14	3.23
DailyInc	-0.65*	0.23	-2.78	-0.65**	0.23	-2.85	1.00^{**}	0.27		1.01^{**}	0.28	
Micro- breaks	0.14	0.14 0.14	1.04	0.16	0.14	1.14	-0.20	0.15	0.15 -1.40	-0.21	0.15	-1.40
Micro- breaks*Inc				-0.98	0.68	0.68 -1.44				0.35	0.84	0.42
Note. Level 1 n = 49. ^{a=} control variable.	<i>Note</i> . Level 1 n = 495-498, Level 2 n =75; GenInc = General Incivility; DailyInc=Daily Incivility; ^{a=} control variable.	98, Lev	rel 2 <i>n=</i> 75	; GenInc =	Genera	l Incivilit	y; DailyInc ⁼	=Daily	Incivility;			
* <i>p<.</i> 05 ** <i>p</i>	p<.05 *p<.01, **p<.001;	<.001;										

Table 8. Direct and Interaction Effects of Composite Micro-break Activities on Well-being

				Perf	orman	ce			
	Ι	Direct		Quadr	atic Te	erms	Inte	eraction	n
	Est	SE	Т	Est	SE	Т	Est	SE	Т
Intercept	3.69***	0.07	51.22	3.69***	0.07	51.12	3.68***	0.07	51.88
GenInc ^a	-0.27**	0.10	-2.64	-0.26*	0.10	-2.61	-0.26**	0.10	-2.58
DailyInc	0.10	0.25	0.39	0.10	0.25	0.39	0.04	0.27	0.17
Micro-breaks	-0.15	0.20	-0.74	0.24	0.45	0.53	0.32	0.45	0.72
Micro-				-0.19	0.19	-0.99	-0.25	0.19	-1.29
breaksSQ Micro- breaks*Inc							-2.93	2.29	-1.28
Micro- breaksSQ*Inc							1.52	1.01	1.50

Table 9. Direct and Moderating effects of Composite Micro-break Activities on Performance

Note. Level 1 *n*=496, Level 2 *n*=75; GenInc = General Incivility; DailyInc=Daily Incivility; Micro-breaks were included as random for improved model fit ($X^2(3)=10.74$, *p*=.01) ^a= control variable. SQ denotes quadratic term.

p*<.05 *p*<.01, ****p*<.001.

3 4 5 6 7	с И	ų		2		×	6	10	1	12	13	14	15	16	17
05		+ 45***	28*	.75***	, 66***	• 0	.05	60	90.	.31	.42	t 5	03 03	01	.12
.03		.18	35**	.58***	$.50^{***}$.18	.11	.32**	.31**	.38***	.37**	.18	.19	.32***	.33**
ı		35**	.27*	04	04	.14	.16	07	.05	.24*	$.26^{*}$	08	04	04	.06
40**		ı	06	.32**	.35**	.01	02	.04	13	.14	.27*	.04	.04	.07	02
60.		05	ı	36**	30**	11	03	25*	24*	00.	08	28*	19	27*	24*
-00		.05	06	ı	.94***	.17	.06	.08	.08	.37**	.48***	.07	.04	.14	.14
09*		.22***	.06	$.14^{**}$	ı	.20	.13	.05	.05	.37**	.48**	.05	.04	.11	.13
60.		.01	.08	.15***	.07	ı	.82***	.62***	.64***	.40***	.42***	.45***	.45***	.62***	.64**
.07		08	01	.04	.08	.19***	ı	.59***	.65***	.28*	.35**	.52***	.57***	.62***	.69
.05		03	14**	.06	02	.21***	.06	ı	.88	.18	.22	.69	.70***	.92***	.86***
.02		01	04	60.	.01	.08	.25***	$.19^{***}$	ı	.15	.17	.64***	.68***	.82***	.92***
06		02	00	.15***	.01	.21***	$.10^{*}$.15***	.02	ı	.71***	.19	.21	.36***	$.30^{*}$
.05		04	.05	.07	$.16^{***}$	$.14^{**}$.24***	.01	.26***	.16***	ı	$.26^{*}$	$.28^{*}$.37***	.39***
.01		03	03	$.12^{**}$	07	.29***	.13**	.21***	.02	.25***	.08	ı	.93***	.90	.84***
.03		07	00.	.08	.06	.07	.27***	.06	.36**	$.13^{**}$.27***	$.13^{**}$	ı	.87***	.89***
.02		04	11*	.13**	04	.33***	.13**	.83**	.15**	.47**	60.	.67**	.13**	ı	.93***
.04		05	01	$.11^{*}$.08	$.12^{*}$.34***	.14**	.84**	$.12^{*}$.54**	$.10^{*}$.76**	.17***	
2.59		2.67	3.69	0.12	0.13	1.78	1.93	1.67	1.70	1.75	1.75	2.02	2.08	0.81	0.84
0.71		0.95	0.66	0.26	0.25	0.54	0.70	0.54	0.65	0.32	0.38	0.63	0.67	0.43	0.50
0.68		0.74	0.73	0.16	0.18	0.47	0.5	0.49	0.43	0.36	0.37	0.42	0.44	0.31	0.31
All variables are within-person. Correlat Correlations above the diagonal represet Level-1 variables were aggregated to est MB= Composite Micro-breaks; Exh= E: break; Soc=Social Micro-break; MB=CC * $p < .05$, ** $p < .01$; *** $p < .001$.	x	All variables are within-person. Correlations below the Correlations above the diagonal represent between-pers Level-1 variables were aggregated to estimate between-MB= Composite Micro-break; Exh= Exhaustion; Perfbreak; Soc=Social Micro-break; MB=Composite Micro-break; MB=Comp	All variables are within-person. Correlations below the diagonal represent within-person correlations. Number of pairwise observations ranged from 446 to 579. Correlations above the diagonal represent between-person correlations ($n = 75$). Within individual (Level 1) variables reflect within-person centered relationships. Level-1 variables were aggregated to estimate between-individual (Level-2) correlations. ^a = within-person, ^b = between-person. MB= Composite Micro-break; Exh= Exhaustion; Perf=Performance; Inc= Incivility; Rel=Relaxation Micro-break; Cog= Cognitive Micro-break; Nut=Nutrition Micro-break; Soc=Social Micro-break; MB=Composite Micro-break; Zog= Cognitive Micro-break; Nut=Nutrition Micro-break; Soc=Social Micro-break; Nut=Nutrition Nute	gonal repr correlation vidual (L formance aks; 2 inc	diagonal represent within-person correlations. Number of pairwise ob on correlations (n = 75). Within individual (Level 1) variables reflect individual (Level-2) correlations. ^a = within-person, ^b = between-perso -Performance; Inc= Incivility; Rel=Relaxation Micro-break; Cog= Co -breaks; 2 indicates Time 2 measure and 3 indicates Time 3 measures	hin-perso). Within orrelation civility; R me 2 mea	in correlation individu is. $^{a} =$ wit Rel=Relax isure and	tions. Nuu al (Level hin-perso cation Mio 3 indicate	nber of p 1) variab n, ^b = bet ero-break ss Time 3	per of pairwise observariables reflect wi variables reflect wi ^b = between-person -break; Cog= Cogn Time 3 measures.	bservatio t within-F son. ognitive] s.	ns ranged berson ce Micro-br	l from 44 ntered rel eak; Nut=	6 to 579. ationships Nutrition	s. Micro-

Study Variables	
Time 3	
of Time 2 and	
and Intercorrelations o	
Standard Deviations, a	
Means,	
Table 10.	

					Est 95% Confidence Interval	
	MX	YM	Direct Effect	Indirect Effects	Lower	Upper
Vigor (T3)						
Anger (T3)	$0.39(0.21)^1$	-0.56(0.16)***	0.22(0.26)	-0.42*	-0.76	-0.19
Shame (T3)	0.13(0.29)	-0.51(0.13)***	-0.18(0.26)	-0.19	-0.43	0.02
Exhaustion (T3)						
Anger (T3)	$0.42(0.24)^1$	0.61(0.19)***	0.22(0.26)	0.39*	0.10	0.82
Shame (T3)	0.14(0.25)	0.40(0.18)*	0.41(0.26)	-0.07	-0.23	0.18
Performance (T3)						
Anger (T3)	0.34(0.20)	-0.03(17)	-0.20(0.42)	-0.01	-0.16	0.13
Shame (T3)	0.06(0.20)	-0.16(0.28)	-0.34(0.50)	-0.10	-0.22	0.07

Table 11. Mediation Analysis for the Effect of Incivility on Well-being and Performance through Negative Emotions

n = 876; Est.MX = estimate of path from Time 2 incivility to mediators; YM = estimate of path from mediators to outcome measures; standard errors of the estimates appear in parentheses; General incivility and shame and anger at Time 1 were included as controls. Estimated Confidence intervals computed from 20,000 Monte Carlo bootstrap samples. *p<.05 **p<.01, ***p<.001; ^{1}p <.08.

Between-person (Level 2) Controls: General Incivility

Within-person (Level 1)

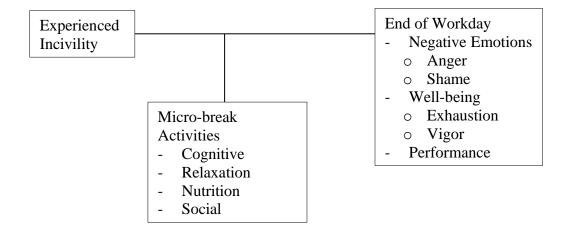


Figure 1. Conceptual model.

Note: Experienced Incivility and Micro-break Activities are Aggregated from Time 2 and Time 3 measures; End of Workday outcomes are all from Time 3.

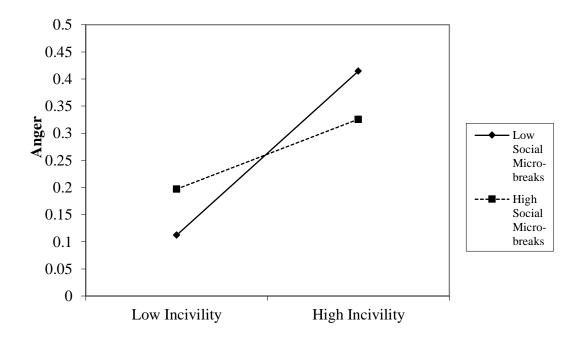


Figure 2. Plot of the interaction between social micro-break activity and daily incivility on anger.

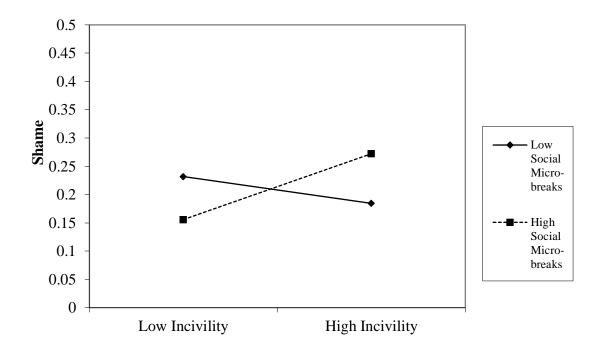


Figure 3. Plot of the interaction between social micro-break activity and daily incivility on shame.

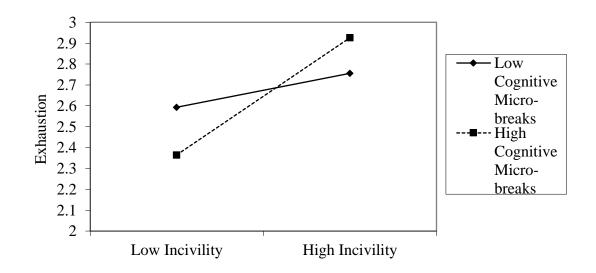


Figure 4. Plot of the interaction between cognitive micro-break activity and daily incivility on exhaustion.

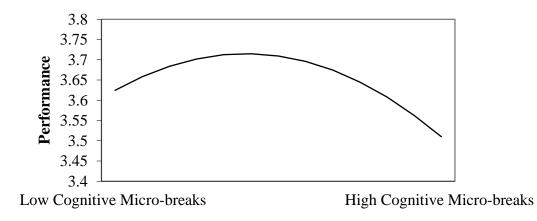


Figure 5. Plot of the quadratic effect of cognitive micro-break activity on performance.

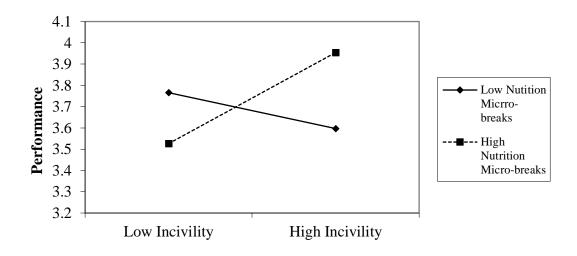


Figure 6. Plot of the interaction between nutrition micro-break activity and daily incivility on performance.

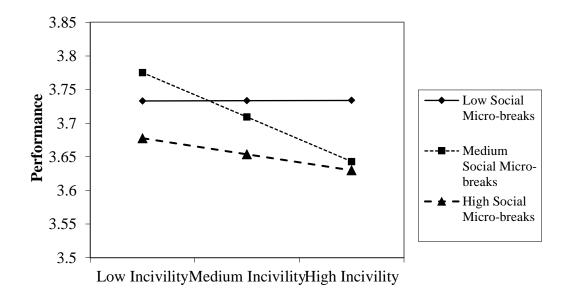


Figure 7. Plot of the interaction between social micro-break activity and daily incivility on performance.

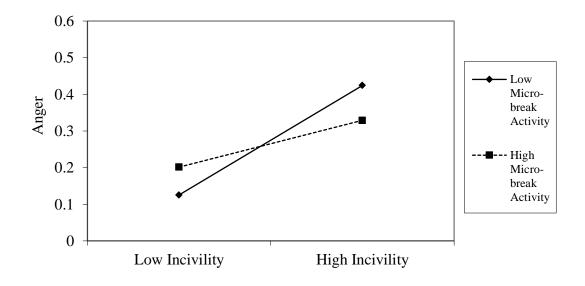


Figure 8. Plot of the interaction between daily micro-break activity and daily incivility on anger.

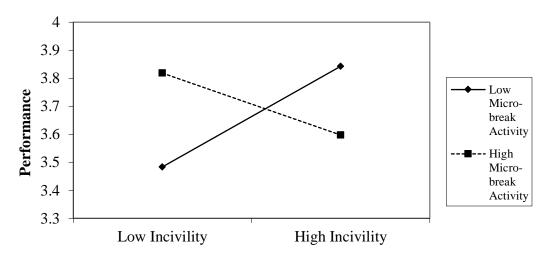


Figure 9. Plot of the interaction between micro-break activity and daily incivility on performance.

•

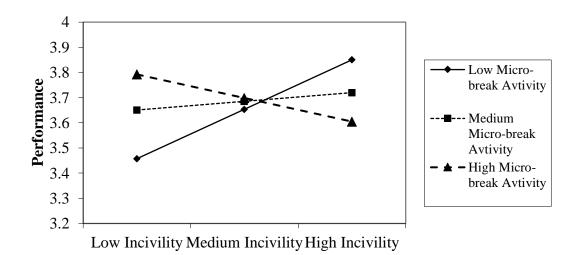


Figure 10. Plot of the interaction between micro-break activity and daily incivility on performance.

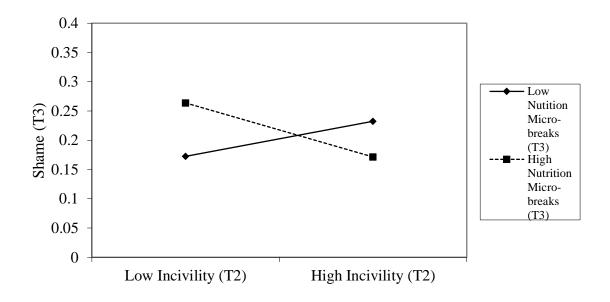


Figure 11. Plot of the interaction between afternoon nutrition micro-break activity and morning incivility on shame.

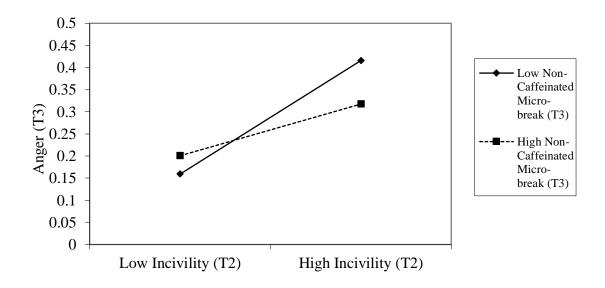


Figure 12. Plot of the interaction between non-caffeinated micro-break activity and daily incivility on anger.

APPENDIX A: RECRUITMENT MATERIALS

EMAIL VERBIAGE

INITIAL INVITATION TO PARTICIPATE IN THE DIARY STUDY

We are currently recruiting people to participate in a research study to understand employees' experiences at work. This study is being conducted by Nicole Harrington as a part of the dissertation requirements for a doctoral degree in Organizational Science at UNC Charlotte. The responsible faculty member is Dr. Enrica Ruggs from the Psychology Department.

As a participant, you will be asked to respond to a short survey (~3 minutes or less) via email **three times per day** (beginning, middle, and end of your workday) for 2 weeks on the days that you work, excluding weekends. The first day of surveys will be **START DATE** and will continue through **END DATE**.

In exchange for participating, you will be rewarded with up to \$30 in gift cards to either Target or Walmart. In addition, you will be entered in a random drawing to win 1 of 10 \$50 Starbucks gift cards. As this study plans to enroll only a small number of participants your chances of winning are relatively high.

If you are interested in participating, please click the link below to sign up by this **DAY**, **DATE.** This link will take you to a baseline survey which will provide you with more detailed information in addition to asking for your informed consent, email contact information, and some demographic and research information. This survey should only take approximately 5-10 minutes to complete. We will follow up shortly via email with a detailed information sheet about the data collection and how to access the daily surveys. If you would like more information or have any questions you may contact either Nicole at <u>nthurmon@uncc.edu</u> or her faculty advisor at <u>enruggs@uncc.edu</u>.

Survey Link: Baseline Survey

Finally, if you know of anyone else (friends/family/co-workers) who might be interested in participating in this study, I would greatly appreciate if you would be willing to pass along this information.

BASELINE FOLLOW-UP

Thank you for taking the time to complete the baseline survey and for agreeing to participate in the current study!

Your **participant ID** is:

XXXX Please remember this number as you will be asked to enter it in at the beginning of each survey.

As a reminder the first round of surveys will start this Monday (DATE) and will conclude after 10 workdays on Friday (DATE). Emails will be sent around 7:00am, 11:00am, and 3:30pm or some slight variation if you stated a work schedule that greatly differs from the traditional 9 to 5.. You do not need to complete the surveys at these times but please try to complete these surveys around the beginning, middle, and end of your workday.

If you are unable to complete each survey or need to miss a day or two, it is okay. Just pick back up with the next survey that you are able to complete. Your input is still valuable.

I have attached a document that provides more in-depth information about the data collection process/purpose of the study should you like to know more.

Finally, if you know of anyone else who might be interested in participating in this study, they may still sign up by taking the <u>baseline survey</u> by no later than this DAY (DATE).

If you have further questions or run across any problems, please contact workbreakstudy@gmail.com.

APPENDIX B: TRAINING MATERIAL

Thank you for agreeing to participate in the Employees' Experiences with Incivility and Work Break Study. The following document outlines all of the information you will need to take part in this study. Please read it carefully. If you have any further questions or experience any technical difficulties, please contact Nicole Harrington at ntec.edu or at workbreakstudy@gmail.com.

Purpose of Survey

Though research suggests that taking breaks at work may be beneficial for reducing strain, the purpose of this study is to examine worker's experiences with different break activities more in depth. In particular we are interested in micro-breaks, which are relatively short non-scheduled rest periods (e.g., going to get a cup of coffee).

We've designed this study to allow you to capture your experiences while at work to better understand a) what types of interactions and work breaks you experience and b) the influence they have on you.

Below are more specific details about the data collection process:

1. When will the study begin?

The study will start on **START DATE**. The last day of the survey will be on **END DATE**.

2. How do I participate?

You will receive an email that contains a link to a survey **three times per day** for **two weeks** (you will not receive an email on the weekends). Each survey will take ~3 minutes or less to complete.

- The three emails will be sent around 7 am, 11:30 am, and 3:30 pm.
 - *Note*: you do not need to complete the survey exactly at the time sent but please try to complete the surveys close to the beginning, middle, and end of your workday.
 - If you are unable to complete every single survey or miss a day or two (e.g., don't work that day or forget about it), it is okay. You can just pick back up when the next survey is sent out.

3. How do I access and fill out the survey?

You can take the survey on the computer or on your mobile device/tablet. The survey link will be sent to you via email from <u>workbreakstudy@gmail.com</u>. Please add this

address to your contacts to ensure the emails will not go to your spam folder and remember your participant id which will be required at the beginning of each survey.

4. What will be asked in the survey?

During the three surveys you will be asked to report your current feelings, in addition to the types of micro-break activities you engaged in and any incivility (i.e., rude behavior) you may have experienced during the morning or afternoon. In the end of the workday (3:30 pm) survey, you will also be asked about your current energy level.

The questions about micro-breaks and incivility will list examples of the types of activities or behaviors you may have engaged in or experienced during the morning or afternoon. You will simply indicate whether or not you took that type of break or had experienced the uncivil behavior during the previous work period.

Although these questions do not require additional comments, you will have the option to describe an event in more detail if you would like.

5. What are "micro-breaks?"

Micro-breaks are short, informal, respite activities taken voluntarily between tasks. These breaks may last anywhere from a few seconds to several minutes and take a variety of forms. For the purpose of this study, micro-breaks will be divided into four separate categories. Below are some examples of the types of breaks you will be asked about. These examples are not exhaustive but should give you an idea of where different types of breaks may best fit.

Relaxation Activities	 Stretching, walking around the office, or relaxing briefly Daydreaming, gazing out the office windows, taking quick naps, or any other psychological relaxation
Nutrition- Intake Activities	 3) Drinking caffeinated beverages (e.g., energy drinks, coffee, black or green tea) 4) Snacking or drinking non-caffeinated beverages (e.g., juice)
Social Activities	 5) Texting, using instant messenger, or calling friends or family members 6) Chatting with coworkers on non-work-related topics 7) Checking personal social networks (e.g., Facebook, Twitter, and personal blogs)
Cognitive Activities	 8) Reading non work-related books, newspapers, and magazines for personal learning or entertainment. 9) Surfing the web for non-work purposes or entertainment (e.g., online shopping, banking, checking personal emails, playing a game and watching short news or video clips)

6. What is incivility?

Incivility refers to deviant acts that include rude verbal and non-verbal behaviors targeted towards another organizational member and can come from co-workers, supervisors, and customers. Unlike other forms of workplace mistreatment, incivility is often subtle and ambiguous in its intent to harm. These behaviors may include making condescending or demeaning remarks, using sarcasm, and talking over others. More subtly incivility may also take the form of withholding information, texting while coworker is talking, or avoiding eye contact. During this study, you will be asked to report the frequency of your experiences with such rude behavior throughout the day.

7. When will I know I have completed the study/what my reward is?

A confirmation email will be sent when the two-week data collection period is over. A follow-up email will be sent soon after notifying you with your reward information and asking you for <u>mailing address</u> preference. For completing the first week of the survey you will be rewarded with a \$10 gift card to either Starbucks, Walmart, or Target (randomly assigned). If you complete both weeks, you will receive an additional \$20 gift card reward. Finally, those who complete **at least 70% of the surveys (21 of the 30)** will be entered in a random drawing to win 1 of 10 \$50 Starbucks gift cards.

Material Adapted from:

Woznyj, H. J. (2017). *The role of events and affect in perceived organizational support: A within-person approach* (Doctoral dissertation, The University of North Carolina at Charlotte).

APPENDIX C: SURVEY ITEMS

BASELINE SURVEY

Eligibility

Are you at least 18 years old?

- Yes (1)
- No (2)

Are you a full-time employee? (30+ hours per week)

- Yes (1)
- No (2)

Do you work from home MORE than 50% of the time?

- Yes (1)
- No (2)

Note: This question was asked because this study assumes that you work around/interact with others throughout the workday. If you work from home/not in an office space this may not be the case. Please clarify:

- I work from home more than 50% of the time but still frequently interact with my co-workers/others (1)
- I work from home more than 50% of the time and rarely interact with others (2)

Are you able to access a computer or mobile phone/tablet while at work?

- Yes (1)
- No (2)

Demographics

Please indicate your gender:

- Male (1)
- Female (2)
- Transgender male (3)
- Transgender female (4)
- Gender queer/gender non-conforming (5)
- Prefer not to respond (6)

Please indicate your race or ethnicity (select all that apply):

- Black or African American (1)
- Asian (2)
- Native Hawaiian/Pacific Islander (3)
- Caucasian/Not Hispanic (4)
- Latino/a or Hispanic (5)

- America Indian/Alaska Native (6)
- Middle Eastern or North African (7)
- Other: (8) _____
- Prefer not to answer (9)

What is the highest level of education you have completed?

- Less than high school (1)
- High school/GED (2)
- Some college (3)
- 2 year degree (4)
- 4 year degree (5)
- Masters degree (6)
- Professional Degree(PhD, JD, MD)(7)

What is your age?

•

Which of the following most closely matches your job title?

- Intern (1)
- Entry level (2)
- Analyst/Associate (3)
- Manager (4)
- Senior Manager (5)
- Director (6)
- Vice President (7)
- Senior Vice President (8)
- C-level Executive (CIO, CTO, COO, CMO, Etc) (9)
- President or CEO (10)
- Owner (11)

What occupation best describes your job function?

- Finance/Accounting (1)
- Human Resources (2)
- Information Technology/MIS (3)
- Administration (4)
- Sales (5)
- Marketing (6)
- Research and/or Development (7)
- Manufacturing (8)
- Engineering (9) Other: (10) _____

How many years have you worked in your current organization?

What time zone do you reside in?

- Eastern Daylight (1)
- Central Daylight (2)
- Mountain Daylight (3)
- Mountain Standard (4)

- Pacific Daylight (5)
- Alaska Daylight (6)
- Hawaii-Aleutian Standard (7)

Other: (8) ______

•

What are your typical work hours (e.g., 9-5; 7-3; it depends on the day):

How many days on average do you work per week?

- 1(1)
- 2(2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6(6)
- 7(7)

•

What is the best email address to which we can send you more information about both the study logistics as well as the links to the daily surveys?

Scales

Positive/Negative Affectivity:

PANAS (Watson, Clark, & Tellegen, 1988)

Response Scale:

1= Very slightly or not at all, 2= A little, 3= Moderately, 4= Quite a bit, 5 = Extremely

Instructions: The following words describe different feelings and emotions. Next to each item, indicate to what extent you feel this way on a typical day.

Items:

- Positive Mood
 - 1. Interested (PA1)
 - 2. Excited (PA2)
 - 3. Strong (PA3)
 - 4. Enthusiastic (PA4)
 - 5. Proud (PA5)
 - 6. Alert (PA6)
 - 7. Inspired (PA7)
 - 8. Determined (PA8)
 - 9. Attentive (PA9)
 - 10. Active (PA10)

Negative Mood

- 1. Distressed (NA1)
- 2. Upset (NA2)
- 3. Guilty (NA3)
- 4. Scared (NA4)
- 5. Hostile (NA5)
- 6. Irritable (NA6)
- 7. Ashamed (NA7)
- 8. Nervous (NA8)
- 9. Jittery (NA9)
- 10. Afraid (NA10)
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scale. *Journal of Personality* and Social Psychology, 54, 1063-1070.

General Workplace Incivility:

Workplace Incivility Scale (WIS; Cortina et al., 2013; Cortina et al., 2001)

Response Scale:

1= Never, 2= Once or twice, 3= Sometimes, 4= Often, 5 = Many Times

Instructions: During the last SIX MONTHS, were you ever in a situation in which any of your supervisors, co-workers, or customers...

Items:

- 1. Paid little attention to your statements or showed little interest in your opinions. (BI1)
- 2. Doubted your judgment on a matter over which you had responsibility. (BI2)
- 3. Gave you hostile looks, stares, or sneers. (BI3)
- 4. Addressed you in unprofessional terms, either publicly or privately. (BI4)
- 5. Interrupted or "spoke over" you. (BI5)
- 6. Rated you lower than you deserved on an evaluation. (BI6)
- 7. Yelled, shouted, or swore at you. (BI7)
- 8. Made insulting or disrespectful remarks about you. (BI8)
- 9. Ignored you or failed to speak to you (e.g., gave you "the silent treatment"). (BI9)
- 10. Accused you of incompetence. (BI10)
- 11. Targeted you with anger outbursts or "temper tantrums." (BI11)
- 12. Made jokes at your expense. (BI12)
- Cortina, L. M., Kabat-Farr, D., Leskinen, E. A., Huerta, M., and Magley, V. J. (2013). Selective incivility as modern discrimination in organizations: evidence and impact. *Journal of Management*. 39, 1579–1605.

Job Control:

Scale: Decision Authority Subscale of the Job Content Questionnaire (1998)

Response Scale:

1= Strongly disagree, 2=Disagree, 3= Somewhat disagree, 4= Neither agree nor disagree, 5= Somewhat agree, 6=A gree, 7=Strongly agree

5= Somewhat agree, 6=Agree, 7=Strongly agree

Instructions: Please indicate the extent to which you agree with the following statements.

Items:

- 1. My job allows me to make a lot of decisions on my own. (JC1)
- 2. I have the freedom to decide how to organize my work. (JC2)
- 3. I have a lot to say about what happens on my job. (JC3)

Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of occupational health psychology*, 3(4), 322.

Civility Norms:

Scale: Civility Norms Questionnaire- Brief

Response Scale:

- 1= Strongly disagree, 2=Disagree, 3= Somewhat disagree, 4= Neither agree nor disagree,
- 5= Somewhat agree, 6=Agree, 7=Strongly agree

Instructions: Please indicate the extent to which you agree with the following statements.

Items:

- 1. Rude behavior is not accepted by your coworkers. (CN1)
- 2. Angry outbursts are not tolerated by anyone in your unit/workgroup. (CN2)
- 3. Respectful treatment is the norm in your unit/workgroup. (CN3)
- 4. Your coworkers make sure everyone in your unit/workgroup is treated with respect. (CN4)
- Walsh, B. M., Magley, V. J., Reeves, D. W., Davies-Schrils, K. A., Marmet, M. D., & Gallus, J. A. (2012). Assessing workgroup norms for civility: The development of the Civility Norms Questionnaire-Brief. *Journal of Business and Psychology*, 27(4), 407-420.

Supervisor Support:

Scale: Supervisory Support

Response Scale:

1= Strongly disagree, 2= Somewhat disagree, 3= Neither agree nor disagree, 4= Somewhat agree, 5=Strongly agree

Instructions: Please indicate the extent to which you agree with the following statements.

Items:

- 1. My supervisor takes time to learn about my career goals and aspirations (SS1)
- 2. My supervisor cares about whether or not I achieve my goals (SS2)
- 3. My supervisor keeps me informed about different career opportunities in the organization (SS3)
- 4. My supervisor makes sure I get credit when I accomplish something substantial on the job (SS4)
- 5. My supervisor gives me helpful feedback about my performance (SS5)
- 6. My supervisor gives me helpful advice about improving my performance when I need it (SS6)
- 7. My supervisor supports my attempts to acquire additional training or education to further my career (SS7)
- 8. My supervisor provides assignments that give me an opportunity to develop and strengthen new skills (SS8)
- 9. My supervisor assigns me special projects that increase my visibility in the organization (SS9)

Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of management Journal*, *33*(1), 64-86.

Coworker Support

Scale: Social Support Scale

Response Scale:

1= Never, 2= Sometimes, 3= About half the time, 4= Most of the time, 5= All of the time

Instructions: Please indicate the extent to which you agree with the following statements.

Items:

- 1. My coworkers provide helpful information or advice about my work (CW1)
- 2. My coworkers provide sympathetic understanding and advice (CW2)
- 3. My coworkers provide clear and helpful feedback about my work (CW3)
- 4. My coworkers provide practical assistance at work (CW4)

O'Driscoll, M. P. (2000). Work and family transactions. In P. Koopman-Boyden, A Dharmalingam, B. Grant, V. Hendy, S. Hillcoat-Nalletamby, D. Mitchell, M. O'Driscoll, and S. Thompson. *Transactions in the mid-life family*, 92-112. University of Waikato, Hamilton: Population Association of New Zealand.

Scale: Coworker Support

Response Scale:

1= Never, 2= Sometimes, 3= About half the time, 4= Most of the time, 5= All of the time

Instructions: Using the response scale below, please indicate how often your colleagues provide you with each of the following in the past three months.

Items:

- 1. I receive help and support from my coworkers (CWS1)
- 2. I feel I am accepted in my work group. (CWS2)
- 3. My coworkers are understanding if I have a bad day. (CWS3)
- 4. My coworkers back me up when I need it. (CWS4)
- 5. I feel comfortable with my coworkers. (CWS5)

Hammer, T. H., Saksvik, P. Ø., Nytrø, K., Torvatn, H., & Bayazit, M. (2004). Expanding the psychosocial work environment: workplace norms and work-family conflict as correlates of stress and health. *Journal of occupational health psychology*, 9(1), 83. Thank you for completing the baseline survey.

You will receive an email from workbreakstudy@gmail.com DATE. In addition to some background information about the study, this email will include your four-digit participant id. You will need to enter this id at the start of each of the surveys.

The first round of surveys will begin on Monday, DATE and will continue through Friday, June DATE. The three emails will be sent around 7am, 11:30am, and 3:30pm to be completed around the beginning, middle, and end of your workday.

DAILY SURVEY: MORNING

Participant ID: _____ Today's Date: _____

Discrete Emotions:

Scale: Discrete Emotion Subscales taken from the Diener model of subjective well-being

Response Scale: 1= Not at all, 2= A little, 3= Moderately, 4= Quite a bit, 5 = Very much

Instructions: Indicate to what extent you are having each of the following feelings <u>right</u> <u>now</u> :

Items:

Joy		<u>Anger</u>		<u>Shame</u>	
1.	Joy	1.	Anger	1.	Shame
2.	Happiness	2.	Irritation	2.	Guilt
3.	Contentment	3.	Disgust	3.	Regret
4.	Pride	4.	Rage	4.	Embarrassment

Diener, E., Smith, H., & Fujita, F. (1995). The personality structure of affect. *Journal of personality and social psychology*, 69(1), 130.

DAILY SURVEY: MIDDAY

Participant ID: _____ Today's Date: _____

Have you already taken your lunch break today?

- Yes (1)
- No (2)
- Taking it now (3)

Discrete Emotions:

Scale: Discrete Emotion Subscales taken from the Diener model of subjective well-being

Response Scale: 1= Not at all, 2= A little, 3= Moderately, 4= Quite a bit, 5 = Very much

Instructions: Indicate to what extent you are having each of the following feelings <u>right</u> <u>now</u> :

Items: <u>Joy</u>	Anger	<u>Shame</u>
1. Joy	1. Anger	1. Shame
2. Happiness	2. Irritation	2. Guilt
3. Contentment	3. Disgust	3. Regret
4. Pride	4. Rage	4. Embarrassment

Diener, E., Smith, H., & Fujita, F. (1995). The personality structure of affect. *Journal of personality and social psychology*, 69(1), 130.

Micro-break Activities:

Scale: Adapted from Common Respite Activity: Kim et al. (2017)

Response Scale:

1 = Never, 2 = Once or twice, 3 = A few times (about once/per hour), 4 = Often (about twice per hour), 5 = Frequently (about three or more per hour)

Instructions: Please indicate how often you engaged in **XXXX** micro-break activities (since you have been at work this morning.

Items:

Relaxation Micro-breaks

- 1. Stretching, walking around the office, or relaxing briefly
- 2. Daydreaming, gazing out the office windows, taking quick naps, or any other psychological relaxation
- 3. Smoking
- 4. Other relaxation break

Nutrition Micro-breaks

- 1. Drinking caffeinated beverages (e.g., energy drinks, coffee, black or green tea)
- 2. Snacking or drinking non-caffeinated beverages (e.g., juice)
- 3. Other nutrition related break

Social Micro-breaks

- 1. Texting, using instant messenger, or calling friends or family members
- 2. Chatting with coworkers on non-work-related topics
- 3. Checking personal social networks (e.g., Facebook, Twitter, and personal blogs)
- 4. Other social break activity

Cognitive Micro-breaks

- 1. Reading non work-related books, newspapers, and magazines for personal learning or entertainment.
- 2. Surfing the web for non-work purposes or entertainment (e.g., online shopping, banking, checking personal emails, playing a game and watching short news or video clips)
- 3. Other cognitive break activity
- Kim, S., Park, Y., & Niu, Q. (2017). Micro-break activities in the workplace to recover from daily work demands. *Journal of Organizational Behavior*, 38, 28-44.

Additional Microbreak Questions

It is possible to engage in break activities from multiple categories simultaneously. For example, getting coffee with a coworker would fall into both Nutrition and Social microbreak activities. Since you have been at work this morning, did you engage in activities from multiple categories at the same time?

- Yes (1)
 - If yes, which break categories overlapped (check all that apply):
 - Relaxation (1)
 - Nutrition (2)
 - Social (3)
 - Cognitive (4)
- No (2)

Please provide a short description of the overlapping break activities (e.g., ate a snack while shopping online). If you engaged in multiple overlapping break activities, please list this in a separate line.

Workplace Incivility

Scale: 7-item Workplace Incivility Scale Response Scale:

1= Never, 2= Once or twice, 3= Sometimes, 4= Often, 5= Many times

Instructions: This morning, how many times were you in a situation where any of your co-workers, supervisors, or customers...

- 1. Put you down or were condescending to you.
- 2. Paid little attention to your statement or showed little interest in your opinion.
- 3. Made demeaning or derogatory remarks about you.
- 4. Addressed you in unprofessional terms, either publicly or privately
- 5. Ignored or excluded you from professional camaraderie.
- 6. Doubted your judgment on a matter over which he/ she has responsibility.
- 7. Made unwanted attempts to draw you into a discussion of personal matters.

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of occupational health psychology*, 6(1), 64.

Additional Incivility Question

Please provide a brief description of any of the rude experiences (listed or other) that you experienced this morning if you wish to elaborate (*optional*):

DAILY SURVEY: EVENING

Participant ID: _____ Today's Date: _____

Discrete Emotions:

Scale: Discrete Emotion Subscales taken from the Diener model of subjective well-being

Response Scale: 1= Not at all, 2= A little, 3= Moderately, 4= Quite a bit, 5 = Very much

Instructions: Indicate to what extent you are having each of the following feelings **<u>right</u> <u>now</u>** :

Items: <u>Joy</u>	Anger	Shame
5. Joy	5. Anger	5. Shame
6. Happiness	6. Irritation	6. Guilt
7. Contentment	7. Disgust	7. Regret
8. Pride	8. Rage	8. Embarrassment

Diener, E., Smith, H., & Fujita, F. (1995). The personality structure of affect. *Journal of personality and social psychology*, 69(1), 130.

Micro-break Activities:

Scale: Adapted from Common Respite Activity: Kim et al. (2017)

Response Scale:

1 = Never, 2 = Once or twice, 3 = A few times (about once/per hour), 4 = Often (about twice per hour), 5 = Frequently (about three or more per hour)

Instructions: Please indicate how often you engaged in **XXXX** micro-break activities since you have been at work this afternoon.

Items:

Relaxation Micro-breaks

- 5. Stretching, walking around the office, or relaxing briefly
- 6. Daydreaming, gazing out the office windows, taking quick naps, or any other psychological relaxation
- 7. Smoking
- 8. Other relaxation break

Nutrition Micro-breaks

- 4. Drinking caffeinated beverages (e.g., energy drinks, coffee, black or green tea)
- 5. Snacking or drinking non-caffeinated beverages (e.g., juice)
- 6. Other nutrition related break

Social Micro-breaks

- 5. Texting, using instant messenger, or calling friends or family members
- 6. Chatting with coworkers on non-work-related topics
- 7. Checking personal social networks (e.g., Facebook, Twitter, and personal blogs)
- 8. Other social break activity

Cognitive Micro-breaks

- 4. Reading non work-related books, newspapers, and magazines for personal learning or entertainment.
- 5. Surfing the web for non-work purposes or entertainment (e.g., online shopping, banking, checking personal emails, playing a game and watching short news or video clips)
- 6. Other cognitive break activity
- Kim, S., Park, Y., & Niu, Q. (2017). Micro-break activities in the workplace to recover from daily work demands. *Journal of Organizational Behavior*, 38, 28-44.

Additional Microbreak Questions

It is possible to engage in break activities from multiple categories simultaneously. For example, getting coffee with a coworker would fall into both **Nutrition** and **Social** microbreak activities. Since you have been at work this afternoon, did you engage in activities from multiple categories at the same time?

- Yes (1)
 - If yes, which break categories overlapped (check all that apply):
 - Relaxation (1)
 - Nutrition (2)
 - Social (3)
 - Cognitive (4)
- No (2)

Please provide a short description of the overlapping break activities (e.g., ate a snack while shopping online). If you engaged in multiple overlapping break activities, please list this in a separate line.

Workplace Incivility

Scale: 7-item Workplace Incivility Scale Response Scale: 1= Never, 2= Once or twice, 3= Sometimes, 4= Often, 5= Many times

Instructions: This afternoon, how many times were you in a situation where any of your co-workers, supervisors, or customers...

- 1. Put you down or were condescending to you.
- 2. Paid little attention to your statement or showed little interest in your opinion.
- 3. Made demeaning or derogatory remarks about you.
- 4. Addressed you in unprofessional terms, either publicly or privately
- 5. Ignored or excluded you from professional camaraderie.
- 6. Doubted your judgment on a matter over which he/ she has responsibility.
- 7. Made unwanted attempts to draw you into a discussion of personal matters.

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of occupational health psychology*, 6(1), 64.

Additional Incivility Question

Please provide a brief description of any of the rude experiences (listed or other) that you experienced this afternoon if you wish to elaborate (*optional*):

Situational Wellbeing

Scale: Emotional Exhaustion¹; Adapted vigor subscale from Shortened version of Utrecht Work Engagement Scale (UWES-9)²

Response Scale:

1= Strongly disagree, 2= Somewhat disagree, 3= Neither agree nor disagree, 4= Somewhat agree, 5=Strongly agree

Instructions: Today:

Items:

- 1. I feel emotionally drained from my work.
- 2. I feel used up due to my work.
- 3. I feel burned out from my work.
- 4. I feel bursting with energy.
- 5. I feel strong and vigorous.

¹Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal* of organizational behavior, 2(2), 99-113.

² Schaufeli, W. B., & Bakker, A. (2003). UWES Utrecht work engagement scale. Preliminary Manual (Version 1). Utrecht University: Occupational Health Psychology Unit, Utrecht/Valencia.

Subjective Performance

Scale: Daily Goal Progress (Adapted)

Response Scale:

1= Strongly disagree, 2= Somewhat disagree, 3= Neither agree nor disagree, 4= Somewhat agree, 5=Strongly agree

Instructions: From the beginning of the workday until now,

Items:

- 1. I have been productive in relation to my work goals.
- 2. I have made good progress on my work goals.
- 3. I have moved forward with my work goals.

Wanberg, C. R., Zhu, J., & Van Hooft, E. A. J. 2010. The job search grind: Perceived progress, self-reactions, and self-regulation of search effort. Academy of Management Journal, 53: 788–807.