Time-Based Work-Personal Life Conflict and Burnout: Predictors of Enacted Workplace Incivility

by

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ABSTRACT

TIME-BASED WORK-PERSONAL LIFE CONFLICT AND BURNOUT:

PREDICTORS OF ENACTED WORKPLACE INCIVILITY

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The existing incivility literature has focused primarily on the antecedents of incivility using between person analyses. This study builds on the previous literature by examining the antecedents of incivility using a within-persons diary study. Using a sample of 101 participants, the current study examined the daily relationships between time-based work-personal life conflict and enacted incivility towards coworkers and patients, as well as the moderating role of emotional exhaustion and depersonalization. Participants completed surveys twice daily over five consecutive working days. The data was analyzed with a hierarchical linear modeling approach using the nlme and multilevel packages in R software, version 3.0.0. There were 16 hypotheses and only two were supported. The significant results indicated that time-based personal-to-work life conflict predicted enacted incivility towards coworkers and that emotional exhaustion predicted enacted incivility towards patients. Theoretical and practical implications are discussed.
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LIST OF ABBREVIATIONS

EE: Emotional Exhaustion

Dep: Depersonalization

EI Coworkers: Experienced Incivility from Coworkers

EI Patients: Experienced Incivility from Patients

PsyCap: Psychological Capital

State NA: State Negative Affect

TWIP: Time-based Work Interfering with Personal Life

TPIW: Time-based Personal Interfering with Work Life

Trait NA: Trait Negative Affect
Time-based Work-Personal Life Conflict and Burnout:

Predictors of Enacted Workplace Incivility

Over the past several decades researchers, managers, consultants, and professional groups have paid increasing attention to workplace mistreatment (Leiter, 2013). Workplace mistreatment can come in various forms, such as bullying, abuse, aggression, conflict, mobbing, and social undermining (Leiter, 2013). Recently, scholars have focused on a less intensive form of mistreatment – workplace incivility (Cortina, Magley, Williams, & Langhout, 2001). Incivility is low intensity deviant behaviour, such as rudeness or discourtesy, which lacks a clear intent to harm (e.g., Cortina et al. 2001; Lim, Cortina, & Magley, 2008; Pearson, Andersson, & Wegner, 2001). Incivility can be manifested in many ways. Examples include making hurtful or derogatory remarks, ignoring the opinion of others, or failing to say please and thank you. Workplace incivility is not illegal behaviour. In fact, many organizations fail to recognize when incivility occurs and unfortunately many managers are not prepared to deal with it or its consequences (Pearson & Porath, 2005).

Like other forms of mistreatment, incivility is related to a number of negative outcomes for employees and organizations. For example, targets of incivility have reported increased stress, anxiety, and depression, job withdrawal, decreased job satisfaction, and increased turnover intentions (Cortina et al., 2001). The effects of incivility have the potential to permeate through an organization, in turn fostering a negative workplace climate (Leiter, 2013) and ultimately hindering an organization’s ability to remain competitive (Reio & Ghosh, 2009).

Given the negative consequences associated with workplace incivility, it is imperative that researchers gain a better understanding of the factors that cause people to engage in uncivil behaviours in the workplace. To date, there has been limited research examining the factors that
cause people to act in an uncivil manner and it remains unclear which factors predict incivility at the daily level. The purpose of the current study is to shed further light on the antecedents of workplace incivility using a within-subjects design. It will specifically examine time-based work-personal life conflict and burnout as predictors of workplace incivility.

I will first discuss the workplace incivility phenomenon. I will review the antecedents of workplace incivility and will then discuss the theoretical rationale for examining time-based work-personal life conflict and burnout as antecedents of incivility. After that, I will present a rationale for my hypotheses, which will be followed by the study methodology, results, discussion and conclusions.

**Workplace Incivility**

In their seminal paper, 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” (p. 447). Workplace incivility differs from other forms of mistreatment, (e.g., aggression and violence) that are unambiguous; workplace incivility includes only minor forms of interpersonal deviance (Pearson & Porath, 2004).

Over fourteen years, Pearson and Porath (2004, 2005) with Andersson (Pearson, Andersson, & Porath, 2000), and Wegner (Pearson et al. 2001) administered questionnaires and conducted interviews, focus groups, experiments, and executive forums with thousands of workers in the United States and Canada. In a recent paper published in Harvard Business Review, Pearson and Porath (2013) stated that of all the people they surveyed over 14 years, 98% reported that they had experienced incivility at some point. In a smaller sample of 800 employees in the United States, Pearson and Porath (2005) found that 10% reported witnessing incivility daily within their workplaces and 20% reported being the targets of incivility at work at
least once per week. Public Agenda, an American research firm, conducted a poll with 2013 individuals in the United States. 79% of respondents indicated that lack of respect and courtesy is a serious problem and 61% indicated that this problem is getting worse (Remington & Darden, 2002). Given the frequency of incivility, it is important to be aware of its consequences.

Consequences of Workplace Incivility

Given that incivility is typically of low intensity, it can be perceived as harmless. Indeed, in isolation, a single act of incivility is not likely to have debilitating consequences (Caza & Cortina, 2007). However, when incivility becomes a regular occurrence for employees at work (Pearson & Porath, 2005), it is associated with many negative consequences for employees and organizations. Incivility has been related to increased anxiety and depression (Cortina et al., 2001), decreased job satisfaction (Cortina et al., 2001), decreased work effort, productivity, and performance (Pearson & Porath, 2005), as well as increased turnover intentions (Cortina et al., 2001). If incivility is not dealt with in its early stages, it can interfere with work patterns and lead to more severe forms of workplace aggression (Pearson et al., 2000; Porath & Erez, 2007), which can in turn have serious legal and economic ramifications (Reio & Ghosh, 2009). Thus, although incivility may be of low intensity, the consequences associated with incivility are far-reaching. Given these consequences it is important to understand the factors that predict incivility.

Antecedents of Workplace Incivility

Using interviews, focus groups, and forums, Pearson and Porath (2004, 2005) learned first-hand from employees about many of the factors that prompt individuals to engage in incivility (e.g., time pressure, casual work environments). Many of their findings, however, have not yet been empirically tested with quantitative methods.
Based on qualitative research conducted by Pearson and Porath (2004, 2005), theoretical work provided by Estes and Wang (2008) and extant empirical research findings, I organized the following framework of the antecedents of workplace incivility around macro, meso, and micro levels.

**Macro factors.** Macro level factors refer to organization-level factors. Scholars have theorized about some of the potential antecedents of incivility at the macro level; these factors include organizational culture and values, management philosophy and leadership style.

Organization-level values, standards, and norms guide employee behaviour; organizations that do not place a strong emphasis on general workplace respect or do not set standards regarding acceptable employee behaviour are likely to experience higher levels of incivility (Estes & Wang, 2008). According to Pearson et al. (2000) many workplaces have “gone casual” (p. 129). Causal workplaces do not provide employees with cues regarding appropriate interpersonal behaviour and thus may inadvertently encourage employees to behave uncivilly. Andersson and Pearson (1999) predicted that the absence of a proactive leader would play a role in the development of lax (i.e., laid back) work environments. In fact, a recent study found that passive leadership had a direct effect on employees’ enacted incivility (Harold & Holtz, 2014).

**Meso factors.** Meso level factors refer to factors that are less distal and more proximal than organization-level factors. These factors tend to occur at the group or unit level. For instance, a meso level factor that contributes to workplace incivility is power and organizational status. Pearson and colleagues (Pearson et al., 2000; Pearson & Porath, 2005) learned that individuals with more power have more opportunities to be uncivil and are more likely to get away with such behaviour. In addition, Estes and Wang (2008) have suggested that group norms can influence workplace incivility. Individuals have a need to belong (Baumeister & Leary,
1995) and to be accepted by in-group members. Employees working in teams often conform to the group’s norms (Cortina, 2008) in order to fulfill their desire to be accepted by other team members. Thus, if coworkers promote or model uncivil behaviours, other employees are likely to follow (Cortina, 2008).

**Micro factors.** Micro factors are those that are more subjective and occur at the individual level. The micro level factors that contribute to workplace incivility can be categorized as dispositional and non-dispositional.

*Dispositional differences.* Evidence suggests that gender is related to the enactment of incivility or deviant behaviours. When instigating incivility, men are more likely to target victims of lower status, whereas women are more likely to target victims of higher status (Pearson et al., 2000). Other dispositional differences include trait negative affect (Reio & Gosh, 2009), low levels of psychological capital (Roberts et al., 2001), difficulty establishing relationships (Reio & Gosh, 2009), individual achievement orientation (Liu et al., 2009), higher levels of direct conflict self-efficacy (Liu et al., 2009), and higher collectivism (Liu et al., 2009).

*Non-dispositional differences.* Uncivil behaviours are discrete events and often occur in response to fluctuating non-dispositional factors at the daily level. It is important to examine the role of non-dispositional differences in the enactment of incivility because these factors are perhaps most malleable and susceptible to change.

Andersson and Pearson proposed the incivility spiral, which suggests that an act of incivility by party A should cause party B to reciprocate with uncivil behaviour. Direct (Harold & Holtz, 2014; Walker, 2009) and indirect (van Jaarsveld et al., 2010) relationships have been found between experienced and enacted incivility, providing preliminary support for Andersson and Pearson’s theoretical relationship. Andersson and Pearson (1999) proposed that perceptions
of injustice and negative affectivity are the mediating mechanisms through which experienced incivility leads to enacted incivility. Although research is needed to test the incivility spiral in its entirety, evidence does suggest that injustice (Blau & Anderson, 2005; Meier & Semmer, 2012) and negative affectivity (Ghosh et al., 2011; Meier & Semmer, 2012) predict enacted incivility. For example, using a cross-sectional design Meier and Semmer (2012) found that state anger mediated the relationship between lack of reciprocity from the organization and incivility. Additionally, Ghosh et al. (2011) found that state negative affect, which resulted from negative mentoring behaviour, predicted enacted incivility.

Almost all of the research examining the antecedents of incivility has been cross-sectional in nature. One known exception is a longitudinal study conducted by Blau and Andersson (2005); their results indicated that perceptions of distributive justice measured in 1998 had a significant impact on 2002 enacted workplace incivility above and beyond perceptions of distributive justice in 2002. They also found that job satisfaction measured in 1999, and work exhaustion measured in 1999 had a significant impact on 2002 enacted workplace incivility above and beyond the 2002 same variable correlate in a sample of 162 medical technologists.

To my knowledge, Blau and Andersson (2005) were the first to report a link between exhaustion and enacted incivility. Since then others have provided support for this relationship (van Jaarsveld et al., 2010, Walker, 2009); however, unlike Blau and Andersson, cross-sectional designs were used. One study (van Jaarsveld et al., 2010) found that the experience of high job demands (which initially resulted from the experience of incivility from customers), led to emotional exhaustion, which in turn caused individuals to engage in incivility.
Although research is beginning to accumulate regarding the non-dispositional fluctuating factors that predict workplace incivility, more work is needed in this area. Pearson and colleagues (Pearson et al., 2000; Pearson & Porath, 2004, 2005) learned from employees that time pressure is a major contributing factor to workplace incivility. In focus groups, employees repeatedly expressed their challenges including single parenting and the need to manage dual careers. Pearson et al. (2000) cited one supervisor who posed the question, “How can I take the time to thank each of my subordinates for a job well done when I have five deadlines to meet, four meetings to attend, and a spouse and two kids at home who need to be fed dinner?” (p. 129). According to Pearson and Porath (2004), “these trends absorb time and attention, making the maintenance of casual relationships a luxury, and for some, civility just one more sponge” (p. 407). This factor, specifically time pressure resulting from the need to juggle work and personal demands, has been proposed based on qualitative data. However, quantitative studies using methods that are not based at one specific point in time are required to examine its specific role in the incivility phenomenon.

The Current Study

Although time pressure may result from a variety of factors, Pearson’s and Porath’s (2004) narrative findings suggest that it is a combination of both work and life stressors that contribute to the feeling that one is pressed for time. Interestingly, the few studies that have empirically examined the antecedents of workplace incivility have focused on work related characteristics and personality factors as antecedents of workplace incivility. Ferguson, Carlson, Hunter and Whitten (2012) stated the importance of examining the effects of non-work related factors on workplace deviance. Therefore, the first goal of the current study was to examine the
role of time pressure that results from work-personal life conflict, as opposed to time pressure simply resulting from work responsibilities, in the enactment of workplace incivility.

Nonetheless, we cannot ignore the fact that workplace stress likely causes people to behave uncivilly. Exposure to prolonged occupational demands has been linked to the experience of burnout. Indeed, empirical evidence suggests that emotional exhaustion, the core component of burnout, predicts workplace incivility (Blau & Andersson, 2005; van Jaarsveld et al., 2010; Walker, 2009). However, it remains unclear whether depersonalization, which represents the interpersonal aspect of burnout, also influences one’s tendency to behave uncivilly. There is a need to enrich our knowledge regarding the role of burnout in the enactment of incivility; therefore, the second goal of the current study was to examine whether depersonalization, in addition to emotional exhaustion, predicts enacted incivility.

Although Pearson and Porath’s (2004) qualitative research provides preliminary evidence to suggest that time pressure predicts the enactment of workplace incivility, it remains unclear whether the strength of the relationship between time pressure and enacted incivility is similar for all individuals. Therefore, the third goal of the current study was to examine burnout as a moderator in the relationship between time-based work-personal life conflict and enacted incivility.

Given that incivility typically occurs as a discrete event that fluctuates based on mood states and environmental factors, there is a need to better understand the antecedents of enacted incivility at the daily level. Therefore, I used a daily diary design to examine the role of time-based work-personal life conflict and burnout in the enactment of incivility.
In the following sections I will review the literature on time-based work-personal life conflict (which has also been referred to as work-family conflict) and burnout, and will then provide the rationale for the proposed hypotheses.

**Time-Based Work-Family/Personal Life Conflict**

Work-family conflict refers to “a form of interrole conflict in which role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (Greenhaus & Beutell, 1985, p. 77). This definition implies that work-family conflict is a bi-directional process whereby work interferes with family life (also termed work-to-family conflict) and family life interferes with work demands (also termed family-to-work conflict).

Although most prior research focuses on work-family conflict, there is evidence to suggest that employees who do not have traditional nuclear families also experience conflict between work and other roles or domains related to their non-working life (e.g., Galinsky, Bond, & Friedman, 1996). Consequently, I will focus on work-personal life conflict, which is inclusive of work-family conflict. The studies I reference below come from work-family research; however, for the sake of consistency and clarity I will refer to work-personal life conflict. Throughout the rest of this paper I will refer to WPC when discussing the general construct work-personal life conflict. I will use WIP when discussing work interfering with personal life (work-to-personal life conflict) and I will use PIW when discussing personal interfering with work life (personal-to-work life conflict).

The perception that work interferes with personal life occurs when individuals experience high job demands and thus are unable to devote their energy and time to their personal responsibilities (Williams and Alliger, 1994). Conversely, the perception that personal life
interferes with work occurs when individuals experience high personal demands and therefore are unable to devote their time and energy to their work related responsibilities (Williams & Alliger, 1994). Not only are there two directions of WPC, there are also three major types. Strain-based conflict occurs when strain produced in one role affects performance in the other role, behaviour-based conflict occurs when behaviours that are useful in one role are incompatible with behaviours needed in the other role, and time-based conflict occurs when time based pressures from one role are incompatible with the demands of the other role (Greenhaus & Beutell, 1985).

**Time-based WPC as a Predictor of Workplace Incivility**

As described above, Pearson and colleagues (2000) found that employees have obligations stemming from both the work and life roles and as a result they do not have the time for the “polite ‘niceties’ of business life” (p. 128). Although Pearson and Porath (2004, 2005) did not specifically refer to time-based WPC, it is these time pressures that ultimately contribute to time-based WPC.

Time-based WIP (which will now be referred to as TWIP) occurs when time spent at work interferes with an employee’s ability to spend time on personal responsibilities. The converse, time-based PIW (which will now be referred to as TPIW), occurs when time devoted to personal responsibilities makes it difficult to spend time or to participate in the work role. TWIP likely drives employees to complete tasks expediently so that they can leave the workplace and return to their personal or family environment as quickly as possible. TPIW likely has the same effect. For example, if an employee is absent for an afternoon in order to attend his or her child’s school event (PIW), it is more likely that the employee will try to work expediently in the morning in order to make up for the impending lost time. Given that social interaction with
coworkers is likely to be perceived as an impediment to task completion, employees are more likely to ignore their coworkers or to be abrupt with their coworkers – two precise examples of workplace incivility. Therefore, TWIP and TPIW should predict enacted incivility towards coworkers.

In addition, coworkers or service recipients may actually be the source of TWIP, which can cause an employee to treat those parties uncivilly. For example, if an employee is scheduled to leave the office, but a coworker or client calls the employee with a request, the employee may perceive this event as a source of TWIP. The employee, expecting to leave the office without interruption, now perceives the coworker/client interaction as a hindrance to personal/family time. As a result, the employee may be more likely to treat the coworker or client uncivilly. See figure 1 for a model illustrating hypotheses 1a-1d.

**Hypothesis 1a.** TWIP will predict enacted incivility towards coworkers.

**Hypothesis 1b.** TWIP will predict enacted incivility towards service recipients/patients.

**Hypothesis 1c.** TPIW will predict enacted incivility towards coworkers.

**Hypothesis 1d.** TPIW will predict enacted incivility towards service recipients/patients.

**The Burnout Syndrome**

Beyond stressors resulting from the interaction between work and personal life, prolonged stress affects the way people behave at work. Burnout has been defined as “a prolonged response to chronic emotional and interpersonal stressors on the job” (Maslach, Schaufeli, & Leiter, 2001, p. 397). There are two core burnout responses: emotional exhaustion and depersonalization (Maslach, 1982).

Exhaustion, which represents the stress and core burnout response, refers to “feelings of being overextended and depleted of one’s emotional and physical resources” (Maslach et al.,
2001, p. 399). It tends to arise as a result of work overload and personal conflict at work, and when experienced, individuals feel that they do not have the ability to replenish their resources (Maslach & Goldberg, 1998). Individuals who describe being burned out most often refer to the experience of exhaustion. As a result, exhaustion has become known as the central feature of burnout.

Depersonalization, which represents the interpersonal aspect of burnout, is defined as the act of putting distance between oneself and one’s service recipients in response to emotional exhaustion. An aspect of this behaviour includes ignoring the unique and interesting qualities of service recipients. When service recipients are thought of as impersonal objects of one’s work, work demands become easier to manage (Maslach et al., 2001).

Burnout has been related to a number of negative consequences for individuals and for organizations. For example, burnout has been linked to absenteeism and turnover (e.g., Schaufeli & Bakker, 2004; Spence Laschinger, Leiter, Day, & Gilin, 2009), as well as decreased performance (Wright & Hobfoll, 2004), organizational commitment (Maslach & Leiter, 1997), and job satisfaction. Burnout has also been related to a number of health problems including, headaches, sleep disturbances, and decreased psychological well-being (e.g., anxiety, depression; Schaufeli & Bakker, 2004).

As mentioned previously, emotional exhaustion has been linked to enacted incivility (Blau & Andersson, 2005; van Jaarsveld et al., 2010; Walker, 2009). These studies, however, only examined emotional exhaustion. The current study examined the role of depersonalization, in addition to emotional exhaustion.
**Burnout as a Predictor of Workplace Incivility**

Researchers have utilized the Conservation of Resources (COR) theory to understand the burnout phenomenon (Hobfoll & Freedy, 1993; Lee & Ashforth, 1996; Shirom, 1989). According to COR theory, individuals strive to obtain, build, and protect their resources. There are four basic categories of resources including objects (e.g., car, house), conditions (e.g., good marriage, job stability), personal characteristics (e.g., high self-esteem), and energies (e.g., stamina; Hobfoll & Shirom, 1993). When individuals’ resources are threatened, lost, or there is a failure to gain further resources after having invested significant resources, stress ensues (Hobfoll, 1989). Individuals who lack a strong resource pool are more likely to experience cycles of resource loss. When individuals perceive a continuous net loss of physical, emotional, or cognitive resources that cannot be replenished, burnout occurs. COR theory will be used to explain how burnout influences the way in which employees behave in the workplace.

Emotional exhaustion refers to the feeling that one’s emotional and physical resources are depleted (Maslach, 1982). According to COR theory, when employees are emotionally exhausted they will attempt to conserve their remaining resources by reducing their morale, their commitment to the organization, and decreasing their performance (Wright & Hobfoll, 2004). In regards to commitment, employees must invest resources in order to maintain a high level of commitment to their organization. COR theory suggests that as individuals reduce their levels of organizational commitment, they simultaneously withdraw the amount of resources they are investing into their work. Consistent with this line of reasoning, employees who are emotionally exhausted will attempt to conserve their resources by not behaving civilly towards their coworkers. Given that civility requires the utilization of resources, not behaving civilly should essentially help to conserve resources.
Furthermore, emotional exhaustion is characterized not only by the depletion of emotional resources, but also by a lack of energy (Maslach, 2006). Thus, when employees are emotionally exhausted, they likely lack the energy to engage civilly in social interactions. Although Pearson, Andersson, and Porath (2005) did not specifically refer to burnout, they suggested that “people may simply have less energy… to attend to civility, to be ever mindful of the ‘niceties’” (p. 183). See figure 2 for a model illustrating hypotheses 2a and 2b.

**Hypothesis 2a.** Emotional exhaustion will predict enacted incivility towards coworkers.

**Hypothesis 2b.** Emotional exhaustion will predict enacted incivility towards service recipients/patients.

In order to cope with the experience of emotional exhaustion, employees distance themselves from their service recipients. Through interviews in the human services, Maslach et al. (2001) learned that detachment as well as lack of concern led service providers to treat their clients in negative, callous, and dehumanized ways. This behaviour may be a way of conserving resources for other aspects of the job, as suggested by COR theory. Therefore, employees with high levels of depersonalization may interact uncivilly with other people at work – not only with service recipients, but with coworkers as well. See figure 3 for a model illustrating hypotheses 3a and 3b.

**Hypothesis 3a.** Depersonalization will predict enacted incivility towards coworkers.

**Hypothesis 3b.** Depersonalization will predict enacted incivility towards service recipients/patients.
Emotional Exhaustion and Depersonalization as Moderators in the Relationship Between Time-Based WPC and Incivility

Thus far, I have hypothesized that burnout and time-based WPC precede the enactment of workplace incivility. Although Pearson and Porath’s (2004, 2005) qualitative research suggests that time pressure prompts individuals to be uncivil, it is unclear whether the effect of time pressure on incivility occurs to the same extent in all individuals. Thus, it is important to examine whether there are moderating variables in the relationship between time-based WPC and enacted incivility.

Based on previous empirical research, there is reason to believe that emotional exhaustion will moderate the relationship between time-based WPC and enacted incivility. According to COR theory, when individuals are burned out, they experience a net loss of resources, which escalates to further loss spirals (Shirom, 2003). Loss of resources makes individuals less resilient to deal with work demands (Hobfoll, 1989). Thus, individuals who are burned out will be less able to cope effectively with time-based work-personal life conflict, and will subsequently be uncivil towards their coworkers. In addition, when faced with time-based WPC, burned out employees will attempt to conserve their resources. Instead of dealing effectively with time-based WPC, which requires utilization of resources, employees may conserve their remaining resources by not behaving civilly. Finally, there is evidence to suggest that under stress, an individual’s social abilities are hindered (Johnson & Indvik, 2001). Thus, when experiencing time-based WPC, individuals who are emotionally exhausted, which is an extreme manifestation of stress, will have difficulty interacting in social situations, and will therefore be more uncivil than individuals who are not emotionally exhausted. See figures 4a and 4b for a model illustrating hypotheses 4a-4d.
**Hypothesis 4a.** Emotional exhaustion will moderate the relationship between TWIP and enacted incivility towards coworkers, such that the relationship will be stronger among individuals who are more emotionally exhausted.

**Hypothesis 4b.** Emotional exhaustion will moderate the relationship between TWIP and enacted incivility towards service recipients/patients, such that the relationship will be stronger among individuals who are more emotionally exhausted.

**Hypothesis 4c.** Emotional exhaustion will moderate the relationship between TPIW and enacted incivility towards coworkers, such that the relationship will be stronger among individuals who are more emotionally exhausted.

**Hypothesis 4d.** Emotional exhaustion will moderate the relationship between TPIW and enacted incivility towards service recipients/patients, such that the relationship will be stronger among individuals who are more emotionally exhausted.

Furthermore, from a conceptual standpoint I will suggest that depersonalization should moderate the proposed relationship between time-based WPC and enacted incivility. As discussed previously, individuals experiencing high levels of depersonalization detach themselves from their service recipients and develop a cynical attitude towards them. Therefore, high levels of this burnout response suggest that employees, as a reaction to chronic job stressors, have developed a callous style of interacting with others. Thus I propose that when experiencing a stressor such as time-based WPC, individuals experiencing higher levels of depersonalization will be more likely, than individuals who report low levels of depersonalization, to treat not only their service recipients, but also their coworkers, uncivilly. See figure 4a and 4b for a model illustrating hypotheses 5a-5d.
Hypothesis 5a. Depersonalization will moderate the relationship between TWIP and enacted incivility towards coworkers, such that the relationship will be stronger among individuals who experience higher levels of depersonalization.

Hypothesis 5b. Depersonalization will moderate the relationship between TWIP and enacted incivility towards service recipients/patients, such that the relationship will be stronger among individuals who experience higher levels of depersonalization.

Hypothesis 5c. Depersonalization will moderate the relationship between TPIW and enacted incivility towards coworkers, such that the relationship will be stronger among individuals who experience higher levels of depersonalization.

Hypothesis 5d. Depersonalization will moderate the relationship between TPIW and enacted incivility towards service recipients/patients, such that the relationship will be stronger among individuals who experience higher levels of depersonalization.

Method

Participants

Participants included 101 employees working at either nursing homes or hospitals. This is an appropriate sample size given that diary studies in high-ranking journals have included at least 100 participants when focusing on predictors at the person level (Ohly, Sonnentag, Niessen, & Zapf, 2010). For example, Spence, Ferris, Brown and Heller’s (2011) study in the Journal of Organizational Behaviour included 99 participants, and Meier, Semmer, and Hupfeld’s (2009) study in Personality and Social Psychology Bulletin included 101 participants.

The sample in the current study was made up of nurses (38.6%), personal support workers (40.6%), other health care professionals (e.g., social workers, dieticians; 10.9%), other professionals (e.g., administrative, program director; 7.9%) and student nurses (2.0%). Although
the sample was made up of a variety of occupations, each individual had regular contact with patients. Ninety-seven percent of the sample was made up of nursing home employees and the remaining three percent were hospital nurses.

The average age of the individuals in this study was 43.90 ($SD = 10.71$). Eighty-nine percent of the respondents were women. Participants worked in their current job (e.g., as a nurse or personal support worker) for an average of 9.78 years and in their current organization for an average of 8.51 years.

**Procedure**

**General procedure.** I contacted the Executive Directors at several nursing homes and met with those who were interested in hearing about the study. Those who were interested in implementing the study in their nursing home introduced me to the scheduling coordinator who posted the study advertisement (see Appendix A) and recruited employees. I worked with the scheduling coordinator to set up times to run the study.

Individuals interested in participating met with me in person during their paid working hours. I described the general purpose of the study as well as the study’s requirements. I assured participants that their data would be used for research purposes only. I also informed them that although the data they provided was not anonymous, it would be kept completely confidential. Additionally, I emphasized the importance of this research study and ensured participants that they would receive aggregated information regarding the study’s results.

Potential participants were provided with a letter of information, which included a consent form to sign (see Appendix B). Those who agreed to participate responded to a baseline questionnaire on paper during this session.

Participants also responded to two daily surveys over five consecutive working days.
Participants were informed that they could withdraw from the study at any point and would receive compensation (five dollars per day) based on the number of days they participated. Sixty-four percent of the participants completed the daily surveys using an online data collection application (LumiSURVEY) on tablets that were provided to them or on their own personal smart phones. The remaining thirty-six percent of participants completed the daily surveys on paper.

I collected tablets and paper daily questionnaires two weeks after originally meeting with participants. I verbally debriefed participants regarding the study’s purposes and also provided them with a debriefing form (see Appendix C). In addition, I spoke to participants about their experience. I asked them how they felt about answering surveys every day, if there was anything they wanted to clarify about their responses, and whether the study helped them think about how they treat others and how others treat them.

The general procedure for hospital participants differed from that of the nursing home participants. I was put in touch with a nurse working at one of the major hospitals in Toronto. I explained the purpose of my study and the procedure. She valued this research and consequently helped solicit participants for me. I provided her with 15 packages, which included the letter of information, a consent form, detailed instructions for participating (see Appendix D), as well as paper baseline and daily questionnaires. (The detailed instructions were not provided to nursing home participants given that I had provided them with verbal instructions). I also included a stamped envelope so that participants could send back their completed questionnaires. Three people returned their surveys, representative of a 20% response rate. Upon receiving their surveys I emailed participants a debriefing form and their compensation for participating.

**Survey administration.** Participants responded to questionnaires at baseline and at the
daily level. At baseline participants completed a demographic form as well as questionnaires that assessed burnout and control variables. Experienced incivility, trait negative affect, psychological capital (PsyCap), age and gender have been linked to enacted incivility in past research. Therefore, these variables were assessed at baseline and controlled for in the analyses if they had a significant effect on the criterion variable.

Participants also responded to two surveys per day for five consecutive working days. The mid-shift survey consisted of measures that assessed TWIP, TPIW, and state negative affect (among other measures). This survey contained 23 items and did not require more than 5 minutes to complete.

The end-shift survey examined whether participants experienced and/or enacted incivility on that particular day. (Other measures not essential to the current study were also included). This survey contained 26 items and also did not require more than 5 minutes to complete. I assessed experienced and enacted incivility at the end of the participants’ shifts and not in the middle of their shifts in order to prevent common method bias. In addition, it allowed more time for participants to experience and instigate incivility on a given day. (See Table 1 for a summary of the data collection procedure).

Although I expected participants to complete the first survey in the middle of their shifts and the second survey at the end of their shifts, after speaking to the first ten participants I learned that they often did not have time to complete the first survey in the middle of their shifts and therefore completed both surveys at the end of their shifts. Consequently, I informed future participants that although it was preferable that they complete the mid-shift and end-shift survey at different time points, if this was not feasible they should complete both surveys at the end of their working day.
Measures

**Burnout.** Emotional exhaustion and depersonalization were measured at baseline using the Maslach Burnout Inventory (Maslach & Jackson, 1981), which was designed to assess burnout among employees working in the human services (see Appendix E). Given that burnout is fairly stable over time (Maslach, 2006), it does not need to be measured on a daily basis. Emotional exhaustion was measured with 9 items (e.g., “I feel emotionally drained from my work”) and depersonalization was measured with 5 items (e.g., “I feel I treat some patients as if they were impersonal objects”) on a Likert scale ranging from 1 (never) to 7 (everyday). The Cronbach’s alpha coefficients for emotional exhaustion and depersonalization at baseline were .93 and .77 respectively.

**Time-based WPC.** Time-based WPC was measured in the middle of the participants’ shifts for five consecutive days (see appendix F). It was measured using two subscales developed by Carlson, Kacmar and Williams (2000). The subscales were modified to assess WPC as opposed to work-family conflict and to capture day level references. One subscale assessed TWIP (e.g., “Today my work is keeping me from my personal activities more than I would like”) and the other subscale assessed TPIW (e.g., “Today, the time I am spending on personal responsibilities is interfering with my work responsibilities”). When participants completed the baseline questionnaire, I provided them with examples of TWIP and TPIW to assist them in responding to the items. An example of TWIP is the need to be at work but wanting to be at home with a sick child. An example of TPIW is spending time at work attending to personal matters, such as making a phone call in the middle of one’s shift. The TWIP and TPIW subscales each contained 3 items. Response options were provided on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). I calculated the alpha coefficients for TWIP and TPIW.
on each day. The alpha coefficient for TWIP ranged from .91 to .95. For TPIW, the alpha coefficient ranged from .86 to .91.

**Enacted incivility towards coworkers and patients.** Enacted incivility towards coworkers and patients was measured at the end of the participants’ shifts for five consecutive days (see appendix G). Participants responded to the Straightforward Incivility Scale by Leiter, Day and Laschinger (2013) and were provided with two versions of this scale; the items were identical but the instructions differed. In one version they were asked to report how often they enacted incivility towards coworkers, and in the other version they were asked to report how often they enacted incivility towards patients. For both scales, participants were asked to indicate how often they engaged in five distinct uncivil behaviours (e.g., ignored someone, excluded someone, spoke rudely to someone) during the present day on a scale from 0 (*never*) to 4 (*often*).

Given that this measure contains distinct behaviours, I used a sum score to capture the amount of incivility enacted. This is consistent with the approach used by Cortina et al. (2001). Although Cortina et al. assessed incivility using a different scale, they utilized a sum score. In the current study, the Cronbach’s alpha coefficient for enacted incivility towards coworkers ranged from .88 to .92. For enacted incivility towards patients, the Cronbach’s alpha coefficient ranged from .80 to .90.

**Control variables.** The following variables were related to enacted incivility in previous research. Therefore, they were assessed and included as control variables in the analyses if they had a significant effect on enacted incivility. This is discussed in more detail in the results section.

**Experienced incivility.** Experienced incivility was measured at the end of the participants’ shifts for five consecutive days (see appendix H). Participants responded to the
Straightforward Incivility Scale (Leiter et al., 2013). This scale contains 5 items that assess how often individuals have been targets of incivility (e.g., ignored you, excluded you, spoke rudely to you). Participants were asked to indicate how often their coworkers and supervisors behaved in uncivil ways towards them on that particular day on a scale from 0 (*never*) to 4 (*often*). Similar to enacted incivility, I used a sum score to capture the amount of incivility experienced. The Cronbach’s alpha coefficient for experienced incivility from coworkers ranged from .90 to .96. For experienced incivility from patients, the alpha coefficient ranged from .89 to .94.

**Trait and state negative affect.** Participants responded to Watson, Clark, and Tellegen’s Positive and Negative Affect Schedule (PANAS; 1988). The measure contains 20 items – 10 that assess positive affect and 10 that assess negative affect. Participants only responded to the 10 items assessing negative affect. Trait negative affect was assessed at baseline (see appendix I) and state negative affect was assessed in the middle of the participants’ shifts for five consecutive days (see appendix J). In order to assess trait negative affect, participants were asked to indicate how often they *generally* experienced ten negative emotions (e.g., sadness, anger). In order to assess state negative affect, participants were asked to indicate the extent to which they were experiencing 10 negative emotions on that particular day. In both cases, response options were provided on a Likert scale ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). The Cronbach’s alpha coefficient for trait negative affect (at baseline) was .85. The alpha coefficient for state negative affect (at the daily level) ranged from .89 to .93.

**Psychological capital.** PsyCap was measured at baseline (see Appendix K) using the shortened Psychological Capital Questionnaire (Luthans, Youssef & Avolio, 2007b), which consists of 12 items that assess hope (e.g., “If I should find myself in a jam at work, I could think of many ways to get out of it”), resilience (e.g., “I usually take stressful things at work in...
stride”), optimism (e.g., “I always look on the bright side of things regarding my job”), and self-efficacy (e.g., “I feel confident in representing my work area in meetings with management”). Items that reflect state-like characteristics (e.g., “Right now I see myself as being pretty successful at work”) were modified to reflect trait-like characteristics (e.g., “I generally see myself as being pretty successful at work”). Items were rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The Cronbach’s alpha coefficient was .90.

**Demographic variables.** Participants were asked to indicate their age in years, their gender (which was coded 0 for male and 1 for female), their marital/partner status, and the number of children they have. Organizational and job tenure were measured based on the number of years participants had worked with the organization and in their specific job, respectively. Additionally participants were asked to indicate in which setting they were employed, the number of hours they work in a typical week, their level of education, annual salary, ethnicity, and whether they have managerial responsibilities. The demographic questionnaire can be found in appendix L.

In addition, all of the variables measured at the daily level (e.g., TWIP, TPIW, experienced incivility from coworkers, experienced incivility from patients, enacted incivility towards coworkers, and enacted incivility towards patients) were assessed at baseline. This data was used for preliminary analyses in order to determine whether certain variables needed to be controlled for in the multilevel analyses. For example, I used baseline data to examine whether there were significant differences among the different occupations of the participants (e.g., nurse, personal support worker, etc.) and whether there were significant differences between nursing home employees and hospital employees on any of the key variables. Any significant differences would suggest the need to control for occupation and setting.
Results

From the original sample of 110 participants, a total of nine people were deleted for failing to complete the surveys according to the instructions provided. For example, three participants completed only one survey per day (either the mid-shift or end-shift survey) and four participants completed baseline surveys but did not complete any daily surveys. As a result a total of 101 people were included in the final analyses.

I also deleted daily data provided by participants that did not correspond to study requirements. The tablets provided electronic time stamps, which enabled me to determine when participants completed their surveys. If it was clear that participants were dishonest about the day they completed their surveys, that data was deleted. For example, some participants completed several days of data on one day. I deleted that data but retained data that was completed on the correct day. In some instances, participants accidentally completed two surveys for the same day. In these instances, I deleted the second survey. After deleting daily data, there were 450 usable daily ratings provided by 101 participants. Participants completed an average of 4.46 usable daily ratings ($SD = 1.15$).

In order to ascertain whether participants completed the mid-shift survey and end-shift survey at different times in the day, I examined the electronic time stamps as well as the date and time provided by participants who completed daily paper questionnaires. Of the 450 daily ratings provided by 101 participants, 434 included information regarding the date and time (16 daily surveys completed on paper did not include the time that the surveys were completed). Among the 434 daily surveys, 54.6% were completed such that the mid-shift and end-shift surveys were completed at different times in the day. Among the remaining 45.4% of the daily surveys, the mid-shift and end-shift surveys were both completed at the end of the shift. Although this
increases the likelihood of common method bias, participants were informed that if they could not complete the mid-shift survey in the middle of their shifts, it was acceptable to complete both surveys at the end of their shifts.

**Data Analysis**

Observations at the daily level (e.g. TWIP and TPIW) are nested within persons and constitute Level 1 data. The stable person characteristics (e.g., emotional exhaustion and depersonalization) that were assessed at baseline constitute Level 2 data (Ohly et al., 2010). I analyzed my data with a hierarchical linear modeling approach using the nlme and multilevel packages in R software version 3.0.0 (R Development Core Team, 2013).

Before running my analyses I examined the distribution of the data as well as the distribution of the residuals. Daily enacted incivility towards both patients and coworkers was positively skewed. This is common in research on incivility and other forms of interpersonal mistreatment (e.g., Miner, Settles, & Hyatt, 2012; Penny & Spector, 2005). The assumption of heteroscedasticity was violated, meaning that the residuals were not normally distributed. Consistent with previous research (e.g., Beattie & Griffin, 2014; Miner et al., 2012), I conducted square root transformations on the summed composite of the dependent variables (enacted incivility towards coworkers and patients), which normalized the residuals.

I then centered the day-level predictors, TWIP and TPIW, at the respective person mean in order to remove between-person variance (Ohly et al., 2010). This was necessary because stable differences (e.g., personality or other individual differences) between individuals could then be ruled out. In addition, by centering my predictors at the person mean it enabled me to examine if an individual’s enacted incivility was greater after he/she experienced greater TWIP and TPIW than he/she did on average (person mean centering). I also centered the
baseline predictors (emotional exhaustion and depersonalization) at the grand mean. This enabled me to examine whether enacted incivility was higher when an individual’s level of emotional exhaustion and depersonalization was higher than on average in the sample.

**Descriptive Statistics**

Descriptive statistics and correlations at baseline and at the daily level are presented in tables 2 and 3. Participants demonstrated relatively low levels of emotional exhaustion ($M = 3.03, SD = 1.52$), depersonalization ($M = 1.83, SD = 1.04$), TWIP ($M = 2.66, SD = 1.70$) and TPIW ($M = 1.83, SD = .94$). Enacted incivility towards coworkers and enacted incivility towards patients were each measured with five items on a five-point Likert scale ranging from 0 to 4. I utilized a sum score to capture levels of enacted incivility and therefore scores could have ranged from 0 to 20 for each criterion variable. Scores for enacted incivility towards coworkers ranged from 0 to 15, and scores for enacted incivility towards patients ranged from 0 to 13. On average, participants demonstrated low levels of enacted incivility towards coworkers ($M = 1.70, SD = 2.70$) and patients ($M = 1.35, SD = 2.32$).

Preliminary analyses were performed prior to analyzing the multi-level data. First, I ran an ANOVA to determine whether there were significant differences among the occupations on any of the measured constructs. Specifically, I tested for differences among nurses, personal support workers, other health care professionals (e.g., social workers, dieticians), other professionals (e.g., administrative), and student nurses. No significant differences were found among any of the groups on any of the variables, indicating that there was no need to control for type of occupation. I also tested for significant differences between employees who worked directly with patients and employees in administration that did not work directly with patients. Individuals working in administration still interacted with patients on a regular basis. No
significant differences were found between those who worked directly with patients and those in administration. Therefore, there was no need to delete or control for participants who did not work with patients directly. Finally, I ran t-tests to examine whether there were significant differences between participants employed in a nursing home and participants employed in a hospital setting on any of the measured constructs. There was a significant difference between hospital and nursing home employees on the amount of incivility enacted towards coworkers, with hospital employees reporting significantly more enacted incivility ($M = 6.00$, $SD = 4.55$) than nursing home employees ($M = 2.25$, $SD = 3.33$), $t(99) = 2.18$, $p < .05$. Therefore, I controlled for setting when running the multilevel analyses.

**Partitioning of Variance**

Before conducting multilevel analyses, I examined whether enacted incivility towards coworkers and patients varied substantially within, as well as between, individuals. I ran a null model, where I partitioned the total variance into within- and between-individual variance. The ICC1, which is an indicator of between-person variance, for enacted incivility towards coworkers was .60. In diary studies, the ICC1 reflects the percentage of variance that is explained by between person differences (Nohe, Michel, & Sonntag, 2013). Therefore 60% of the total variance of enacted incivility towards coworkers was between persons and 40% was within persons. This indicated the necessity to conduct multilevel modeling. In regards to the second criterion variable, enacted incivility towards patients, the ICC1 was .50. This indicates that 50% of the variance was between persons and that 50% of the variance was within persons, again demonstrating the need to conduct multilevel modeling. I also examined the ICC2, or the overall person mean reliability for both enacted incivility towards coworkers and patients. The ICC2 for the former was .88, and for the latter was .81. Both values surpass the required cut off of .70.
Test of Hypotheses

In order to test my hypothesis, which contained nested hierarchical linear models, I began with an intercept only model (null model). In Model 1, I entered day-level (level 1) and person-level (level 2) control variables. Although I assessed age, gender, work setting, experienced incivility, trait negative affect, state negative affect, and psychological capital as potential control variables, I only controlled for them if they significantly predicted the criterion variable. This is because including too many predictors without increasing the number of participants reduces power. Work setting, trait negative affect and experienced incivility from coworkers significantly predicted enacted incivility towards coworkers and therefore they were included as control variables (see table 4a and 4b). When predicting enacted incivility towards patients, work setting, trait negative affect, state negative affect, and experienced incivility from coworkers and patients had significant effects. Therefore, these variables were controlled for in the prediction of enacted incivility towards patients (see table 5a and 5b).

In model 2, I entered day-level predictors (level 1 variables). In model 3, I entered person-level predictors (level 2 variables), and in model 4 I entered the interaction terms. The results of these analyses are displayed in tables 4 and 5. In order to determine model fit I compared the AIC and BIC from each model to the previous model. I also compared the AIC and BIC of each model to the null model to examine the cumulative effect of all the variables added.

Enacted incivility towards coworkers.

For the first dependent variable, enacted incivility towards coworkers, I first ran a null model to examine whether there was systematic between-person variance in the dependent variable. The -2 log likelihood ratio between the model with the random intercept and the model without the random intercept was significant, $t(1) = 217.44, p < .001$, indicating that the model
with the random intercept was significantly better than the model without the random intercept. This suggests that there was significant intercept variation.

In model 1 (see table 4a), I entered day-level (experienced incivility from coworkers) and person-level (trait negative affect, work setting) control variables to predict that significant intercept variation. The variables were strong predictors of enacted incivility towards coworkers. The model explained 13.45% (1 – 0.53/0.61) of the between-person variance and 21.23% (1 – 0.33/0.41) of the within person variance. Additionally, the AIC decreased by 86.24 and the BIC decreased by 73.97 from the null model to model 1, indicating that model 1 showed a better fit than the null model.

In model 2 (see table 4a), I regressed enacted incivility towards coworkers on the control variables as well as the level 1 predictors: TWIP and TPIW. Hypothesis 1a was not supported; TWIP did not predict enacted incivility towards coworkers, \( t(343) = 1.62, \) ns. However, hypothesis 1c was supported; TPIW significantly predicted enacted incivility towards coworkers, \( t(343) = 1.96, p = .05. \) I compared model 2 to the previous model and to the null model. The AIC and BIC increased by 4.88 and 13.02 respectively from model 1 to model 2. These increases are small and therefore demonstrate comparative fit between model 1 and model 2. The AIC and BIC decreased by 81.36 and 60.95 respectively from the null model to model 2, demonstrating that model 2 fit better than the null model.

In model 3 (see table 4b), I regressed enacted incivility towards coworkers on level 2 predictors, emotional exhaustion and depersonalization. Neither emotional exhaustion, \( t(96) = 1.73, \) ns, nor depersonalization, \( t(96) = -0.08, \) ns, significantly predicted enacted incivility towards coworkers. Therefore hypotheses 2a and 3a were not supported.
In order to test for an interaction, there must be significant level 1 slope variation. I examined whether there was significant variation in slopes between TWIP and enacted incivility towards coworkers across people. The -2 log likelihood ratio between the model with and the model without a random slope was significant $t(2) = 8.98, p < .05$, indicating significant slope variation. In other words, the strength of the relationship between TWIP and enacted incivility towards coworkers varied among persons. I attempted to determine what person level properties were related to the variation in slopes between TWIP enacted incivility towards coworkers. I hypothesized (hypotheses 4a and 5a) that emotional exhaustion and depersonalization would moderate this relationship. In model 4a I regressed the interaction between TWIP and emotional exhaustion and TWIP and depersonalization on enacted incivility towards coworkers. Neither interaction was significant (table 4b). Neither emotional exhaustion nor depersonalization explained significant variation in the slopes between TWIP and enacted incivility towards coworkers. Therefore, hypotheses 4a and 5a were not supported.

I also examined whether there was significant variation in slopes between TPIW and enacted incivility towards coworkers across people. The -2 log likelihood ratio between the model with and the model without a random slope was significant $t(2) = 6.66, p < .05$, indicating significant slope variation. In model 4b I regressed the interaction between TPIW and emotional exhaustion and TPIW and depersonalization on enacted incivility towards coworkers. Neither interaction was significant (table 4b). Neither emotional exhaustion nor depersonalization explained significant variation in the slopes between TPIW and enacted incivility towards coworkers. Therefore, hypotheses 4c and 5c were not supported.

See table 6 for a list of the hypotheses and the outcome of each analysis.
**Enacted incivility towards patients.**

Similar to the first dependent variable, I ran a null model to examine whether there was systematic between-person variance in enacted incivility towards patients. The -2 log likelihood ratio between the model with and without the random intercept was significant, \( t(1) = 157.93, p < .001 \), indicating that the model with the random intercept was significantly better than the model without the random intercept. This suggests that there was significant intercept variation.

In model 1 (see table 5a), I entered day-level (state negative affect, experienced incivility from patients, experienced incivility from coworkers) and person-level (work setting, trait negative affect) control variables. They were all strong predictors of enacted incivility towards patients. The model explained 12.55% \((1 - 0.38/0.44)\) of the between-person variance and 13.00% \((1 - 0.38/0.43)\) of the within person variance. Additionally, the AIC and BIC decreased by 46.08 and 25.71 respectively from the null model to model 1, indicating that model 1 showed a better fit than the null model.

In model 2 (see table 5a), I regressed enacted incivility towards patients on the control variables as well as the level 1 daily predictors: TWIP and TPIW. Neither TWIP, \( t(339) = -0.68, ns \), nor TPIW, \( t(339) = 1.60 \), was significant. Therefore hypotheses 1b and 1d were not supported. The AIC and BIC increased by 10.75 and 18.87 respectively from model 1 to model 2, indicating that model 2 showed a worse fit than model 1. Nonetheless, model 2 still showed a better fit than the null model with the AIC and BIC decreasing by 35.33 and 6.84 respectively from the null model to model 2.

In model 3 (see table 5b), I regressed enacted incivility towards coworkers on the control variables, the level 1 predictors, and the level 2 predictors: emotional exhaustion and depersonalization. Hypothesis 2b was supported; emotional exhaustion significantly predicted
enacted incivility towards patients, $t(96) = 2.14, p < .05$. However, hypothesis 3b was not supported; depersonalization did not predict enacted incivility towards patients, $t(96) = .60, ns$. The AIC and BIC increased by 3.49 and 11.59 from model 2 to model 3. Although emotional exhaustion was a significant predictor, it was just marginally significant and may explain why the AIC and BIC increased. Nonetheless, these are only slight increases demonstrating comparative fit between models 2 and 3.

When comparing the null model to model 3, the AIC decreased by 31.84; however, the BIC increased slightly by 4.75. Although I predicted that depersonalization would be a significant predictor of enacted incivility towards patients, it was not. In order to test the model with increased power, I tested a rival model (model 3b; see table 5b) where depersonalization was not included as a predictor. When comparing the rival model to the null model, the BIC decreased by 4.01 (the BIC decreased from 1087.72 in the null model to 1083.71). Therefore, model 3b, the rival model, showed a better fit than the null model. It also showed a better fit than model 3.

In order to test for an interaction, there must be significant level 1 slope variation. For TWIP, the -2 log likelihood ratio between the model with the random slope and the model without the random slope was not significant, $t(2) = 3.87, ns$, indicating that the model with the random slope was not significantly better than the model without the random slope. Given that there was no level 1 slope variation, I could not examine the cross level interaction between TWIP and both burnout indicators. For TPIW, the -2 log likelihood ratio between the model with the random slope and the model without the random slope was also not significant, $t(2) = 2.61, ns$. Therefore, I also could not examine the cross level interaction between TPIW and both burnout indicators. Hypotheses 4b, 4d, 5b and 5d could not be tested.
Discussion

Although research on workplace incivility has increased in the past decade, we do not have a clear picture of its antecedents, especially at the daily level. Research has primarily focused on individual differences in the enactment of workplace incivility using cross-sectional designs. Based on qualitative data and COR theory, I attempted to address this gap in the literature by modeling both inter- and intra-individual variation in the enactment of incivility. First, I examined whether increases in time-based WPC at the daily level related to increases in enacted incivility. Second, I examined whether differences in levels of burnout (emotional exhaustion and depersonalization) between individuals related to enacted incivility, and third I examined whether burnout moderated the relationship between time-based WPC and enacted incivility.

The results of the current study revealed that a considerable portion of the variance in incivility towards coworkers and patients can be explained by both between and within-person variation. This emphasizes the need for researchers to understand the role of not only the stable, inter-individual factors that contribute to this phenomenon, but also the role of fluctuating, intra-individual factors that occur at the daily level.

The first group of hypotheses proposed that TWIP would predict enacted incivility towards coworkers (h1a) and patients (h1b), and that TPIW would predict enacted incivility towards coworkers (h1c) and patients (h1d). Hypotheses 1a and 1b were not supported. Perhaps when time devoted to work interferes with people’s personal lives, they are more likely to be amongst family and/or friends and thus are uncivil towards those people and not to coworkers or patients with whom they work. For example, while at home, an individual may need to devote
time to work matters; if a family member interrupts this person, then he/she may treat that family member uncivilly.

As expected, TPIW predicted enacted incivility towards coworkers (h1c), but it did not predict enacted incivility towards patients (h1d). It is likely that when individuals experience time pressure at work due to time spent on personal responsibilities (e.g., making personal phone calls in the middle of a shift), they are less likely to devote time to civility, and in an effort to complete their work tasks, they may behave uncivilly towards coworkers. Although TPIW may affect the way individuals interact with their coworkers, it is possible that individuals do not allow this particular stressor (TPIW) to affect the standard of care they provide and therefore they do not become uncivil when working with their patients. Interestingly, the finding that TPIW predicted enacted incivility is consistent with that of Ferguson et al. (2012) who found that family interfering with work predicted deviant behaviour (specifically production deviance).

The second group of hypotheses proposed that emotional exhaustion would predict enacted incivility towards coworkers (h2a) and patients (h2b). Unexpectedly, emotional exhaustion did not predict enacted incivility towards coworkers. However, it did predict enacted incivility towards patients. Pearson et al. (2005) proposed that when individuals lack energy, it is more difficult to be civil; however, their findings do not explicate whether this lack of energy should predict incivility towards all targets. The current study suggests that emotional exhaustion, which is characterized by lack of energy (Maslach, 2006), predicts enacted incivility towards patients but does not predict enacted incivility towards coworkers.

Burnout research stems from work in the care giving and human service occupations. Early research discovered that the provision of care can be demanding and stressful. Consequently, emotional exhaustion, the core dimension of burnout, can develop as a result of a
chronic exposure to long-term interpersonal demands with service recipients (Maslach et al., 2001). Therefore, from a classical perspective, emotional exhaustion has been related to the demands that arise from dealing with people as the object of one’s work. This can help explain why emotional exhaustion predicted uncivil behaviour towards patients, as a source of the stressful experience, but not coworkers. Coworkers, on the other hand, may in fact be a source of relief or support and therefore not a target of rudeness for participants.

The findings of the current study are consistent with findings from two prior studies that examined the relation between emotional exhaustion and enacted incivility towards service recipients. Walker (2009) and van Jaarsveld et al. (2010) both found relations between emotional exhaustion and enacted incivility towards service recipients. However, it is important to note that they did not explore the relationship between emotional exhaustion and enacted incivility towards coworkers.

The third group of hypotheses proposed that depersonalization would predict enacted incivility towards coworkers (h3a) and patients (h3b). Neither hypothesis 3a nor 3b was supported. Although it has been found that individuals high in depersonalization distance themselves emotionally from their service recipients (Demerouti et al., 2001), it did not predict incivility towards service recipients or coworkers. It is possible that depersonalization does not manifest as uncivil behaviour towards coworkers because depersonalization is an attitude that individuals form about their service recipients, and not about their coworkers.

However, it is more difficult to understand why depersonalization did not predict enacted incivility towards patients. It is possible that when care providers depersonalize their service recipients and consider them to be impersonal objects of their work (Maslach et al., 2001), these professionals fail to recognize their own uncivil behaviour. We are more likely to recognize and
remember being uncivil to a coworker, a friend, or even a patient with whom we have an interpersonal relationship. However, it would be hard to remember being uncivil to a person who, in our eyes, is only an object. Another plausible explanation could be that when employees put distance between themselves and their patients and eliminate any possibility for a relationship, they just treat them reasonably. Employees may not go the extra mile to treat their patients nicely, but they do not necessarily treat them uncivilly.

The fourth group of hypotheses proposed that emotional exhaustion would moderate the relationship between TWIP and enacted incivility towards coworkers (h4a) and patients (h4b), and TPIW and enacted incivility towards coworkers (h4c) and patients (h4d). The fifth group of hypotheses proposed that depersonalization would moderate the relationship between TWIP and enacted incivility towards coworkers (h5a) and patients (h5b), and TPIW and enacted incivility towards coworkers (h5c) and patients (h5d).

In order to test for a cross-level interaction the slope between the predictor variable and the criterion variable must significantly differ across people. The relation between TWIP and enacted incivility towards patients, and TPIW and enacted incivility towards patients did not differ significantly among participants. Therefore I could not explore the cross level interaction between TWIP and both burnout indicators and TPIW and both burnout indicators.

However, the slopes between TWIP and enacted incivility towards coworkers and TPIW and enacted incivility towards patients did differ significantly among participants, suggesting the need to examine what was explaining that significant variation. I examined the cross-level interaction between TWIP and each burnout response, and TPIW and each burnout response. Contrary to my hypotheses, neither emotional exhaustion (h4a and h4c) nor depersonalization (h5a and h5c) moderated the relations between TWIP and enacted incivility towards coworkers.
ad TPIW and enacted incivility towards coworkers. In other words, the relation between WPC and enacted incivility towards coworkers did not depend on levels of burnout. As discussed earlier, incivility is defined as low-intensity deviant behaviour with ambiguous intent to harm the target (Andersson & Pearson, 1999). A dirty look, an eye roll, or simply neglecting to acknowledge a colleague or subordinate (Pearson et al., 2005) constitutes uncivil behaviour. Given that incivility is of low-intensity, perhaps levels of burnout are not important when examining them as moderators. The experience of just one stressor on its own (in this case TWIP or TPIW) is probably enough to spark one to behave uncivilly. Therefore, when one is experiencing a stressor, such as WPC, it likely does not matter if he/she is only a little burned out or completely burned out. An individual experiencing WPC who is not burned out at all is just as likely to engage in incivility as someone else experiencing WPC who is very burned.

In sum, the results of the current study suggest that the antecedents of incivility vary depending on the target. The findings indicate that individuals are likely to treat their service recipients uncivilly when their service job is the source of their stress (as shown by the finding that emotional exhaustion predicted incivility towards service recipients but not coworkers). On the other hand, individuals are likely to treat their coworkers uncivilly when they experience stressors that stem from non-work matters, in this case TPIW.

**Theoretical Contributions**

The current study offers new insights into the antecedents of incivility using a within-persons design. Using a quantitative methodology it tested Pearson et al.’s (2004, 2005) qualitative finding that time pressure, resulting from the interference between work and personal demands, predicts enacted incivility.
Studies examining workplace incivility are typically cross-sectional or longitudinal with time lags spanning multiple years. Prior empirical research indicates that non-dispositional differences (e.g., experienced incivility, state negative affect, lack of reciprocity) predict enacted incivility; this suggests that enacted incivility is not a stable phenomenon, but one that fluctuates based on environmental factors and mood states. This study utilized a diary design to investigate how short-term fluctuations in time-based WPC relate to short-term fluctuations in enacted incivility. Indeed, results of the current study indicated that enacted incivility towards coworkers is higher on days that individuals experience higher levels of TPIW. This conclusion could not have been drawn using a between-persons design.

Results of the current study also suggest that the factors that predict incivility towards coworkers are different from the factors that predict incivility towards patients/service recipients. Specifically, TPIW was found to predict incivility towards coworkers, whereas emotional exhaustion was found to predict incivility towards patients. Overall, these findings suggest that the factors that predict incivility are likely not consistent across targets.

There are now a few studies (e.g., Harold & Holtz, 2014; van Jaarsveld et al., 2010; Walker, 2009) that have examined the relationship between experienced incivility and enacted incivility. These studies have provided some initial support for Andersson and Pearson’s (1999) incivility spiral. The current study provided further support for the relationship between experienced and enacted incivility, but at the daily level. Specifically, the results indicated that individuals are more likely to be uncivil towards coworkers on days where they experience higher levels of incivility from coworkers. Additionally, individuals are more likely to be uncivil towards service recipients on days where they experience higher levels of incivility from service recipients and coworkers. These findings are important because they suggest that the enactment
of incivility does not just differ between people who experience different levels of incivility, but that the enactment of incivility differs within individuals depending on how much incivility they have experienced on a given day.

**Implications of Qualitative Data**

Upon completion of the study participants were asked how they felt about answering the surveys every day. Out of 94 responses only three responses were negative. One individual indicated that the surveys were repetitive and boring, the second individual indicated that it was a little burdensome, and the third individual indicated that it felt like she was doing work at home. However, the remainder of the participants indicated that “it was good,” “it was not a hassle,” and “it was super easy.” Two participants even indicated that they were looking forward to completing their surveys. One person stated: “other team members were reminding me at the end of the day. We called each other to remind each other.” The other person stated: “this is something I have never done before and it opened my eyes to our relationships within our workplace, things we do that we don’t realize we are doing. For those five days, it forced me to pay attention to what’s around me and to what I’m doing.”

This sentiment was echoed when participants were asked whether the current study helped them think about how they treat others and how others treat them. For example, participants stated: “Absolutely. I never think about these things. It’s a good thing because you think about what you are doing to other people”; “For sure, you are more attentive and you are more aware of what you are doing. It made me want to be better”; “It caused me to be more aware of the feelings and competencies of my peers, to be patient, and try not to judge.” Only one comment was negative; one individual indicated that the study was not helpful: “I always like to be nice to people, especially at work.”
This qualitative data has important implications for future research and practice. It suggests that requiring participants to complete short daily surveys on topics that interest them does not necessarily contribute to greater hassles and stress at work. Because participants were able to recognize the practical benefits of completing the surveys, it did not feel burdensome. This suggests that using daily diary studies to assess constructs of relevance to employees may be less burdensome than researchers have previously thought. However, the completion of the daily surveys caused participants to monitor their behaviour, which could have affected how uncivil they were during the study period. The limitations of this will be discussed in the following section.

In regards to the practical implications, when designing workplace intervention programs practitioners may want to include quick, daily surveys that assess levels of enacted and experienced workplace incivility. The qualitative data suggests that daily surveys can aid individuals in monitoring their behaviour and may in fact reduce their tendency to be uncivil. One participant stated that she could use the surveys as an outlet: “Yes. It helped. Instead of voicing my upset to someone, I did it in the surveys.”

Limitations

As with all research, the findings of the current study must be interpreted within the context of their limitations. One of the major limitations of the current study is that all of the variables, including incivility, were assessed with self-report measures. Measuring incivility with a self-report measure can be problematic given that individuals tend to view their uncivil behaviour as well as the consequences of their uncivil behaviour differently than victims (Jex, Geimer, Clark, Guidroz, & Yugo, 2010). Perpetrators often view their actions as isolated events. They find ways to justify their behaviour and also believe that their actions have short-term
effects, if any at all. In fact, perpetrators often do not consider their behaviour to be uncivil when actually it is. Targets of negative behaviours, on the other hand, perceive such events as arbitrary, unexplainable, and unjustified (Baumeister, Stillwell, & Wotman, 1990).

In the current study, participants were asked to report the frequency with which they engaged in specific behaviours such as ignoring someone or excluding someone. It is likely that a participant may have ignored someone or excluded someone but did not interpret it that way, whereas the victim felt that he/she was ignored or excluded. These conflicting attributions can lead to misleading findings regarding the frequency of uncivil behaviour. Jex et al. suggested that victims may report a higher rate of incivility compared to perpetrators. In fact in the present study, participants reported that they experienced more incivility from coworkers ($M = 2.94$) than they enacted towards coworkers ($M = 1.70$). Similarly, participants reported that they experienced more incivility from patients ($M = 3.69$) than they enacted towards patients ($M = 1.35$). This suggests that individuals likely have difficulty recognizing the amount of incivility they enact, which may have led to type 2 errors. For example, had there been more variability in the amount of enacted incivility participants reported, significant relationships between level 1 variables (e.g., TWIP, depersonalization) and enacted incivility towards coworkers and patients may have emerged.

Another limitation associated with the use of self-report data in this particular context is that incivility is a sensitive topic. Even if participants were able to acknowledge when they were uncivil, they may have been dishonest when indicating the extent to which they enacted incivility in order to promote social desirability. Additionally, use of self-report data may have contributed to common method bias, which occurs when predictor and criterion variables are measured at the same point in time and can result in inflated relationships (Podsakoff, MacKenzie, Lee, &
Podsakoff, 2003). Originally the study was designed so that the predictor and criterion variables would be measured at different time points. However, this was not always feasible. Many participants did not have the time in the middle of their shifts to complete the mid-shift survey and as a result completed both surveys at the end of their working days.

Moreover, the qualitative data illustrated another important limitation associated with using self-report measures to assess enacted incivility. Participants indicated that as a result of survey completion they were more inclined to monitor their behaviour; therefore, during the study period they may have been less uncivil than they normally are, which would have influenced the study’s findings. This suggests that future research measuring the enactment of incivility should avoid using self-report measures.

Finally, another limitation is that Carlson et al.’s (2000) work-family conflict scale was used to assess TPIW at the daily level among a sample of participants who do shift-work. It is possible that participants had difficulty interpreting the TPIW items. For example, one item to assess TPIW states, “Today the time I am spending with my friends and family is causing me not to spend time in activities at work that could be helpful to my career.” Individuals might have interpreted the items differently from one another depending on the time of day they completed the measure. Participants who completed the TPIW scale in the middle of their shifts may have interpreted this item as inapplicable because at work it may not be physically possible to spend time with family and friends. These individuals would consequently have responded with a low score. Other participants who responded to the TPIW scale in the middle of their shifts might have interpreted the item according to whether or not they would be spending time with friends and family later on in the day. Thus, their responses would be based on an estimate of future behaviour. And yet there were still participants who completed the TPIW scale at the end of their
shift, or at the end of their day, due to lack of time in the middle of their shifts. These individuals might have based their responses on the actual time they spent with family and friends. Evidently, participants might not have interpreted the TPIW items in the same manner. This would have negative implications for the significant finding that TPIW predicted enacted incivility towards coworkers.

Furthermore, Carlson et al.’s (2000) work-family conflict scale is limited in that the items are long and double-barreled (González-Morales, Tetrick, & Ginter, 2012), which may also have influenced participants’ ability to understand the items and respond appropriately. In order to enhance item comprehensibility and to deal with double-barreled items, researchers should consider splitting the items into separate assessments (González-Morales et al., 2012). For example, participants could respond to an item at work that states, “Today I am not spending time in activities at work that could be helpful to my career.” At home, they could respond to an item that states, “Today I am spending time with friends and family.” Researchers could then assess this relationship statistically to provide an indication of work-family conflict. This is an optimal approach because it does not require participants to make causal attributions. In addition, the portion of the item related to work would be measured while one is at work, and the portion of the item related to one’s personal life would be measured after work or at home. This should result in increased comprehensibility as well as increased consistency among participants in regards to the way in which they respond to WPC items from Carlson et al.’s (2000) work-family conflict scale.

**Future Directions**

The body of research addressing the antecedents of incivility is still quite small and therefore more research in this area is needed. Results of the current study showed that enacted
incivility towards coworkers and patients can be explained not only by variation that occurs between individuals, but also by variation that occurs within individuals. Therefore, it is important to examine other potential antecedents of incivility, such as perceptions of injustice (Andersson & Pearson, 1999) at the daily level. Furthermore, although the current study provides support for the relationship between experienced and enacted incivility, it does not test the reciprocal nature of incivility between people (i.e. party A is uncivil to party B which in turn causes party B to be uncivil to party A; Andersson & Pearson, 1999). Therefore, future research should use a daily diary design to examine the spiraling nature of incivility.

Many scholars have theorized that workplace climate plays a role in enacted incivility (e.g., Estes & Wang, 2008; Pearson et al., 2000); therefore, there is a need to conduct incivility research using multilevel modeling in different organizations to examine whether workplace climate moderates the relation between predictor variables, such as experienced incivility or perceptions of injustice, and enacted incivility.

Results of the current study suggest that the predictors of workplace incivility are dependent on the target. Therefore, researchers should not only examine the different predictors of coworker- and client-targeted incivility; they should also examine different predictors of subordinate and supervisor-targeted incivility. When examining the antecedents of workplace incivility, researchers should not use measures that combine targets because it can underestimate or overestimate the true population effect (Hershcovis et al., 2007).

Moreover, the current study found that TPIW predicted enacted incivility towards coworkers. Researchers should explore the mechanisms through which this relation unfolds. Based on COR theory, it would be worthwhile to examine stress as a mediating variable in the relation between TPIW and enacted incivility towards coworkers.
In addition, future research should use multiple sources to measure incivility including other reports of enacted incivility. This will not only reduce common method bias and social desirability bias, but it will also address the issue of perception when measuring incivility from a perpetrator’s perspective. Nonetheless, regardless of who provides the incivility ratings, one of the major methodological problems in the measurement of incivility is whether to use an average score, a maximum score, or a sum score to capture levels of enacted incivility. Cortina et al.’s (2001) Workplace Incivility Scale, which is the most commonly used measure in incivility research, as well as the Straightforward Incivility Scale used in the present study (Leiter et al., 2013) consists of various discrete uncivil behaviours. In the present study, response options were provided on a scale from 0 (never) to 4 (often). An average score cannot necessarily capture the amount of enacted incivility in all scenarios. For example, if an individual responds with a 1 (rarely) to four items on the Straightforward Incivility Scale and with a 4 (often) to one item (e.g., spoke rudely to someone), his/her average score would be 1.6 (in between rarely and sometimes). The average score underestimates the frequency with which this individual was uncivil. Even though this person only engaged in one form of uncivil behaviour, he/she was uncivil often.

However, a maximum score is also flawed and may not necessarily capture the amount of incivility an individual enacts. For example, an individual who responds to four incivility items with a 0 (never) and one incivility item with a 4 (often) would receive a maximum score of 4. Similarly, an individual who responds to all five items with a 4 (often) would receive a maximum score of 4. These two people are engaging in very different amounts of incivility, but are nonetheless receiving the same score.
Although a sum score is not mathematically different from an average score, it can influence the comprehensibility of the interpretation of the results. A sum score may be best suited when assessing a construct, such as incivility, that consists of discrete behaviours that do not need to be correlated with one another.

Although a sum score may provide greater conceptual clarity regarding the amount of incivility enacted than an average score or a maximum score, there is a pressing need for researchers to determine the best method for measuring incivility.

**Practical Implications**

Incivility presents major challenges for individuals and organizations. Being a target of incivility has been related to decreased employee health and well-being (Cortina & Magley, 2004), performance (Wright & Hobfoll, 2004), and organizational productivity (Porath & Pearson, 2013). It is therefore important to determine the factors that contribute to this phenomenon. A better understanding of the factors that predict uncivil behaviour can aid in the development of intervention programs for decreasing incivility in the workplace.

Results of this study indicate the need for practitioners to design intervention programs that provide individuals with strategies to cope with TPIW and emotional exhaustion. For example, companies could implement programs that help employees achieve better work-life balance. This may help contribute to decreasing levels of workplace incivility directed at coworkers. In addition, companies could implement programs that provide their employees with positive coping skills such as relaxation, meditation, and mindfulness, which have been related to significant improvements in burnout symptoms (Mackenzie, Poulin, & Seidman-Carlson, 2006). These types of interventions may be a starting point for reducing incivility in the workplace.
Conclusion

Although the current study provides insight into the antecedents of incivility, more work is needed to fully understand the factors that predict incivility towards various targets. An in-depth understanding of the factors that cause people to engage in incivility in the workplace will enable practitioners to provide companies with evidence-based management recommendations to approach workplace incivility, which is taking a serious toll on the well-being of employees and the productivity of organizations.
References


Table 1

Summary of Data Collection

<table>
<thead>
<tr>
<th>Measures</th>
<th>Baseline</th>
<th>Middle of Shift (Daily)</th>
<th>End of Shift (Daily)</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Burnout</td>
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<tr>
<td><strong>Control Variables</strong></td>
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<td></td>
</tr>
<tr>
<td>Trait Negative Affect</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>State Negative Affect</td>
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<td></td>
</tr>
<tr>
<td>Experienced incivility from coworkers</td>
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<td></td>
</tr>
<tr>
<td>Experienced incivility from patients / clients</td>
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<td>✓</td>
<td></td>
</tr>
<tr>
<td>TWIP</td>
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<td>✓</td>
<td></td>
</tr>
<tr>
<td>TPIW</td>
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<td></td>
</tr>
<tr>
<td>Enacted incivility towards coworkers</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Enacted incivility towards patients / clients</td>
<td></td>
<td>✓</td>
<td></td>
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Table 2

Zero-order Correlations between Variables Measured at Baseline

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<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>No. items</th>
<th>Response Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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</thead>
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<tr>
<td>1. Age</td>
<td>43.90</td>
<td>10.71</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>.90</td>
<td>.30</td>
<td>1</td>
<td></td>
<td>.20*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. EE</td>
<td>3.03</td>
<td>1.52</td>
<td>9</td>
<td>1 - 7</td>
<td>-.10</td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
<td>(.93)</td>
</tr>
<tr>
<td>4. Dep</td>
<td>1.83</td>
<td>1.04</td>
<td>5</td>
<td>1 - 7</td>
<td>-.10</td>
<td>-.19</td>
<td>.62***</td>
<td></td>
<td></td>
<td>(.77)</td>
</tr>
<tr>
<td>5. Trait NA</td>
<td>1.57</td>
<td>.53</td>
<td>10</td>
<td>5</td>
<td>-.02</td>
<td>-.08</td>
<td>.60***</td>
<td>.53***</td>
<td></td>
<td>(.85)</td>
</tr>
<tr>
<td>6. PsyCap</td>
<td>5.73</td>
<td>.93</td>
<td>12</td>
<td>7</td>
<td>.02</td>
<td>-.03</td>
<td>-.27**</td>
<td>-.14</td>
<td>-.20*</td>
<td>(.90)</td>
</tr>
</tbody>
</table>

Note. EE = Emotional Exhaustion; Dep = Depersonalization; Trait NA = Trait Negative Affect; PsyCap = Psychological Capital. 

n = 101 participants. Coefficient alpha is reported on the diagonal. Gender is dummy coded 0 = males and 1 = females.

*** p < .001, ** p < .01, *p < .05
Table 3
Zero-order Correlations between Variables Measured at the Daily Level

<table>
<thead>
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<th>Variables</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
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<td>1. TWIP</td>
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<td>1.70</td>
<td>3</td>
<td>1 - 7</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(.91-.95)</td>
</tr>
<tr>
<td>2. TPIW</td>
<td>1.83</td>
<td>.94</td>
<td>3</td>
<td>1 - 7</td>
<td>.48***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(.86-.91)</td>
</tr>
<tr>
<td>3. State NA</td>
<td>1.27</td>
<td>.52</td>
<td>10</td>
<td>1 - 5</td>
<td>.31***</td>
<td>.36***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(.89-.93)</td>
</tr>
<tr>
<td>4. EI Coworkers</td>
<td>2.94</td>
<td>3.90</td>
<td>5</td>
<td>0 – 4&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td>.15**</td>
<td>.11*</td>
<td>.39***</td>
<td>(.90-.96)</td>
</tr>
<tr>
<td>5. EI Patients</td>
<td>3.69</td>
<td>4.29</td>
<td>5</td>
<td>0 – 4&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td>.19***</td>
<td>.10*</td>
<td>.30***</td>
<td>.50***</td>
</tr>
<tr>
<td>6. II Coworkers</td>
<td>1.70</td>
<td>2.70</td>
<td>5</td>
<td>0 – 4&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td>.23***</td>
<td>.25***</td>
<td>.41***</td>
<td>.64***</td>
</tr>
<tr>
<td>7. II Patients</td>
<td>1.35</td>
<td>2.32</td>
<td>5</td>
<td>0 – 4&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
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<td>.22***</td>
<td>.23***</td>
<td>.37***</td>
<td>.52***</td>
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*Note. TWIP = Time-based Work Interfering with Personal Life; TPIW = Time-based Personal Interfering with Work Life; State NA = State Negative Affect; EI Coworkers = Experienced Incivility from Coworkers; EI Patients = Experienced Incivility from Patients; II Coworkers = Instigated Incivility towards Coworkers; II Patients = Instigated Incivility towards Patients. n = 446-450 observations. Coefficient alphas were calculated by separately analyzing the internal consistency of measures of each day. The range of resulting values is reported on the diagonal.

<sup>a</sup>Enacted incivility towards coworkers and enacted incivility towards patients were each measured with 5 items on a five-point Likert scale ranging from 0-4. A sum score was used; therefore, scores could have ranged from 0 to 20 for each criterion variable.

*<i>p < .05</i>, **<i>p < .01</i>, ***<i>p < .001</i>
Table 4a

*Unstandardized Multilevel Estimates for Models (null, 1, and 2) Predicting Daily Enacted Incivility Towards Coworkers*

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*Note.* Trait NA = Trait Negative Affect; EI Coworkers = Experienced Incivility from Coworkers; TWIP = Time-based Work Interfering with Personal Life; TPIW = Time-based Personal Interfering with Work Life; EE = Emotional Exhaustion; Dep = Depersonalization * $p < .05$, ** $p < .01$, *** $p < .001$
### Table 4b

**Unstandardized Multilevel Estimates for Models (3 and 4) Predicting Daily Enacted Incivility Towards Coworkers**

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*Note.* Trait NA = Trait Negative Affect; EI Coworkers = Experienced Incivility from Coworkers; TWIP = Time-based Work Interfering with Personal Life; TPIW = Time-based Personal Interfering with Work Life; EE = Emotional Exhaustion; Dep = Depersonalization *p < .05, **p < .01, ***p < .001
### Table 5a

*Unstandardized Multilevel Estimates for Models (Null, 1, and 2) Predicting Daily Enacted Incivility Towards Patients*

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*Note. Trait NA = Trait Negative Affect; State NA = State Negative Affect; EI Patients = Experienced Incivility from Patients; EI Coworkers = Experienced Incivility from Coworkers; TWIP = Time-based Work Interfering with Personal Life; TPIW = Time-based Personal Interfering with Work Life; EE = Emotional Exhaustion; Dep = Depersonalization*

* *p < .05, ** p < .01, *** p < .001*
Table 5b

Unstandardized Multilevel Estimates for Models (3a and 3b) Predicting Daily Enacted Incivility Towards Patients

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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual variance</td>
<td>.38 (.61)</td>
<td></td>
<td></td>
<td></td>
<td>.38 (.61)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>( \sigma^2 ) (SD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Trait NA = Trait Negative Affect; State NA = State Negative Affect; EI Patients = Experienced Incivility from Patients; EI Coworkers = Experienced Incivility from Coworkers; TWIP = Time-based Work Interfering with Personal Life; TPIW = Time-based Personal Interfering with Work Life; EE = Emotional Exhaustion; Dep = Depersonalization

\*p = .05, \**p < .05, ***p < .001
### Table 6

**Summary of Hypotheses and Outcomes**

<table>
<thead>
<tr>
<th>Hypothesis Number</th>
<th>Hypothesis</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>TWIP will predict enacted incivility towards coworkers.</td>
<td>✓</td>
</tr>
<tr>
<td>1b</td>
<td>TWIP will predict enacted incivility towards service recipients/patients.</td>
<td>✓</td>
</tr>
<tr>
<td>1c</td>
<td>TPIW will predict enacted incivility towards coworkers.</td>
<td>✓</td>
</tr>
<tr>
<td>1d</td>
<td>TPIW will predict enacted incivility towards service recipients/patients.</td>
<td>✓</td>
</tr>
<tr>
<td>2a</td>
<td>Emotional exhaustion will predict enacted incivility towards coworkers.</td>
<td>✓</td>
</tr>
<tr>
<td>2b</td>
<td>Emotional exhaustion will predict enacted incivility towards service recipients/patients.</td>
<td>✓</td>
</tr>
<tr>
<td>3a</td>
<td>Depersonalization will predict enacted incivility towards coworkers.</td>
<td>✓</td>
</tr>
<tr>
<td>3b</td>
<td>Depersonalization will predict enacted incivility towards service recipients/patients.</td>
<td>✓</td>
</tr>
<tr>
<td>4a</td>
<td>Emotional exhaustion will moderate the relationship between TWIP and enacted incivility towards coworkers, such that the relationship will be stronger among individuals who are more emotionally exhausted.</td>
<td>✓</td>
</tr>
<tr>
<td>4b</td>
<td>Emotional exhaustion will moderate the relationship between TWIP and enacted incivility towards service recipients/patients, such that the relationship will be stronger among individuals who are more emotionally exhausted.</td>
<td>✓</td>
</tr>
<tr>
<td>4c</td>
<td>Emotional exhaustion will moderate the relationship between TPIW and enacted incivility towards coworkers, such that the relationship will be stronger among individuals who are more emotionally exhausted.</td>
<td>✓</td>
</tr>
<tr>
<td>4d</td>
<td>Emotional exhaustion will moderate the relationship between TPIW and enacted incivility towards service recipients/patients, such that the relationship will be stronger among individuals who are more emotionally exhausted.</td>
<td>✓</td>
</tr>
<tr>
<td>5a</td>
<td>Depersonalization will moderate the relationship between TWIP and enacted incivility towards coworkers, such that the relationship will be stronger among individuals who experience higher levels of depersonalization.</td>
<td>✓</td>
</tr>
<tr>
<td>5b</td>
<td>Depersonalization will moderate the relationship between TWIP and enacted incivility towards service recipients/patients, such that the relationship will be stronger among individuals who experience higher levels of depersonalization.</td>
<td>✓</td>
</tr>
<tr>
<td>5c</td>
<td>Depersonalization will moderate the relationship between TPIW and enacted incivility towards coworkers, such that the relationship will be stronger among individuals who experience higher levels of depersonalization.</td>
<td>✓</td>
</tr>
<tr>
<td>5d</td>
<td>Depersonalization will moderate the relationship between TPIW and enacted incivility towards service recipients/patients, such that the relationship will be stronger among individuals who experience higher levels of depersonalization.</td>
<td>✓</td>
</tr>
</tbody>
</table>
Figure 1. Hypothesis 1
Figure 2. Hypothesis 2

Figure 3. Hypothesis 3
Figure 4a. Hypotheses 4a, 4b, 5a, and 5b

Figure 4b: Hypotheses 4c, 4d, 5c, and 5d
Appendix A: Study Advertisement

R-E-S-P-E-C-T
FIND OUT WHAT IT MEANS TO ME
- Aretha Franklin

Are you treated rudely or disrespectfully in your workplace?  
Are you respectful, considerate, and courteous to others in your workplace?

The University of Guelph is conducting a study to learn about the factors that contribute to a respectful and safe workplace.

Orientation sessions will be held in groups during your working hours (this session will take around 1 hour). Participation is voluntary and confidential. If you choose to participate you will complete short surveys over a five-day period (10 minutes per day). Financial compensation will be provided for your time.
Appendix B: Letter of Information

CONSENT TO PARTICIPATE IN RESEARCH

Project Title: Respectful Workplaces Study

You are asked to participate in a research study conducted by Alexandra Chris and Dr. M. Gloria González-Morales, from the Psychology Department at the University of Guelph.

If you have any questions or concerns about the research, please feel free to contact: Alexandra Chris at achriss@uoguelph.ca or Dr. M. Gloria González-Morales at gonzalez.morales@uoguelph.ca.

PURPOSE OF THE STUDY

The purpose of this research study is to investigate the situations we encounter every day that contribute to daily uncivil, rude or disrespectful behaviours in the workplace. We will study this over a one-week time period.

PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

If you choose to participate, you will meet with the researchers at the beginning of the research for an explanatory session about the research project. During this meeting session we will describe the research, answer any questions, train you in the use of the survey technology and get you to start your participation. At this time you will also complete a baseline survey.

You can choose the type of meeting. The meeting with researchers can be:
- A group meeting session with other potential participants
- An individual meeting only with the researchers in your office or in our office at the University of Guelph.

You will be asked to respond to 1 initial baseline survey and 2 surveys per day for 5 days. Reminders will be sent by email to prompt you to answer each survey. In addition, the survey application will activate a reminder in the mobile device you are using to respond to the short surveys.

- The initial base survey will take around 30 to 45 minutes.
- Each daily survey will take approximately 5 minutes. Given that you will respond to two surveys per day (one in the middle of your shift/work day and one at the end of your shift/work day), the daily surveys will take you ten minutes per day. You will be asked to complete daily surveys for 5 consecutive days if possible.
You will begin the daily survey the day after the explanatory meeting. During this session you will be trained on how to use a daily mobile application to answer the daily surveys in your smartphone or tablet or in a tablet that you will borrow from the research team.

Upon completion of the study, we will have a debriefing meeting where we will provide you with more detail regarding the study’s purposes as well as the hypotheses of the study. We will provide you with the opportunity to ask any questions about the study. We will also ask you a few questions, which will enable us to understand how you felt about participating in the study. We will also ask you if you wish to be contacted for future research. If you do wish to be contacted in the future we will keep a record of that. This is completely voluntary.

**POTENTIAL RISKS AND DISCOMFORTS**

We do not anticipate any major risks however you may experience psychological distress due to:

1. Not finding time to answer the surveys in a given day
2. Becoming aware of negative behaviours in which you engage
3. Becoming aware of negative treatment you receive from others
4. Becoming aware of your stress levels
5. Becoming aware of conflict you experience between your work and personal lives

If you feel any discomfort or conflict, please stop answering the surveys and contact the researchers. Please remember that you can leave the study without negative consequences for you. We suggest that you do not discuss your participation in the study with your coworkers.

In order to avoid any economic or psychological risk related to the use of borrowed tablets, if you borrow a tablet from the researchers you will be able to sign a waiver declining responsibility in case of loss or damage of the equipment.

**POSSIBLE BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY**

Upon completion of the study, we will provide the participating organizations with the opportunity to participate in a workshop that addresses how to build more respectful workplaces.

This study will add to the body of knowledge and extend our understanding of respectful and disrespectful social interactions in the workplace.

**PAYMENT FOR PARTICIPATION**

You will receive monetary compensation on a sliding scale ($30 maximum) according to your number of survey responses. You will receive $5 for attending the orientation session and for completing the baseline survey. You will also receive $5 for each day you participate ($2.50 for each daily survey).

You will also be given the opportunity to choose an alternative compensation system in which the money will be donated to a charity of your choice in your name.
In addition, if you complete 60% of the surveys, you will be given 1 entry ticket for a lottery prize. If you complete 80% of the surveys, you will be given 2 entry tickets, and if you complete 90% you will be given 3 entry tickets. The lottery will consist of a $100 gift card. Chances to win will depend on how many surveys you complete and can oscillate between 1 out of 100 to 1 out of 600. You will be given lottery entry tickets with codes. An email to all participants (with blocked electronic addresses) will be sent with the winner code.

CONFIDENTIALITY

Every effort will be made to ensure confidentiality of any identifying information that is obtained in connection with this study.

Data will not be anonymous because we will need to identify and link responses from the different surveys (your survey from Monday needs to be linked to your survey on Tuesday). However data will be confidential: only the principal investigator and research assistant will have access to the identified data. In addition your individual results will not be shared with anyone in the organization, including management and coworkers.

Daily data will be collected using a mobile application called Lumi SURVEY. While data are in transit over the Internet, confidentiality cannot be guaranteed. However, in order to increase confidentiality this data will only identify participants with a unique ID that will not contain any identifying information. IP addresses will not be collected.

Baseline data will be collected using Limesurvey. The server is located within the University of Guelph. Participants will use the same confidential ID numbers only known by participants and researchers.

Computers and hard drives where data is stored are password protected. Anonymized data will be temporarily stored on mobile electronic devices, until the data is uploaded to the Lumi survey server when the electronic device is connected to internet. For this reason, mobile electronic devices will be password protected.

All results will be reported without identifying information.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind.

If you withdraw from the research project prior to completion, you will be paid for the portion of the research project you have completed.

You may exercise the option of removing your data from the study. You may also refuse to answer any questions you don’t want to answer and still remain in the study. If you want your data collected to date to be destroyed, this will be done.
RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. This study has been reviewed and received ethics clearance through the University of Guelph Research Ethics Board. If you have questions regarding your rights as a research participant, contact:

Research Ethics Coordinator
University of Guelph
437 University Centre
Guelph, ON N1G 2W1

Telephone: (519) 824-4120, ext. 56606
E-mail: sauld@uoguelph.ca
Fax: (519) 821-5236

SIGNATURE OF RESEARCH PARTICIPANT

I have read the information provided for the study “RESPECTFUL WORKPLACES” as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

______________________________
Name of Participant (please print)

______________________________
Signature of Participant

______________________________
Date
Appendix C: Debriefing Form

Project Title: Respectful Workplaces Study

The purpose of this study was to examine the factors that contribute to uncivil behaviours in the workplace. More specifically, we are interested in understanding whether burnout and work-personal life conflict contribute to workplace incivility. Workplace incivility is low intensity deviant behaviour, such as rudeness or discourtesy, which lacks a clear intent to harm (e.g., Andersson & Pearson, 1999; Cortina, Magley, Williams, & Langhout, 2001; Pearson, Andersson, & Wegner, 2001).

Incivility is highly prevalent in the workforce today. Among a sample of 126 Canadian white-collar employees, 25% reported witnessing incivility daily and 50% reported being direct targets of incivility at least once per week (Pearson & Porath, 2002). Not surprisingly, incivility is related to a number of negative outcomes for employees and organizations. Targets of incivility have reported decreased job satisfaction as well as increased turnover intentions, increased stress, anxiety, depression, and job withdrawal (Cortina et al., 2001). The effects of incivility have the potential to permeate through an organization, in turn fostering a negative workplace climate (Leiter, 2013) and ultimately hindering an organization’s ability to remain competitive (Reio & Ghosh, 2009).

Given the negative consequences associated with workplace incivility, it is imperative that researchers gain a better understanding of the factors that cause people to engage in uncivil behaviours in the workplace. There is currently very limited research examining the factors that cause people to act uncivilly. Thus, the goal of this research is to shed further light on the antecedents of workplace incivility. I am specifically examining work-personal life conflict and burnout as antecedents of workplace incivility.

I hypothesized that higher levels of work-personal life conflict and burnout would be related to higher levels of enacted incivility. We collected data on a daily basis because it enables us to investigate how short-term fluctuations in time-based work-personal life conflict relate to short-term fluctuations in enacted incivility. The enactment of incivility is not a stable phenomenon. The tendency to be uncivil fluctuates based on environmental factors and mood states. Therefore, it is important to collect daily data so that we can capture fluctuations in this behaviour.

As stated in the consent form, every effort will be made by the researchers to ensure your confidentiality. In accordance with guidelines set by the University of Guelph and the American Psychological Association, all data will be stored for five years after the findings have been published. After that time, all data will be destroyed. The data will be used for scientific purposes only and any publication of these data will not contain any identifying information.

Thank you for participating in this research. In doing so, you are helping us to better understand that factors that predispose individuals to be uncivil in the workplace. The findings of this study will be used to provide companies with evidence-based management recommendations aimed at creating civil workplaces where psychological well-being and sustainable
organizational performance are protected as suggested in the new voluntary standard for psychological health and safety in the workplace (MHCC, 2013).

We hope this has been a worthwhile learning experience for you. If you have any further questions about any aspect of this study, you may contact any of the people listed below.

Alexandra Chris, BA
Master’s student at the University of Guelph
Email: achris@uoguelph.ca
Office: Blackwood Hall 217, University of Guelph

Dr. M. Gloria González-Morales, Ph.D.
Email: gonzalez.morales@uoguelph.ca
Office: MacKinnon Extension 3002, University of Guelph

Alternatively, if you have any questions about the conduct of this study or your rights as a research participant, you may contact Sandy Auld, Director of Research Ethics at (519) 824-4120 x. 56606 or sauld@uoguelph.ca.

References


Appendix D: Detailed Instructions for Hospital Nurses

Dear Sir / Madam,

Thank you very much for expressing your interest in participating in the Respectful Workplaces study.

You can find more information about this study in the consent form, which is included in this package. The consent form contains all the necessary information for you to make an informed decision about participating in this research.

If you agree to participate, you will be asked to complete a baseline questionnaire, which should take no more than thirty minutes to complete.

You will also be asked to complete short questionnaires on 5 consecutive working days. The daily questionnaires should take approximately 5 minutes. We ask that you complete the daily questionnaires on 5 **consecutive** working days. If you have a day off within a period of 5 consecutive working days then do not complete the questionnaire on the day you have off because you will not be able to report your work experiences. (See the next page for more specific instructions regarding the procedure).

As an incentive for your participation, you will be thanked on a sliding scale according to your number of survey responses ($30 maximum). You will receive $5 for every day you participate.

As you will read in the consent form, this study is examining the factors that predict uncivil behaviours at work as well as nurses’ experiences of incivility. Incivility is low intensity deviant behaviour such as rudeness or discourtesy. It is very common and something that we all do. We understand that this is a sensitive topic. However, we ask that you answer the questions as honestly as possible. Please try to pay attention to your behaviours so that you can respond accurately.

The information you provide is highly confidential. The data you provide will not be shared with anyone. If the findings of this study are published the name of the organization in which you work will not be shared. In addition, we will only be publishing aggregated results.

Your participation is individual, confidential and voluntary and you may withdraw at any time and for any reason. If you have any questions please contact Alexandra Chris at achriss@uoguelph.ca or (519) 546-1939.

Best regards,

Alexandra Chris
STEP 1: Complete the baseline questionnaire (thirty minutes to complete)

STEP 2: Complete your daily surveys.

Start completing your daily surveys the day after you complete your baseline survey. If you complete your baseline survey on a Monday then do your first daily survey on a Tuesday. If you are not working on Tuesday, then start on Wednesday. Your daily surveys are included at the back of this package.

Each day you should complete 2 surveys (a survey in the middle of your shift and a survey at the end of your shift). We realize that it may be difficult to complete a survey in the middle of your shift. If it isn’t possible to do so then complete your middle of shift survey at the end of your shift when you complete your end of shift survey. You will not be penalized for this decision.

Please complete the surveys over a period of 5 consecutive working days. If you miss a day that is okay.

STEP 3: Complete the post-questionnaire

STEP 4: Return your package

Your package should include:

1) The consent form / signature page
2) The baseline questionnaire
3) The daily questionnaires
4) The post-questionnaire
You can return your package in two ways:

1) We have included an addressed pre-paid envelope. Feel free to drop your envelope in the mail.

2) Return your package to Jane and put your signature on the seal.

**STEP 5: Wait to hear from me over email**

After I receive your documents I will send you an email that will contain a debriefing form. I will also let you know how much you will be compensated. I will send you this money over email or I can donate this money on your behalf to a charity of your choice. In addition, I will send you raffle ticket numbers. When I have finished my data collection I will complete a draw and the winner will receive a $100 gift card.

Thank you very much for your participation!

If you have any questions feel free to get in touch with me.

**My contact information is:**

Alexandra Chris

Email: achrisk@uoguelph.ca

Phone: (519) 546-1939
Appendix E: Burnout – Baseline

Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, choose “never”. If you have had this feeling, choose the option that best describes how frequently you feel that way.

**Emotional Exhaustion**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>A few times a year or less</th>
<th>Once a month or less</th>
<th>A few times a month</th>
<th>Once a week</th>
<th>Agree A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel emotionally drained from my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel used up at the end of the workday.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel fatigued when I get up in the morning and have to face another day on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Working with people all day is really a strain for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel burned out from my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel frustrated by my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel I’m working too hard on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Working with people directly puts too much stress on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel like I’m at the end of my rope.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, choose “never”. If you have had this feeling, choose the option that best describes how frequently you feel this way.

**Depersonalization**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>A few times a year or less</th>
<th>Once a month or less</th>
<th>A few times a month</th>
<th>Once a week</th>
<th>Agree in A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I treat some patients as if they were impersonal objects.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I’ve become more callous toward people since I took this job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I worry that this job is hardening me emotionally.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I don’t really care what happens to some recipients.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel recipients blame me for some of their problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Appendix F: Work-Personal Life Conflict

Please respond to the following items based on your experience today. Please choose the appropriate response for each item.

**Time-based work-to-personal life conflict**

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree or disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Today my work is keeping me from personal activities more than I would like.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Today the time I must devote to my job keeps me from participating equally in personal responsibilities and activities.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Today I have to miss personal activities due to the amount of time I must spend on work responsibilities.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Time-based personal-to-work life conflict**

Today the time I am spending on personal responsibilities is interfering with my work responsibilities.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Today the time I am spending with my friends and family is causing me not to spend time in activities at work that could be helpful to my career.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Today I have to miss work activities due to the amount of time I must spend on personal responsibilities.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
## Appendix G: Enacted Incivility towards Coworkers and Patients

The following questions refer to the way in which **YOU HAVE TREATED** the people you work with (e.g., coworkers and supervisors)

**Today how often have you behaved in the following ways towards the people you work with?**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Moderately Often</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignored someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Excluded someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Spoke rudely to someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Behaved rudely to someone (e.g., gestures, facial expression etc.)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Behaved without consideration for someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

The following questions refer to the way in which **YOU HAVE TREATED YOUR PATIENTS/ PATIENTS’ FAMILY/ CLIENTS**

**Today how often have you behaved in the following ways towards your patients / clients at work?**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Moderately Often</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignored someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Excluded someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Spoke rudely to someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Behaved rudely to someone (e.g., gestures, facial expression etc.)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Behaved without consideration for someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix H: Experienced Incivility from Coworkers and Patients

The following questions refer to the way in which your COWORKERS AND SUPERVISORS have treated YOU.

Today how often have your coworkers and supervisors behaved in the following ways towards YOU?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Moderately Often</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignored you</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Excluded you</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Spoke rudely to you</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Behaved rudely to you (e.g., gestures, facial expression etc.)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Behaved without consideration for you</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

The following questions refer to the way in which YOU HAVE TREATED the people you work with (e.g., coworkers and supervisors).

Today how often have you behaved in the following ways towards the people you work with?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Moderately Often</th>
<th>Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignored someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Excluded someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Spoke rudely to someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Behaved rudely to someone (e.g., gestures, facial expression etc.)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Behaved without consideration for someone</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix I: Trait Negative Affect

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way generally.

<table>
<thead>
<tr>
<th></th>
<th>Very slightly or not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Guilty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Scared</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Hostile</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Irritable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ashamed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Nervous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Jittery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Afraid</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**Appendix J: State Negative Affect**

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you feel this way today.

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Very slightly or not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Guilty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Scared</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Hostile</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Irritable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ashamed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Nervous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Jittery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Afraid</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix K: Psychological Capital

Below are statements that describe how you may think about yourself generally. Use the following scale to indicate your level of agreement or disagreement with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree or disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel confident in representing my work area in meetings with management.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel confident contributing to discussions about the organization’s strategy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I feel confident presenting information to a group of colleagues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>If I should find myself in a jam at work, I could think of many ways to get out of it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Right now I see myself as being pretty successful at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I can think of many ways to reach my current work goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>At this time, I am meeting the work goals that I have set for myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I can be “on my own,” so to speak, at work if I have to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I usually take stressful things at work in stride.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I can get through difficult times at work because I’ve experienced difficulty before.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I always look on the bright side of things regarding my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>I’m optimistic about what will happen to me in the future as it pertains to work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Appendix L: Demographic Form

1. What is your participant ID?

2. What is your gender?
   - Male
   - Female
   - Other

3. What is your current age? __________

4. What is your ethnicity? __________

5. What is your current marital/partner status?
   - Single
   - In a relationship – living alone
   - In a relationship – living with partner
   - Married
   - Separated
   - Divorced

Please turn the page
6. How many children do you have?
   Age 3 and under? ________
   Between the age of 4 and 6? ________
   Between the age of 7 and 9? ________
   Between the age of 10 and 12? ________
   Between the age of 13 and 15? ________
   Between the age of 16 and 18? ________
   Age 19 and above? ________

7. If you have children, where do they live?
   ○ Children live at home full time
   ○ Children live at home part time (e.g., attend university away from home)
   ○ Children do not live at home
   ○ Some children live at home, some live out of the home
   ○ I do not have children

8. In which department, service, work unit/team do you work (e.g., hospital, nursing home, private practice, other)?
   ○ Hospital
   ○ Nursing home
   ○ Private practice
   ○ Other __________________________

9. What is your current position (e.g., nurse, doctor, personal support worker)?
   __________________________
10. How many years/months have you worked in your current position (e.g., as a nurse, doctor, or personal support worker)?
   Number of years: _________________
   Number of months (if less than a year): _________________

11. How many years/months have you worked in your current organization?
   Number of years: _________________
   Number of months (if less than a year): _________________

12. Do you have managerial responsibilities?
   ○ Yes
   ○ No

13. If you have managerial responsibilities, how many individuals do you manage?
   __________

14. What is your highest level of education?
   ○ Less than high school
   ○ High school
   ○ College
   ○ Bachelor’s
   ○ Master’s
   ○ PhD
   ○ Other. Please indicate __________

15. How many hours do you work in a normal week?
   - 20 hours or under
   - 21-30 hours
   - 31-40 hours
   - 41-50 hours
   - 51-60 hours
   - 61 hours or over

16. What is your annual salary?
   - 20,000 and under
   - 20,001 – 30,000
   - 30,001 – 40,000
   - 40,001 – 50,000
   - 50,001 – 60,000
   - 60,001 and over