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Effects of Workplace Incivility on Nurses' Emotions, Well-being, and Behaviors:

A Longitudinal Study

By

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy
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Keywords: workplace incivility, nurse health, engaged incivility, experience sampling

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DEDICATION

I want to dedicate my dissertation to my parents for their faith in me. They have been very understanding and supportive in my pursuit of my education and career.

I also want to dedicate my dissertation to my advisor Dr. Paul Spector. He has been a role model to me and I will always be grateful for the past 5 years I have worked with him.

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ABSTRACT

This dissertation used an experience sampling design to examine effects of experienced workplace incivility from three categories of organizational insiders (coworkers, supervisors, and physicians) and from organizational outsiders (patients and their visitors) on targets' emotions, burnout, physical symptoms, and their own uncivil behaviors toward each of the four groups of people. Data were collected from 75 nurses with each nurse responding to online surveys twice per week for 5 consecutive weeks. Results from hierarchical linear modeling showed that within individuals, negative emotions were positively associated with experienced workplace incivility (overall and source-specific), burnout was positively associated with overall workplace incivility and incivility from coworkers, and that physical symptoms were positively associated with experienced workplace incivility from supervisors. In addition, within individuals overall and source-specific experienced workplace incivility all positively predicted targets' own uncivil behaviors correspondingly. None of the proposed moderating effects of three between-person level personality traits (emotional stability, hostile attribution bias, and emotional competence) were supported, and the only significant moderating effect found was that emotional stability moderated the relationship between experienced workplace incivility from- and targets' own uncivil behaviors toward- supervisors was opposite to the prediction. Further, both violence prevention climate and civility climate showed main effects in negatively predicting participants' own uncivil behaviors, but only violence prevention and two of its dimensions (policies and procedures, and pressure for unsafe practices) buffered some of the negative effects of experienced workplace incivility. In summary, the current study found that within individuals



experienced workplace incivility had negative effects on targets' emotions, well-being, and behaviors, and that perceived violence prevention climate buffered some of the negative effects.



CHAPTER 1: INTRODUCTION

Workplace incivility refers to uncivil behaviors characterized by low intensity, ambiguous intent to harm, and violating workplace norms of mutual respect (Andersson & Pearson, 1999). Example behaviors include rude comments, using a condescending tone, and addressing someone unprofessionally. These uncivil behaviors are very common in the workplace (Milam, Spitzmueller, & Penney, 2009; Pearson & Porath, 2002). For example, Porath and Pearson (2013) reported that 98% of more than 14,000 people they had surveyed in the past 14 years had experienced workplace incivility at work, with half of them reporting being treated rudely at least once a week. Due to this high prevalence, a great deal of research has been done to explore its negative effects on both individuals and organizations. Past studies have found that experienced workplace incivility was related to decreased job satisfaction (Cortina, Magley, Williams, & Langhout, 2001), less intention to stay (Griffin, 2010), reduced satisfaction with supervisors and coworkers (Lim, Cortina, & Magley, 2008; Lim & Lee, 2011), decreased mental and physical health (Lim et al., 2008), as well as increased work-family conflict and depression (Lim & Lee, 2011).

The current literature on workplace incivility has several gaps that need to be addressed, and they are the foci in the current study. First, while the majority of outcomes examined in workplace incivility literature were job attitudes and well-being, less attention has been paid to targets' emotional and behavioral responses (Sakurai & Jex, 2012). Second, a limited number of moderators of relationships of workplace incivility with its outcomes have been examined (Sakurai & Jex, 2012). This is a significant gap because some personal and situational characteristics could buffer or amplify the effects of experienced workplace incivility on the

outcomes, and understanding the moderating effects of these personal and situational characteristics can help organizations to develop and implement better prevention and intervention programs. Third, the majority of current studies were cross-sectional and retrospective, with all studied variables being measured at one time and workplace incivility experiences being measured by asking respondents how often they have certain incivility experiences instead of measuring the actual incivility incidents and their influences. This not only makes it hard to conclude the direction of events, but also raises the concern that participants might not be able to recall their experiences accurately. Jex, Geimer, Clark, Guidroz, and Yugo (2010) suggested a weekly measurement would help us better capture participants' experiences and responses. Fourth, most of the current studies have examined workplace incivility in general, while only a few studies (e.g., Lim & Lee, 2011; Reio, 2011; M. Sliter, Sliter, & Jex, 2012) have examined effects of workplace incivility from more than one source. Fifth, Andersson and Pearson (1999) proposed the concept of an incivility spiral in which targets of workplace incivility might reciprocally engage in uncivil behaviors which might further lead to escalated aggressive behaviors. However, only a limited number of studies (e.g., Ghosh, Dierkes, & Falletta, 2011) have examined their proposition, mainly because of the difficulty of tracking individuals' experiences and behaviors in retrospective studies with cross-sectional designs.

Lastly, it is surprising that only a few empirical studies were conducted among nurses in health care settings given that nurses experience a high prevalence of workplace incivility from multiple sources. For example, Smith et al. (2005) found that over the prior 2 years, 90.4% of participating nurses experienced coworker incivility, and 77.8% of them experienced supervisor incivility. Haines et al. (2007) reported that among 87 operation room nurses, the percentage of



nurses who had experienced physician incivility, coworker incivility and supervisor incivility were 67%, 49% and 64% over 5 years at work, respectively.

The current study aimed to address all aforementioned limitations. Specifically, the current study not only extended our understanding of the effects of experienced workplace incivility on targets' emotional and behavioral responses, but also examined the mediating role of negative emotions on relationships of experienced workplace incivility with more distal outcomes (well-being and behaviors). Further, the current study examined the moderating effect of several dispositional variables (emotional stability, hostile attribution bias and emotional competence) and organizational factors (violence prevention climate and civility climate) on relationships of experienced workplace incivility with its outcomes. Furthermore, a weekly experience sampling survey design across 5 consecutive weeks was used in the current study to better capture nurses' experiences and responses within individuals. Lastly, the current study provided us an opportunity to examine effects of workplace incivility from a variety of sources, including insiders of coworkers (other nurses), supervisors, and physicians, and outsiders combining patients and patient visitors (e.g., family members and friends). To sum up, using a within-person weekly experience sampling design, the current study aimed to examine the effects of workplace incivility from four possible sources (coworkers, supervisors, physicians, and patients/patient visitors) on nurses' emotions, well-being, as well as their behaviors. In addition, both dispositional variables and environmental factors were examined as potential moderators.

Workplace Incivility: Definition and Measurement

Andersson and Pearson (1999) defined workplace incivility as "low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual



respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others" (p. 457). As one subtype of workplace deviance (Robinson & Bennett, 1995), workplace incivility differs from other types of workplace mistreatment based on the following characteristics: violation of norms, ambiguous intent to harm, and low intensity (Cortina & Magley, 2009; Pearson, Andersson, & Wegner, 2001). The differences and similarities between workplace incivility and workplace aggression, interpersonal conflict, bullying, and abusive supervision have been discussed (see details in Hershcovis, 2011; Spector & Fox, 2005). In the following section, I will briefly discuss the three defining characteristics of workplace incivility.

Defining Characteristics of Workplace Incivility

First, although the specific cultures and norms might differ from one organization to another, there should be similar norms for mutual interpersonal respect across industries and organizations, and uncivil behaviors that violate these norms are considered as workplace incivility (Cortina & Magley, 2009; Pearson, Andersson, & Porath, 2005). This characteristic conceptually links workplace incivility with workplace deviance (Robinson & Bennett, 1995) as they both violate organizational norms.

The second characteristic of workplace incivility is the ambiguous intent to harm. Among the domain of workplace mistreatment, most of the specific constructs include intent to harm in their definitions, such as workplace aggression (Neuman & Baron, 1998), counterproductive work behavior (CWB; Spector & Fox, 2005), and social undermining (Duffy, Ganster, & Pagon, 2002), while others imply so, such as bullying (Einarsen & Skogstad, 1996) and abusive supervision (Tepper, 2000). Since the intent of instigators of workplace incivility cannot be clearly and directly perceived by the targets and observers, it is likely that the same uncivil behavior will have different effects on different targets based on the targets' perceptions.



Low intensity is the last defining characteristic of workplace incivility, which excludes physical violence from workplace incivility behaviors (Cortina & Magley, 2009). Pearson et al. (2001) suggested that incivility involves minor forms of workplace deviance that are not as strong as workplace aggression.

Although not considered as a defining characteristic, Pearson and colleagues (Andersson & Pearson, 1999; Pearson et al., 2005) proposed that workplace incivility is a process instead of an individual event. Because at least two people are involved in an uncivil exchange, workplace incivility may escalate to workplace aggression if targets of workplace incivility turn into instigators of workplace incivility reciprocally (Pearson et al., 2001). Thus, workplace incivility should not be limited to one single event, but as a process examining the interchange between instigators and targets, which is one of the foci of the current study.

Measurement of Workplace Incivility

Workplace incivility has been mostly studied from targets' perspective (Jex et al., 2010). The most frequently used scale to measure experienced workplace incivility was developed by Cortina et al. (2001) and it has been adapted to measure targets' experienced workplace incivility from supervisors (e.g., Laschinger, Leiter, Day, & Gilin, 2009; Lim & Lee, 2011), coworkers (e.g., Ferguson, 2012; Laschinger et al., 2009; Lim & Lee, 2011), customers (e.g., van Jaarsveld, Walker, & Skarlicki, 2010), and workplace incivility in general (e.g., Cortina & Magley, 2009). Most of the studies asked participants how often they had experience each of the behaviors, with timeframes ranging from past month (e.g., van Jaarsveld et al., 2010) to as long as past 5 years (e.g., Cortina et al., 2001; Lim & Lee, 2011).

Jex et al. (2010) suggested that measuring workplace incivility from the instigators' perspective is also important, and several studies have examined instigated workplace incivility.



For example, van Jaarsveld et al. (2010) used the items from Cortina et al. (2001) to measure service employees' engagement in workplace incivility, and found that customer mistreatment was positively related to service employees' own engagement in workplace incivility toward customers. Blau and Andersson (2005) proposed a construct labeled as instigated workplace incivility (uncivil behaviors initiated by employees) and developed a scale to measure it. They found that instigated workplace incivility was distinct from experienced workplace incivility, and that a group of variables predicted instigated workplace incivility, including distributive and procedural justice, job satisfaction, and work exhaustion.

A scale developed for general organizational contexts might lose information about some workplace incivility incidents specific to certain working environments (Jex et al., 2010). Further, workplace incivility from different sources might differ in terms of specific behaviors. Burnfield, Clark, Devendorf, and Jex (2004) developed a multidimensional incivility scale that measured workplace incivility of 12 dimensions from within (e.g., supervisor and coworker) and outside of (e.g., customer) organizations. Building on this, Guidroz, Burnfield-Geimer, Clark, Schwetschenau, and Jex (2010) developed a nursing incivility scale (NIS) specific to the nursing industry, and workplace incivility is measured from coworkers, supervisors, physicians, and patients and visitors with some different items in each subscale. Since this scale captures more specific information in the nursing context, items from the NIS were adapted to measure nurses' workplace incivility experiences in the current study.

Jex et al. (2010) also summarized several challenges in workplace incivility measurement and proposed several recommendations in measuring workplace incivility using retrospective self-report. For example, they suggested researchers use shorter period time frames in the question (e.g., weekly), ask respondents their behavioral responses, and survey the



respondents more than once. The current study incorporated their suggestions in the measurement of workplace incivility. Detail can be found in the method section.

Theoretical Background

The current study uses the Affective Events Theory (AET; Weiss & Cropanzano, 1996) and Job Demands-Resources Model (JD-R; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) as main theoretical frameworks. AET proposes that negative affective work events will lead to negative emotional reactions which will in turn influence employees' subsequent behaviors and attitudes. As a workplace stressor (Penney & Spector, 2005), workplace incivility includes behaviors that are rude, discourteous, and violating the norm of mutual respect (Andersson & Pearson, 1999). Thus it is likely that these behaviors are appraised unpleasant and can elicit negative affective reactions of the targets (Porath & Pearson, 2012; Reio & Ghosh, 2009). Cortina and Magley (2009) provided empirical support for this notion, finding that the most frequent appraisals of workplace incivility experience were negative, including that they were insensitive, annoying, frustrating, and bothersome. Therefore, it is reasonable to consider workplace incivility as a negative affective event, and it is likely that after experiencing workplace incivility people tend to have stronger negative emotions. Further, when the negative emotions are sustained over time, people are likely to experienced impaired psychological and physical health, and that people are like to engage in emotion-driven behaviors (e.g., uncivil behaviors) toward other people in response.

Another important component of AET (Weiss & Cropanzano, 1996) is that individual dispositions are likely to moderate the relationships between negative affective events and negative emotional reactions. Therefore, individuals with higher levels of certain personality traits are likely to react to experienced workplace incivility in a different pattern from individuals



with lower levels of these personality traits. Further, given that negative emotional reactions are likely to influence people's subsequent health and behaviors as discussed above, it is likely that the potential moderating effects will also appear between workplace incivility and its more distal outcomes (psychological and physical health, and behaviors). Therefore, the current study proposes that three individual dispositions (emotional stability, hostile attribution bias, and emotional competence) as potential moderators might moderate the effects of workplace incivility.

Another theoretical framework the current study uses is the Job Demands-Resources Model (JD-R; Demerouti et al., 2001). According to JD-R, various job characteristics can be categorized in to two categories: job demands and job resources. Job demands include the physical, psychological, social and organizational factors of the job which need employees to uses physical and psychological effort to achieve work-related goals, while job resources refer to various aspects of the job that can reduce job demands and buffer the negative effects of job demands (Bakker & Demerouti, 2007). According to JD-R, job demands are likely to cause psychological and physical costs, and thus result in strains, while job resources are likely to buffer the negative effects of job demands (Bakker & Demerouti, 2007). As discussed above, workplace incivility tends to be appraised negatively, and it may require targets of workplace incivility to use psychological and physical efforts to cope with. Therefore, as one potential type of job demands, workplace incivility is likely to have negative effects on targets.

Further, the JD-R model proposes that job resources are likely to reduce the negative effects of job demands. Dollard and Bakker (2010) suggests that climate as one type of external resources is likely to buffer the negative effects of job demands. Thus, in the current study, I argue that two organizational factors, including violence prevention climate (Spector, Coulter,



Stockwell, & Matz, 2007), employees' perception of organizational policies, procedures, and practices that prevent violence, and civility climate (Ottinot, 2011), employees' perception of organizational policies, procedures, and practices that promote a civil workplace, are important job resources, and that a positive violence prevention climate and civility climate can buffer the negative effects of experienced workplace incivility.

Outcomes of Workplace Incivility

Negative emotions

Both the Affective Events Theory (AET; Weiss & Cropanzano, 1996) and Job Demands-Resources Model (JD-R; Demerouti et al., 2001) provide the theoretical basis for the link between experienced workplace incivility and targets' negative emotions. Empirical studies have also established positive relationships between experienced workplace incivility and negative emotions. For example, Cortina and Magley (2009) found that experienced workplace incivility elicits negative appraisals, especially with frequent and varied incivility from instigators of high power. Porath and Pearson (2012) found that experienced workplace incivility was positively related to three types of negative emotions, including anger, sadness, and fear of targets. Sakurai and Jex (2012) also reported that experienced coworker-instigated incivility was positively related to general negative emotions. While these findings established a link between experienced workplace incivility and negative emotions, there were mainly using betweenperson designs that showed higher levels of incivility in general were associated with more frequent negative emotions. A limitation to this approach is that they are unable to link specific experiences of incivility to specific episodes of emotions, or that within-individuals, emotions are experienced following incivility. In the current study, the experience sampling design enables us to examine the relationship between experienced incivility and negative emotions within



individuals across time, and to explore whether individuals' experience of workplace incivility contributes to the fluctuation of their negative emotions. Based on both theoretical and empirical background, a positive relationship between experienced workplace incivility and general negative emotions is expected within individuals in the current study.

Hypothesis 1: Experienced workplace incivility will have a positive effect on targets' negative emotions.

Psychological and Physical Well-being

Workplace incivility happens very frequently in workplaces. For example, in a nationwide survey, it was reported that 10% of respondents had witnessed workplace incivility almost every day (Pearson et al., 2005); in another study, it was reported that 20% of sampled respondents had experienced workplace incivility at least once per week (Pearson & Porath, 2002). This feature qualifies workplace incivility as one type of daily hassle (Lazarus & Folkman, 1984), and also one type of chronic stressor (Lim et al., 2008). Thus, with the negative effects of experienced workplace incivility on targets' emotions accumulating across time, it is likely that targets' psychological well-being will be impaired with increased anxiety and depression, and the psychological symptoms will eventually influence targets' physical health (Lim et al., 2008). With cross-sectional data, Lim et al. (2008), Miner, Settles, Pratt-Hyatt, and Brady (2012), Reio and Ghosh (2009), and M. Sliter, Jex, Wolford, and McInnerney (2010) have established negative relationships of experienced workplace incivility with psychological wellbeing and physical well-being, with both psychological well-being and physical well-being being measured in several different ways. For example, psychological well-being has been measured either as mental health (e.g., Cortina et al., 2001; Lim et al., 2008), workplace affect (Reio & Ghosh, 2009), or emotional exhaustion (M. Sliter et al., 2010), while physical well-being has



also been measured with different indicators across studies, including health satisfaction (Cortina et al., 2001; Lim et al., 2008), subjective self-evaluation on level of health (Reio & Ghosh, 2009), or number of days of illness or absences caused by illness (Miner et al., 2012). In the current study, psychological well-being is considered a long-term sustained effect of the negative emotions caused by workplace incivility on targets, which is consistent with the definition of burnout that is a "psychological response to chronic work stress" (Halbesleben & Demerouti, 2005, p. 208). Thus, psychological well-being was measured with level of burnout in this study with higher level of burnout indicating decreased psychological well-being. Further, previously studied physical well-being was mainly assessed as subjective general evaluations of health status, while more objective and specific indicators of physical health (e.g., headache, fatigue, and sleep disturbance) haven't been studied as consequences of experience workplace incivility. Thus, in the current study, physical well-being was measured with targets' reports of specific physical symptoms with the Physical Symptom Inventory (Spector & Jex, 1998). The same relationships of experienced workplace incivility and targets' psychological and physical wellbeing were expected in the current study with nurses.

Hypothesis 2: Experienced workplace incivility will have positive relationships with targets' burnout (a) and physical symptoms (b).

Targets' Own Uncivil Behaviors

According to AET (Weiss & Cropanzano, 1996), the negative emotions elicited by experienced workplace incivility might lead to affect-driven negative behaviors. Further, the Stressor-Emotion model of counterproductive work behavior (CWB; Spector & Fox, 2005) suggests that situational factors that are appraised as stressful might lead to negative emotions, which will in turn result in more CWB. These theoretical models echo the incivility spiral



proposed by Andersson and Pearson (1999) which describes the escalation from workplace incivility to more intense and aggressive workplace behaviors, such as aggression. Studies that have directly examined the incivility spiral are scarce. The only known published study (Ghosh et al., 2011) found that mentors' distancing behaviors were significantly related to protégés' instigated workplace incivility against mentors. Other studies have provided indirect evidence on the effects of workplace incivility on targets' deviant behaviors, including counterproductive work behavior, workplace aggression, and instigated workplace incivility. Counterproductive work behavior (CWB) refers to harmful behaviors that hurt organizations and/or people within organizations (Spector & Fox, 2005). CWB against individuals (CWB-I) overlaps with the concept of workplace incivility because it is about negative behaviors happening between individuals, while CWB against organizations (CWB-O) is different from workplace incivility because the target is an organization. According to the incivility spiral, it is likely that workplace incivility leads to more harmful behaviors such as CWB-I as the incivility spiral escalates. However, Penney and Spector (2005) reported that while experienced workplace incivility was positively related to both CWB-I and CWB-O, the correlations not significantly different from one another. Furthermore, people who reported more workplace incivility also reported more CWB in general (Sakurai & Jex, 2012). While the aforementioned two studies used crosssectional data to examine the relationship between workplace incivility and CWB, Meier and Spector (2013)tested a reciprocal relationship between workplace incivility and CWB with a longitudinal design. They found that engagement in CWB predicted subsequent workplace incivility experience, but workplace incivility experience did not predict subsequent engagement in CWB. It seems that perpetrators of the more severe interpersonal CWB are more likely to be the targets of less severe workplace incivility, but not the other way around. However, whether



perpetrators of workplace incivility are more likely to be targets of the same level of negative behaviors is still unclear. The current study aimed at addressing this question. In addition to CWB, experienced workplace incivility has been linked to other negative behaviors of targets in cross- sectional designs, including more workplace aggression (Taylor & Kluemper, 2012), and more workplace incivility (van Jaarsveld et al., 2010). Thus, based on the aforementioned theoretical background and empirical evidence, I proposed the following hypothesis.

Hypothesis 3: Experienced workplace incivility will have a positive relationship with targets' own uncivil behaviors.

As discussed earlier, AET (Weiss & Cropanzano, 1996) argues that negative emotions following negative events are likely to lead to more distal outcomes. For example, when negative emotions are sustained, targets of workplace incivility are likely to experience more burnout and physical symptoms. Further, when experiencing increased negative emotions, individuals are likely to engage in negative behaviors in response to the perpetrators. Therefore, I propose that negative emotions are likely to mediate the effects of experienced workplace incivility on targets' burnout, physical symptoms, and their own uncivil behaviors.

Hypothesis 4: Negative emotions will mediate the effects of experienced workplace incivility on targets' burnout, physical symptoms, and targets' own uncivil behaviors.

Moderators of Relationships of Experienced Workplace Incivility with Outcomes Emotional Stability

Individuals of low emotional stability tend to be nervous, anxious, and fearful, while individuals of high emotional stability are more likely to be calm and secure (Mount, Barrick, & Strauss, 1994). Thus, individuals low on emotional stability not only tend to experience more negative feelings in general, but also are more reactive to experienced negative work events



(Taylor & Kluemper, 2012). For example, in an experimental study, Ng (2011) found that initially elicited negative mood led to stronger negative emotions for individuals of low emotional stability than for individuals of high emotional stability. Further, it was found that individuals of low emotional stability are more likely than individuals of high emotional stability to have depressive symptoms when exposed to daily hassles (Hutchinson & Williams, 2007). Furthermore, compared to individuals of high emotional stability, individuals of low emotional stability were more likely to engage in CWB in general (Berry, Ones, & Sackett, 2007), and were more likely to engage in CWB as reactions to organizational constraints, interpersonal conflict, and role stressors (Bowling & Eschleman, 2010), and experienced workplace incivility (Penney & Spector, 2005).

The above evidence is consistent with the proposition in AET (Weiss & Cropanzano, 1996), and suggests that individuals of low emotional stability tend to react to encountered experienced negative events with stronger negative emotions, more severely impaired well-being, and more negative behavioral responses than individuals of high emotional stability. Thus, the same pattern is expected for experienced workplace incivility.

Hypothesis 5: Emotional stability will moderate the effects of experienced workplace incivility on targets' negative emotions, burnout, physical symptoms, and their own uncivil behaviors; specifically, the relationships will be stronger for targets of low emotional stability than for targets of high emotional stability.

Hostile Attribution Bias

The ambiguous intent feature of workplace incivility might result in different interpretations on instigators' intent among targets with different attribution styles. Attribution styles describe people' tendencies to make causal attributions of events (Martinko, Harvey,



Sikora, & Douglas, 2011). Commonly studied attribution styles include optimistic and pessimistic attribution styles (Martinko, Douglas, & Harvey, 2006), with individuals of the optimistic attribution style tending to attribute successes to internal causes and attribute failures to external causes, and individuals of the pessimistic attribution style tending to attribute successes to external causes and attribute failures to internal causes.

Another attribution style that has gained increased attention is hostile attribution bias (Martinko et al., 2011). Hostile attribution bias (HAB; Crick & Dodge, 1996) refers to the extent to which people attribute the causes of negative events to others' hostile intention. People of high HAB are more likely than people of low HAB to think that the negative situations at work are created by others intentionally, and thus are likely to experience more negative emotions (e.g., anger) and engage in more negative behaviors as reactions (Spector, 2011). HAB has been found to be related to people's aggressive and deviant reactions to negative work events (Chiu & Peng, 2008; Douglas & Martinko, 2001). In addition, a recent study shows that people of low hostile attribution bias are more likely to engage in more counterproductive work behaviors in responses to experienced workplace incivility (Wu, Zhang, Chiu, Kwan, & He, 2013). Thus, given the ambiguous intention of workplace incivility, it is likely that people of higher HAB are more likely to assume that instigators' rude and uncivil behaviors are intentionally hostile, and thus they might react with stronger emotional reactions, more severely impaired well-being, and increased engagement in uncivil behaviors.

Hypothesis 6: HAB will moderate the effects of experienced workplace incivility on targets' negative emotions, burnout, physical symptoms, and their own uncivil behaviors; specifically, the effects will be stronger for targets of high HAB than for targets of low HAB.



Emotional Competence

Emotional competence, or emotional intelligence, is a relatively new construct which refers to one's ability to perceive, regulate and utilize affective responses (Giardini & Frese, 2006). Individuals of high emotional competence are suggested to be more aware of their own feelings and emotions of others, more capable of regulating their own emotions (Johnson & Spector, 2007), are more likely to recognize the emotions of the instigators (Bechtoldt, Rohrmann, De Pater, & Beersma, 2011). Thus, when experiencing workplace incivility, individuals of high emotional competence might be more capable of recognizing the emotions of instigators and understanding that some uncivil acts are just momentary expressions of negative emotions of the instigators, and will react with less negative emotions. Further, as one type of psychological resource, emotional competence was suggested to buffer the effects of work characteristics that require organizationally desired emotions on employees' well-being (Giardini & Frese, 2006). Thus, when experiencing workplace incivility, targets of high emotional competence may be aware of the negative emotions that are elicited by their experiences, and recover more quickly from the negative emotional state. Therefore, it is likely that individuals of high emotional competence are less likely to experience negative emotions after experiencing workplace incivility, have less impaired well-being, and engage in less uncivil behaviors.

Hypothesis 7: Emotional competence will moderate the effects of experienced workplace incivility on targets' negative emotions, burnout, physical symptoms, and their own uncivil behaviors; specifically, the effects will be stronger for targets of low emotional competence than for targets of high emotional competence.



Violence Prevention Climate

Organizational climate refers to employees' shared perceptions about different aspects of working environments (Zohar & Luria, 2005). Organizational climate has been found to play an important role in influencing individuals' experience and behaviors, and two specific climate constructs are relevant to workplace incivility, including violence prevention climate and civility climate. Violence prevention climate refers to individuals' perception of organizational policies, practices, and procedures on controlling and reducing the occurrence of workplace violence and verbal aggression (Spector et al., 2007). A positive violence prevention climate indicates that an organization has implemented policies, practices, and procedures to prevent workplace violence/aggression from happening, and also to identify and remove risk factors that might lead to the occurrence of workplace violence/aggression (Kessler, Spector, Chang, & Parr, 2008). Violence prevention climate was found to be negatively related to employees' exposure to workplace violence and workplace aggression among employees from various organizations (Kessler et al., 2008) and among nurses (Spector et al., 2007; Yang, Spector, & Chang, 2011), suggesting a protective effect of violence prevention climate on employees' exposure to workplace violence. However, whether a positive violence prevention climate will reduce the occurrence of workplace aggression after various negative experiences has not been examined. Since workplace incivility has the potential to escalate to workplace aggression (Pearson et al., 2001) and was found to relate to CWB (Penney & Spector, 2005; Sakurai & Jex, 2012) and workplace aggression (Taylor & Kluemper, 2012), it is likely that violence prevention climate might also have a buffering the effect of experienced workplace incivility on targets' own uncivil behaviors, such that targets of workplace incivility working in organizations with positive



violence climate might consider the uncivil behaviors to be less acceptable, and thus engage in less uncivil behaviors in response.

Hypothesis 8: Violence prevention climate will moderate the effect of experienced workplace incivility on targets' own uncivil behaviors; specifically, the effect will be weaker for targets working in a positive violence prevention climate than for targets working in a less positive violence prevention climate.

Civility Climate

In their conceptual model of workplace incivility, Pearson et al. (2005) proposed that one contextual factor, informal climate, might buffer the negative effects of workplace incivility on outcomes. Since workplace incivility is defined as violation of workplace norms of mutual respect (Andersson & Pearson, 1999), an informal climate for mutual respect should promote civility, decrease workplace incivility, and buffer the effects of workplace incivility that actually happens. Civility climate can be a good example of such informal climate.

There are two conceptualizations of civility climate. Walsh et al. (2012) defined civility climate as "as employee perceptions of norms supporting respectful treatment among workgroup members "(p. 409). They found that civility climate was negatively related to both coworker and supervisor incivility experiences. Building on the concept of safety climate (Zohar, 2002) and violence prevention climate (Spector et al., 2007), Ottinot (2011) proposed a more structured definition of civility climate as "employee perceptions of how management uses policies, procedures, and practices to maintain a civil workplace" (p. 24). This definition of civility climate is similar to violence prevention climate in that they both focus the policies, procedures and practices of management, but they are also different because they have different purpose with violence prevention climate focusing on violence prevention and civility climate focusing



on maintaining a civil workplace. Ottinot (2011) used a multi-level design and found that school-level civility climate was negatively related to teachers' experience of incivility, and positively related to teachers' well-being. Although there have been no published empirical evidence on the moderating effect of civility climate, I am going to test the proposed buffering effect of civility climate proposed by Andersson and Pearson (1999) with the following hypothesis.

Hypothesis 9: Civility climate will moderate the effects of experienced workplace incivility on targets' negative emotions, burnout, physical symptoms, and their uncivil behaviors; specifically, the effects will be weaker for targets working in a stronger civility climate than for targets working in a weaker civility climate.

Workplace Incivility from Multiple Sources

Recent research has suggested that targets may experience different outcomes to workplace aggression from different sources (e.g., Chang & Lyons, 2012; Hershcovis & Barling, 2010; Hershcovis et al., 2007; Inness, LeBlanc, & Barling, 2008). In the recent meta-analysis, Hershcovis and Barling (2010) found that workplace aggression from supervisors had the strongest negative relationships with targets' attitudinal and behavioral outcomes, while workplace aggression from coworkers had stronger effects on attitudinal and behavioral outcomes than outsider aggression did. To extend our understanding of the underlying mechanism through which workplace aggression from different sources impacts the victims, Chang and Lyons (2012) tested both affective and cognitive paths, and found evidence that both employees' emotional strain and employees' corresponding judgment of their social exchange relationships with three groups of perpetrators (superiors, coworkers, and customers) mediated the relationships of workplace aggression from supervisors, coworkers, and customers with morale and turnover intention.



Unlike studies on workplace aggression, studies that have examined the differential effects of workplace incivility from different sources are limited, and sources that have been examined were mainly supervisors, coworkers and customers. Lim and Lee (2011) found that supervisor-instigated workplace incivility was more common than coworker- and subordinate-instigated workplace incivility. While coworker-instigated workplace incivility was positively related to targets' decreased coworker satisfaction, increased perception of unfair treatment, and increased depression, supervisor-instigated workplace incivility was found to relate to targets' decreased supervisor satisfaction and increased work-family conflict. K. Sliter, Sliter, Withrow, and Jex (2012) found that coworker-instigated incivility was positively related to withdrawal behaviors, while customer-instigated incivility was positively related to withdrawal behaviors and negatively related to sales performance. In a nursing context, Laschinger et al. (2009) found that both supervisor- and coworker- instigated workplace incivility were negatively related to nurses' job satisfaction and organizational commitment, and positively related to nurses' turnover intention.

In a nursing context, while most of the studies focused on supervisor incivility and coworker incivility, only one study examined the effect of physician incivility (Haines et al., 2007) and one study looked at patient incivility (Hutton & Gates, 2008). It has been suggested that the source of incivility is as important as the frequency (Hutton & Gates, 2008), but no study has provided a complete picture to compare the effects of incivility from all four sources at the same time in nursing context, not to mention their differential effects on nurses' emotions, well-being and behavioral responses. Thus, the current study examined the effects of incivility from four sources, including coworkers, supervisors, physicians, and patients and visitors. Because



there has not been sufficient evidence to predict differential relationships, the current study examined the following research question instead of testing a hypothesis.

Research Question 1: Will workplace incivility from different sources (coworkers, supervisors, physicians, and patients and visitors) have different effects on targets' negative emotions, burnout, physical symptoms, and their own engagement in uncivil behaviors?

The Current Study

To extend our understanding of workplace incivility, the current study aimed to address several limitations in the current workplace incivility literature using a weekly experience sampling within-person design to explore the relationships of experienced workplace incivility from four possible sources (coworkers, supervisors, physicians, and patients and visitors) on targets' negative emotions, burnout, physical symptoms, as well as their own uncivil behaviors. Furthermore, both dispositional variables (emotional stability, hostile attribution bias, emotional competence,) and organizational factors (violence prevention climate and civility climate) were examined as potential moderators.



CHAPTER 2: METHOD

Participants

Participants were recruited from a large pool of nurses from an ongoing longitudinal study of University of South Florida nursing graduates beginning May 2010. The ongoing study aimed at examining the relationships of violence exposure with personal and organizational antecedents, as well as its outcomes. Seven cohorts (N = 422) of University of South Florida nursing graduates were surveyed before they graduated and were contacted for at least one follow-up survey by January 2013. The majority of them were female (87.83%) with a mean age of 25.43 years (SD = 6.01) the when they took the initial survey. They were all at least 20 years old at the initial survey.

Since the current study uses a within-person design for 5 weeks, it has two levels: within individual (Level 1) and between individuals (Level 2). Based on the estimates suggested by Scherbaum and Ferreter (2009), a sample of at least 40 nurses (Level 2) will be needed to reach sufficient statistical power at a medium fixed effect size. However, a larger sample size will be needed to reach good power to detect cross-level interaction effects which is the case in the current study (Snijders, Steglich, & Schweinberger, 2007). Thus, a sample size of 80 at level 2 should be able to have reasonable power.

Recruiting emails were sent to the 422 nursing graduates. One hundred and fifty-five targeted participants (response rate = 36.7%) responded to the recruiting email to show their interest in the study. After they were sent detailed instructions about study data collection procedure (see next section), one hundred and two participants took the baseline survey. Among



them, 93 decided to participate in the weekly surveys. Eighteen participants' weekly surveys were dropped because the participants completely only 1 or 2 weekly surveys, and could not be included for further analyses. The final sample included 75 participants, with the majority being female (97%). Their average age was 30.3 years old (SD = 9.2), and they worked on average 37.8 hours per week (SD = 3.5). All of them had received a bachelor's degree in nursing.

Procedure

Participant recruitment

A recruiting email was sent to a large pool of nurses (N = 422) who had been participating in a two-year longitudinal study. The email explained the purpose of the study, qualification criteria, and data collection procedure (explained in the following section). People who were willing to participate provided their contact information, including name, addresses, email addresses, and phone numbers in their response emails.

Data collection

Participants who were willing to participate and provided personal contact information were first asked to take a baseline online survey which measured emotional stability, emotional competence, hostile attribution bias, perceived violence prevention climate, and civility climate, as well as demographic information including age, gender, and working hour per week. Further, they were also asked to provide the starting time of their first shift (referred to as "starting time" from now on) and ending time of last shift per week (referred to as "ending time" from now on) for the following 5 weeks.

Starting the following week after baseline survey, participants were sent individual reminder emails with survey links 2 hours before the starting time (before-work survey) and 2 hours before the ending time (after-work survey). The before-work survey included measures of



negative emotions and burnout while after-work surveys measured participants' experience of workplace incivility in the past week, negative emotions, burnout, physical symptoms, and self-engagement in uncivil behaviors in the past week. In the end of all surveys, participants were asked to answer secret questions: city of birth, high school name, and mother's birthday (month and day). Baseline surveys and weekly surveys were matched using the three secret questions. After each survey, participants were directed to a separate page that collected their names. Participants had to finish all survey questions to be directed to enter their names, and their compensation was determined by whether they have entered their names. There was no connection between the surveys and their names. Thus, survey data were anonymous.

Names of variables that were collected at each phase of data collection are listed in Table 1.

Measures

All data were collected through an online data collection platform (Surveymonkey.com).

All study scale items are attached in Appendix A.

Experience of workplace incivility

Experience of workplace incivility was measured with an adapted version of the 34-item Nursing Incivility Scale (NIS; Guidroz et al., 2010) in after-work surveys, which measured nurses' experience of incivility from physicians (7 items), coworkers (10 items), patients/family members/visitors (10 items), and supervisors (7 items) in the prior week. Response options ranged from 1 (*never*) to 6 (*five times and more*). Example items for experienced workplace incivility were "Other nurses argued with you" (coworker incivility), "Your direct supervisor is verbally abusive to you" (supervisor incivility), "Physicians are condescending to you"



(physician incivility), and "Patients and/or their family and visitors are condescending to you" (patient and visitor incivility).

Negative emotions

Negative emotions were measured using 10 items from the Job-related Affective Wellbeing Scale (JAWS; Van Katwyk, Fox, Spector, & Kelloway, 2000) in the before-work survey and the after-work survey for 5 weeks. Participants were asked to rate to what extent they were having each of the 10 feeling from 1 (*not at all*) to 5 (*extremely*). An example item was "My job made me feel anxious".

Psychological well-being

Psychological well-being was measured in the before-work and after-work survey for 5 weeks using an adapted version of the 21-item Burnout Measure (BM; Pines & Aronson, 1988). Participants were asked to rate to what degree they felt each of the 21 feelings when they thought about their work overall. Response options were from 1 (*very slightly or not at all*) to 5 (*extremely*). An example item was "Being tired".

Physical well-being

Physical well-being was measured using Spector and Jex's (1998) 13-item Physical Symptom Inventory (PSI) in before-work and after-work surveys for 5 weeks. Participants were asked how often they have experienced each of the 13 physical symptoms in the past week. Response options ranged from 1 (*never*) to 5 (*four times and more*). An example item was "Trouble sleeping".

Engagement in uncivil behaviors

Targets' engagement in uncivil behaviors was measured in after-work surveys using adapted versions of the 7-item scale from Cortina et al. (2001) toward physicians, coworkers,



supervisors, and patients/family members/visitors. All were measured using 7 items except for patients and visitors where 2 items were dropped. Participants were asked to report how many times they had engaged in each of the listed behaviors. Response options ranged from 1 (*never*) to 6 (*five times and more*). One example item is "I made demeaning or derogatory remarks about a coworker".

Emotional stability

Emotional stability was measured with an 10-item IPIP measure (Goldberg et al., 2006) in the baseline survey. Participants were asked how accurate each item was characterizing them, and response options were from 1 (*very inaccurate*) to 5 (*very accurate*). An example item was "I get upset easily". Coefficient alpha was .74 in the current sample.

Hostile attribution style

Hostile attribution bias was measured with a 7-item scale from Bal and O'Brien (2010) in the baseline survey. Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). An example item was "If coworkers ignore me, it is because they are being rude". Coefficient alpha was .77 in the current sample.

Emotional competence

Emotional competence was measured using the 16-item emotional intelligence scale from Wong and Law (2002) in the baseline survey. Participants were asked to indicate to what extent they agreed with each of the statements. Response options were from 1 (*strongly disagree*) to 7 (*strongly agree*). One sample item was "I always know whether or not I am happy". Coefficient alpha was .94 in the current sample.



Violence prevention climate

Perceived violence prevention climate was measured in the baseline surveys with a 12item version of the Violence Climate Survey (Kessler et al., 2008) with 4 items for each of the
following three subscales: policies and procedures, practices, and pressure for unsafe practices.

Participants were asked to indicate to what extent they agreed with each of the statements.

Response options ranged from 1 (*disagree very much*) to 6 (*agree very much*). Example items
were "Management in this organization quickly responds to episodes of violence." (Policies and
Procedures), "My employer provides adequate assault/violence prevention training" (Practices),
and "In my unit in order to get the work done, one must ignore some violence prevention
policies" (Pressure for unsafe practices). Scores were reversed for Pressure for unsafe practices
so that high scores indicated a more positive climate with less pressure. Coefficient alphas
were .75 (overall), .96 (policies and procedures), .88 (Practices), and .90 (pressure), respectively.

Civility climate

Civility climate was measured using 13 items from the Workplace Civility Climate scale (Ottinot, 2011) in the baseline survey. Participants were asked to indicate to what extent they agreed with each of the statements. Response options were from 1 (*disagree completely*) to 6 (*agree completely*), with higher scores indicating stronger civility climate. One sample item was "My supervisor has a low tolerance for disrespectful behavior among employees". Coefficient alpha was .90 in the current sample.

Data Analysis

In the current study, variables were grouped at two levels: level 1 (within individuals) and level 2 (across individuals). Level 1 variables were collected through 5 weeks, including negative emotions, burnout, physical symptoms, experience of workplace incivility, and



engagement in uncivil behaviors. Level 2 variables were collected in the baseline survey, including individual difference variables (emotional stability, emotional competence, and hostile attribution bias) and organizational climates (perceived violence prevention climate and civility climate). The main effects of experienced workplace incivility on targets' negative emotions, burnout, physical symptoms, and their own uncivil behaviors were examined at level 1. The moderating effects of individual difference variables and organizational climates were examined across levels. Thus data was analyzed at both levels and also across the levels. Main effects (Hypotheses 1 to 3) and moderating effects (Hypotheses 5-9) were tested with hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002). All level 1 variables were group-mean centered and level 2 variables were grand-mean centered. The restricted maximum-likelihood procedure in HLM was used to estimate the fixed and random parameters. The current study used the robust standard error for significance tests because they were suggested to overcome the effect of sampling (Nezlek, 2011). Significant interactions indicated that the level 1 main effects were moderated by Level 2 variables. The mediating effects (Hypothesis 4) were examined using Mplus (Muthén & Muthén, 2010).

Negative emotions and burnout were measured both before participants started a week's shift and after their shifts, and the current study conducted analyses with and without controlling for before-shift negative emotions and burnout in predicting after-shift negative emotions and burnout, respectively, and there were no differences in patterns of results. Therefore, only analyses without controlling for before-shift negative emotions and burnout are presented.



CHAPTER 3: RESULTS

Table 2 shows means, standard deviations, and the inter-correlations among level 1 and level 2 variables, respectively. Among 5 level-2 moderator variables, all correlations except for the one between hostile attribution bias and the policies and procedures dimension of violence prevention climate were significant. Intra-class correlation coefficients (ICC-1s) were calculated for the following level 1 variables and reported in Table 3: negative emotions, burnout, physical symptoms, and targets' overall own uncivil behaviors, uncivil behaviors toward coworkers, supervisors, physicians, and patients and visitors. Between-person variance shows the amount of variance that is between individuals, and within-person variances show the amount of variance is within individuals across 5 weeks. ICC-1s were calculated by dividing the between-person variance over the total amount of variance (sum of between-person variance and within-person variance), and shows the proportion of variance of the outcome variables that are between individuals. As shown in Table 3, there was a fair amount of variance in each of the outcome variables within individuals.

Hypothesis 1 to 3 were tested using HLM models with random intercepts and random slopes, and each of the predictors was analyzed separately. Table 4 shows the coefficients and standard errors for each of five predictors (overall experienced incivility, experienced incivility from coworkers, experienced incivility from supervisors, experienced incivility from physicians, and experienced incivility from patients and visitors) to predict negative emotions, burnout, and physical symptoms, and Table 5 shows the results to predict targets' overall own incivility, own incivility toward coworkers, own incivility toward supervisors, own incivility toward physicians,



and own incivility toward patients and visitors, respectively. Result showed that within individuals, overall experienced incivility ($\beta = 0.49$, p < .01), as well as experienced incivility from coworkers (($\beta = 0.40$, p < .01) and physicians ($\beta = 0.17$, p < .05) positively predicted negative emotions, while experienced incivility from patients and visitors marginally predicted negative emotions ($\beta = 0.12$, p < .10). Experienced incivility from supervisors did not predict negative emotions ($\beta = 0.18$, n.s.). Hypothesis 1 predicting that workplace incivility positively predicts targets' negative emotions was largely supported.

Hypothesis 2 predicted that experienced workplace incivility would negatively predict psychological well-being (2a) and physical well-being (2b). Results showed that overall experienced workplace incivility ($\beta = 0.37$, p < .01) and experienced workplace incivility from coworkers ($\beta = 0.36$, p < .01) positively predicted burnout, and experienced incivility from supervisors positively predicted physical symptoms ($\beta = 0.21$, p < .05). None of the other types of workplace incivility predicted burnout or physical symptoms. Thus, both hypothesis 2a and hypothesis 2b were partially supported.

Hypothesis 3 predicted that targets' experience of workplace incivility would positively predict their own uncivil behaviors. As shown in Table 5, analyses were conducted within each of the five domains (overall experienced/engaged incivility, and experienced incivility from-/ engaged incivility toward- coworkers, supervisors, physicians, and patients/visitors). Results showed that within each of the domains, targets experiencing more incivility also reported higher engaged incivility. Therefore, Hypothesis 3 was supported. Further analyses were conducted to test the cross-domain effects and results are also shown in Table 5. Overall experienced workplace incivility positively predicted targets' own uncivil behaviors toward coworkers (β = 0.29, p < .05), supervisors (β = 0.19, p < .01), physicians (β = 0.22, p < .01), and toward patients



and visitors (β = 0.24, p < .05), respectively. Experienced workplace incivility from coworkers positively predicted targets' own overall uncivil behaviors (β = 0.15, p < .01), and targets' own uncivil behaviors toward supervisors (β = 0.12, p < .05), but not targets' own uncivil behaviors toward physicians (β = 0.03, n.s.) or patients and visitors (β = -0.05, n.s.). Experienced workplace incivility from supervisors predicted targets' overall own uncivil behaviors (β = 0.19, p < .01), and their own uncivil behaviors toward coworkers (β = 0.35, p < .05) and toward physicians (β = 0.16, p < .05), but not their own uncivil behaviors toward patients and visitors (β = -0.04, n.s.). Experienced incivility from physicians did not predict targets' own uncivil behaviors toward other domains other than physicians. Lastly, experienced incivility from patients and visitors predicted targets' own overall uncivil behaviors, and their own uncivil behaviors toward all the three other domains. The general pattern across domains partially supported Hypothesis 3.

Hypothesis 4 predicted that negative emotions would mediate the effects of experienced workplace incivility on targets' psychological well-being, physical well-being, and their own uncivil behaviors. Mediating models were tested using Mplus (Muthén & Muthén, 2010), and results are presented in Tables 6 to 8 for burnout, physical symptoms, and targets' own uncivil behaviors, respectively. Results in Table 6 showed that negative emotions mediated the effects of overall experienced incivility, experienced incivility from coworkers, as well as experienced incivility from patients and visitors on targets' burnout, but not the effects of experienced incivility from supervisors or physicians on targets' burnout. Hypothesis 4a was partially supported.

As shown in Table 7, negative emotions did not mediate any of the effects of incivility experiences on targets' physical symptoms, thus failing to support Hypothesis 4b. Mediating



effects of negative emotions were tested between experienced incivility and targets' own uncivil behaviors within domains for Hypothesis 4c. Results in Table 8 showed that negative emotions only mediated the effect of experienced incivility on targets' own uncivil behaviors in the domain of patients and visitors, but not in any other domains. Thus, Hypothesis 4c was only partially supported.

Tables 9 to 14 show results of the moderating role of emotional stability on relationships between experienced incivility from various sources and targets' negative emotions, burnout, and physical symptoms. As shown in Table 9, the main effects of overall experienced incivility, as well as experienced incivility from specific domains on negative emotions, burnout, and physical symptoms remained the same as in Table 4. Emotional stability negatively predicted target's negative emotions, burnout, and physical symptoms, indicating that targets with higher emotional stability tended to report less negative emotion, less burnout, and less physical symptoms in general. Failing to support Hypothesis 5a or 5b, emotional stability did not moderate the effects of experienced incivility (overall and domain-specific) on targets' negative emotions, burnout, or physical symptoms.

Tables 10 to 14 show the moderating effect of emotional stability on the relationship between experienced incivility and targets' own uncivil behaviors within each of the domains. The positive main effects of experienced incivility on targets' own uncivil behaviors remained significant across domains. Further, emotional stability only had a positive main effect on targets' own uncivil behaviors toward patients and visitors ($\beta = -0.12$, p < .01), suggesting that participants with high emotional stability reported engaging in less uncivil behaviors toward patients and visitors. Emotional stability did not have main effects on participants' own uncivil behaviors toward other domains. Emotional stability only moderated the positive effect of



experienced incivility from supervisors on targets' own uncivil behaviors toward supervisor ($\gamma = 0.23$, p < .05), suggesting that the positive effect is stronger for individuals of high emotional stability. As shown in Figure 1, this only significant moderating effect of emotional stability is against predictions in Hypothesis 5c. Taken together, Hypothesis 5c was not supported.

Tables 15 shows the moderating effect of hostile attribution bias on the effects of experienced incivility (overall and domain-specific) on targets' negative emotions, burnout, and physical symptoms. The main effects of various experienced incivility on targets' negative emotions, burnout, and physical symptoms were the same as in Table 4, except that the originally significant main effect of experienced incivility from physicians on targets negative emotions (β = 0.17, p < .05) became marginally significant (β = 0.17, p < .10). Further, hostile attribution bias had positive main effects on targets burnout and physical symptoms, but not on targets' report of negative emotions, suggesting that participants with high hostile attribution bias tended to report higher burnout and more physical symptoms on average. However, failing to support Hypothesis 6a or 6b, hostile attribution bias did not moderate the effects of experienced incivility on targets' negative emotions, burnout, or physical symptoms.

Tables 16 to 20 show results of the moderating effect of hostile attribution bias on relationships between experienced incivility and targets' own uncivil behaviors within each of the domains, respectively. Within each domain, experienced incivility positively predicted targets' own uncivil behaviors in that domain, and hostile attribution bias had positive main effects on targets' overall uncivil behaviors ($\gamma = 0.08$, p < .10), and targets' uncivil behaviors toward coworkers ($\gamma = 0.17$, p < .05), suggesting that targets with high hostile attribution bias tended to report engaging in more overall uncivil behaviors and more uncivil behaviors toward coworkers, respectively. Hostile attribution bias did not have main effects on targets' own



uncivil behaviors toward supervisors ($\gamma = 0.01$, n.s.), physicians ($\gamma = 0.03$, n.s.), or patients and visitors ($\gamma = 0.11$, n.s.). Lastly, failing to provide support for Hypothesis 6c, hostile attribution bias did not moderate the effects of experienced incivility on targets' own uncivil behaviors.

Tables 21 shows the results of examining the moderating effect of emotional intelligence on the relationships of experienced incivility (overall and domain-specific) with targets' negative emotions, burnout, and physical symptoms. After adding the main effect of emotional intelligence and the cross-level interactions, most of the main effects of experienced incivility on negative emotions, burnout and physical symptoms remained the same, except that the originally significant effect of experienced incivility from supervisors on physical symptoms, and the effect of experienced incivility from physicians on targets' negative emotions became nonsignificant. Emotional intelligence marginally predicted targets' average levels of burnout and physical symptoms (p < .10), but did not predict participants' negative emotions. Emotional intelligence did not moderate any effect of experienced incivility (overall and domain-specific) on targets' negative emotions, burnout, or physical symptoms, thus failing to support Hypothesis 7a or Hypothesis 7b.

Table 22 to Table 26 show results of the moderating effect of emotional intelligence on the relationship between experienced incivility and targets' own uncivil behaviors. At the overall level and within each domain, experienced incivility remained significant predictors of targets' own uncivil behaviors, but emotional intelligence did not have significant main effects or moderating effects. Hypothesis 7c was not supported.

Hypothesis 8 predicted that violence prevention climate would moderate the effect of experienced incivility on targets' own uncivil behaviors. Tables 27 to 31 show the moderating effect of overall violence prevention climate. Overall violence prevention climate had negative



main effects on targets' overall own uncivil behaviors (γ = - 0.06, p < .01), and targets' own uncivil behaviors toward supervisors (γ = - 0.05, p < .05) and physicians (γ = - 0.07, p < .05), but not on targets' own uncivil behaviors toward coworkers (γ = - 0.07, n.s.), or patients and visitors (γ = - 0.04, n.s.). Lastly, violence prevention climate moderated the effect of overall experienced incivility on targets' overall own uncivil behaviors (γ = - 0.10, p < .05), but it did not moderated the effect of experienced incivility on targets' own uncivil behaviors within specific domains. The pattern of moderation shown in Figure 2 was consistent with the prediction, Thus, Hypothesis 8 was partially supported.

Tables 32 to 36 show the moderator effects of the policies and procedures dimension of violence prevention climate. The policies and procedures dimension had a negative main effect on targets' overall own uncivil behaviors ($\gamma = -0.03$, p < .05) and their own uncivil behaviors toward physicians ($\gamma = -0.04$, p < .05), but not on targets' own uncivil behaviors in other specific domains. Lastly, the policies and procedures dimension only moderated the effect of experienced incivility on targets own uncivil behaviors in the domain of physicians ($\gamma = -0.06$, p < .05) and had a marginally significant moderating effect on the relationship between overall experienced incivility and targets' overall own uncivil behaviors ($\gamma = -0.06$, p < .10). Policies and procedures did not moderate the relationship between experienced incivility and targets' own uncivil behaviors in other domains. The pattern of significant moderation is shown in Figure 3 which is consistent with the prediction in Hypothesis 8.

Tables 37 to 41 show the moderating effect of the practices dimension of violence prevention climate. The practices dimension did not have main effects on targets' overall own uncivil behaviors or targets' own uncivil behaviors within specific domains. Lastly, the practice dimension only marginally moderated the effect of overall experienced incivility on targets'



overall own uncivil behaviors (γ = - 0.08, p < .10), but not the relationships between experienced incivility and targets' own uncivil behaviors within specific domains.

Tables 42 to 46 show the moderating effect of the pressure for unsafe practices dimension. The pressure for unsafe practices dimension had negative main effects on targets' uncivil behaviors toward patients and visitors (γ = - 0.07, p < .05), but not on targets' overall uncivil behaviors or targets' uncivil behaviors toward other sources. Lastly, the pressure for unsafe practices dimension moderated the relationship between experienced incivility from supervisors and targets' own uncivil behaviors toward supervisors (γ = - 0.22, p < .05), but not other relationships. The pattern shown in Figure 4 is consistent with the prediction in Hypothesis 8. Taken together, two of three dimensions of violence prevention climate (Policies and procedures, and Pressure for unsafe practices) moderated one of the relationships between experienced incivility and targets' own uncivil behaviors, providing partial support for Hypothesis 8.

Hypothesis 9 predicted that civility climate would moderate the effects of experienced incivility on targets' negative emotions, burnout, physical symptoms, and their own uncivil behaviors. The results examining the moderating effects are shown in Tables 47 to 52. As shown in Table 47, civility climate had negative main effects on burnout (γ = - 0.18, p < .01), and physical symptoms (γ = - 0.15, p < .01), suggesting that individuals who perceived a positive civility climate reported less burnout and fewer physical symptoms. However, civility climate did not moderate the effects of experienced incivility (overall and domain-specific) on targets' negative emotions, burnout or physical symptoms, failing to support Hypothesis 9a or 9b.

Tables 48 to 52 show the moderating effect of civility climate on the relationship between experienced incivility (overall and domain-specific) and targets' own uncivil behaviors. Civility



climate had a negative main effect on targets' own uncivil behaviors toward supervisors (γ = -0.05, p < .01), but not on targets' overall own uncivil behaviors or their own uncivil behaviors toward other groups of people at work. Further, civility climate did not moderate any of the relationship between experienced incivility and targets' own uncivil behaviors, thus failing to support Hypothesis 9c.

To answer Research Question 1, effects of experienced incivility from multiple sources on targets' negative emotions, burnout, physical symptoms, and their own uncivil behaviors were examined. Due to small sample size, the models with experienced incivility from all four domains (coworkers, supervisors, physicians, and patients and visitors) being entered could not converge. Therefore, only the combinations of two types of incivility were examined in predicting various outcomes, and the results are shown in Tables 53-57. As shown in Table 53, experienced incivility from coworkers remained a significant predictor of targets' negative emotions when entered together with each of the other three types of incivility, which is consistent with when experienced incivility from coworkers was entered alone (Table 4). Experienced incivility from physicians remained a significant predictor of negative emotions when combined with experienced incivility from supervisors and patients and visitors, respectively, but became nonsignificant when combined with experienced incivility from coworkers. Lastly, experienced incivility from supervisors and patients and visitors were not significant predictors of negative emotions in any of the combinations. There was no incremental predicting effect in any of the combinations.

Experienced incivility from coworkers remained a significant predictor of targets' burnout when it was combined with any other types of incivility, while none of the other types of incivility significantly predicted targets' burnout above and beyond experienced incivility from



coworkers. Experienced incivility from supervisors remained a significant predictor of targets' physical symptom when combined with experienced incivility from physicians and from patients and visitors, but not when combined with experienced incivility from coworkers. None of the other types of experienced incivility predicted targets' physical symptoms in all combinations, and there was no incremental predicting effect in the combinations.

Tables 54 to 57 show the results of combinations of two types of experienced incivility in predicting each of the four types of targets' own uncivil behaviors. When predicting targets' own uncivil behaviors toward coworkers, experienced incivility from coworkers remained a significant predictor in all combinations, and only experienced incivility from supervisors had an incremental predicting effect ($\beta = 0.16$, p < .05). Experienced incivility from supervisors remained a significant predictor of targets' own uncivil behaviors toward supervisors when combined with the other three types of experienced incivility, and only experienced incivility from patients and visitors had an incremental predictive effect ($\beta = 0.07$, p < .01). Experienced incivility from physicians remained a significant predictor of targets' own uncivil behaviors toward physicians when combined with experienced incivility from coworkers and experienced incivility from patients and visitors, but not when combined with experienced incivility from supervisors. Further, experienced incivility from supervisors (($\beta = 0.10, p < .05$) and from patients and visitors ($\beta = 0.09$, p < .01) had incremental predicting effects, respectively. Experienced incivility from patients and visitors remained a significant predictor of targets' own uncivil behaviors toward patients and visitors in all three combinations, and only experienced incivility from supervisors had a negative incremental predicting effect ($\beta = -0.08$, p < .05).

Additionally, correlations between experienced incivility and nurses' own incivility in the following weeks were calculated and shown in Tables 58 to 61. As shown in the tables, most of



the correlations between experienced incivility and nurses' own uncivility in the next week were significant, regardless of the domains. The results indicated that when nurses experienced incivility from a particular group in a particular week, they were also likely to report engaging in more incivility in the week after toward that group of people and other groups of people they might interact with at work.



CHAPTER 4: DISCUSSION

This dissertation aimed to address several issues in the current literature of workplace incivility by examining effects of experienced workplace incivility from multiple sources (overall, coworkers, supervisors, physicians, and patients and visitor) on targets' emotions, psychological and physical well-being, and targets' own uncivil behaviors with a weekly experience sampling survey design. Further, multiple potential moderators (emotional stability, hostile attribution bias, emotional competence, violence prevention climate, and civility climate) were examined. The results of the study showed that experienced workplace incivility of some specific domains positively predicted targets' negative emotions, burnout and physical symptoms, and that experienced workplace incivility positively predicted targets' own uncivil behaviors at the overall level and within each of the domains. Further, results showed that negative emotions might mediate some of the relationships between experienced workplace incivility and targets' burnout and own uncivil behaviors, but not the relationships between experienced workplace incivility and targets' physical symptoms. Unfortunately, all three personality traits, including emotional stability, hostile attribution bias, and emotional competence, did not moderate the effects of experienced workplace incivility as predicted. Further, while overall violence prevention and its dimensions moderated some of the observed relationships between experienced workplace incivility and its outcomes as expected, civility climate was not a significant moderator of the observed relationships. Below, I will discuss the findings, their implications, the limitations of the current study and directions for future research.



Previous research has shown that experiences of various mistreatments at work are linked with increased negative emotions (for a review see Aquino & Thau, 2009). However, whether a relative mild form of workplace mistreatment, workplace incivility, also leads to increased negative emotions, remains less examined in the current literature. Recent studies (e.g., Porath & Pearson, 2012; Sakurai & Jex, 2012) have found positive connections between experienced workplace incivility and targets' negative emotional reactions, but all of the studies were examining the relationship between individuals. That is to say, individuals who experienced more workplace incivility also reported having stronger negative emotions. However, whether workplace incivility experience influences individuals' emotions across time has not been examined. Given the high prevalence of workplace incivility (Porath & Pearson, 2013) and previous findings, it is likely that the same person might experience different levels of workplace incivility across time, and that in weeks people experience more workplace incivility, they might report more negative emotions as compared to weeks when they experience less workplace incivility. The current study provided such evidence by demonstrating that experienced workplace incivility (overall and domain-specific) had a positive effect on targets' negative emotions across weeks. Given the fact that negative emotions resulted from work-related activities tend to spillover to their life after work (Judge & Ilies, 2004; Song, Foo, & Uy, 2008), the results indicate that workplace incivility experienced at work are likely to influence targets' family activities, and their behaviors toward people outside of work. This probably will provide some insight into the mechanism for the observed relationships between workplace incivility and work-family conflict (Lim & Lee, 2011).

The current study provides partial support for the notion that workplace incivility might influence targets' psychological and physical health. Consistent with the pattern in previous



studies using between-person designs (Laschinger et al., 2009), the current study finds that overall experienced workplace incivility and experienced incivility from coworkers positively predicts burnout. What the current study adds to the current literature is that individuals' burnout level fluctuates across weeks, and that experienced workplace incivility contributes to increases of burnout. However, it seems that only experienced incivility from coworkers tends to influence targets' burnout level, while experienced incivility from other sources (supervisors, physicians, and patients and visitors) does not. One possible reason is that the participants are likely to spend more time with their coworkers, and experiencing workplace incivility from coworkers are likely to lead to more rumination of the future interaction between them, and thus participants' burnout level increases.

In addition, using a physical symptom checklist, the current study also finds that experienced incivility from supervisors predicts worse physical well-being. While this is consistent with previous findings that workplace incivility is negatively related to physical health (Lim et al., 2008; Lim & Lee, 2011), the current study uses a more specific checklist measure of physical health, and suggests that workplace incivility not just negatively predicts targets' evaluation of physical health, but also positively predicts targets' reports of specific physical symptoms that occurred to them. However, the current study was not able to find similar patterns between workplace incivility from the other three source (coworkers, physicians, and patients and visitors) and physical well-being. One possible reason is that when experiencing rude behaviors from supervisors as compared to from other sources, participants are more concerned about the potential consequences, and have greater strain reactions that have physical manifestations.



Supporting the incivility spiral (Andersson & Pearson, 1999), the current study finds that when experiencing incivility from one particular source, the targets also reported engaging in more uncivil behaviors toward that source. The same pattern is consistent across all four domains of coworkers, supervisors, physicians, and patients/visitors. This pattern is similar to findings in other types of workplace mistreatment. For example, it was found that employees who received more abusive supervision also reported to engage in more aggression toward their supervisors (Mitchell & Ambrose, 2007). This finding provides further evidence above and beyond previous findings that experienced workplace incivility is positively related to targets' own negative behaviors, such as counterproductive work behavior (Sakurai & Jex, 2012) and workplace aggression (Taylor & Kluemper, 2012). It is likely that targets' own uncivil behaviors take place as the first stage of behavioral responses to their experience of workplace incivility, and that stronger and intentional behaviors take place later as the spiral escalates.

The mediating effect of negative emotions in relationships between work-related factors and more distal outcomes have been proposed in several theoretical frameworks. For example, the Affective Events Theory (Weiss & Cropanzano, 1996) and Stressor-strain model (Spector & Fox, 2002) both propose that work-related negative events are likely to lead to increased negative emotions which in turn cause more distal negative outcomes. Following the propositions, the current study examined the mediating effect of negative emotions in the relationships between experienced workplace incivility and three distal outcomes (burnout, physical symptoms, and targets' own uncivil behaviors). Results provide support for the mediating role of negative emotions in the relationship between workplace incivility (overall, coworker, and patients and visitors) and targets' burnout, but not its mediating role in the relationship between workplace incivility and physical symptoms. Further, negative emotions



only showed evidence for mediation of the relationship between experience workplace incivility and targets' own uncivil behaviors in the domain of patients and visitors. While the results provide some support for the notion that negative emotions resulting from experiencing workplace incivility are likely to lead to further decreased health and targets' own uncivil behaviors, more research are needed to explore this topic.

The moderating role of personality traits on the relationship between work-related negative events and employees' responses have been widely examined. The current study included three personality traits (emotional stability, hostile attribution bias, and emotional competence) and examined their potential moderating effects on the relationship between workplace incivility (overall and domain-specific) and targets' burnout, physical symptoms, and their own uncivil behaviors. With one exception, the three personality traits did not moderate the effects of workplace incivility. In the only exception, emotional stability moderates the relationship between experienced workplace incivility and targets' own uncivil behaviors in the domain of supervisors, but the patter is against the prediction in a way that the positive relationship is stronger when participants are with high emotional stability as compared to with low emotional stability. It is likely that the small sample size made it difficult to detect the cross-level moderating effect. Nevertheless, more research are need to examine how individuals with different personality traits react differently to experienced workplace incivility.

The current study for the first time examines the main effects of violence prevention climate and civility climate on participants' own uncivil behaviors, and their moderating effects of violence prevention climate and civility climate on relationships of experienced workplace incivility with its outcomes. Results show that violence prevention climate, as well as all three dimensions, negatively predict participants' own uncivil behaviors, suggesting that a positive



climate not only reduces employees' exposure to workplace mistreatment (Kessler et al., 2008), but also inhibits employees' own uncivil behaviors at work, which could further foster a more friendly working environment and more harmonious working relationships. In addition, overall violence prevention climate and its dimensions (policies and procedures, and pressure for unsafe practices) have some buffering effects on the relationship between experienced incivility and targets' own uncivil behaviors, while civility climate does not buffer any of the effects of experienced workplace incivility. The buffering effects were promising in a way that a positive climate not only contributes to reducing employees' general tendency to engage in uncivil behaviors, but also prevents employees from engaging uncivil behaviors when experiencing workplace incivility. It is important to acknowledge this because a positive climate might be built and prompted by top management and direct supervisors.

The current study also for the first time examined the effects of experienced workplace incivility from multiple sources, including coworkers, supervisors, physicians, and patients/visitors. Although the current study is not able to compare their relative effects on targets' burnout, physical symptoms, and their own uncivil behaviors all at one time, there are some interesting findings that are worth noting. For example, experienced workplace incivility from all four domains (coworkers, supervisors, physicians, and patients/visitors) were significant predictors of negative emotions when entered alone, but none of them had incremental predicting effect above and beyond another in predicting negative emotions. However, the results show that experienced incivility from coworkers seems to be the strongest predictor of negative emotions, while experienced incivility from physicians appears to be the next strongest one. In addition, experienced workplace incivility from coworkers seems to be the most dominant predictor of targets' burnout, while experienced workplace incivility from supervisors seems to be the most



promising predictor of target's reports of physical symptoms. Taken together, although no incremental effect was found, the current study for the first time examines experienced workplace incivility from multiple sources and found that experienced workplace incivility from a specific domain is more likely to predict targets' negative emotions, burnout, and physical symptoms. This has particularly important implications for employees who have to interact with various groups of people. In the current case, nurses react to experienced incivility from coworkers and supervisors with more impaired health.

When predicting targets' own uncivil behaviors, the current study finds more incremental predicting effects from different sources. The results show that in addition to experienced workplace incivility from one particular source, experience from another domain also contributes to targets' own uncivil behaviors toward that particular source. These findings are in line with findings in previous studies of other types of workplace mistreatment. For example, Mitchell and Ambrose (2012) found that experienced abusive supervision from supervisors predicts targets' own aggressive behaviors toward their coworkers. While the current study is not able to examine the underlying mechanism in the process, results indicate that we should not just study experienced incivility from only one group of people, but rather look at the bigger picture and examine all the possible predictors of people's own uncivil behaviors.

Theoretical and Practical Implications

The current study has several theoretical implications. First of all, the current study provides further evidence for the Affective Events Theory (Weiss & Cropanzano, 1996). As discussed earlier in this dissertation, workplace incivility as a negative affective event is likely to lead to negative affective reactions, which in turn might result in more negative distal outcomes such as worse health and more negative behaviors. Results of this study provides some evidence



for these notions. Unfortunately, findings of the current study do not support the notion that individuals of different dispositions tend to react differently. Second, the current study further demonstrates the importance of organizational resources (violence prevention climate and civility climate) in reducing strains and buffering the effects of job demands. One the one hand, violence prevention climate and its dimensions, as well as civility climate predict fewer uncivil behaviors of the participants. One the other hand, violence prevention climate and its dimensions (policies and procedures, and pressure for unsafe practices) serve as buffers of negative effects of experienced workplace incivility.

The current study also has methodological implications to the current literature of workplace incivility. First, to my knowledge, the current study is the first one to use a weekly experience sampling within-person deign to examine effects of experienced incivility. The with-person design provides insight into the reasons why people's negative emotions, burnout, physical symptoms, and own uncivil behaviors fluctuate across time. The current study suggests that in weeks participants experience more incivility, they also report stronger negative emotions, more burnout, more physical symptoms, and more uncivil behaviors. This increases our understanding of the relationship between workplace incivility and its outcomes above and beyond the findings in previously published studies using between-person designs. Second, the current study examines effects of experienced workplace incivility from multiple sources, including coworkers, supervisors, physicians, and patients and visitors. Although direct comparison among incivility from all sources is not feasible, the current study shows the relative contribution of them in predicting each of the outcomes.

Lastly, the current study also has several practical contributions. First, the current study further demonstrates that although workplace incivility is a type of workplace mistreatment with



low intensity (Andersson & Pearson, 1999), it has negative effects on individuals' emotions, psychological and physical well-being, as well as their own behaviors. Therefore, it is important for management to realize this and develop relevant strategies to prevent this from happening. One of the strategies can be inspired by the second practical implication of this study. The second practice implication is that both violence prevention climate and civility climate contributes to lower levels of uncivil behaviors of employees, which indicates the importance of prompting and sustaining positive climates in organizations. Further, positive violence prevention climate and its dimensions also might inhibit employees' tendency to engage in uncivil behaviors in response to experienced incivility. Therefore, in situations or environments where workplace incivility is inevitable, having a positive violence prevention climate can contribute to situations getting worse. A third practical implication is that the current study shows the relative importance of experienced workplace incivility from multiple sources in predicting employee outcomes. Results show that experienced incivility from coworkers has a relatively stronger effect on targets' negative emotions and burnout, while experienced incivility from supervisors is the most important one in predicting targets' physical symptoms. In addition, experienced incivility from supervisors appears to have more prominent incremental effects in predicting targets' own uncivil behaviors toward other groups of people targets have contact with. These patterns provide evidence for organizations and management to decide what type of workplace incivility needs more attention when limited resources is the case.

Limitations and Future Research

The current study has several limitations that need to be addressed in future research on workplace incivility. First of all, all of the variables were measured with participants' self-reports, which may raise concerns of common method variance (CMV). However, the concern



might be overestimated based on the argument by Spector (2006) that CMV is likely an urban legend. Further, most of the variables of interest in the current study (e.g., negative emotions, well-being, personality traits, and perception of climates) are about individuals' own feelings and perceptions, and it seems more appropriate to ask participants to report their feelings and perceptions instead of using objective measures or others' reports. Nevertheless, future research that are able to obtain data from multiple sources for comparison purpose are encouraged.

A second limitation of the small sample size. The current study has a sample size (N=75) that is similar to the suggested number by Snijders et al. (2007), and is able to detect significant within-level effects. Although most of the cross-level moderation effects are in the predicted direction, they were not significant. However, if more participants are enrolled or more time points are collected from the participants, the current study might have more power to detect the cross-level moderating effects.

A third limitation of the current study is that no causal relationship can be drawn based on the study deign. Although a weekly within-person deign adds new information above and beyond previous cross-sectional or two-wave between-person designs, it can't inform us whether the experienced workplace incivility actually causes the outcomes. Therefore, future research that measures people's responses after to experienced incivility episodes are strongly encouraged. One way to achieve this is for future research to track people's responses after each episode of workplace incivility.

A fourth limitation is that the current study only sampled from a pool of nurses who graduated after 2010. It likely that the results generated from this sample is not generalized to other samples or the population. Therefore, future research are encouraged to use a more representative sample to examine the proposed relationships in the current study.



Conclusion

A recent review (Porath & Pearson, 2013) reported that among all the participants the authors and colleagues have sampled in the past decade, 98% have experienced workplace incivility. Given the prevalence of this type of mild form workplace mistreatment, research that focus on its effects and factors that buffer and exacerbate these effects are important for us to better understand this phenomenon. The current study contributes to the current literature by examining the effects of experienced incivility from multiple sources (coworkers, supervisors, physicians, and patients and visitors) on targets' emotions, psychological and physical well-being, as well as their own uncivil behaviors with a weekly experience sampling within-person design. The findings on the effects of experienced workplace incivility, main effects of violence prevention climate and civility climate, and the buffering effects of violence prevention climate provide insight into how workplace incivility affect targets, and how organizational climates can potentially contribute to reducing workplace incivility and its effects.



TABLES



Table 1. List of variables and measurement time

Variable	Measurem	Measurement Time					
variable	Baseline	Before-shift	After-shift				
Experienced Workplace Incivility			X				
Negative Emotions		X	X				
Psychological Well-being		X	X				
Physical Well-being			X				
Engagement in Uncivil Behaviors			X				
Emotional Stability	X						
Hostile Attribution Bias	X						
Emotional Competence	X						
Violence Prevention Climate	X						
Civility Climate	X						



Table 2. Means, standard deviations, and bivariate correlations among Level 1(within-person) and Level 2 (between-person) variables

Lev	rel 1 Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1	Experienced Incivility-Coworker	1.14	0.20										
2	Experienced Incivility-Supervisor	1.09	0.50	.33									
3	Experienced Incivility-Physician	1.19	0.28	.35	.35								
4	Experienced Incivility-Patient and visitor	1.33	0.45	.30	.15	.26							
5	Own Incivility-Coworker	1.28	0.42	.45	.20	.24	.21						
6	Own Incivility-Supervisor	1.08	0.15	.31	.45	.24	.13	.26					
7	Own Incivility-Physician	1.11	0.20	.14	.14	.39	.20	.31	.18				
8	Own Incivility-Patient and Visitor	1.14	0.27	.33	.17	.41	.52	.43	.16	.39			
9	Negative Emotions	1.52	0.48	.35	.27	.33	.42	.21	.28	.27	.38		
10	Burnout	2.01	0.67	.35	.36	.36	.43	.18	.30	.15	.41	.80	
11	Physical Symptoms	1.61	0.48	.25	.35	.22	.16	.19	.20	.14	.18	.31	.46
Lev	rel 2 Variables												
1	Gender												
2	Age	30.30	9.20	12									
3	Hour	37.80	3.50	35**	.25*								
4	Emotional stability	2.51	0.71	16	03	.20							
5	Hostile attribution bias	2.00	0.82	.04	.18	09	56**						
6	Emotional intelligence	5.82	0.84	17	01	.27*	.58**	58**					
7	Violence prevention climate	4.80	0.92	19	07	.21	.36**	26*	.29*				
8	Policies and Procedures	4.43	1.46	17	04	.24*	.33**	17	.24*	.87**			
9	Practices	5.19	0.98	14	06	.16	.24*	25*	.21	.77**	.57**		
10	Pressure for unsafe practices	4.78	1.05	13	06	.07	.26*	23*	.22	.69**	.38**	.31**	
11	Incivility climate	4.34	1.00	22	14	.15	.38**	36**	.38**	.74**	.63**	.67**	.45**

Note: N = 75; * p < .05, * p < .01; For gender, male = 0, female = 1.



Table 3. Null model results of outcome variables and ICCs

Variables	Level-2 Variance	Level-1 Variance	ICC-1
Negative Emotions	0.208	0.120	0.634
Burnout	0.393	0.074	0.842
Physical Symptoms	0.174	0.074	0.701
Own Uncivil Behavior: all	0.033	0.013	0.723
Own Uncivil Behavior: nurse	0.161	0.073	0.690
Own Uncivil Behavior: supervisor	0.020	0.016	0.566
Own Uncivil Behavior: physician	0.037	0.024	0.603
Own Uncivil Behavior: patient and visitor	0.071	0.036	0.666

Table 4. Effects of experienced incivility on targets' negative emotions, burnout, and physical symptoms

	Negative Emotions	Burnout	Physical Symptoms
	Coefficients (SE)		
Intercept	1.53 (0.06)***	2.06 (0.07) ***	1.63 (0.05)***
Level 1 Predictor			
Experienced Incivility-All	0.49 (0.15)***	0.37 (0.14)*	0.17 (0.14)
Experienced Incivility-Coworker	0.40 (0.09) ***	0.36 (0.13) **	0.14 (0.09)
Experienced Incivility-Supervisor	0.18 (0.21)	0.28 (0.18)	0.21 (0.10) *
Experienced Incivility-Physician	0.17 (0.08)*	0.06 (0.08)	-0.01 (0.05)
Experienced Incivility-Patient and visitor	0.12 (0.07)	0.09 (0.06)	-0.01 (0.04)



Table 5. Effects of experienced workplace incivility on targets' own uncivil behaviors

	Own Incivility -All	Own Incivility -Coworker	Own Incivility -Supervisor	Own Incivility -Physician	Own Incivility -Patient and visitor
		Coefficients (SE)			
Intercept	1.15 (0.02) ***	1.29 (0.05) ***	1.09 (0.02)***	1.11 (0.02)***	1.14 (0.03) ***
Level 1 Predictor					
Experienced Incivility-All	0.26 (006) ***	0.29 (0.12) *	0.19 (0.05) ***	0.22 (0.07) **	0.24 (0.10) *
Experienced Incivility-Coworker	0.15 (0.05)**	0.37 (0.10) **	0.12 (0.06) *	0.03 (0.03)	-0.05 (0.05)
Experienced Incivility-Supervisor	0.19 (0.07) **	0.35 (0.16)*	0.17 (0.08)*	0.16 (0.08)*	-0.04 (0.05)
Experienced Incivility-Physician	0.03 (0.03)	-0.06 (0.07)	0.04 (0.03)	0.10 (0.04) *	0.03 (0.04)
Experienced Incivility-Patient and visitor	0.11(0.02)***	0.08 (0.03)*	0.08 (0.02)***	0.11 (0.04)*	0.15 (0.04)***



Table 6. Mediating effects of negative emotions in relationships between experienced incivility and burnout

	Coefficient	SE	90% Confide	dence Interval	
Experienced Incivility-All>Negative emotions	0.59***	0.17	0.32	0.87	
Negative Emotions> Burnout	0.53***	0.04	0.47	0.59	
Indirect Effect	0.31**	0.09	0.16	0.46	
Experienced Incivility-Coworker>Negative emotions	0.42***	0.09	0.28	0.56	
Negative Emotions> Burnout	0.53***	0.04	0.47	0.59	
Indirect Effect	0.22***	0.05	0.14	0.31	
Experienced Incivility-Supervisor>Negative emotions	0.01	0.23	-0.37	0.39	
Negative Emotions> Burnout	0.53***	0.04	0.46	0.6	
Indirect Effect	0.01	0.09	-0.19	0.21	
Experienced Incivility-Physician>Negative emotions	0.14	0.1	-0.02	0.29	
Negative Emotions> Burnout	0.53***	0.04	0.46	0.59	
Indirect Effect	0.07	0.05	-0.1	0.15	
Experienced Incivility-Patient and visitor>Negative emotions	0.20**	0.07	0.09	0.31	
Negative Emotions> Burnout	0.53	0.04	0.47	0.6	
Indirect Effect	0.11**	0.04	0.04	0.17	



Table 7. Mediating effects of negative emotions in relationships between experienced incivility and physical symptoms

	Coefficient	SE	90% Confide	nce Interval
Experienced Incivility-All>Negative emotions	0.59***	0.17	0.32	0.87
Negative Emotion s> Physical Symptoms	0.05	0.09	-0.11	0.
Indirect Effect	0.03	0.06	-0.07	0.12
Experienced Incivility-Coworker>Negative emotions	0.42***	0.09	0.28	0.56
Negative Emotions> Physical Symptoms	0.04	0.02	-0.11	0.19
Indirect Effect	0.02	0.04	-0.05	0.08
Experienced Incivility-Supervisor>Negative emotions	0.01	0.23	-0.37	0.40
Negative Emotions> Physical Symptoms	0.06	0.07	-0.05	0.17
Indirect Effect	0.001	0.01	-0.02	0.02
Experienced Incivility-Physician>Negative emotions	0.14	0.1	-0.02	0.29
Negative Emotions> Physical Symptoms	0.07	0.08	-0.07	0.2
Indirect Effect	0.01	0.01	-0.01	0.03
Experienced Incivility-Patient and visitor>Negative emotions	0.20***	0.07	0.09	0.31
Negative Emotions> Physical Symptoms	0.07	0.02	-0.07	0.21
Indirect Effect	0.01	0.02	-0.01	0.04



Table 8. Mediating effects of negative emotions in relationships between experienced incivility and targets own uncivil behaviors

	Coefficient	SE	90% Confidence Interval	
Experienced Incivility-Coworker>Negative emotions	0.42***	0.09	0.28	0.56
Negative Emotion s> Own Incivility -Coworker	-0.01	0.04	-0.09	0.06
Indirect Effect	-0.01	0.02	-0.04	0.03
Experienced Incivility-Supervisor>Negative emotions	0.01	0.23	-0.37	0.39
Negative Emotions> Own Incivility -Supervisor	0.03	0.02	-0.01	0.07
Indirect Effect	0	0.01	-0.01	0.01
Experienced Incivility-Patient and visitor>Negative emotions	0.14	0.1	-0.02	0.29
Negative Emotion s> Own Incivility -Physician	0.05	0.04	-0.01	0.12
Indirect Effect	0.01	0.01	-0.01	0.02
Experienced Incivility-Patient and visitor>Negative emotions	0.20**	0.07	0.09	0.31
Negative Emotions> Own Incivility -Patient and visitor	0.10*	0.04	0.02	0.17
Indirect Effect	0.02*	0.01	0.003	0.04

Table 9. Emotional stability moderating effects of experienced incivility on negative emotions, burnout and physical symptoms

	Negative Emotions	Burnout	Physical Symptoms
Predictors		Coefficients (SE)	
Intercept	1.53 (0.05) ***	2.06 (0.07) ***	1.63 (0.05) ***
Level 1 Predictor			
Experienced Incivility-All	0.48 (0.15) **	0.40 (0.14) **	0.10 (0.12)
Level 2 Predictor			
Emotional Stability	-0.27 (0.07) **	-0.43 (0.13) **	-0.24 (0.08)**
Cross-level Interaction			
Emotional Stability * Experienced Incivility-All	0.01 (0.22)	-0.33 (0.28)	-0.05 (0.15)
Level 1 Predictor			
Experienced Incivility-Coworker	0.40 (0.08) ***	0.32 (0.11)**	0.17 (0.13)
Level 2 Predictor			
Emotional Stability	-0.27 (0.10)**	-0.423 (0.13) **	-0.24 (0.04) ***
Cross-level Interaction			
Emotional Stability * Experienced Incivility-Coworker	-0.01 (0.15)	-0.26 (0.24)	0.11 (0.19)
Level 1 Predictor			
Experienced Incivility-Supervisor	0.19 (0.22)	0.28 (0.19)	0.34 (0.14) *
Level 2 Predictor			
Emotional Stability	-0.27 (0.10) **	-0.43 (0.13) **	-0.24 (0.08) **
Cross-level Interaction			
Emotional Stability * Experienced Incivility-Supervisor	0.13 (0.34)	-0.13 (0.27)	-0.21 (0.18)



Table 9 (Continued)

Level 1 Predictor			
Experienced Incivility-Physician	0.16 (0.08) *	0.06 (0.08)	0.02 (0.05)
Level 2 Predictor			
Emotional Stability	-0.27 (0.10) **	-0.43 (0.13)**	-0.24 (0.08) **
Cross-level Interaction			
Emotional Stability * Experienced Incivility-Physician	0.14 (0.08) +	-0.05 (0.09)	-0.05 (0.06)
Level 1 Predictor			
Experienced Incivility-Patient and visitor	0.11 (0.07)	0.08 (0.06)	-0.01 (0.04)
Level 2 Predictor			
Emotional Stability	-0.27 (0.10)**	-0.43 (0.13)**	-0.26 (0.08)**
Cross-level Interaction			
Emotional Stability * Experienced Incivility-Patient and visitor	0.05 (0.12)	-0.003 90.11)	0.03 (0.05)

Table 10. Emotional stability moderating effects of overall experienced incivility on targets' overall own uncivil behaviors

	Own Incivility -All	
	Coefficients (SE)	
Intercept	1.15 (0.02)***	
Level 1 Predictor		
Experienced Incivility-All	0.26 (0.05) ***	
Level 2 Predictor		
Emotional Stability	0.05 (0.03)+	
Cross-level Interaction		
Emotional Stability * Experienced Incivility-All	0.01 (0.06)	
<i>Note</i> : $N = 75$; $+ p < .10$, * $p < .05$, * $p < .01$.		



Table 10. Emotional stability moderating effects of experienced incivility from coworkers on targets' own uncivil behaviors toward coworkers

	Own Incivility -Coworker
	Coefficients (SE)
Intercept	1.29 (0.05)***
Level 1 Predictor	
Experienced Incivility-Coworker	0.39 (0.10) ***
Level 2 Predictor	
Emotional Stability	-0.08 (0.06)
Cross-level Interaction	
Emotional Stability * Experienced Incivility-Coworker	0.05 (0.14)

Table 11. Emotional stability moderating effects of experienced incivility from supervisors on targets' own uncivil behaviors toward supervisors

	Own Incivility -Supervisor	
	Coefficients (SE)	
Intercept	1.08 (0.02) ***	
Level 1 Predictor		
Experienced Incivility-Supervisor	0.21 (0.07)**	
Level 2 Predictor		
Emotional Stability	-0.01 (0.03)	
Cross-level Interaction		
Emotional Stability * Experienced Incivility-Supervisor	0.23(0.11)*	



Table 12. Emotional stability moderating effects of experienced incivility from physicians on targets' own uncivil behaviors toward physicians

	Own Incivility -Physician
	Coefficients (SE)
Intercept	1.11 (0.02) ***
Level 1 Predictor	
Experienced Incivility-Physician	0.10 (0.05) *
Level 2 Predictor	
Emotional Stability	-0.02 (0.03)
Cross-level Interaction	
Emotional Stability * Experienced Incivility-Physician	0.04 (0.05)

Table 13. Emotional stability moderating effects of experienced incivility from patients and visitors on targets' own uncivil behaviors toward patients and visitors

	Own Incivility -Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03)***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.04) **
Level 2 Predictor	
Emotional Stability	-0.12 (0.04) **
Cross-level Interaction	
Emotional Stability * Experienced Incivility-Patient and visitor	-0.08 (0.06)



Table 14. Hostile attribution bias moderating effects of experienced incivility on negative emotions, burnout and physical symptoms

	Negative Emotions	Burnout	Physical Symptoms
		Coefficients (SE)	
Intercept	1.53 (0.05) ***	2.06 (0.07) ***	1.64 (0.05) ***
Level 1 Predictor			
Experienced Incivility-All	0.50 (0.15) **	0.37 (0.14) **	0.17 (0.14)
Level 2 Predictor			
Hostile Attribution Bias	0.13 (0.08)	0.23 (0.09) *	0.18 (0.06) **
Cross-level Interaction			
Hostile Attribution Bias * Experienced Incivility-All	-0.03 (0.18)	0.10 (0.18)	-0.11 (0.16)
Level 1 Predictor			
Experienced Incivility-Coworker	0.38 (0.09) ***	0.37 (0.11)**	0.13 (0.07) +
Level 2 Predictor			
Hostile Attribution Bias	0.13 (0.08)	0.23 (0.11) *	0.17 (0.06) **
Cross-level Interaction			
Hostile Attribution Bias * Experienced Incivility-Coworker	-0.09 (0.12)	0.03 (0.20)	-0.13 (0.07) +
Level 1 Predictor			
Experienced Incivility-Supervisor	0.17 (0.22)	0.27 (0.19)	0.20 (0.09) *
Level 2 Predictor			
Hostile Attribution Bias	0.13 (0.08)	0.23 (0.11) *	0.18 (0.06) **
Cross-level Interaction			
Hostile Attribution Bias * Experienced Incivility-Supervisor	0.13 (0.18)	-0.01 (0.19)	0.01 (0.08)



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Level 1 Predictor			
Experienced Incivility-Physician	0.17 (0.09) +	0.05 (0.08)	-0.02 (0.06)
Level 2 Predictor			
Hostile Attribution Bias	0.13 (0.08)	0.23 (0.11)*	0.17 (0.06) **
Cross-level Interaction			
Hostile Attribution Bias * Experienced Incivility-Physician	-0.03 (0.06)	0.10 (0.07)	0.03 (0.03)
Level 1 Predictor			
Experienced Incivility-Patient and visitor	0.12 (0.07) +	0.08 (0.05)	-0.01 (0.04)
Level 2 Predictor			
Hostile Attribution Bias	0.13 90.08)	0.23 (0.11) *	0.17 (0.06) **
Cross-level Interaction			
Hostile Attribution Bias * Experienced Incivility-Patient and visitor	0.06 (0.09)	-0.05 (0.09)	0.004 (0.03)

Table 15. Hostile attribution bias moderating effects of overall experienced incivility on targets' overall own uncivil behaviors

	Own Incivility -All
	Coefficients (SE)
Intercept	1.15 (0.03) ***
Level 1 Predictor	
Experienced Incivility-All	0.26 (0.05) ***
Level 2 Predictor	
Hostile Attribution Bias	0.08 (0.03) *
Cross-level Interaction	
Hostile Attribution Bias * Experienced Incivility-All	-0.05 (0.06)



Table 16. Hostile attribution bias moderating effects of experienced incivility from coworkers on targets' own uncivil behaviors toward coworkers

	Own Incivility -Coworker
	Coefficients (SE)
Intercept	1.29 (0.05) ***
Level 1 Predictor	
Experienced Incivility-Coworker	0.38 (0.10) **
Level 2 Predictor	
Hostile Attribution Bias	0.17 (0.05) **
Cross-level Interaction	
Hostile Attribution Bias * Experienced Incivility-Coworker	-0.01 (0.13)

Table 17. Hostile attribution bias moderating effects of experienced incivility from supervisors on targets' own uncivil behaviors toward supervisors

	Own Incivility -Supervisor
	Coefficients (SE)
Intercept	1.08 (0.02) ***
Level 1 Predictor	
Experienced Incivility-Supervisor	0.19 (0.08) *
Level 2 Predictor	
Hostile Attribution Bias	0.01 (0.02)
Cross-level Interaction	
Hostile Attribution Bias * Experienced Incivility-Supervisor	-0.09 (0.07)



Table 18. Hostile attribution bias moderating effects of experienced incivility from physicians on targets' own uncivil behaviors toward physicians

	Own Incivility -Physician
	Coefficients (SE)
Intercept	1.11 (0.02) ***
Level 1 Predictor	
Experienced Incivility-Physician	0.11 (0.05) *
Level 2 Predictor	
Hostile Attribution Bias	0.03 (0.02) +
Cross-level Interaction	
Hostile Attribution Bias * Experienced Incivility-Physician	-0.07 (0.04)

Table 19. Hostile attribution bias moderating effects of experienced incivility from patients and visitors on targets' own uncivil behaviors toward patients and visitors

	Own Incivility -Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03) ***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.04) **
Level 2 Predictor	
Hostile Attribution Bias	0.11 (0.07)
Cross-level Interaction	
Hostile Attribution Bias * Experienced Incivility-Patient and visitor	0.02 (0.05)



Table 20. Emotional intelligence moderating effects of experienced incivility on negative emotions, burnout and physical symptoms

	Negative Emotions	Burnout	Physical Symptoms
		Coefficients (SE)	
Intercept	1.53 (0.06) ***	2.06 (0.07) ***	1.64 (0.05) ***
Level 1 Predictor			
Experienced Incivility-All	0.50 (0.15) **	0.38 (0.15) *	0.14 (0.13)
Level 2 Predictor			
Emotional Intelligence	-0.04 (0.05)	-0.15 (0.09) +	-0.14 (0.07)+
Cross-level Interaction			
Emotional Intelligence * Experienced Incivility-All	-0.04 (0.19)	-0.12 (0.19)	0.11 (0.21)
Level 1 Predictor			
Experienced Incivility-Coworker	0.36 (0.09) ***	0.37 (0.13) **	0.13 (0.08)
Level 2 Predictor			
Emotional Intelligence	-0.04 (0.05)	-0.15 (0.09) +	-0.13 (0.07) +
Cross-level Interaction			
Emotional Intelligence * Experienced Incivility-Coworker	0.12 (0.08)	-0.01 (0.13)	0.06 (0.09)
Level 1 Predictor			
Experienced Incivility-Supervisor	0.18 (0.21)	0.29 (0.18)	0.17 (0.09) +
Level 2 Predictor			
Emotional Intelligence	-0.04 (0.05)	-0.15 (0.09)+	-0.14 (0.07)+
Cross-level Interaction			
Emotional Intelligence * Experienced Incivility-Supervisor	-0.03 (0.14)	-0.05 (0.19)	0.04 (0.12)



Table 20 ((Continued))
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Level 1 Predictor			
Experienced Incivility-Physician	0.16 (0.08) +	0.05 (0.08)	-0.02 (0.05)
Level 2 Predictor			
Emotional Intelligence	-0.04 (0.05)	-0.15 (0.09) +	-0.13 (0.07) +
Cross-level Interaction			
Emotional Intelligence * Experienced Incivility-Physician	-0.01 (0.06)	-0.04 (0.06)	-0.03 (0.04)
Level 1 Predictor			
Experienced Incivility-Patient and visitor	0.12 (0.07) +	0.08 (0.06)	-0.01 (0.03)
Level 2 Predictor			
Emotional Intelligence	-0.04 (0.05)	-0.15 (0.09)+	-0.13 (0.07) +
Cross-level Interaction			
Emotional Intelligence * Experienced Incivility-Patient and visitor	-0.02 (0.07)	0.03 (0.08)	-0.01 (0.04)

Table 21. Emotional intelligence moderating effects of overall experienced incivility on targets' overall own uncivil behaviors

	Own Incivility -All	
	Coefficients (SE)	
Intercept	1.15 (0.02) ***	
Level 1 Predictor		
Experienced Incivility-All	0.25 (0.05) ***	
Level 2 Predictor		
Emotional Intelligence	-0.02 (0.03)	
Cross-level Interaction		
Emotional Intelligence * Experienced Incivility-All	0.03 (0.06)	



Table 22. Emotional intelligence moderating effects of experienced incivility from coworkers on targets' own uncivil behaviors toward coworkers

	Own Incivility -Coworker
	Coefficients (SE)
Intercept	1.529 (0.05) ***
Level 1 Predictor	
Experienced Incivility-Coworker	0.37 (0.10) **
Level 2 Predictor	
Emotional Intelligence	-0.03 (0.06)
Cross-level Interaction	
Emotional Intelligence * Experienced Incivility-Coworker	-0.01 (0.09)
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Table 23. Emotional intelligence moderating effects of experienced incivility from supervisors on targets' own uncivil behaviors toward supervisors

	Own Incivility -Supervisor
	Coefficients (SE)
Intercept	1.08 (0.02) ***
Level 1 Predictor	
Experienced Incivility-Supervisor	0.18 (0.08) *
Level 2 Predictor	
Emotional Intelligence	0.01 (0.01)
Cross-level Interaction	
Emotional Intelligence * Experienced Incivility-Supervisor	0.03 (0.06)

Table 24. Emotional intelligence moderating effects of experienced incivility from physicians on targets' own uncivil behaviors toward physicians

	Own Incivility-Physician
	Coefficients (SE)
Intercept	1.11 (0.02) ***
Level 1 Predictor	
Experienced Incivility-Physician	0.10 (0.05) *
Level 2 Predictor	
Emotional Intelligence	-0.001 (0.03)
Cross-level Interaction	
Emotional Intelligence * Experienced Incivility-Physician	0.02 (0.04)

Table 25. Emotional intelligence moderating effects of experienced incivility from patients and visitors on targets' own uncivil behaviors toward patients and visitors

	Own Incivility-Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03) ***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.04) **
Level 2 Predictor	
Emotional Intelligence	-0.07 (0.05)
Cross-level Interaction	
Emotional Intelligence * Experienced Incivility-Patient and visitor	-0.01 (0.04)



Table 26. Violence prevention climate moderating effects of overall experienced incivility on targets' overall own uncivil behaviors

	Own Incivility-All	
	Coefficients (SE)	
Intercept	1.15 (0.02) ***	
Level 1 Predictor		
Experienced Incivility-All	0.25 (0.05) ***	
Level 2 Predictor		
VPC	-0.06 (0.02) **	
Cross-level Interaction		
VPC * Experienced Incivility-All	-0.10 (0.05)*	

Table 27. Violence prevention climate moderating effects of experienced incivility from coworkers on targets' own uncivil behaviors toward coworkers

	Own Incivility-Coworker
	Coefficients (SE)
Intercept	1.29 (0.05) ***
Level 1 Predictor	
Experienced Incivility-Coworker	0.37 (0.12) **
Level 2 Predictor	
VPC	-0.07 (0.05)
Cross-level Interaction	
VPC * Experienced Incivility-Coworker	-0.03 (0.11)



Table 28. Violence prevention climate moderating effects of experienced incivility from supervisors on targets' own uncivil behaviors toward supervisors

	Own Incivility-Supervisor
	Coefficients (SE)
Intercept	1.08 (0.02) ***
Level 1 Predictor	
Experienced Incivility-Supervisor	0.17 (0.07) *
Level 2 Predictor	
VPC	-0.05 (0.02) *
Cross-level Interaction	
VPC * Experienced Incivility-Supervisor	-0.08 (0.08)

Note: N = 75; VPC = Violence prevention climate. + p < .10, * p < .05, * p < .01.

Table 29. Violence prevention climate moderating effects of experienced incivility from physicians on targets' own uncivil behaviors toward physicians

	Own Incivility-Physician	
	Coefficients (SE)	
Intercept	1.11 (0.02) ***	
Level 1 Predictor		
Experienced Incivility-Physician	0.09 (0.04)*	
Level 2 Predictor		
VPC	-0.07 (0.03) *	
Cross-level Interaction		
VPC * Experienced Incivility-Physician	-0.09 (0.05) +	

Note: N = 75; VPC = Violence prevention climate. + p < .10, * p < .05, * p < .01.

Table 30. Violence prevention climate moderating effects of experienced incivility from patients and visitors on targets' own uncivil behaviors toward patients and visitors

	Own Incivility-Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03) ***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.04) **
Level 2 Predictor	
VPC	-0.04 (0.03)
Cross-level Interaction	
VPC * Experienced Incivility-Patient and visitor	-0.002 (0.05)

Note: N = 75; VPC = Violence prevention climate. + p < .10, * p < .05, * p < .01.

Table 31. Policies and procedures moderating effects of overall experienced incivility on targets' overall own uncivil behaviors

	Own Incivility-All	
	Coefficients (SE)	
Intercept	1.15 (0.02)	
Level 1 Predictor		
Experienced Incivility-All	0.25 (0.05) ***	
Level 2 Predictor		
Policies	-0.03 (0.01) *	
Cross-level Interaction		
Policies * Experienced Incivility-All	-0.06 (0.03) +	

Note: N = 75; Policies = Policies and procedures. + p < .10, * p < .05, * p < .01.



Table 32. Policies and procedures moderating effects of experienced incivility from coworkers on targets' own uncivil behaviors toward coworkers

	Own Incivility-Coworker	
	Coefficients (SE)	
Intercept	1.29 (0.05)	
Level 1 Predictor		
Experienced Incivility-Coworker	0.36 (0.11)**	
Level 2 Predictor		
Policies	-0.03 (0.03)	
Cross-level Interaction		
Policies * Experienced Incivility-Coworker	-0.03 (0.07)	

Note: N = 75; Policies = Policies and procedures. + p < .10, * p < .05, * p < .01.

Table 33. Policies and procedures moderating effects of experienced incivility from supervisors on targets' own uncivil behaviors toward supervisors

	Own Incivility-Supervisor	
	Coefficients (SE)	
Intercept	1.08 (0.02) **	
Level 1 Predictor		
Experienced Incivility-Supervisor	0.18 (0.08) *	
Level 2 Predictor		
Policies	-0.02 (0.01)	
Cross-level Interaction		
Policies * Experienced Incivility-Supervisor	-0.02 (0.05)	

Note: N = 75; Policies = Policies and procedures. + p < .10, * p < .05, * p < .01.



Table 34. Policies and procedures moderating effects of experienced incivility from physicians on targets' own uncivil behaviors toward physicians

Own Incivility-Physician	
Coefficients (SE)	
1.11 (0.02) ***	
0.09 (0.04)*	
-0.04 (0.02) *	
-0.06 (0.03) *	
	Coefficients (SE) 1.11 (0.02) *** 0.09 (0.04)* -0.04 (0.02) *

Note: N = 75; Policies = Policies and procedures. + p < .10, * p < .05, * p < .01.

Table 35. Policies and procedures moderating effects of experienced incivility from patients and visitors on targets' own uncivil behaviors toward patients and visitors

	Own Incivility-Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03) ***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.04) **
Level 2 Predictor	
Policies	-0.01 (0.02)
Cross-level Interaction	
Policies * Experienced Incivility-Patient and visitor	-0.002 (0.03)

Note: N = 75; Policies = Policies and procedures. + p < .10, * p < .05, * p < .01.



Table 36. Practices moderating effects of overall experienced incivility on targets' overall own uncivil behaviors

	Own Incivility-All	
	Coefficients (SE)	
Intercept	1.15 (0.02) ***	
Level 1 Predictor		
Experienced Incivility-All	0.24 (0.05) ***	
Level 2 Predictor		
Practices	-0.03 (0.02)	
Cross-level Interaction		
Practices * Experienced Incivility-All	-0.08 (0.04) +	

Table 37. Practices moderating effects of experienced incivility from coworkers on targets' own uncivil behaviors toward coworkers

	Own Incivility-Coworker	
	Coefficients (SE)	
Intercept	1.29 (0.05)***	
Level 1 Predictor		
Experienced Incivility-Coworker	0.36 (0.11) **	
Level 2 Predictor		
Practices	-0.03 (0.04)	
Cross-level Interaction		
Practices * Experienced Incivility-Coworker	-0.03 (0.08)	



Table 38. Practices moderating effects of experienced incivility from supervisors on targets' own uncivil behaviors toward supervisors

	Own Incivility-Supervisor
	Coefficients (SE)
Intercept	1.08 (0.02) **
Level 1 Predictor	
Experienced Incivility-Supervisor	0.19 (0.07) *
Level 2 Predictor	
Practices	-0.05 (0.03) +
Cross-level Interaction	
Practices * Experienced Incivility-Supervisor	-0.004 (0.08)

Table 39. Practices moderating effects of experienced incivility from physicians on targets' own uncivil behaviors toward physicians

	Own Incivility-Physician	
	Coefficients (SE)	
Intercept	1.11 (0.02) ***	
Level 1 Predictor		
Experienced Incivility-Physician	010 (0.04) *	
Level 2 Predictor		
Practices	-0.02 (0.03)	
Cross-level Interaction		
Practices * Experienced Incivility-Physician	-0.04 (0.04)	



Table 40. Practices moderating effects of experienced incivility from patients and visitors on targets' own uncivil behaviors toward patients and visitors

	Own Incivility-Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03) ***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.05) **
Level 2 Predictor	
Practices	-0.003 (0.03)
Cross-level Interaction	
Practices * Experienced Incivility-Patient and	
visitor	0.01 (0.04)

Table 41. Pressure moderating effects of overall experienced incivility on targets' overall own uncivil behaviors

	Own Incivility-All
	Coefficients (SE)
Intercept	1.15 (0.02) ***
Level 1 Predictor	
Experienced Incivility-All	0.26 (0.05) ***
Level 2 Predictor	
Pressure	-0.06 (0.02)
Cross-level Interaction	
Pressure * Experienced Incivility-All	-0.04 (0.04)

Note: N = 75; Pressure = Pressure for unsafe practices. + p < .10, * p < .05, * p < .01.

Table 42. Pressure moderating effects of experienced incivility from coworkers on targets' own uncivil behaviors toward coworkers

	Own Incivility-Coworker
	Coefficients (SE)
Intercept	1.29 (0.05) ***
Level 1 Predictor	
Experienced Incivility-Coworker	0.39 (0.10) ***
Level 2 Predictor	
Pressure	-0.07 (0.04) +
Cross-level Interaction	
Pressure * Experienced Incivility-Coworker	0.03 (0.08)

Note: N = 75; Pressure = Pressure for unsafe practices. + p < .10, * p < .05, * p < .01.

Table 43. Pressure moderating effects of experienced incivility from supervisors on targets' own uncivil behaviors toward supervisors

	Own Incivility-Supervisor
	Coefficients (SE)
Intercept	1.09 (0.02) **
Level 1 Predictor	
Experienced Incivility-Supervisor	0.13 (0.08)
Level 2 Predictor	
Pressure	-0.03 (0.02) +
Cross-level Interaction	
Pressure * Experienced Incivility-Supervisor	-0.22 (0.08) *

Note: N = 75; Pressure = Pressure for unsafe practices. + p < .10, * p < .05, * p < .01.

Table 44. Pressure moderating effects of experienced incivility from physicians on targets' own uncivil behaviors toward physicians

	Own Incivility-Physician
	Coefficients (SE)
Intercept	1.11 (0.02) ***
Level 1 Predictor	
Experienced Incivility-Physician	0.10 (0.04) *
Level 2 Predictor	
Pressure	-0.06 (0.03) +
Cross-level Interaction	
Pressure * Experienced Incivility-Physician	-0.03 (0.04)

Note: N = 75; Pressure = Pressure for unsafe practices. + p < .10, * p < .05, * p < .01.

Table 45. Pressure moderating effects of experienced incivility from patients and visitors on targets' own uncivil behaviors toward patients and visitors

	Own Incivility-Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03) ***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.05) **
Level 2 Predictor	
Pressure	-0.07 (0.03) *
Cross-level Interaction	
Pressure * Experienced Incivility-Patient and visitor	-0.01 (0.04)

Note: N = 75; Pressure = Pressure for unsafe practices. + p < .10, * p < .05, * p < .01.



Table 46. Civility climate moderating effects of experienced incivility on negative emotions, burnout and physical symptoms

	Negative Emotions	Burnout	Physical Symptoms
		Coefficients (SE)	
Intercept	1.53 (0.05) ***	2.06 (0.07) ***	1.63 (0.05)***
Level 1 Predictor			
Experienced Incivility-All	0.49 (0.15) **	0.38 (0.14) **	0.16 (0.14)
Level 2 Predictor			
Civility Climate	-0.09 (0.06)	-0.18(0.07) **	-0.15 (0.05) **
Cross-level Interaction			
Civility Climate * Experienced Incivility-All	-0.02 (0.12)	0.05 (0.11)	-0.07 (0.13)
Level 1 Predictor			
Experienced Incivility-Coworker	0.41 (0.09) ***	0.42 (0.13) **	0.12 (0.10)
Level 2 Predictor			
Civility Climate	-0.09 (0.06)	-0.18 (0.07) **	-0.15 (0.05)**
Cross-level Interaction			
Civility Climate * Experienced Incivility-Coworker	0.13 (0.05) *	0.13 (0.10)	-0.02 (0.07)
Level 1 Predictor			
Experienced Incivility-Supervisor	0.07 (0.23)	0.27 (0.23)	0.19 (0.14)
Level 2 Predictor			
Civility Climate	-0.09 (0.06)	-0.18 (0.07) **	-0.15 (0.05)**
Cross-level Interaction			
Civility Climate * Experienced Incivility-Supervisor	-0.26 (0.20)	-0.02 (0.17)	0.11 (0.10)
Level 1 Predictor			
Experienced Incivility-Physician	0.16 (0.08) +	0.04 (0.09)	0.003 (0.05)
Level 2 Predictor			
Civility Climate	-0.09 (0.06)	-0.18 (0.07) **	-0.15 (0.05)**
Cross-level Interaction			
Civility Climate * Experienced Incivility-Physician	-0.07 (0.08)	-0.10 (0.07)	0.04 (0.05)



Table 47 (Continued)

Level 1 Predictor			
Experienced Incivility-Patient and visitor	0.12 (0.07)+	0.09 (0.05)	-0.01 (0.04)
Level 2 Predictor			
Civility Climate	-0.09 (0.06)	-0.18 (0.07)**	-0.15 (0.05)**
Cross-level Interaction			
Civility Climate * Experienced Incivility-Patient and visitor	-0.01 (0.09)	0.07 (0.06)	0.01 (0.05)

Note: N = 75; + p < .10, * p < .05, * p < .01.

Table 47. Civility climate moderating effects of overall experienced incivility on targets' overall own uncivil behaviors

	Own Incivility-All
	Coefficients (SE)
Intercept	1.15 (0.02) ***
Level 1 Predictor	
Experienced Incivility-All	0.25 (0.05) ***
Level 2 Predictor	
Civility Climate	-0.04 (0.02) +
Cross-level Interaction	
Civility Climate * Experienced Incivility-All	-0.07 (0.04)



Table 48. Civility climate moderating effects of experienced incivility from coworkers on targets' own uncivil behaviors toward coworkers

	Own Incivility-Coworker	
	Coefficients (SE)	
Intercept	1.29 (0.05) ***	
Level 1 Predictor		
Experienced Incivility-Coworker	0.38 (0.11) **	
Level 2 Predictor		
Civility Climate	-0.05 (0.03)	
Cross-level Interaction		
Civility Climate * Experienced Incivility-Coworker	-0.003 (0.09)	

Table 49. Civility climate moderating effects of experienced incivility from supervisors on targets' own uncivil behaviors toward supervisors

	Own Incivility-Supervisor	
	Coefficients (SE)	
Intercept	1.09 (0.02) ***	
Level 1 Predictor		
Experienced Incivility-Supervisor	0.20 (0.08) *	
Level 2 Predictor		
Civility Climate	-0.05 (0.02) *	
Cross-level Interaction		
Civility Climate * Experienced Incivility-Supervisor	-0.02 (0.07)	



Table 50. Civility climate moderating effects of experienced incivility from physicians on targets' own uncivil behaviors toward physicians

	Own Incivility-Physician	
	Coefficients (SE)	
Intercept	1.11 (0.02) ***	
Level 1 Predictor		
Experienced Incivility-Physician	0.09 (0.04) *	
Level 2 Predictor		
Civility Climate	-0.03 (0.03)	
Cross-level Interaction		
Civility Climate * Experienced Incivility-Physician	-0.05 (0.05)	

Table 51. Civility climate moderating effects of experienced incivility from patients and visitors on targets' own uncivil behaviors toward patients and visitors

	Own Incivility-Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03) ***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.04) **
Level 2 Predictor	
Civility Climate	-0.02 (0.03)
Cross-level Interaction	
Civility Climate * Experienced Incivility-Patient and visitor	0.02 (0.04)



Table 52. Joints effects of experienced workplace incivility in predicting targets' negative emotions, burnout, and physical symptoms

	Negative Emotions	Burnout	Physical Symptoms
		Coefficients (SE)	
Intercept	1.53 (0.06) ***	2.06 (0.07) ***	1.63 (0.05) ***
Level 1 Predictor			
Experienced Incivility-Coworker	0.39 (0.13) **	0.35 (0.13) **	0.11 (0.08)
Experienced Incivility-Supervisor	0.09 (0.21)	0.13 (0.17)	0.15 (0.11)
Experienced Incivility-Coworker	0.43 (0.09) **	0.36 (0.13)**	0.14 (0.09)
Experienced Incivility-Physician	0.15 (0.09) +	0.08 (0.08)	0.01 (0.05)
Experienced Incivility-Coworker	0.37 (0.08) ***	0.38 (0.10) **	0.14 (0.09)
Experienced Incivility-Patient and visitor	0.09 (0.07)	0.07 (0.05)	-0.02 (0.04)
Experienced Incivility-Supervisor	0.14 (0.21)	0.22 (0.16)	0.23 (0.09)*
Experienced Incivility-Physician	0.15 (0.08) *	0.05 (0.07)	-0.03 (0.06)
Experienced Incivility-Supervisor	0.18 (0.20)	0.28 (0.19)	0.21 (0.10) *
Experienced Incivility-Patient and visitor	0.12 (0.07) +	0.07 (0.06)	-0.01 (0.04)
Experienced Incivility-Physician	0.15 (0.07) *	0.05 (0.08)	-0.01 (0.05)
Experienced Incivility-Patient and visitor	0.12 (0.06) +	0.06 (0.06)	-0.01 (0.04)



Table 53. Joints effects of experienced workplace incivility in predicting targets' own uncivil behaviors toward coworkers

	Own Incivility-Coworker	
	Coefficients (SE)	
Intercept	1.29 (0.05) ***	
Level 1 Predictor		
Experienced Incivility-Coworker	0.35 (0.11) **	
Experienced Incivility-Supervisor	0.16 (0.08) *	
Experienced Incivility-Coworker	0.38 (0.10) **	
Experienced Incivility-Physician	-0.07 (0.06)	
Experienced Incivility-Coworker	0.34 (0.10) **	
Experienced Incivility-Patient and visitor	0.05 (0.03)	

Table 54. Joints effects of experienced workplace incivility in predicting targets' own uncivil behaviors toward supervisors

	Own Incivility-Supervisor
	Coefficients (SE)
Intercept	1.08 (0.02)***
Level 1 Predictor	
Experienced Incivility-Supervisor	0.15 (0.08) *
Experienced Incivility-Coworker	0.06 (0.03)
Experienced Incivility-Supervisor	0.14 (0.07)*
Experienced Incivility-Physician	0.03 (0.04)
Experienced Incivility-Supervisor	0.15 (0.07) *
Experienced Incivility-Patient and visitor	0.07 (0.02)**



Table 55. Joints effects of experienced workplace incivility in predicting targets' own uncivil behaviors toward physicians

	Own Incivility-Physician
	Coefficients (SE)
Intercept	1.11 (0.02) ***
Level 1 Predictor	
Experienced Incivility-Physician	0.10 (0.05) *
Experienced Incivility-Coworker	0.01 (0.02)
Level 1 Predictor	
Experienced Incivility-Physician	0.09 (0.05) +
Experienced Incivility-Supervisor	0.10 (0.04)*
Level 1 Predictor	
Experienced Incivility-Physician	0.09 (0.04) *
Experienced Incivility-Patient and visitor	0.09 (0.03)**

Table 56. Joints effects of experienced workplace incivility in predicting targets' own uncivil behaviors toward patients and visitors

	Own Incivility-Patient and visitor
	Coefficients (SE)
Intercept	1.14 (0.03) ***
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.17 (0.04) ***
Experienced Incivility-Coworker	-0.08 (0.07)
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.04) **
Experienced Incivility-Supervisor	-0.08 (0.04)*
Level 1 Predictor	
Experienced Incivility-Patient and visitor	0.15 (0.04) **
Experienced Incivility-Physician	0.001 (0.03)



Table 57. Bivariate correlations between week 1 experienced incivility and week 2 nurses' own incivility

		1	2	3	4	5	6	7	8
1	Experienced Incivility-Coworker								
2	Experienced Incivility-Supervisor	.28*							
3	Experienced Incivility-Physician	.31**	.23*						
4	Experienced Incivility-Patient and visitor	.41**	.07	.29*					
5	Own Incivility-Coworker	.31**	.16	.24*	.27*				
6	Own Incivility-Supervisor	.33**	.32**	.24*	.08	.40**			
7	Own Incivility-Physician	.04	.06	.45**	.25*	.34**	.18		
8	Own Incivility-Patient and Visitor	.24*	.04	.22	.46**	.63**	.25*	.50**	

Note: N = 75; * p < .05, * p < .01.

Table 58. Bivariate correlations between week 2 experienced incivility and week 3 nurses' own incivility

		1	2	3	4	5	6	7	8
1	Experienced Incivility-Coworker								
2	Experienced Incivility-Supervisor	.36**							
3	Experienced Incivility-Physician	.65**	.38**						
4	Experienced Incivility-Patient and visitor	.54**	.09	.30**					
5	Own Incivility-Coworker	.40**	.05	.39**	.25*				
6	Own Incivility-Supervisor	.36**	.41**	.16	.21	.17			
7	Own Incivility-Physician	.22	-0.06	.29*	.14	.20	05		
8	Own Incivility-Patient and Visitor	.56**	0.08	.59**	.37**	.33**	.06	.48**	

Note: N = 75; * p < .05, * p < .01.



Table 59. Bivariate correlations between week 3 experienced incivility and week 4 nurses' own incivility

		1	2	3	4	5	6	7	8
1	Experienced Incivility-Coworker								
2	Experienced Incivility-Supervisor	.60**							
3	Experienced Incivility-Physician	.42**	.69**						
4	Experienced Incivility-Patient and visitor	.16	.29*	.26*					
5	Own Incivility-Coworker	.22	.23	.37**	.08				
6	Own Incivility-Supervisor	.36**	.20	.16	.05	.15			
7	Own Incivility-Physician	.09	.20	.33**	.23	.27*	.06		
8	Own Incivility-Patient and Visitor	.32**	.57**	.67**	.38**	.34**	006	.34**	

Note: N = 75; * p < .05, * p < .01.

Table 60. Bivariate correlations between week 4 experienced incivility and week 5 nurses' own incivility

		1	2	3	4	5	6	7	8
1	Experienced Incivility-Coworker								
2	Experienced Incivility-Supervisor	.26*							
3	Experienced Incivility-Physician	.13	.47**						
4	Experienced Incivility-Patient and visitor	.20	.33**	.21					
5	Own Incivility-Coworker	.22	.19	.19	.10				
6	Own Incivility-Supervisor	.09	.43**	.19	.03	.24*			
7	Own Incivility-Physician	.10	.19	.26*	.02	.30*	.22		
8	Own Incivility-Patient and Visitor	.23	.38**	.48**	.44**	.42**	.06	.13	

Note: N = 75; * p < .05, * p < .01.



FIGURES



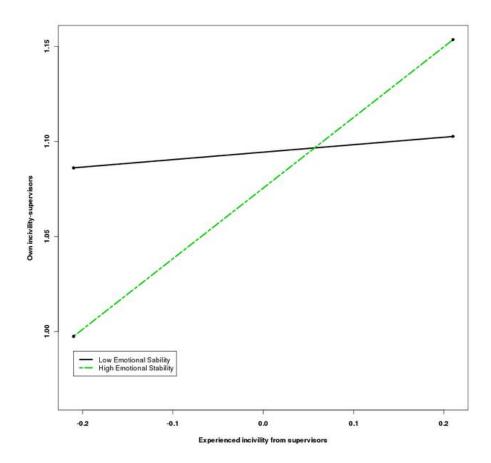


Figure 1. Interaction between experienced incivility from supervisors and emotional stability in predicting targets' own uncivil behaviors toward supervisors



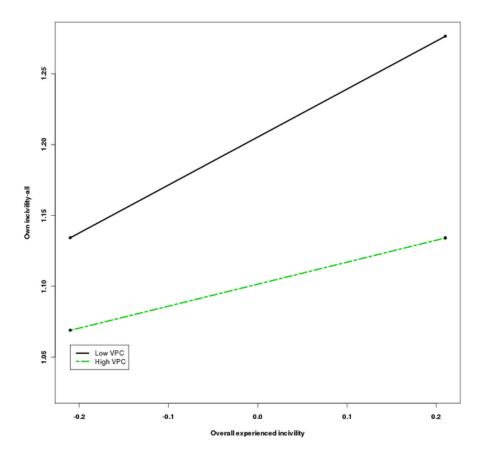


Figure 2. Interaction between overall experienced incivility and violence prevention climate (VPC) in predicting targets' overall own uncivil behaviors



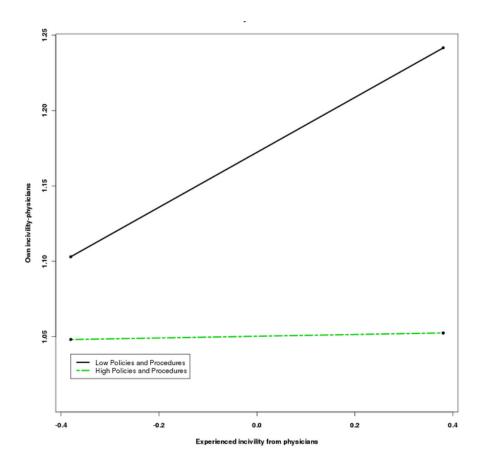


Figure 3. Interaction between experienced incivility from physicians and policies and procedures in predicting targets' own uncivil behaviors toward physicians



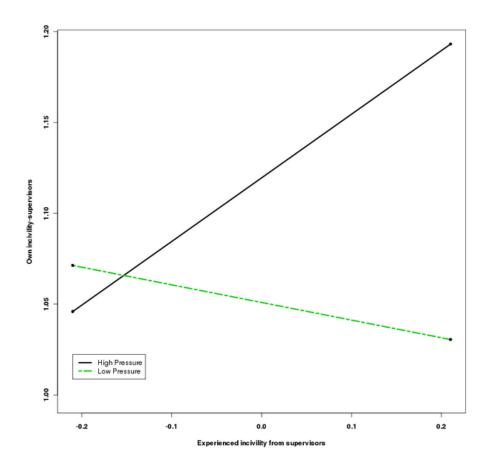


Figure 4. Interaction between experienced incivility from supervisors and pressure for unsafe practices in predicting targets' own uncivil behaviors toward supervisors

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APPENDICES



Appendix A: IRB Approval Letter



DIVISION OF RESEARCH INTEGRITY AND COMPLIANCE Institutional Review Boards, FWA No. 00001669 12901 Bruce B. Downs Blvd. MDC035 • Tampa, FL 336124799 (813) 974-5638 • FAX (813) 974-5618

October 18, 2012

Zhiqing Zhou Department of Psychology 4202 East Fowler Ave., PCD4118G Tampa, FL 33620

RE: Expedited Approval for Initial Review

IRB#: Pro00009244

Title: Effects of Workplace Incivility on Nurses' Emotions, Well-being, and Behaviors: A

Longitudinal Study

Dear Mr. Zhou:

On 10/18/2012 the Institutional Review Board (IRB) reviewed and APPROVED the above referenced protocol. Please note that your approval for this study will expire on 10/18/2013.

Approved Items:

Protocol Document:

Effects of Workplace Incivility on Nurses' Emotions, Well-being, and Behaviors

Consent Document:

Informed consent.pdf

Please use only the official, IRB- stamped consent document(s) found under the "Attachment Tab" in the recruitment of participants. Please note that these documents are only valid during the approval period indicated on the stamped document.

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review category:

(7) Research on individual or group characteristics or behavior (including, but not limited to,



research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

John A. Schinka, Ph.D., Chairperson USF Institutional Review Board



Appendix B: Baseline Survey

Pleas	Please circle the one response that comes closest to characterizing you											
1= V	1= Very Inaccurate, 2= Moderately Inaccurate, 3= Neither Accurate Nor Inaccurate, 4= Moderately											
Accurate, 5= Very Accurate												
1	I am relaxed most of the time	1	2	3	4	5						
2	I seldom feel blue	1	2	3	4	5						
3	I get stressed out easily	1	2	3	4	5						
4	I worry about things	1	2	3	4	5						
5	I am easily disturbed	1	2	3	4	5						
6	I get upset easily	1	2	3	4	5						
7	I change my mood a lot	1	2	3	4	5						
8	I have frequent mood swings	1	2	3	4	5						
9	I get irritated easily	1	2	3	4	5						
10	I often feel blue	1	2	3	4	5						

	Please indicate your level of agreement to the following items.								
	1= Strongly Disagree, 2= Moderately Disagree, 3= Slightly Disagree, 4= Neither Disagree nor Agree, 5=								
Sligh	Slightly Agree, 6= Moderately Agree, 7= Strongly Agree								
11	I have a good sense of why I have certain feelings most of the time	1	2	3	4	5	6	7	
12	I have good understanding of my own emotions	1	2	3	4	5	6	7	
13	I really understand what I feel	1	2	3	4	5	6	7	
14	I always know whether or not I am happy	1	2	3	4	5	6	7	
15	I always know my friends' emotions from their behavior	1	2	3	4	5	6	7	
16	I am a good observer of others' emotions	1	2	3	4	5	6	7	
17	I am sensitive to the feelings and emotions of others	1	2	3	4	5	6	7	
18	I have good understanding of the emotions of people around me	1	2	3	4	5	6	7	
19	I always set goals for myself and then try my best to achieve them	1	2	3	4	5	6	7	
20	I always tell myself I am a competent person	1	2	3	4	5	6	7	
21	I am a self-motivated person	1	2	3	4	5	6	7	
22	I would always encourage myself to try my best	1	2	3	4	5	6	7	
23	I am able to control my temper and handle difficulties rationally	1	2	3	4	5	6	7	
24	I am quite capable of controlling my own emotions	1	2	3	4	5	6	7	
25	I can always calm down quickly when I am very angry	1	2	3	4	5	6	7	
26	I have good control of my own emotions	1	2	3	4	5	6	7	

Pleas	Please indicate to what extent do you agree with each of the following statements.								
$1 = S_1$	1= Strongly Disagree, 2= Moderately Disagree, 3= Slightly Disagree, 4= Slightly Agree, 5=								
, 5=N	Moderately Agree, 6= Strongly Agree								
27	When coworkers leave me out of social events, it is to hurt my feelings	1	2	3	4	5	6		
	If coworkers do not appreciate me enough, it is because they are self-	1	1	2	4	-	6		
28	centered	1		3	4	3	6		
	If coworkers work slowly on a task I assigned them, it is because they do	1	2	2	4	4	6		
29	not like me	1		٦	4	۲	O		
30	If people are laughing at work, I think they are laughing at me	1	2	3	4	5	6		
31	If coworkers ignore me, it is because they are being rude	1	2	3	4	5	6		
32	Coworkers deliberately make my job more difficult	1	2	3	4	5	6		
33	When my things are missing, they have probably been stolen	1	2	3	4	5	6		

Please indicate to what extent do you agree with each of the following statements.

1= Disagree Very Much, 2= Disagree Moderately, 3= Disagree Slightly

4= Agree Slightly, 5= Agree Moderately, 6= Agree Very Much

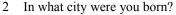
34 | Management in this organization quickly responds to episodes of violence. | 1 | 2 | 3 | 4 | 5 | 6



35	Management encourages employees to report physical violence.	1	2	3	4	5	6
36	Management encourages employees to report verbal violence.	1	2	3	4	5	6
37	Reports of violence from other employees are taken seriously by management	1	2	3	4	5	6
38	My employer provides adequate assault/violence prevention training.	1	2	3	4	5	6
39	In my unit, violence prevention procedures are detailed.	1	2	3	4	5	6
40	In my unit, there is training on violence prevention policies and procedures.	1	2	3	4	5	6
41	In my unit, employees are informed about potential violence hazards	1	2	3	4	5	6
42	In my unit in order to get the work done, one must ignore some violence prevention policies.	1	2	3	4	5	6
43	In my unit, whenever pressure builds up, the preference is to do the job as fast as possible, even if that means compromising violence prevention.	1	2	3	4	5	6
44	In my unit, human resource shortage undermines violence prevention standards.	1	2	3	4	5	6
45	In my unit, violence prevention policies and procedures are ignored.	1	2	3	4	5	6

	Please indicate to what extent do you agree with each of the following statements. 1 = Disagree completely, 2 = Disagree moderately, 3 = Disagree slightly								
	Agree slightly, 5 = Agree moderately, 6 = Agree completely								
	lirect supervisor								
46	Periodically provides suggestions on how to improve the quality of interpersonal relationships among coworkers	1	2	3	4	5	6		
47	Generally discusses the extent to which employees are getting along during my performance reviews or evaluations	1	2	3	4	5	6		
48	Ignores rude or discourteous behavior among employees as long as work gets done	1	2	3	4	5	6		
49	Insists that employees show respect during all non-face-to-face communications (e g , e-mail and phone) with coworkers or parents	1	2	3	4	5	6		
50	Maintains a respectful work environment among employees during periods of stressful work events (e g , testing)	1	2	3	4	5	6		
51	Participates in the spreading of nasty or hurtful gossip among employees	1	2	3	4	5	6		
52	Supports or encourages the creation of employee social events (e g , potluck, year-end celebrations, etc)	1	2	3	4	5	6		
53	Informs employees on where to find information on mistreatment policies or reminds employees to review policies	1	2	3	4	5	6		
54	Allows rude or discourteous behavior to occur among employees in his/her presence	1	2	3	4	5	6		
55	Has a low tolerance for disrespectful behavior among employees	1	2	3	4	5	6		
56	Periodically inquires about the extent to which employees are getting along with each other	1	2	3	4	5	6		
57	Is completely unaware of ongoing disputes or arguments among employees	1	2	3	4	5	6		
58	Does not get both sides of the story when addressing conflicts or minor disputes among coworkers	1	2	3	4	5	6		

1.	Your gender	_Male	_Female	
2.	Your age	years		
3.	How many hours do	you currently	work per week?	hours
Pleas	se answer the followi	ng three secret	questions before entering y	our name to get your gift card.
1	What was the name	of your high so	chool (the first one if you a	ttended more than one)?
2	T.,1 4	a - 1 a 2	•	



³ What's your mother's birthday (month and day)?



Appendix C: Before-Shift Survey

Please indicate to what extent you are having each of the feelings **right now** with the following scale. 1= Very slightly or Not at all, 2= A little, 3= Moderately, 4= Quite a bit; 5= Extremely My job made me feel angry. My job made me feel anxious. My job made me feel bored. My job made me feel depressed. My job made me feel discouraged. My job made me feel disgusted. My job made me feel fatigued. My job made me feel frightened. My job made me feel furious. My job made me feel gloomy.

Please use the following scale to answer the question: When you think about your work overall, to what degree do you feel the following? 1= Very slightly or Not at all, 2= A little, 3= Moderately, 4= Quite a bit; 5= Extremely Being tired Feeling depressed Having a good day Being physically exhausted Being emotionally exhausted Being happy Being "wiped out" "Can't take it anymore" Being unhappy Feeling run-down Feeling trapped Feeling worthless Being weary Being troubled Feeling disillusioned and resentful Being weak and susceptible to illness Feeling hopeless 28 Feeling rejected Feeling optimistic Feeling energetic Feeling anxious

Please answer the following three secret questions before entering your name to get your gift card.

- 1 What was the name of your high school (the first one if you attended more than one)?
- 2 In what city were you born?
- 3 What's your mother's birthday (month and day)?



Appendix D: After-Shift Survey

	Please indicate to what extent you are having each of the feelings right now with the following										
scale.											
1= Very slightly or Not at all, 2= A little, 3= Moderately, 4= Quite a bit; 5= Extremely											
1	My job made me feel angry.	1	2	3	4	5					
2	My job made me feel anxious.	1	2	3	4	5					
3	My job made me feel bored.	1	2	3	4	5					
4	My job made me feel depressed.	1	2	3	4	5					
5	My job made me feel discouraged.	1	2	3	4	5					
6	My job made me feel disgusted.	1	2	3	4	5					
7	My job made me feel fatigued.	1	2	3	4	5					
8	My job made me feel frightened.	1	2	3	4	5					
9	My job made me feel furious.	1	2	3	4	5					
10	My job made me feel gloomy.	1	2	3	4	5					

	Please indicate how many times each of the following statements happens to you in the past week. 1 = Never, 2 = Once, 3= Twice, 4 = Three times, 5= Four times, 6= Five times and more												
In the you?	past week, how many times did other nurses on your unit do the follow	ing	thin	gs t	o								
11	argue with you	1	2	3	4	5	6						
12	have violent outbursts or heated arguments in the workplace	1	2	3	4	5	6						
13	scream at you	1	2	3	4	5	6						
14	gossip about you	1	2	3	4	5	6						
15	bad-mouth you in the workplace.	1	2	3	4	5	6						
16	spread bad rumors about you	1	2	3	4	5	6						
17	make little contribution to a project but expect to receive credit for working on it.	1	2	3	4	5	6						
18	claim credit for your work	1	2	3	4	5	6						
	past week , how many times did your direct supervisor (i.e., the person ntly)do the following things to you?	you	rep	ort	to n	nost							
19	is verbally abusive to you	1	2	3	4	5	6						
20	yells at you about matters that are not important.	1	2	3	4	5	6						
21	shouts or yells at you for making mistakes.	1	2	3	4	5	6						
22	takes his/her feelings out on you (e.g., stress, anger, "blowing off steam").	1	2	3	4	5	6						
23	does not respond to your concerns in a timely manner.	1	2	3	4	5	6						
24	is condescending to you	1	2	3	4	5	6						
25	factors gossip and personal information into personnel decisions about you	1	2	3	4	5	6						



In the	<u>In the past week</u> , how many times did <u>physicians</u> you work with do the following things to you?											
26	are verbally abusive to you	1	2	3	4	5	6					
27	yell at you about matters that are not important.	1	2	3	4	5	6					
28	shout or yell at you for making mistakes.	1	2	3	4	5	6					
29	take their feelings out on you(e.g., stress, anger, "blowing off steam").	1	2	3	4	5	6					
30	do not respond to your concerns in a timely manner.	1	2	3	4	5	6					
31	treated you as though your time is not important.	1	2	3	4	5	6					
32	are condescending to you	1	2	3	4	5	6					
	past week, how many times did patients you care for and/or their famit do the following things to you?	iiiy :	anu 	VIS	ltor	<u>s</u> 011						
33	do not trust the information you give them and ask to speak with someone of higher authority.	1	2	3	4	5	6					
34	are condescending to you	1	2	3	4	5	6					
35	make comments that question the competence of you	1	2	3	4	5	6					
36	criticize your job performance.	1	2	3	4	5	6					
37	make personal verbal attacks against you	1	2	3	4	5	6					
38	pose unreasonable demands one you	1	2	3	4	5	6					
39	have taken out their frustrations on you	1	2	3	4	5	6					
40	make insulting comments to you	1	2	3	4	5	6					
41	treat you as if you were inferior or stupid.	1	2	3	4	5	6					
42	show that they are irritated or impatient to you	1	2	3	4	5	6					

Please indicate how many times you have engaged in each of the following behaviors at work *in the past week* to **other nurses** on your unit.

1 = Never, 2 = Once, 3= Twice, 4 = Three times, 5= Four times, 6= Five times and more

43	Put another nurse down or was condescending to another nurse	1	2	3	4	5	6
44	Paid little attention to another nurse's statement or showed little interest in another nurse's opinion.	1	2	3	4	5	6
45	Made demeaning or derogatory remarks about another nurse	1	2	3	4	5	6
46	Addressed another nurse in unprofessional terms, either publicly or privately	1	2	3	4	5	6
47	Ignored or excluded another nurse from professional camaraderie.	1	2	3	4	5	6
48	Doubted another nurse's judgment on a matter over which he/ she has responsibility	1	2	3	4	5	6
49	Made unwanted attempts to draw another nurse into a discussion of personal matters	1	2	3	4	5	6



Please indicate how many times you have engaged in each of the following behaviors at work *in the* past week to **your direct supervisor**

1 = Never, 2 = Once, 3= Twice, 4 = Three times, 5= Four times, 6= Five times and more

50	Put your direct supervisor down or was condescending to your direct supervisor	1	2	3	4	5	6
51	Paid little attention to your direct supervisor's statement or showed little interest in your direct supervisor's opinion.	1	2	3	4	5	6
52	Made demeaning or derogatory remarks about your direct supervisor	1	2	3	4	5	6
53	Addressed your direct supervisor in unprofessional terms, either publicly or privately	1	2	3	4	5	6
54	Ignored or excluded your direct supervisor from professional camaraderie.	1	2	3	4	5	6
55	Doubted your direct supervisor's judgment on a matter over which he/she has responsibility	1	2	3	4	5	6
56	Made unwanted attempts to draw your direct supervisor into a discussion of personal matters	1	2	3	4	5	6

Please indicate how many times you have engaged in each of the following behaviors at work in the past week to **physicians** you work with. Put a physician down or was condescending to a physician Paid little attention to a physician 's statement or showed little interest in a physician 's opinion. Made demeaning or derogatory remarks about a physician Addressed a physician in unprofessional terms, either publicly or privately Ignored or excluded a physician from professional camaraderie. Doubted a physician's judgment on a matter over which he/ she has responsibility

Please indicate how many times you have engaged in each of the following behaviors at work *in the past week* to **patients you care for and/ or their family members/ visitors**

Made unwanted attempts to draw a physician into a discussion of

1 = Never, 2 = Once, 3= Twice, 4 = Three times, 5= Four times, 6= Five times and more

Put patients/family members/ visitors down or was condescending to patients/family members/ visitor



personal matters

1 2 3 4 5 6

65	Paid little attention to patients/family members/ visitors' statement or showed little interest in patients/family members/ visitors' opinion.	1	2	3	4	5	6
66	Made demeaning or derogatory remarks about patients/family members/ visitors	1	2	3	4	5	6
67	Addressed patients/family members/ visitors in unprofessional terms, either publicly or privately	1	2	3	4	5	6
68	Made unwanted attempts to draw patients/family members/ visitors into a discussion of personal matters	1	2	3	4	5	6

Please use the following scale to answer the question: When you think about your work overall,							
to what degree do you feel the following?							
	ry slightly or Not at all, 2= A little, 3= Moderately, 4= Quite a bit; 5= Ex	trer	nery	3	4	5	
69	Being tired	1					
70	Feeling depressed	1	2	3	4	5	
71	Having a good day	1	2	3	4	5	
72	Being physically exhausted	1	2	3	4	5	
73	Being emotionally exhausted	1	2	3	4	5	
74	Being happy	1	2	3	4	5	
75	Being "wiped out"	1	2	3	4	5	
76	"Can't take it anymore"	1	2	3	4	5	
77	Being unhappy	1	2	3	4	5	
78	Feeling run-down	1	2	3	4	5	
79	Feeling trapped	1	2	3	4	5	
80	Feeling worthless	1	2	3	4	5	
81	Being weary	1	2	3	4	5	
82	Being troubled	1	2	3	4	5	
83	Feeling disillusioned and resentful	1	2	3	4	5	
84	Being weak and susceptible to illness	1	2	3	4	5	
85	Feeling hopeless	1	2	3	4	5	
86	Feeling rejected	1	2	3	4	5	
87	Feeling optimistic	1	2	3	4	5	
88	Feeling energetic	1	2	3	4	5	
89	Feeling anxious	1	2	3	4	5	

Over the past week, how often have you experienced each of the following symptoms? 1= Not at all, 2= Once, 3= Twice, 4= Three Times, 5= Four times and more							
90	An upset stomach or nausea	1	2	3	4	5	
91	A backache	1	2	3	4	5	
92	Trouble sleeping	1	2	3	4	5	



93	Headache	1	2	3	4	5
94	Acid indigestion or heartburn	1	2	3	4	5
95	Eye strain	1	2	3	4	5
96	Diarrhea	1	2	3	4	5
97	Stomach cramps (Not menstrual)	1	2	3	4	5
98	Constipation	1	2	3	4	5
99	Ringing in the ears	1	2	3	4	5
100	Loss of appetite	1	2	3	4	5
101	Dizziness	1	2	3	4	5
102	Tiredness or fatigue	1	2	3	4	5

Please answer the following three secret questions before entering your name to get your gift card.

- 1. What was the name of your high school (the first one if you attended more than one)?
- 2. In what city were you born?
- 3. What's your mother's birthday (month and day)?

