WORKPLACE INCIVILITY: EXTENDING RESEARCH TO THE DAY-LEVEL

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ABSTRACT

This thesis investigates the construct of workplace incivility, a form of interpersonal mistreatment that is a prevalent phenomenon in today's organisations (Andersson & Pearson, 1999). High incidence rates, in conjunction with detrimental outcomes to both individuals and organisations and the possibility that incivility may spiral into more extreme and violent behaviour, underline the need for a better understanding of this phenomenon.

The first aim of this thesis was to extend the current between-person understanding of incivility by investigating within-person processes. The second aim was to consider the impact of incivility on health behaviours, an important research area because the known association between stressors (such as incivility) and employee ill health is likely to be mediated in part by unhealthy behaviours. The third aim of this thesis was to examine within-person differences in individuals' immediate behavioural and cognitive responses to incivility at work, and to identify factors that determine within-person differences in these responses. This is a thesis by publication. I present three papers (all under review with leading international journals), which report on the results of a diary study of 130 participants. The first paper demonstrated that daily experiences of incivility were associated with daily fluctuations in stress. The second paper reports on how incivility was significantly related to some health behaviours: fewer relaxation activities and higher consumption of unhealthy foods at the between-person level and at the within-person level. However, the latter relationships were only significant for those with low core selfevaluation. The third paper reports the analysis of immediate responses to incivility, where perceived severity of an uncivil incident significantly predicted whether or not a target engaged in negative behaviour toward the instigator, negative behaviour toward others, support seeking, and forgiveness, and the relative hierarchical status of the instigator predicted ignore/avoid responses.

To examine the role of stable individual differences in accounting for response processes, trait-based neuroticism was considered as a direct predictor of response types and as a moderator of the within-person relationships between the severity of daily incivility and daily response types. Significant between-person differences were found for both direct and moderation relationships. The thesis concludes with a summary chapter discussing the implications of these results with suggestions for future research.

CANDIDATE STATEMENT

This thesis contains material that has been submitted for publication, as follows:

Paper 1 (in Chapter 3), titled "Day-level fluctuations in stress and engagement in response to day-level workplace incivility: A diary study", has been submitted to the journal *Work & Stress*. I am the first author and my principal supervisor, Barbara Griffin, is the second author of this paper. My contribution to the research and paper was: Concept = 65%; Data collection = 100%; Data analysis = 100%; Writing = 70%; Total = 80%.

Paper 2 (in Chapter 4), titled "Workplace incivility: Extending outcomes to health behaviours" is under review with the *Journal of Occupational Health Psychology*. I am the first author and my principal supervisor, Barbara Griffin, is the second author of this paper. My contribution to the research and paper was: Concept = 65%; Data collection = 100%; Data analysis = 100%; Writing = 70%; Total = 80%.

Paper 3 (in Chapter 5), title "Appraisals of, and responses to, incivility at work: A diary study", has been submitted to the *Journal of Occupational and Organizational Psychology*. I am the first author and my principal supervisor, Barbara Griffin, is the second author of this paper. My contribution to the research and paper was: Concept = 65%; Data collection = 100%; Data analysis = 100%; Writing = 70%; Total = 80%.

Except where indicated by specific reference, the work submitted is the result of my own investigation and the views expressed are my own. No portion of the work presented has been submitted in substance for any other degree or award at this or any other university or institution. Macquarie University Human Research Ethics Committee approval was obtained for this research and all survey data was collected in line with this approval (Reference: 5201000967).

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	Larissa Beattie		
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	Barbara Griffin		

PUBLICATIONS ARISING FROM THIS THESIS

Journal Articles

- Beattie, L., & Griffin, B. (2012). Day-level fluctuations in stress and engagement in response to day-level workplace incivility: A diary study. Manuscript submitted for publication.
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- Beattie, L., & Griffin, B. (2012). Appraisals of, and responses to, incivility at work: A diary study. Manuscript submitted for publication.

Conference Papers & Posters

- Beattie, L., & Griffin, B. (2011, June). *Day-level workplace incivility: The influence of core self-evaluation and role identity in determining attribution and response*. Paper presented at the 9th Industrial and Organisational Psychology Conference, Brisbane, Australia.
- Beattie, L. (2011, November). Day-level workplace incivility: The influence of core self-evaluation and role identity in determining attribution and response. Paper presented at the Macquarie University Higher Degree Research showcase.
- Beattie, L., & Griffin, B. (2013, April). *Appraisals of, and responses to, interpersonal mistreatment at work: A diary study*. Poster presented at the 28th Annual Conference of the Society for Industrial and Organizational Psychology, Houston, Texas.
- Beattie, L., & Griffin, B. (2013, May). Day-level fluctuations in stress and engagement in response to day-level workplace incivility: A diary study. Paper presented at the 16th Annual Congress of the European Association of Work and Organizational Psychology, Münster, Germany.

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Lastly, and most importantly, I wish to thank my new husband for all the emotional support, humour, and caring he has provided in helping me get through the difficult times (i.e., enrolment all the way through to submission). I can't wait to enjoy our lives sans thesis!

CHAPTER 1:

Introduction

This thesis investigates the construct of workplace incivility, which is a form of interpersonal mistreatment. Workplace incivility is a prevalent phenomenon in many organisations (Andersson & Pearson, 1999; Pearson, Andersson, & Wegner, 2001) and a review of the literature suggests instances of incivility are on the rise (Blau & Andersson, 2005; Cortina & Magley, 2009; Johnson & Indvik, 2001; Lewis & Malecha, 2011; Pearson, Andersson, & Porath, 2000). Being treated in an uncivil manner is a significant concern because it is associated with numerous negative outcomes for both individuals and organisations, including psychological distress (Caza & Cortina, 2007; Cortina, Magley, Williams, & Langhout, 2001), reduced job satisfaction (Cortina et al., 2001), and increased voluntary turnover (Lim, Cortina, & Magley, 2008; Pearson, Andersson, & Porath, 2005). Possibly because uncivil incidents are milder than other forms of interpersonal mistreatment, such as bullying, and lack clear intent, organisations have been more likely to let such behaviours slide and not address the issue. Increasingly though, the high frequency and negative impact of incivility are being recognised in research and in workplaces.

This introductory chapter begins by defining workplace incivility, and outlining the impact and incidence of such behaviours. Gaps in the current literature are then presented, followed by the major aims of this thesis and an overview of the remaining thesis chapters. The chapter concludes with an explanation of existing research approaches, their shortfalls, and an alternate research approach used in this body of work.

Definition

Interpersonal mistreatment in the workplace is a broad construct, encompassing violence, aggression, bullying, tyranny, harassment, deviance, social undermining, and injustice. The concept of workplace incivility was introduced to account for the lesser forms

of mistreatment in organisations in which the intent to harm is ambiguous. In their seminal work, Andersson and Pearson (1999, p.457) define incivility – as it occurs within the workplace – as "low intensity deviant behaviour with the ambiguous intent to harm the target, in violation of [organisational] norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others". However, "low intensity" should not be confused with being a "minor" problem (Vickers, 2006). Uncivil behaviour manifests itself in many forms – including use of condescending tone, interruption, rude comments, unprofessional terms of address, degradation, thoughtless acts, and insinuating or negative body language (Andersson & Pearson, 1999; Cortina & Magley, 2009; Milam, Spitzmueller, & Penney, 2009) – and may spiral into increasingly intense aggressive behaviours (Andersson & Pearson, 1999; Pearson et al., 2000; Pearson et al., 2001). I discuss the contrast between workplace incivility and these other interpersonal mistreatment constructs in Chapter 2.

Impact and Incidence of Incivility

People are sensitive to violations of interpersonal norms (Mikula, Petri, & Tanzer, 1990) and being treated in an uncivil manner is associated with various poor outcomes for both individuals and organisations. Evidence indicates employees targeted with uncivil behaviour experience general psychological distress such as depression and anxiety (Caza & Cortina, 2007; Cortina et al., 2001), rumination and worry (Pearson et al., 2000), as well as increased physical health problems (Lim & Cortina, 2005; Lim, et al., 2008). At an organisational level, accumulating research findings show employees subject to incivility display reduced task performance (Pearson et al., 2000), creativity (Porath & Erez, 2007), and job satisfaction (Cortina et al., 2001). Indeed, it is estimated that incivility in the workplace can cost businesses \$14,000 a year per employee as a result of distraction with work and project delays (Pearson & Porath, 2009).

In addition to lost productivity (Burnes & Pope, 2007; Penney & Spector, 2005), organisations ultimately lose employees as a result of voluntary turnover (Lim et al., 2008; Pearson et al., 2005). These outcomes will be discussed further in Chapter 2 of this thesis.

Workplace incivility is a prevalent phenomenon in many organisations (Andersson & Pearson, 1999; Pearson et al., 2001). It may be the case that incivility is an inevitable aspect of the work environment to some degree, because people work with others who have different values, personalities, and standards for interpersonal conduct in terms of what is acceptable and what is not (Zemke, Raines, & Filipczak, 2000). However, a review of the literature suggests instances of incivility are widespread (Blau & Andersson, 2005; Johnson & Indvik, 2001; Pearson et al., 2000). For example, 71% of court employees (Cortina et al., 2001), 75% of university employees (Cortina & Magley, 2009), and 79% of law enforcement employees (Cortina, Lonsway, & Magley, 2004) reported they had encountered some form of uncivil behaviour at work in recent years, and two studies of nurses showed 85% to 91% were experiencing incivility at work (Lewis & Malecha, 2011; Sofield & Salmond, 2003).

Whilst it is claimed that incivility in the workplace is an increasing problem (Pearson et al., 2001; Pearson & Porath, 2005), it is a relatively new area of research. As a result, we cannot be sure if the incidence of uncivil behaviours is on the rise – because society is becoming less civil, for example – or if incivility (and related mistreatment constructs) is simply receiving more research attention, which may in turn be increasing employees' awareness of such behaviours. Regardless, high incidence rates in conjunction with detrimental outcomes and the possibility that incivility may spiral into more intense forms of workplace aggression – including physical violence, harassment, and intimidation (e.g., Pearson et al., 2000; Pearson, & Porath, 2004; Porath & Erez, 2007) – underline the need for a better understanding of this phenomenon.

Major Aims of this Thesis

To date, the majority of research has focused on the outcomes of incivility. Some antecedents of incivility as well as some moderators of the incivility-outcome relationship have also been considered, but there are several substantial gaps in the literature. First, existing studies – as with much of the interpersonal mistreatment literature – have been almost exclusively at a single level of analysis, examining between-person relationships. Between-person only analyses ignore possibilities such as social desirability, personality, context and other situational factors confounding relations between events and outcomes. Thus, the first major aim of this thesis was to examine within-person processes. Exposure to incivility varies from one day to the next, and so the impacts of incivility are also likely to vary from day to day. I investigated day-level relationships between incidents and outcomes, with the hypothesised relationships operating across two levels: Level 1 variables constituted within-person, day-level data, and Level 2 variables constituted between-person, individual-level or trait data. Given the nested nature of the data, multilevel modelling techniques were required (Hofmann, Griffin & Gavin, 2000). Further details about multilevel analysis are provided later in this chapter.

Second, incivility may result in other outcomes not yet examined. A growing body of research on workplace incivility demonstrates that it is associated with negative personal outcomes such as lowered wellbeing and increased physical health problems (Lim & Cortina, 2005; Lim et al., 2008). As the second major aim of this thesis, I extend those findings to include the impact of incivility on health behaviours. This is an important research area because the association between stress (such as incivility) and employee ill health is likely to be mediated, at least to some extent, by unhealthy behaviours (Ng & Jeffery, 2003). The health behaviour variables are considered at both the between- and within-person level.

Third and finally, there has been somewhat less research examining peoples' immediate responses to incidents of mistreatment in the workplace. Immediate responses to a personal offence are important because these may be mediators or moderators of the longer-term individual and organisational outcomes, which have been the major focus of existing research. Thus, the third major aim of this thesis was to examine within-person differences in individuals' immediate behavioural and cognitive responses to incivility at work. This investigation also considers different appraisals about an uncivil incident that may influence a person's subsequent behavioural and cognitive responses to incivility. Again, both between- and within-person factors are examined.

Thesis Overview

This is a thesis by publication. I present three papers, which are all under review with major international journals: *Work & Stress* (paper 1), *Journal of Occupational Health Psychology* (paper 2), and *Journal of Occupational and Organizational Psychology* (paper 3). Preceding these papers is a literature review on workplace incivility, and following these papers is a discussion drawing together the major themes of this body of work, with a conclusion. More explicitly, Chapter 2 provides a comprehensive literature review on incivility within the interpersonal mistreatment domain. In this review I discuss problems of definition and measurement, which result in a lack of conceptual clarity around interpersonal mistreatment constructs. Following this I give an overview of the theoretical models that have underpinned incivility research, and the results of incivility research to date, which has focused on the antecedents of incivility, consequences of incivility, and moderators of these relationships. Finally, I briefly discuss some of the methodological and statistical problems associated with data in this field.

Chapters 3 through 5 comprise the three papers currently under review with international journals. Each of these papers develops the literature on workplace incivility by addressing at least one of the gaps in the current literature, as outlined above. The first

paper, presented in Chapter 3, extends existent research on incivility-outcome relationships at the between-person level by using a diary design to examine the effect of uncivil workplace encounters at a within-person level. In line with the hypotheses, this initial study found that there is a significant relationship between daily incivility and daily outcomes, such as stress. This is a key finding and introduces a recurring theme throughout the empirical content of this body of work. The second paper, presented in Chapter 4, is the first study to consider the impact of incivility on employee health behaviours. Both between- and within-subject associations are investigated. In Chapter 5, attention turns to individuals' immediate responses to experiences of workplace incivility. I comment on how people immediately respond to interpersonal mistreatment (e.g., revenge, forgiveness, and support seeking) before presenting the third and final paper, which examines within-person differences in day-level responses to incivility and the relationships between targets' appraisals of critical uncivil incidents and their subsequent responses.

This thesis concludes with a final chapter that summarises the findings of all three papers, drawing together the major themes that have emerged over the progression of the research. Before reviewing the incivility literature in Chapter 2, this introductory chapter concludes with an explanation of existing research approaches, their shortfalls, and an alternate research approach used in this body of work.

Existent Research Approach and Analysis

Existing theory and research on workplace incivility has been almost exclusively at the between-person level of analysis. There are two exceptions. Lim, Cortina, and Magley (2008) investigated the effect of workgroup incivility on individual level employee well-being, and Griffin (2010) examined incivility climate (organisation level variable) on individual level intention to remain. Researchers have not yet investigated incivility at the within-person level of analysis. In addition, incivility research to date has relied heavily on cross-sectional studies, collecting data at a single point in time.

Between-person cross-sectional studies typically ask individuals on a single occasion to recall their experiences of incivility over the preceding period of time, which varies from two weeks (e.g., Kern & Grandey, 2009) to five years (e.g., Cortina et al., 2001). Although such studies have made important contributions to our understanding of the effects of incivility at work, this standard approach to measurement are problematic for several reasons. Firstly, the data are retrospective, so potentially affected by memory biases (Sato & Kawahara, 2011). Indeed, research indicates retrospective judgments can be highly inaccurate (e.g., Feldman Barrett, 1997; Robinson, Johnson, & Shields, 1998) and can be easily biased by other phenomena, such as current mood state (Schwarz & Strack, 1999), and situation-specific or identity-related beliefs (Robinson & Clore, 2002). Secondly, it requires people to summarise their experiences of incivility across a relatively long period of time, and therefore it is unknown if incivility has an immediate or only an accumulative effect. This has implications for the design of effective interventions and training aimed at minimising the impact of uncivil behaviour. Thirdly, between-person cross-sectional studies raise concerns about common-method variance, that is, variance that is attributable to the measurement method rather than to the constructs the measures represent (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Finally, the retrospective and typically crosssectional nature of the data poses questions about causality. Unique approaches to incivility measurement, including within-person investigations and longitudinal studies, are necessary to further explicate the effect of uncivil behaviour on victims.

Present Research Approach and Analysis

To address this gap, the papers in this thesis were designed as longitudinal diary studies collecting data over a 4-week period. "Diaries" provide a means to examine short-term processes and everyday experiences of working individuals. In addition to capturing within-person day-to-day fluctuations, the daily paradigm is also advantageous in terms of

predictive value, reporting accuracy, and statistical power (Gunthert, Cohen, & Armeli, 1999).

Constructs were defined at two different levels: data recorded on a daily basis (e.g., incivility, daily outcomes), constituted within-person Level 1 data, whereas data assessed in an initial survey at the beginning of the 4-week period (e.g., trait variables), constituted between-person Level 2 data. Hence, day-level data were nested within the person-level data. Multilevel theory and analysis, also known as hierarchical linear modelling, was used to analyse the data (Bryk & Raudenbush, 1992; Snijders & Bosker, 1999). For hierarchically structured data sets, multilevel analysis is superior to ordinary least square regression analysis because it does not assume independence of observations but allows for dependent observations within the higher level data structure (Snijders & Bosker, 1999). With respect to the present studies, multilevel analysis takes the dependence of day-level measurements within each person into account. The use of self-reported diary surveys still raises concerns about potential common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), which has been a problem for previous diary survey research (e.g., Sonnentag, Binnewies, & Mojza, 2008; Mojza, Sonnentag, & Bornemann, 2011). However, I centred all person-level predictor and control variables at the grand mean, and all day-level predictor and control variables at the respective person mean (cf. Judge, Ilies, & Scott, 2006). Centring day-level variables at the person mean removes all between-person variance in these variables so the direct and cross-level moderation results cannot be attributed to stable differences between persons (Bryk & Raudenbush, 1992; Ilies, Schwind, & Heller, 2007). That is, using person-centred scores in the within-person analyses eliminated the potential influence of response tendencies stemming from individual differences (e.g., negative affectivity).

I used the mixed-model procedure in SPSS for continuous dependent variables and the SPSS genlinmixed procedure for dichotomous dependent variables (Peugh & Enders, 2005).

Interaction plots were graphed using values one SD above and below the mean for the moderator, as recommended by Cohen, Cohen, West, and Aiken (2003). The same participant sample of real-world employees was used across all studies in this thesis. All the survey data were collected following approval from Macquarie University's Human Research Ethics Committee.

Because researchers have not examined incivility at the within-person level using multi-level designs, it may be that many of the previous findings are only applicable at a broad, between-person level. Before I explore new directions using longitudinal day-level data, I start by verifying that incivility had the types of effects previous studies have inferred at the between-person level. There were three main new directions in this thesis. First I examined within-person stress and engagement as outcome variables (Paper 1). Having conceptualised incivility as a fluctuating, rather than stable, phenomenon, and then establishing that daily variations in experience of incivility are linked to fluctuations in individuals' wellbeing, it justified further investigation of incivility at this level. Specifically, I examined health behaviours (Paper 2) and immediate responses to uncivil behaviour (Paper 3). Thus, this thesis offers a series of related conceptual advances all derived from the notion of incivility as a fluctuating phenomenon.

CHAPTER 2:

Literature Review On Incivility

In this chapter I review the concept of incivility within the interpersonal mistreatment domain. I start by discussing how incivility is distinct from other forms of interpersonal mistreatment, although there are problems with definition and measurement in the field, which result in a lack of conceptual clarity around the separate interpersonal mistreatment constructs. I then give an overview of the theoretical models that have underpinned incivility research: predominantly stressor-strain frameworks, the Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001b), and Affective Events Theory (AET; Weiss & Cropanzano, 1996). Following this, I detail the results of incivility research to date – specifically, the antecedents of incivility, consequences of incivility, and moderators of these relationships – before finally touching on some of the methodological and statistical problems associated with data in this field.

Distinguishing Incivility from Other Constructs

Workplace incivility is distinguished from other forms of interpersonal mistreatment examined from the target's perspective, such as bullying (e.g., Rayner, 1997), abusive supervision (e.g., Tepper, 2000), and social undermining (e.g., Duffy, Ganster, & Pagon, 2002), based on two criteria (see Figure 2.1). First, incivility is milder or lower in intensity. That is, compared with other forms of interpersonal mistreatment, incivility represents the lower end along a continuum of severity or intensity (Schat & Kelloway, 2005). In contrast, most other mistreatment constructs are not defined in terms of their intensity, though intensity may be inferred by their definition or measurement. For example, bullying can be assumed to be of higher intensity than incivility because of its persistence and frequency (Hershcovis, 2011).

Second, the intent behind acts of incivility is ambiguous. When introducing and defining incivility as a construct, Andersson and Pearson (1999) theorized that instigators may behave in an uncivil manner deliberately – as a way to harm the organisation, the target, or to benefit themselves – or they may engage in such conducts without conscious intent. This is in contrast to other more serious forms of interpersonal deviance, such as abusive supervision and bullying, where there is deliberate intent to inflict harm on the target (Hoel & Cooper, 2001; Tepper, 2000).

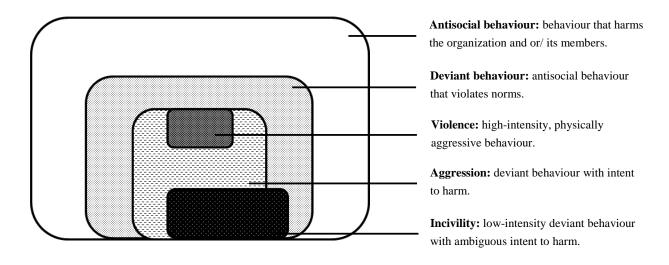


Figure 2.1: Incivility and other forms of mistreatment in organisations (adapted from Andersson & Pearson, 1999)

These key characteristics distinguish uncivil behaviour conceptually from other forms of interpersonal mistreatment. However, it has also been argued that incivility is one of several overlapping constructs – including *bullying* (e.g., Einarsen & Skogstad, 1996), *mobbing* (e.g., Leymann, 1990), *victimisation* (e.g., Aquino, Grover, Bradfield, & Allen, 1999), *abusive supervision* (e.g., Tepper, 2000), *emotional abuse* (e.g., Keashly & Harvey, 2005), *social undermining* (e.g., Duffy et al., 2002), *interpersonal conflict* (e.g., Spector & Jex, 1998), and *interpersonal aggression* (Glomb & Liao, 2003) – that fall under the broad rubric of workplace aggression (Hershcovis, 2011). While each of these constructs has distinguishing features, these differences are assumptions of the definition and

conceptualisation. Researchers have not tended to measure the factors that make these constructs different. For example, in the case of workplace incivility, operationalisation of this construct does not include any mention of the differentiating factors of intent or intensity (Raver & Barling, 2008).

Researchers in the workplace mistreatment literature have frequently debated the notion of intent. For instance, Neuman and Baron (2005) argued that when defining mistreatment from the perspective of the actor, intent is crucial. Otherwise, accidentally harmful behaviours such as being hurt by a hairdresser during a beauty procedure may be considered aggressive. Moreover, attributions of others' behavioural motivations are often flawed: observers attribute intentionality to another's behaviour only when it results in a negative outcome (Knobe, 2004), and attributions of another's intent to harm are affected by the target's personality, the perpetrator's personality, and the context (Collins, Ford, Guichard & Allard, 2006; Dasborough & Ashkanasy, 2002). On the other hand, perceived intent may be all that matters from a target's perspective because targets will interpret and react to mistreatment based on their perception, whether or not their perception is accurate. Although incivility measures purport to ask about low intensity behaviours, the items may or may not be of low intensity from the perspective of the victim. Therefore, as with other mistreatment constructs, intent and intensity are assumptions of the target and the construct. Further, the different interpersonal mistreatment scales appear to be assessing a single construct. For example, Griffin (2009) compared measures of incivility, emotional abuse, interpersonal aggression, bullying, and social undermining and found that all assess the same underlying factor. Problems with empirically differentiating theoretically distinct constructs raise questions about the utility of the distinctions.

Overall, there is presently considerable definitional, conceptual, and measurement overlap and shortcomings (Aquino & Thau, 2009; Fox & Spector, 2005), which are ongoing issues for incivility and interpersonal mistreatment research. The manner in which

researchers have differentiated mistreatment constructs has fragmented the field and this may be impeding theoretical development in a literature that largely examines the same relationships (Hershcovis & Barling, 2007; Raver & Barling, 2008). However, for the sake of my thesis I have used incivility as presently defined and measured. This is in keeping with key investigators in the field, such as Andersson, Pearson, Cortina, Magley, Porath, and Lim (e.g., Lim et al., 2008; Pearson et al., 2000).

Theoretical Models

Researchers have drawn upon several theories to underpin their studies of workplace incivility. Most commonly, incivility is conceptualised as a chronic stressor or type of daily hassle within a stressor-strain theoretical framework (e.g., Cortina, 2008; Cortina & Magley, 2009; Griffin, 2010; Lim et al., 2008; Miner, Settles, Pratt-Hyatt, & Brady, 2012; Penney & Spector, 2005). According to this theoretical justification, incivility is defined as an environmental workplace stressor that may be perceived by individuals as a threat. The transactional model of stress and coping (Lazarus & Folkman, 1984) explains this interpretive cognitive process and how it relates to peoples' responses. This model asserts that if, following a primary appraisal process, an uncivil event is deemed to be threatening (i.e., having the potential to harm personal growth or gain) or challenging (i.e., having the potential to promote personal gain or growth), the individual then assesses their cognitive, emotional, or physical resources and subsequent options for responding (secondary appraisal). Similarly, the job-stress process model presented by Spector (1998) asserts that stressors lead to negative emotions and reactions, which may be followed by reactions to the stressors, called job strains. Job strains can be classified as psychological, physical, or behavioural (Jex & Beehr, 1991). These stressor-strain frameworks explain how an apparently "mild" phenomenon can have such negative consequences.

Researchers (e.g., Cortina & Magley, 2009; Lim et al., 2008) have also frequently studied incivility within the framework of Affective Events Theory (AET; Weiss & Cropanzano, 1996). AET proposes that some work behaviours are direct reactions to employees' affective experiences at work. This theory focuses particularly on salient events in an individual's life that evoke an emotional reaction or mood change. As such, AET predicts that being treated rudely or disrespectfully is a significant event that can trigger negative emotions, which might be expressed through uncivil or deviant behaviours at work. Similarly, researchers such as Sakurai and Jex (2012) have drawn upon the Emotion-Centered Model of Work Behaviours (Spector & Fox, 2002), which suggests that people are emotionally responsive to events that occur in the workplace and negative events tend to induce negative emotions.

Alternatively, researchers (e.g., Oore et al., 2010; Sliter, Jex, Wolford, & McInnerney, 2010) have viewed incivility as a job demand within the Job Demands-Resources (JD-R) model (Demerouti et al., 2001b) or Conservation of Resources (COR) theory (Hobfoll, 1989). Job demands include those aspects of a job that require sustained psychological effort that may deplete an individual's resources. They are therefore associated with negative outcomes and psychological costs, such as the depletion of energy (i.e. a state of exhaustion) or health problems (e.g. Demerouti, Bakker, Nachreiner, & Schaufeli, 2000; Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001a; Leiter, 1993), and to negative job-related outcomes such as low employee engagement (Sonnentag, Binnewies, & Mojza, 2010). Similarly, COR encapsulates the relationship between stress and resources. Incivility, which occurs as part of the interpersonal relating that is required of any task involving more than one person, is a psychosocial job demand under the category of emotional conflict or emotional demands (Crawford, LePine, & Rich, 2010; Van den Broeck, Vansteenkiste, DeWitte, & Lens, 2008).

In addition to predicting the direct effect of stressors on negative person- and jobrelated outcomes, the stressor-strain model (Spector, 1998) and the JD-R model (Demerouti
et al., 2001b) also incorporate the concept of personal and environmental (e.g., job)
resources as moderators of the relationship. The theory purports that individuals have
different levels and types of resources and therefore react differently to the same stressors.
These moderators can either mitigate or exacerbate the strain response (e.g., Bliese & Britt,
2001).

The present body of research primarily uses the stressor-strain models and the JD-R model as the theoretical justification underpinning the work.

Consequences of Incivility

The outcomes that have been studied can be summarised under individual effects, which include psychological and physical health outcomes, and organisational effects, which include attitudes toward work, performance, organisational relationships, and financial costs. Below I detail the research findings in each of these areas. It is important to note that the negative consequences of workplace incivility extend beyond the victim to affect bystanders, workgroups, and whole organisations (Andersson & Pearson, 1999; Miner-Rubino & Cortina, 2004; 2006; Montgomery, Kane, & Vance, 2004).

Antecedents of Incivility

Antecedents to incivility are not the topic of this thesis, but a brief overview of antecedents that have been investigated is warranted for completeness. Although deleterious consequences of incivility are generally recognized in the literature, there are few studies examining variables that enable, motivate, or trigger this behaviour. Antecedents can be related to the person and include characteristics of both the instigator and the target such as personality, demographics, influence, status, and power. Alternatively, antecedents can be related to the organisation and include attitudes toward work, the environment and culture, and structural variables.

With regard to instigators and targets, the dispositional factors of Type A personality, trait aggression, hostility, power, ego, and internal competition can all motivate uncivil behaviour (Cortina et al., 2001; Hornstein, 2003; Salin, 2003). Individuals with high negative affect are also more likely to behave uncivilly (Reio & Ghosh, 2009). Conflict management style predicts frequency of workplace incivility for both instigators and targets of uncivil behaviour. People with a dominating style (i.e., those who are highly concerned with their own goals while displaying little concern for the goals of others) are more likely to both instigate and be the target of incivility. In contrast, people with an integrative style (i.e., those who seek a win–win solution to conflicts) are both less likely to instigate incivility and less likely to be targets of incivility (Trudel & Reio, 2011).

In terms of demographic variables, men (in general and younger men in particular) more frequently engage in uncivil behaviour (Pearson & Porath, 2005; Reio & Ghosh, 2009), and there is some evidence that women encounter more acts of incivility (Cortina et al., 2001). Other findings indicate that men and women are equally likely to be targets of incivility (Pearson & Porath, 2005), but regardless, both men and women are equally negatively impacted by these acts (Cortina et al., 2001). In terms of influence and power, leaders who are less competent or lack knowledge can trigger uncivil behaviour, as can an absence of communication (Berger, 2000). In addition, insufficient assertiveness from leaders can motivate incivility (Alexander-Snow, 2004). Similarly, individuals that are viewed as less competent are more likely to be targets of incivility (Berger, 2000).

In terms of organisational antecedents, Blau and Andersson (2005) found people with higher job satisfaction were less likely to instigate workplace incivility, while those who reported high work exhaustion were more likely to behave uncivilly. People who do not establish relationships with co-workers and supervisors are also more likely to engage in uncivil acts (Reio & Ghosh, 2009). Lower perceived job security and perceptions of distributive justice are characteristics of an environment that is conducive to workplace

incivility (Blau & Andersson, 2005). Other environmental and structural antecedents cited are an anxious work climate and difficult working conditions, downsizing, restructuring, organisational change, and globalisation (Andersson & Pearson, 1999; Blau & Andersson, 2005; Muir, 2000; Rau-Foster, 2004; Vickers, 2006). More transient workplaces – as a result of corporate plans to rearrange, recast, or reduce the workforce – may make long-standing norms and values irrelevant (Pearson & Porath, 2004).

Some antecedents of workplace incivility are also outcomes of this behaviour. These bi-directional pathways may explain how a cycle, or spiral, of incivility begins. For example, the experience of stress may cause an individual to be uncivil, and consequences of being uncivil can elicit more stress, which then triggers further uncivil behaviours. If a number of individuals within a team or organisation are experiencing negative work attitudes, the potential for an uncivil exchange, a secondary spiral, or escalation to more aggressive behaviours may be even greater (Andersson & Pearson, 1999; Pearson et al., 2000). However, this thesis focuses predominantly on one part of these potential spirals – the consequences of incivility.

Individual Outcomes

Psychological Health

Results of between-person cross-sectional studies suggest that being treated uncivilly is damaging to a person's identity and psychological well-being. Experiences of incivility trigger negative mood, anger, fear, cognitive distraction, damage to one's social identity, and a decrease in psychological health (e.g., Andersson & Pearson, 1999; Barling, Weber, & Kelloway, 1996; Barling, Rogers, & Kelloway, 2001; Cortina et al., 2001; Lim & Cortina, 2005; Miner-Rubino & Cortina, 2004). Similarly, Cortina, Magley, Williams, and Langhout (2001) found frequent uncivil workplace incidents led to higher psychological distress, with victims of incivility experiencing feelings of anxiety, depression, nervousness, and sadness. Several studies have also linked face-to-face incivility with greater levels of burnout (Kern

& Grandey, 2009; Spence Laschinger, Leiter, Day, & Gilin, 2009; van Jaarsveld, Walker, & Skarlicki, 2010). Psychological conditions such as stress, depression, and anxiety can hurt organisations through performance and productivity declines (e.g., Baba, Jamal, & Tourigny, 1998; Cartwright & Cooper, 1997), decreases in job satisfaction, job involvement, and organisational commitment (e.g., Baba et al., 1998; Smither, 1998), by being late or absent (e.g., Baba et al., 1998), or sick and making health compensation claims (e.g., Cartwright & Cooper, 1997; Smither, 1998), and voluntary turnover (e.g., Baba et al., 1998).

Physical Health

In addition to employees' mental health, their physical health has been shown to be negatively impacted by incivility. Several researchers have reported that experiences of incivility at work result in a decrease in workers' perceived physical health (Cortina et. al., 2001; Lim & Cortina, 2005; Reio & Ghosh, 2009). Workplace incivility has also been found to be a precursor of more intense, overtly aggressive acts in the workplace such as bullying and violence (Andersson & Pearson, 1999; Baron & Neuman, 1996), which can severely damage victim's physical health (Mikkelsen & Einarsen, 2002; Zapf, Knorz, & Kulla, 1996). Existing research has not considered *how* incivility results in negative physical health outcomes. Unhealthy behaviours and habits are closely related to illnesses and mortality rates (Breslow & Enstrom, 1980) and may moderate the association between stress and disease (Ng & Jeffery, 2003). Thus, the second paper presented in this thesis considers the role incivility might play in inhibiting positive health behaviours or promoting negative ones.

Organisation Outcomes

Attitudes Toward Work

Job Satisfaction. One of the most widely cited outcomes of uncivil workplace behaviour is the reduction of employee job satisfaction. Numerous researchers have found that uncivil workplace experiences, such as interpersonal conflict, can serve as a stressor

that negatively affects job satisfaction (Chen & Spector, 1992; Cortina et al., 2001; Pearson & Porath, 2004; Penney & Spector, 2005; Reio & Ghosh, 2009). Job satisfaction is an important variable because of its relationship with critical business outcomes, including absenteeism, intention to leave, turnover, organisational citizenship behaviour, and counterproductive workplace behaviours (see for example Organ & Ryan, 1995; Spector, 1997; Tett & Meyer, 1993), and employee and organisational learning (Rowden & Conine, 2005).

Organisational Commitment and Turnover. Pearson and colleagues reported that at least one-third of employees who experienced incivility at work subsequently reported lower organisational commitment (Pearson, 1999; Pearson et al., 2000). Similarly, after experiencing incivility in the workplace, employees are thought to place less importance on the role of work and more importance on other roles in their life (Cortina et al., 2001). Another frequently cited – and costly – outcome of workplace incivility is employee turnover intentions and rates. Studies have found that as a result of incivility, 12% of employees left the organisation to avoid working with the instigator (Pearson, 1999; Pearson et al., 2000). Moreover, as incivility becomes more frequent, turnover intentions increase (Cortina et al., 2001; Griffin, 2010).

Performance Outcomes

Performance outcomes of incivility include reduced productivity and increased counter-productive workplace behaviours. Pearson (1999) found that 53% of participants reported losing work time worrying about an uncivil encounter and about possible future interactions with the instigator, and a number of studies have demonstrated reductions in productivity as a result of workplace incivility (e.g., Andersson & Pearson, 1999; Pearson et al., 2000; Pearson & Porath, 2005). Moreover, 25-50% of employees are thought to intentionally withhold their efforts on the job following uncivil encounters (Buhler, 2003; Pearson et al., 2000). Lastly, in response to incivility, some employees admit to stealing

property from the instigator (~5%) and/ or from the organisation (~5%) (Pearson et al., 2000).

Organisational Relationships

Employee Interactions. Incivility has been shown to reduce a person's satisfaction with their co-workers. For example, co-worker satisfaction is negatively related to the uncivil behaviours of exclusionary behaviour and gossip (Martin & Hine, 2005). Further, being treated uncivilly can cause alienation and isolation, which is demoralising and damages the person's sense of belonging (Hornstein, 2003; Pearson et al., 2001; Vickers, 2006). Again, researchers noted that this type of behaviour can lead to physical violence (Hornstein, 2003; Pearson et al., 2001). Given the collaborative nature of many work teams and project teams, employee relationships are likely to be important to the effective functioning of an organisation.

Organisational Climate. Uncivil behaviour can negatively affect organisational culture (Pearson & Porath, 2005), and contribute to an organisational climate of incivility (Andersson & Pearson, 1999). Deterioration in climate can result from multiple factors, for example, experiences of incivility at work lead to perceived injustice (Barling et al., 1996; Barling et al., 2001), or employees may model their behaviour on instigators, especially if the act goes unpunished (Pearson & Porath, 2005). Left unchecked, incivility may become pervasive throughout the entire organisation due to the spiralling effect (Pearson et al., 2000). This negative work climate may even create an emotionally unsafe work environment for employees (Berger, 2000). Moreover, such environments are not conducive to employee learning and development (Reio & Ghosh, 2009). For example, incivility may negatively affect employee attitudes and the application of learning, or a negative supervisor-staff relationship may equate to a lack of vital support for training and development activities or the application of what was learned (Gregoire, Propp, & Poertner, 1998).

Financial Costs

The negative individual and organisational outcomes of workplace incivility carry substantial financial costs – both measurable and hidden. It is estimated that incivility in the workplace can cost businesses \$14,000 a year per employee as a result of distraction with work and project delays (Pearson & Porath, 2009). Stress-related illness, specifically depression, due to workplace bullying, a related construct, was estimated to cost organisations in Australia \$673.61 million in 2009 (McTernan & Dollard, under review, cited in Dollard et al., 2011). Econtech (2008) estimates that stress-related lost productivity costs Australia around \$14.8 billion annually or 1.78% of GDP, and approximately one third of stress claims across a variety of industries are a result of workplace bullying (Earnshaw & Cooper, 1996). Loss of profit is another organisational cost resulting from incivility (Andersson & Pearson, 1999). An example of a hidden cost for organisations is the amount of time that management spends away from typical duties to attend to issues of incivility. Pearson and Porath (2005) reported that senior leaders spend as much as 13% of their time, which equates to approximately 7 weeks a year, on mediating and resolving cases of incivility.

Moderating the Effect of Incivility

In addition to predicting the direct effect of incivility on person- and job-related outcomes, variables that moderate these incident-outcome relationships have been considered. Researchers agree that both person and environment variables are likely to make a contribution in predicting behaviour (Penney & Spector, 2005) and influencing individuals' behavioural reactions to aversive workplace events such as incivility (Fox & Spector, 1999). Importantly, the concept of environmental and personal resources as moderators fits within the theoretical frameworks detailed above. Specifically, individuals have different levels and types of resources and therefore react differently to the same stressors: individuals who have more coping resources are projected to be less affected when facing stressful events

than those with fewer resources (e.g., Bliese & Britt, 2001; Hobfoll, 2002; Seligman & Csikszentmihalyi, 2000).

Recent investigations on the possible buffers of the negative consequences associated with incivility have considered both environmental and personal resources. For example, Miner, Settles, Pratt-Hyatt, and Brady (2012) examined the moderating effects of social support in reducing the negative impact of incivility and found people who experienced higher levels of incivility reported better outcomes when they felt emotionally and organisationally supported. In terms of personal resources, Penney and Spector (2005) considered the role of negative affectivity as a moderator of the relationship between job stressors (including incivility) and counterproductive work behaviour (CWB) and concluded the relationships between job stressors and CWB were stronger for individuals high in negative affectivity. Moreover, higher levels of core self-evaluation (CSE; Judge, 2009) — an individual difference variable that represents the fundamental appraisals individuals make about their self-worth and capabilities — have been shown to moderate the negative influence of social stressors on job satisfaction and turnover intention (Harris, Harvey, & Kacmar, 2009).

The multi-level design of the current research means environmental and personal resources, which are perceptions of an individual or an individual characteristic and so sit at the between-person level, will act as cross-level moderators of the within-person relationships (Davison, Kwak, Seo, & Choi, 2002). The present body of work advances previous interpersonal mistreatment research, which has typically examined interaction effects at a single level, by examining personal and job-related resources as cross-level moderators of the within-person incivility-outcome relationships. This is consistent with recent multilevel trends in the organisational sciences (e.g., Klein & Kozlowski, 2000), attending to influences at the level of the individual, the organisation, and society.

Methodological and Statistical Issues

A common finding in research on incivility – and other interpersonal mistreatment constructs – is that the incidence or frequency of these behaviours is highly skewed in a positive direction (e.g., Miner et al., 2012; Miner-Rubino & Reed, 2010; Penney & Spector, 2005). Even though this result is typical, it is often not addressed. The studies in this thesis correct for the skewed nature of the incivility data by normalising the scores using a square-root transformation. This overcomes of the problem of using non-normal data in analyses that require normality as one of their assumptions.

Another shortfall of current research methodology is the assessment tools available to assess the incivility process. As discussed in Chapter 1, self-report surveys dominate the assessment of interpersonal mistreatment. Because individual perceptions are so important within the psychology of the incivility and stress process, this emphasis is understandable. However, the dynamics of the incivility and stress processes require multiple measurement approaches including ratings by people other than the target or instigator, such as coworkers and family members (e.g., Sonnentag & Kruel, 2006); observational and participative methods (e.g., Rutledge et al., 2009); discourse analysis (e.g., Harkness et al., 2005), which could be used to investigate cyber-incivility, for example; archival data, such as performance measures and absentee records; and experiments. Lastly, the use of aggregated ratings would have enabled properties at the team and organisational level to be assessed (e.g., Griffin, 2010; Lim et al., 2008). Like past research, the studies in this thesis use self-report surveys, albeit longitudinal and focused on the day-level. As detailed in Chapter 1, day-level diary studies provide high temporal resolution and a means to examine short-term processes and everyday experiences of working individuals. The daily paradigm also addresses the potential problem of retrospective ratings, which could be subject to memory flaws (Bolger, Davis, & Rafaeli, 2003), and is advantageous in terms of predictive value and statistical power (Gunthert, Cohen, & Armeli, 1999).

Workplace incivility: Extending research to the day-level

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Workplace incivility: Extending research to the day-level

CHAPTER 3:

Extending the Literature to Consider Within-Person Outcomes of Incivility

The first paper presented uses a diary design to consider the outcomes of incivility on a day-to-day basis, and thereby address the first major aim of this thesis. To date, studies of incivility – as with much of the interpersonal mistreatment literature – have been almost exclusively at a single level of analysis, examining the broader outcomes of incivility at the between-person level. The within-person, day-level outcome variables examined in this first paper are stress and work engagement.

This study also investigates whether between-person factors moderate the relationship between incivility and negative outcomes at the within-person level. The moderating factors considered are perceived supervisor support (a job resource) and core self-evaluation (a personal resource). The hypotheses of the study, which operate across two levels, can be summarised in Figure 3.1. In line with the hypotheses, this research found that there is a significant relationship between daily incivility and daily outcomes, namely stress and engagement. This is a key finding and introduces a recurring theme throughout the empirical content of this body of work.

The paper is currently in a third stage of review with the journal *Work & Stress*, following requests to "revise and resubmit". I am the first author and my principal supervisor, Barbara Griffin, is the second author of this paper. My contribution to the research and paper was: Concept = 65%; Data collection = 100%; Data analysis = 100%; Writing = 70%; Total = 80%.

An adapted version of this paper was accepted and presented at the 16th Annual Congress of the European Association of Work and Organizational Psychology, held in Münster, Germany in May 2013.

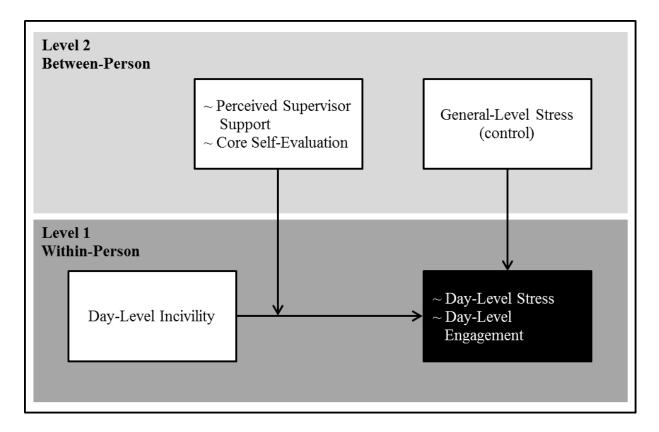


Figure 3.1: Examining the relationships between incivility and outcomes at the day-level.

Paper 1:

Day-level fluctuations in stress and engagement in response to day-level

workplace incivility: A diary study

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This study extends incivility research, which has focused on between-person relationships,

by using a diary design to examine the effect of experiences of incivility at work on stress

and engagement at a within-person level. Data were collected from 130 security employees

invited to complete two diary surveys per week over four consecutive weeks (a total of eight

day-level surveys), and analysed with multilevel modelling. Participants had higher stress

on the days they experienced more incivility but high supervisor support reduced this effect.

However a negative relationship between incivility and daily engagement was only

significant for those with low core self-evaluation. The results are discussed in terms of their

implications for interventions aimed at reducing the negative effects of workplace incivility.

Keywords: incivility; stress; engagement; diary study.

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Incivility, or rude and discourteous behaviour, is a particularly pervasive form of antisocial conduct in the workplace (Cortina, 2008), with significant numbers of employees reporting personal experiences of incivility. Meta-analytic results (Hershcovis, 2011) highlight the negative impact of such experiences. However, the existing theory and research on incivility has been almost exclusively cross-sectional and at the between-person level of analysis. The current study is the first to apply diary survey methodology to the problem of incivility in order to establish whether daily experience is linked to within-person fluctuations in well-being and work attitudes. Extending current knowledge to an understanding of the short-term processes involved in the everyday uncivil experiences of working individuals, and in doing so providing evidence of causality, is a significant contribution.

Incivility research to date has typically asked individuals to remember and reflect on their experiences over the preceding period of time, which varies from two weeks (e.g., Kern & Grandey, 2009) to five years (e.g., Cortina, Magley, Williams, & Langhout, 2001). Despite providing useful information on the effects of incivility at work, this standard approach is not without problems. First, the data are retrospective so potentially affected by memory biases (Sato & Kawahara, 2011); second, it requires people to summarise their experiences of incivility across a relatively long period of time, and therefore it is unknown if incivility has an immediate or only an accumulative effect; and third, the retrospective and typically cross-sectional nature of the data poses questions about causality. Our use of the diary paradigm addresses these issues, with advantages in terms of predictive value, reporting accuracy, and statistical power (Gunthert, Cohen, & Armeli, 1999).

Consequences of incivility

A review of the literature suggests incivility is widespread. For example, 71% of court employees (Cortina et al., 2001), 75% of university employees (Cortina & Magley, 2009), and 79% of law enforcement employees (Cortina, Lonsway, & Magley, 2004) reported they

had encountered some form of uncivil behaviour at work in recent years, while 85% to 91% of nurses experienced incivility at work (Lewis & Malecha, 2011; Sofield & Salmond, 2003).

Although subtle and lacking a clear intent to harm (Andersson & Pearson, 1999), uncivil behaviour nevertheless violates social norms for respect that exist within an organisation and has been associated with negative person-related and job-related consequences when studied at the between-person level. Employees targeted with uncivil behaviour experience general psychological distress, depression and anxiety (Caza & Cortina, 2007; Cortina et al., 2001) and rumination and worry (Pearson, Andersson & Porath, 2000), as well as increased physical health problems (Lim, Cortina, & Magley, 2008). Job-related outcomes include greater job stress (Cortina, 2008), reduced task performance (Pearson et al., 2000), creativity (Porath & Erez, 2007), and job satisfaction (Cortina et al., 2001), and higher turnover (Pearson, Andersson & Porath, 2005).

Theoretical background

The Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001b) explains how negative emotions and reactions occur as a consequence of certain work conditions. The model posits that regardless of the job, work characteristics can be categorised as either job demands or job resources (Demerouti et al., 2001b; Schaufeli & Bakker, 2004). Job demands refer to those physical, psychological, social, or organisational aspects of a job that require sustained physiological and/or psychological effort. According to the JD-R model, an employee must expend physical and psychological effort in order to cope in the presence of job demands. This effort triggers a health impairment process as the person exhausts or depletes their mental and emotional resources. Exhaustion of resources overtaxes the individual leading to negative personal and jobrelated outcomes. Empirical support for this process includes a significant relationship between job demands and exhaustion and health problems (Demerouti, Bakker, Nachreiner,

& Schaufeli, 2000; Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001a) and low engagement (Sonnentag, Binnewies, & Mojza, 2010). Incivility, which occurs as part of the interpersonal relating that is required of any task involving more than one person, is a psychosocial job demand under the category of emotional conflict or emotional demands (Crawford, LePine, & Rich, 2010; Van den Broeck, Vansteenkiste, DeWitte, & Lens, 2008). Therefore, coping with incivility is likely to deplete the victim's emotional resources – through sympathetic activation and increased subjective effort (Bakker & Demerouti, 2007) – with subsequent psychological costs. The current paper examines individual stress and work engagement as potential within-person outcomes of incivility.

Workplace stress, which has been associated with incivility at a between-person level (e.g. Caza & Cortina, 2007), is defined as the change in one's physical or mental state in response to situations (stressors) that pose an appraised threat to that employee (Zimbardo, Weber, & Johnson, 2003). Accumulation of employee stress is associated with anxiety (Spector, Chen, & O'Connell, 2000), depression (Garst, Frese, & Molenaar, 2000), job dissatisfaction (Jex & Bliese, 1999), burnout (Barling & MacIntyre, 1993; Kim & Stoner, 2008), cognitive impairment (Stawski, Sliwinski, & Smyth, 2009), and maladaptive behaviours such as alcohol use (Liu, Wang, Zhan, & Shi, 2009). In addition, high workplace stress has a negative impact on organisations, including lower productivity, increased absenteeism, increased organisational dysfunction (Levin-Epstein, 2002), accidents (Cooper & Cartwright, 1994), and turnover (Kim & Stoner, 2008).

Work engagement, less frequently studied in relation to incivility but an important job-related outcome, is defined as a positive, fulfilling work-related state of mind characterized by vigour, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). High engagement is related to positive work affect (Rothbard, 2001) and organisational commitment (Demerouti et al. 2001a). It also positively affects employee performance (Bakker & Demerouti, 2008). A recent study (Chen et al., in press) used self-

enhancement theory (Pfeffer & Fong, 2005) to further explain the effect of incivility on engagement. This theory posits that people will seek contexts where they can maintain a positive self-view and withdraw from contexts where their view of self is under threat. Clearly, incivility threatens one's self-image and sense of competence, value and worth, which then reduces desire to invest in work-related activities.

However, researchers have shown that processes between persons do not necessarily correspond to processes within persons (Affleck, Zautra, Tennen, & Armeli, 1999) and therefore a within-person study is an important extension to the existing incivility research. Experience sampling studies demonstrate that there are substantial intra-individual variations in person- and job-related affective experiences (Fisher, 2000). The current study examines whether or not this type of fluctuation in daily levels of individual stress and work engagement can be attributed to daily experiences of incivility.

There is a growing body of evidence demonstrating that stress shows intra-individual variation and fluctuates from one day to the other, which has in turn been linked to a person's daily experience of negative events (e.g., Almeida, 2005; Stawski, Sliwinski, Almeida, & Smyth, 2008). Work engagement also shows intra-individual variation and fluctuates from one day to the other. For example, Sonnentag (2003) showed that at least 40% of the variance in work engagement was attributable to within-person variation, suggesting engagement is not completely stable over time. It is therefore possible that the psychological cost of dealing with job demands such as incivility, as described by the JD-R model, might be manifest within a relatively short period, affecting individuals on a daily basis.

Hypothesis 1a: Individuals will have higher stress on days when they experience incivility compared to days when they are not treated uncivilly.

Hypothesis 1b: Individuals will have lower engagement on days when they experience incivility compared to days when they are not treated uncivilly.

Moderating job- and person-related resources

In addition to the main effects of job demands, the JD-R model proposes that the interaction between job demands and job resources is important for the development of job strain and motivation. Specifically, job resources are motivational processes, including physical, psychological, social, or organisational aspects of the job, that reduce the effect of job demands and their associated physiological and psychological costs (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Bakker & Demerouti, 2007). The moderating role of job resources on the job demand-strain relationship has been demonstrated empirically (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). The JD-R model has also been extended to include personal resources (as distinct from job resources) as potential moderators (e.g., Sonnentag et al., 2010). Personal resources are relatively stable dispositional characteristics including personality, attitudinal, and cognitive factors that provide the psychological context for coping (Moos & Billings, 1982). In the current study we examine one job resource (supervisor support) and one personal resource (core self-evaluation).

There have been some recent investigations on the possible buffers of the negative consequences associated with incivility. For example, Miner, Settles, Pratt-Hyatt, and Brady, (2012) considered the moderating effects of social support in reducing the negative impact of incivility and found people who experienced higher levels of incivility reported better outcomes when they felt emotionally and organisationally supported. Similarly, Penney and Spector (2005) considered the role of negative affectivity as a moderator of the relationship between job stressors (including incivility) and counterproductive work behaviour (CWB) and concluded the relationships between job stressors and CWB were stronger for individuals high in negative affectivity.

The second part of our study advances previous research by examining personal and job-related resources as cross-level moderators of the within-person incivility-outcome relationships.

Job resource: perceived supervisor support

Perceived supervisor support (PSS) describes the general view employees develop concerning the degree to which their supervisor values their contributions and cares about their well-being (Kottke & Sharafinski, 1988). Those who perceive their supervisor as supportive may be better able to redefine an uncivil incident in a way they perceive to be less harmful and within their ability to cope, or use this resource to mitigate the usual negative outcomes of such an event. The protective role of PSS is likely to result because it communicates to targets that they are valued and accepted despite the way they have been treated in a particular incident. In terms of the self-enhancement model referred to previously (Chen et al., in press), PSS would act to maintain one's positive view of self despite the threat posed by incivility.

Having a supportive supervisor has been found to be more effective in reducing one's work stress compared to receiving support from one's co-workers or other sources (Frese, 1999). For example, it has been shown to buffer the negative effect of student misbehaviour on engagement (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007), of job stress on job satisfaction (Wong, Cheuk, & Rosen, 2000), and of work-family conflict on psychological strain (O'Driscoll et al., 2003). The current study extends this to examine the ability of PSS to moderate within-person variability in daily stress and engagement in response to daily incivility.

Personal resource: core self-evaluation

Core self-evaluation (CSE) is an individual difference variable encompassing self-esteem, self-efficacy, locus of control, and high emotional stability (Judge, 2009).

Individuals with high core self-evaluations appraise themselves in a consistently positive

manner across situations, perceiving themselves as worthy, capable, and in control of their lives (Judge, van Vianen, & de Pater, 2004). These enduring beliefs reflect key components of the person's view of the world and their ability to function successfully in that world, and therefore considered an especially salient personal resource in shaping reactions to stressful events (Cozzarelli, 1993).

Subjective self-appraisals have been demonstrated to be important in the stress process because stress reactions are likely to be more profound when individuals believe they do not have sufficient personal resources to cope with threats (Fleishman, 1984; Kobasa, 1979; Lee & Ashforth, 1996). The approach/avoidance theoretical framework (Elliot & Thrash, 2002) has been applied to explaining CSE, with the suggestion by Ferris et al., (2011) that those with high levels of CSE have a strong approach temperament (sensitive to positive stimuli) and weak avoidance temperament (insensitive to negative stimuli). Because of this insensitivity to negative input, high CSE individuals would be less likely to be influenced by incivility.

Overall, individuals with high CSE are more likely to believe that they can meet the requirements of the job despite the presence of stressors (Jex, Bliese, Buzzell, & Primeau, 2001), whereas individuals who are lower in CSE strive to avoid threats (Srivastava, Locke, Judge, & Adams, 2010) and may perceive stressors as more overwhelming. Higher CSEs have been shown to moderate the negative influence of social stressors on job satisfaction and turnover intention (Harris, Harvey, & Kacmar, 2009). The current study contributes to the existing literature by examining the cross-level moderating impact of CSE on the within-person relationship between incivility and job-related and person-related outcomes.

Hypothesis 2a: There will be weaker relationships between incivility and daily stress for those with high levels of supervisor support compared to those with low levels of support.

Hypothesis 2b: There will be weaker relationships between incivility and daily engagement for those with high levels of supervisor support compared to those with low levels of support.

Hypothesis 2c: There will be weaker relationships between incivility and daily stress for those with high CSE compared to those with low CSE.

Hypothesis 2d: There will be weaker relationships between incivility and daily engagement for those with high CSE compared to those with low CSE.

Method

Participants

Participants were employees of a security company undertaking customer service, screening, and administrative roles either in field locations or in the corporate head office. Of the 323 participants who answered the initial survey, 130 completed at least one of the eight diary surveys. The numbers completing each of the eight diary surveys are reported in Table 1. On completion of the diary surveys, participants were given the opportunity to enter a prize draw. Of the diary survey participants, 60.8% were male, 35.4% female, and 3.9% did not specify gender. Participants were aged between 19 and 69 years (M = 42.84, SD = .42) and had been employed at the company between 3 months and 20 years (M = 4.43, SD = .13).

[Insert Table 1 about here]

Design

This research was designed as a longitudinal diary study, with two types of data collected. Between-person (Level 2) data were collected from an initial survey of demographic, work, and individual attitude measures. Following this, within-person (Level 1) data were collected using "diary surveys". Participants were asked to complete a total of eight daily surveys, which measured incivility, stress, and engagement experienced on the day. Two diary surveys were completed per week over four consecutive weeks, each shortly

after finishing work for the day. As recommended for this methodology (Ohly, Sonnentag, Niessen, & Zapf, 2010), participants were sent a text message or email each week reminding them to complete their surveys.

Measures

Incivility

Level 2 (between-person) incivility was measured in the initial survey using the Workplace Incivility Scale (WIS; Cortina et al., 2001). The WIS is a seven-item, psychometrically sound, general measure of workplace incivility (Martin & Hine, 2005). Responses to items asking how frequently participants experienced uncivil behaviour (e.g. "Put you down or was condescending to you") over the previous 12 months were recorded on a 5-point frequency scale, ranging from 1 (never) to 5 (very often). The mean of the items (α = .93) provided a retrospective baseline level of incivility during the last 12 months.

Level 1 (daily) incivility was measured in the diary surveys with 20 items from the Interpersonal Treatment at Work Scale (Burnfield, Clark, Devendorf, & Jex, 2004) and the Uncivil Workplace Behaviour Questionnaire (Martin & Hine, 2005), for example "Spoke to you in an aggressive tone of voice", "Blamed you or others for their mistakes", "Not consulted you when you should have been involved". Participants were asked to indicate whether they had experienced any such encounters at work that day on a "yes" or "no" scale. The number of affirmative responses was summed to give a daily incivility score.

Outcomes

Stress. The seven-item stress subscale of the short version of the Depression Anxiety Stress Scale (DASS 21; Lovibond & Lovibond, 1995) was used to measure both Level 2 (general) and Level 1 (daily) stress. The DASS captures distress, tension, irritability, and the self-reported tendency to overreact to stressful events. The items included "I found it hard to wind down" and "I tended to over-react to situations". The DASS has high internal consistency and yields meaningful discriminations in a variety of settings (Lovibond &

Lovibond, 1995). Level 2 stress (α = .83) assessed feelings over the previous month and was used as a control when examining daily stress, given that general levels of stress have been associated with greater reported exposure to daily stressors and greater stress-related increases in negative affect (Stawski et al., 2008).

Work engagement. Daily work engagement was measured using the shortened Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003), re-worded to assess work engagement on a specific day. The UWES has shown a median Chronbach's alpha of .92 across ten different countries (Schaufeli, Bakker, & Salanova, 2006). Nine items cover the three aspects of the work engagement concept: vigour (e.g., "At my work, I felt bursting with energy"), dedication (e.g., "I was enthusiastic about my job"), and absorption (e.g., "I was immersed in my work"). Participants answered the items on a 5-point Likert-type scale, ranging from 1 (strong disagree) to 5 (strongly agree). An overall mean day-level engagement score was computed (α = .92). Schaufeli and Bakker (2003) argued that the total score for work engagement may sometimes be more useful because of the moderate to high correlations between the dimensions, which was supported by recent meta-analytic findings (Christian, Garza, & Slaughter, 2011).

Cross-level moderators

Perceived supervisor support. The Survey of Perceived Organizational Support (SPOS; Eisenberger, Huntington, Hutchison, & Sowa, 1986) was included in the initial survey (Level 2), replacing 'organisation' with 'supervisor' (as per Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Participants rated their agreement with eight statements about their supervisor, such as "would take on board a complaint from you", and "really cares about your well-being", using a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree). Coefficient alpha was .93.

Core self-evaluation. The 12-item Core Self-Evaluation Scale (CSES; Judge, Erez, Bono, & Thoresen, 2003) was used in the initial (Level 2) survey. The CSES measures four

core traits – self-esteem, generalised self-efficacy, neuroticism, and locus of control – but displays a unitary factor structure justifying a combined score (Judge et al., 2003). Items, including "I am confident I get the success I deserve in life", were rated on a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree). Coefficient alpha was .81.

Data Analysis

The hypothesised relationships operate within and across the two different levels, therefore multilevel modelling techniques were required (Hofmann, Griffin & Gavin, 2000). We used the mixed-model procedure in SPSS (Peugh & Enders, 2005) specifying maximum likelihood method, which draws on all available data (in stacked format) to provide valid estimates of effects despite some missing values.

First, an unconditional means model examined whether outcome variables differed substantially within persons. Within-individual variance was 36.2% for daily stress, and 27.4% for daily engagement, demonstrating that a portion of the variance could be attributed to variance within persons and justifies analysis at this level. The intraclass correlation coefficients were .64 for daily stress and .73 for daily engagement.

Second, several models were examined sequentially to test the hypothesised withinperson main and interactive effects. All models included random intercepts. Because
participants completed their diary surveys on different days throughout each week, the diary
data was not recorded at equally spaced time intervals. To account for this, *time* was treated
as a categorical variable and specified as a repeated factor, which allowed different patterns
of residuals for repeated measures to be examined. The possible effects of the field vs.
corporate site, which varied in terms of work duties, work schedules, and built environment,
were accounted for by treating the *work setting* variable as a fixed factor (also important for
meeting the underlying assumption of regression-type analyses that all relevant variables are
included in the model). *General stress* (Level 2) was included as a control in the models
examining daily stress.

The distribution of daily incivility was positively skewed (skewness = 2.97), which is a common finding in research on incivility and other interpersonal mistreatment constructs (e.g., Miner et al., 2012; Penney & Spector, 2005). A square-root transformation was therefore computed and used to create a between- and within-person measure of daily incivility. The between-person variable was an average of each person's daily incivility scores and was included in the multilevel analyses for completeness, as recommended by Rabe-Hesketh and Skrondal (2012). The within-person daily incivility variable was centred around the respective person mean, thus removing between-subject variation (Bryk & Raudenbush, 1992). The Level 1 regressions (i.e., main effect of incivility experienced on a given day on stress and engagement that day) therefore represented only within-subject effects without possible confounding of between-subject effects, and ensured the cross-level moderation truly reflected the impact of between-subject differences on the within-subject associations. All Level 2 variables (general stress, PSS, and CSE) were grand mean centred.

Results

Within-person main effect of daily incivility

Table 2 presents the means, standard deviations, and correlations for the within-person analyses. Tables 3 and 4 present multilevel modelling parameter estimates for within-subject main effects of daily incivility in predicting daily stress and daily engagement.

The within-person relationship between daily incivility and daily stress was significant, over and above the significant effects of between-person differences in daily incivility and general (Level 2) stress. This finding provided support for Hypothesis 1a, which predicted that individuals would have higher stress on days when they experienced incivility. The relationship between daily incivility and daily engagement was not significant, thus the hypothesis that individuals would have lower engagement on days when they experienced incivility (Hypothesis 1b), was not supported.

[Insert Table 2 about here]

Cross-level moderation

Perceived supervisor support (PSS)

As reported in Table 3, PSS significantly moderated the within-person relationship between daily incivility and daily stress. The effect of the moderation is illustrated in Figure 1 (using values one SD above and below the mean for the moderator, as recommended by Cohen, Cohen, West, & Aiken, 2003), where it can be seen that the relationship between daily incivility and daily stress was stronger for people with low levels of PSS. These results support Hypothesis 2a, which proposed that there would be weaker relationships between incivility and daily stress for those with high levels of supervisor support compared to those with low levels of support. The interaction between daily incivility and PSS at the between-person level significant was not significant, nor was there a significant main effect of PSS on daily stress.

However, Hypothesis 2b – which projected weaker relationships between incivility and daily engagement for those with high levels of supervisor support – was not supported. As can be seen in Table 3, PSS did not moderate the effect of within-person daily incivility on daily engagement. The interaction between daily incivility and PSS at the between-person level significant was also not significant, but PSS had a significant and positive main effect on daily engagement.

[Insert Figure 1 about here]

Core self-evaluation (CSE)

CSE did not significantly moderate the relationship between daily incivility and daily stress, although this relationship approached significance (p = .058) and was in the expected direction. Thus, Hypothesis 2c, which anticipated a weaker relationship between incivility and daily stress for those with high CSE, was not supported.

The interaction between daily incivility and CSE at the between-person level was not significant, nor was there a significant main effect of CSE on daily stress.

In contrast, CSE was a significant moderator of the effect of within-person daily incivility on daily engagement. Figure 2 illustrates how those with low CSE reported reduced daily engagement when faced with daily incivility, while daily engagement was not negatively impacted following experiences of daily incivility for people with high CSE. This finding provides support for Hypothesis 2d, which predicted weaker relationships between incivility and daily engagement for those with high CSE compared to those with low CSE. The interaction between daily incivility and CSE at the between-person level was not significant, nor was there a significant main effect of CSE on daily engagement. The results were similar when repeated without control variables, which are reported for completeness.

[Insert Tables 3 and 4 about here]

[Insert Figure 2 about here]

Effect of time

As reported in Tables 3 and 4, time did not significantly moderate either the withinperson relationship between daily incivility and daily stress or between daily incivility and daily engagement. However, there was a significant, negative main effect of time on daily stress (B = -0.01, SE = .00, t (228.00) = -2.96, p < .01) and on daily engagement (B = -0.02, SE = .00, t (251.03) = -3.94, p < .01). Both of these main effects were linear and indicated that day-level stress and day-level engagement decreased over the time of the investigation.

Discussion

This study sought to extend the current body of research on the effects of incivility at work to the within-person level, examining the extent to which incivility on a given workday predicted stress and engagement on the same day. We also investigated whether between-person differences in a job resource (perceived supervisor support) and a personal resource (core self-evaluation) changed the effect of daily incivility on daily outcomes.

Using diary study methodology, we established that the negative effect of workplace incivility found between persons is also evident at a within-person level of analysis. In other words, participants had higher levels of stress on days when they were treated in an uncivil manner. This effect was above and beyond individuals' general levels of stress. The diary study provided high temporal resolution, linking specific experiences of interpersonal mistreatment with negative outcomes and addressed the potential problem of retrospective ratings, which could be subject to memory flaws (Bolger, Davis, & Rafaeli, 2003). The findings provide support for existing research showing that incivility has a negative effect of individual and job-related outcomes. It is one of few studies to provide empirical evidence of the causal nature of interpersonal mistreatment at work and also extended our understanding not just of the long term effects of incivility, but also the immediate effect on the individual.

The negative effect of incivility on daily stress was reduced for those who felt that they had high levels of supervisor support, thus providing further support for the JD-R model (Demerouti et al., 2001b). Perceiving one's supervisor to be supportive appeared to alleviate the influence of job demands (e.g., incivility) on stress, possibly because supervisor appreciation and support makes them feel that a central person in their work environment is caring, despite how others might treat them. This finding is in line with past research showing that individuals who have more work-related coping resources will be less stressed when facing negative events than those with fewer resources (Hobfoll, 2002; Seligman & Csikszentmihalyi, 2000), and that supervisor support may aid the worker in coping with job demands and act as a protector against ill health (Väänänen et al., 2003). The important practical implications of the buffering effect of supervisor support in the face of incivility are discussed below.

Despite the direct effects on individual stress, daily experiences of incivility only had a negative effect on work engagement for those who had low core self-evaluations. One

possible explanation is that work engagement is a more stable attitude, not focused on any particular object, event, individual, or behaviour (Schaufeli et al., 2006) for people with stable self-evaluations, but is more momentary for people with unstable self-evaluations. There have been some inconsistent findings regarding the stability of engagement, with Schaufeli et al. (2002) proposing that it is a relatively stable individual difference while others (e.g., Kahn, 1990; Sonnentag, 2003) demonstrating daily fluctuations in engagement within a person. Our findings suggest that the link between within-person variations in engagement and incivility are dependent on the individual's level of CSE. This result supports the approach/avoidance concept (Elliot & Thrash, 2002), whereby people with high core self-evaluations are insensitive to negative input and probably don't attribute uncivil incidents as being their fault so don't allow them to affect their attitudes to work. On the other hand, people with low CSE may interpret an uncivil incident as confirmation of their poor self-opinions, which consequently affects their attitude towards work, including lowered engagement. This supports prior tests of the JD-R model, which have found work engagement is most likely when job resources are high and the individual is faced with high job demands (Bakker & Demerouti, 2007).

An intriguing finding of this research is that PSS only moderated incivility's effect on stress while CSE only moderated the effect of incivility on engagement (albeit with a p value of .058 in relation to stress). Given large sample sizes are required to detect moderating effects among continuous variables (Aiken & West, 1993), there may have been a lack of power. Alternatively, as suggested above, engagement is a generally more stable characteristic and therefore supervisor support would not necessarily influence engagement unless CSE is low. However, future research could identify contextual factors, for example the source of the incivility, which might interact with this set of variables to explain the differences.

Limitations

We assessed all data with self-report measures, potentially inflating relationships between study variables and raising concerns about common-method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This has been a problem for other diary survey designs (e.g., Sonnentag, Binnewies, & Mojza, 2008; Mojza, Sonnentag, & Bornemann, 2011). However, by using person-centred scores in the analyses we eliminated the potential influence of response tendencies stemming from individual differences (e.g., negative affectivity), thereby reducing some of the effect associated with common-method data. Furthermore, the presence of significant interactions suggests common method variance was not a major issue (Evans, 1985). Future studies might include reports of significant others in the analyses or other objective measures of the outcome variables. Indeed, it is crucial for the development of the field to include objective measures that play a role in business (Bakker & Demerouti, 2007).

Another limitation refers to our sample of employees, many of whom did shift work and worked irregular hours. While replication with samples from different employment contexts and with samples working more regular hours will be useful, we believe that our findings have some degree of generalizability, as we surveyed employees with various professional backgrounds from multiple locations. We also note that diary study participants had slightly lower incivility over the last year than those who only completed the initial survey, but if anything this may have reduced relationships with stress and engagement.

Practical implications and future research

The findings of this study have important implications for interventions aimed at reducing the negative effects of workplace incivility. Supervisors appear to play a pivotal role in minimising the negative impact of incivility and, consequently, of strain on employees. Supervisor support is an environmental resource for individuals, which organisations can influence and develop. Supervisors transmit organisational norms into

actual practices. Increasing supervisor awareness of incivility and their role in company policies and procedures for dealing with uncivil behaviour may be an important strategy for anticipating inappropriate behaviour in the workplace and preventing incivility-induced strain. For example, supervisors need to be familiar with and have an understanding of the range of circumstances that their employees confront and where / when uncivil behaviour is more likely to occur. Such an approach should yield positive outcomes for both organisations and their members.

Core self-evaluation is an individual characteristic that helps to shape perceptions and interpretations of events, enabling a person to exercise influence over events that affect their lives. This personal resource appears to be important in minimising the negative impact of incivility might be considered in recruitment and selection activities. Facilitating the development of elements of CSE, such as self-efficacy, is likely to enhance one's ability to respond.

Because daily experiences of incivility were linked to fluctuations in stress and engagement, it highlights the need to deal with uncivil behaviour regularly (ideally as it occurs) to prevent negative individual and job-related outcomes to accumulate.

Increasing diversity in institutions makes it likely that misunderstandings and unintentional incivilities will occur (Muir, 2000) and therefore future research could extend the current results with participants from differing nationalities and job types. Additional day-level outcomes resulting from day-level experiences of incivility, such as health behaviours (person-related), performance (job-related), and responses such as retaliation (organisation-related), should also be investigated. Finally, future studies may extend our findings to examine the day-level impact of different sources (supervisors, co-workers, subordinates, customers) of uncivil workplace behaviour. Research at the between-person level of analysis suggests that incivility from different sources may have differential outcomes (Lim & Lee, 2011). A meta-analysis (Hershcovis & Barling, 2009) showed that

outcomes of interpersonal mistreatment type behaviours were worse if the instigator was a supervisor compared to when they were instigated by co-workers. The results of the current study may have been even stronger on days when the participants' supervisor was uncivil.

In summary, we focused on the outcomes of personal stress and work engagement, to investigate whether the established incivility-outcome relationships are the same when examined within-individuals on a daily level. By adopting a day-level perspective, with diary data collected twice a week for four weeks, we not only incorporated a different time frame to the study of incivility, but explicitly addressed within-person processes. This study also investigated cross-level moderators of the day-level incivility-stress and incivility-engagement relationships, and demonstrated the importance of both perceived supervisor support (an environmental resource) and core self-evaluations (a personal resource) in these relationships.

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Table 1: Completion Rate of Diary Surveys

Diary Number	1	2	3	4	5	6	7	8
Number of Completed Surveys	130	122	112	108	102	100	97	92

Day-level workplace incivility

Table 2: Means, Standard Deviations, and Correlations of Level 1 and Level 2 Variables

Variables	M	Within- Between-		1	2	3	4	
	IVI	subject SD	subject SD	1	2	3	7	
Level 1: Within-Person Measures								
1. Time (nominal variable)					01	10**	11**	
2. Daily Incivility (within person)	-1.63	2.55	3.11	.23**		06	.07	
3. Daily Stress	1.44	0.50	0.42	14	18*		23**	
4. Daily Engagement	3.22	0.77	0.69	19*	.10	19*		
Variables	M	Within-	Between-	1	2	3	4	5
	IVI	subject SD	subject SD	1	۷	3	4	3
Level 2: Between-Person Measures								
1. Work Setting								
2. Daily Incivility Aggregated	0.97		1.06	.49**				
3. General Stress	1.77		0.50	.01	.19*			
4. Perceived Supervisor Support	3.56		0.96	.26**	.00	16		
5. Core Self-Evaluation	3.70		0.54	11	13	53**	.23*	

Note: Correlations below the diagonal represent between-subject correlations (N = 130). Work Setting: 0 = Field, 1 = Corporate. To calculate the between-subject correlations, within-subject variables (i.e., daily incivility, daily stress, and daily engagement) were averaged across days. Correlations above the diagonal represent within-subject correlations (N = 863). * p < .05. ** p < .01.

Table 3: Multilevel Estimates for Models Predicting Daily Stress from Daily Incivility

	Main Effects Model			PSS Moderation Model			CSE Moderation Model		
Variable	В	SE	t	В	SE	t	В	SE	t
Level 1									
Intercept	1.38	0.07	20.03**	1.39	0.07	19.51**	1.37	0.07	19.82**
Time 2 [#]	-0.03	0.04	-0.88	-0.01	0.03	-0.29	-0.03	0.04	-0.80
Time 3	-0.08	0.04	-1.90	-0.07	0.04	-1.69	-0.08	0.04	-1.90
Time 4	-0.13	0.04	-3.09**	-0.13	0.04	-3.31**	-0.13	0.04	-3.02**
Time 5	-0.13	0.04	-3.06**	-0.11	0.04	-2.64**	-0.13	0.04	-3.13**
Time 6	-0.10	0.04	-2.36**	-0.10	0.04	-2.49*	-0.10	0.04	-2.29*
Time 7	-0.11	0.04	-2.61**	-0.10	0.04	-2.36*	-0.11	0.04	-2.53*
Time 8	-0.14	0.04	-3.25**	-0.13	0.04	-3.03**	-0.14	0.04	-3.25**
Daily Incivility (within-person)	0.02	0.01	2.09*	0.02	0.01	1.62	0.02	0.01	1.75
Level 2 – Direct Effects									
Daily Incivility Aggregated (between-person)	0.11	0.05	2.31*	0.09	0.05	1.97*	0.10	0.05	2.19*
Work Setting	0.14	0.07	1.98*	0.13	0.08	1.72	0.17	0.07	2.31*
General Stress	0.47	0.06	7.46**	0.46	0.06	7.10**	0.38	0.07	5.16**
Perceived Supervisor Support				0.01	0.05	0.22			
Core Self-Evaluation							-0.08	0.08	-0.95
Level 2 – Interaction Effects									
Moderator x Daily Incivility (within-person)				-0.03	0.01	-3.20**	-0.05	0.02	-1.90
Moderator x Daily Incivility (between-person)				-0.07	0.04	-1.67	-0.12	0.09	-1.44

Note: N=863 for day-level and N=130 for between person measures. *p<.05, **p<01. Work Setting: 0=Field, 1=Corporate. # Time1=reference

Day-level workplace incivility

Table 4: Multilevel Estimates for Models Predicting Daily Engagement from Daily Incivility

	Main Effects Model			PSS	Moderatio	n Model	CSE Moderation Model		
Variable	В	SE	t	В	SE	t	В	SE	t
Level 1									
Intercept	3.43	0.13	26.99**	3.25	0.13	24.72**	3.40	0.13	27.00**
Time 2 [#]	-0.01	0.05	-0.24	0.00	0.05	0.04	-0.01	0.05	-0.11
Time 3	-0.07	0.05	-1.27	-0.05	0.05	-0.93	-0.06	0.05	-1.12
Time 4	-0.21	0.06	-3.73**	-0.16	0.06	-2.85**	-0.19	0.06	-3.40**
Time 5	-0.13	0.06	-2.29*	-0.11	0.06	-1.89	-0.10	0.06	-1.74
Time 6	-0.26	0.06	-4.53**	-0.22	0.06	-3.79**	-0.25	0.06	-4.28**
Time 7	-0.20	0.06	-3.38**	-0.18	0.06	-2.98**	-0.20	0.06	-3.28**
Time 8	-0.21	0.06	-3.51**	-0.18	0.06	-3.04**	-0.20	0.06	-3.23**
Daily Incivility (within-person)	-0.03	0.02	-1.56	-0.01	0.02	-0.70	-0.02	0.02	-0.93
Level 2 – Direct Effects									
Daily Incivility Aggregated (between-person)	-0.15	0.08	-1.91	-0.06	0.08	-0.70	-0.11	0.08	-1.31
Work Setting	0.00	0.14	0.02	0.23	0.15	1.54	0.01	0.14	0.09
Perceived Supervisor Support				0.30	0.10	3.09**			
Core Self-Evaluation							0.29	0.15	1.87
Level 2 – Interaction Effects									
Moderator x Daily Incivility (within-person)				0.02	0.01	1.24	0.07	0.03	2.05**
Moderator x Daily Incivility Aggregated				-0.05	0.07	-0.65	0.12	0.15	0.82
(between-person)									

Note: N=863 for day-level and N=130 for between-person measures. *p<.05, **p<.01. Work Setting: 0=Field, 1=Corporate. *Time1=reference

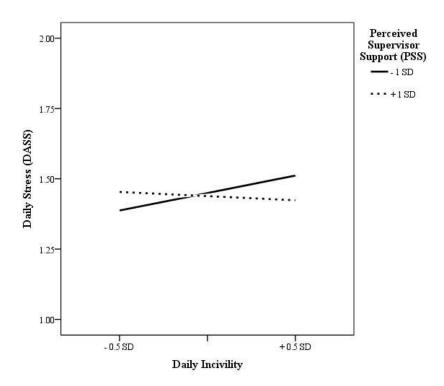


Figure 1: Perceived supervisor support (PSS) as a moderator of the relationship between daily incivility and daily stress.

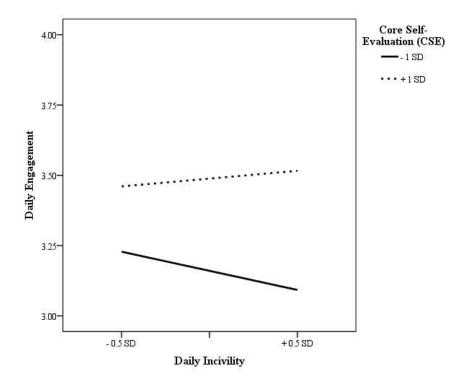


Figure 2: Core self-evaluation (CSE) as a moderator of the relationship between daily incivility and daily engagement.

Workplace incivility: Extending research to the day-level

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Workplace incivility: Extending research to the day-level

CHAPTER 4:

Investigating Health Behaviours as Possible Outcomes of Incivility

Having demonstrated in the first study that daily experiences of incivility are linked to fluctuations in psychological outcomes, the second paper presented in this thesis considers the impact of incivility on employee health behaviours. Both between- and within-subject relationships are investigated. Examining the link with health behaviours is the second major aim of this thesis because a growing body of research on workplace incivility demonstrates that it is associated with negative personal outcomes such as increased physical health problems (Lim & Cortina, 2005; Lim et al., 2008), and this pathway is likely to be moderated, in part, by unhealthy behaviours. The specific variables I assessed are the target person's smoking, alcohol intake, eating habits, relaxation, and exercise activities, with the expectation that stress from incivility will be negatively related to the target person's health behaviours in general and on a daily basis. This study also investigates core self-evaluation, a personal resource, as a potential moderator of the relationship between incivility and health behaviours outcomes at the within-person level. The hypotheses of the study, which again operate across two levels, can be summarised in Figures 4.1 and 4.2.

The paper is currently under review with the *Journal of Occupational Health*Psychology. I am the first author and my principal supervisor, Barbara Griffin, is the second author of this paper. My contribution to the research and paper was: Concept = 65%; Data collection = 100%; Data analysis = 100%; Writing = 70%; Total = 80%.

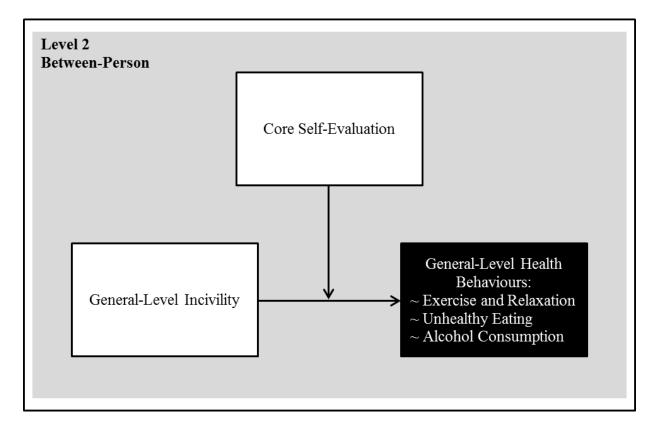


Figure 4.1: Examining the relationships between incivility and health behaviours at the between-person level.

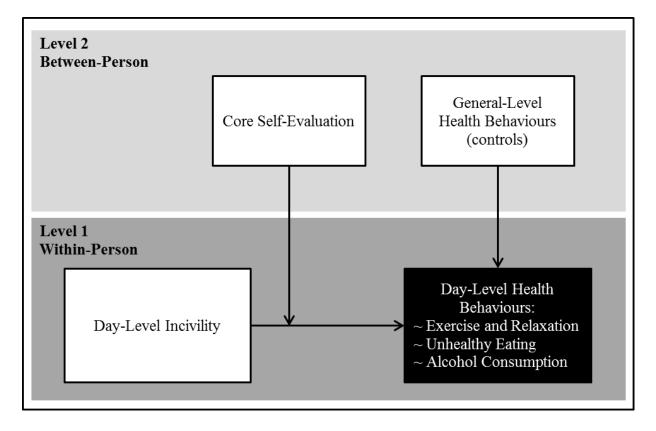


Figure 4.2: Examining the relationships between incivility and health behaviours at the within-person level.

Paper 2:

Workplace incivility: Extending outcomes to health behaviours

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A growing body of research on incivility at work demonstrates that it is associated with negative personal and work outcomes such as lowered wellbeing, job satisfaction, and commitment. This study extends those findings to include its impact on health behaviours. Following mood self-management theory and the limited-resources model of self-regulation, we proposed that incivility is negatively related to engaging in healthy behaviours because after stressful uncivil encounters employees have fewer resources left for initiating and persisting in effortful behaviours such as exercise, relaxation activities, healthy eating, and abstaining from alcohol consumption. Data were collected from 130 security employees invited to complete an initial survey followed by eight day-level surveys (two diary surveys per week over four consecutive weeks), and analysed with multilevel modelling. The results from both the cross-sectional survey and a longitudinal diary study showed that incivility was significantly related to some health behaviours. At the between-person level, individuals who experienced higher incivility over the previous year participated in fewer relaxation activities and consumed more unhealthy foods in general. At the within-person level, the negative relationship between daily incivility-daily relaxation and the positive relationship between daily incivility-daily unhealthy eating were only significant for those with low core self-evaluation. The current findings shed light on the consequences of workplace incivility for individuals' health, providing important theoretical and practical implications.

Workplace incivility and health behaviours

Keywords: incivility; interpersonal mistreatment; health behaviours; diary study; multilevel	
theory.	
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Workplace incivility is a form of interpersonal mistreatment that is considered to be a type of daily hassle, or chronic stressor (Lim, Cortina, & Magley, 2008; Penney & Spector, 2005). Such mistreatment refers to behaviours such as offensive verbal interactions (e.g., swearing, rude comments, raising one's voice), disrespect (e.g., interruption, public humiliation, condescending remarks), and isolation (e.g., from important work activities) (Cortina, Magley, Williams, & Langhout, 2001; Lim & Cortina, 2005). Although uncivil behaviours are "low intensity" and the intent to harm is ambiguous (Andersson & Pearson, 1999), experiencing incivility on the job is linked to an array of negative job-related and person-related outcomes. In terms of job-related outcomes, employees targeted with uncivil behaviour experience greater job stress (Cortina, 2008), reduced job performance (Pearson, Andersson, & Porath, 2000), less creativity (Porath & Erez, 2007), lower job satisfaction, increased job withdrawal (Cortina et al., 2001; Lim & Cortina, 2005; Lim et al., 2008), and higher turnover (Pearson, Andersson, and Porath, 2005). Incivility can also foster contempt and subvert organisational leadership (Andersson & Pearson, 1999). Person-related outcomes include general psychological distress such as depression and anxiety (Cortina et al., 2001), rumination and worry (Pearson et al., 2000), and cognitive distraction (Barling, Rogers, & Kelloway, 2001), as well as increased physical health problems (Lim & Cortina, 2005; Lim et al., 2008). Such outcomes are likely to create significant ongoing problems for organisations and the individual targets. However, the existing research has not considered the role incivility might play in inhibiting positive health behaviours or promoting negative ones. The current research aims to address this gap in the literature.

Psychological and social factors are known to play a prominent role in determining physical health (Bishop, 1994). Unhealthy behaviours and habits are closely related to mortality rates and illnesses (Breslow & Enstrom, 1980) and may moderate the association between stress and disease (Ng & Jeffery, 2003).

The importance of health behaviours

Employee health behaviour and health is a topic of increasing interest for both practitioners and organisations. Lower physical activity, poor dietary habits, and excessive alcohol consumption have been identified as preventable risk factors for disease, including new-onset diabetes mellitus, hypertension, and cardiovascular disease. In 2007, cardiovascular disease alone accounted for 33.6% of all deaths in the United States (Roger et al., 2011) and 33.8% of all deaths in Australia (Australian Institute of Health and Welfare, 2012). In recent years, health care costs have been rising at a rate nearly three times the rate of inflation (Smith, Cowan, Heffler, & Catlin, 2006), and by 2015 health care costs are projected to account for 20% of the United States gross domestic product (Borger et al., 2006).

Direct medical costs represent only a portion of the costs that an organisation faces when employees are not well; absenteeism, medical leave, turnover, productivity loss, and the use of compensation and disability programs may account for more than 50% of the total costs associated with poor health (Goetzel, Guindon, Turshen, & Ozminkowski, 2001). Positive health behaviours, such as physical activity and relaxation, yield numerous physiological and psychological health benefits and therefore will contribute to cost reduction. Both exercise and relaxation techniques lead to improvements in mood (Berger & Owen, 1992), reduce cognitive stress and tension (e.g., Benson, 1975; Norris, Carroll, & Cochrane, 1992), and are associated with positive mental well-being (Biddle & Mutrie, 2001; Brown, Mishra, Lee, & Bauman, 2000). As a result of the myriad of health and organisational challenges related to unhealthy behaviours and the benefits of positive behaviours, research identifying their antecedents is warranted.

Theoretical background

As detailed above, workplace incivility constitutes an important source of stress.

During times of high stress individuals are less likely to follow through with intentions to

maintain a healthy way of life (Budden & Sagarin, 2007). There are two theoretical explanations for the link between stress and unhealthy behaviours. The first is mood self-management, which posits that stressful events motivate people to engage in unhealthy behaviours that bring them pleasure (Zillmann & Bryant, 1985) and mitigate the experienced tension and strain. Empirical support comes from studies on eating behaviour (Macht & Simons, 2000) and alcohol intake (Abbey, Smith, & Scott, 1993; Frone, 2008), which have shown people turn to 'comfort foods' and alcohol when stressed. On the basis that unhealthy behaviours are immediately rewarding and therefore stress relieving, we propose experiences of incivility will be associated with immediately gratifying comfort behaviours, such as eating higher fat and sugar foods or consuming more alcohol.

The second relevant theory is the limited resource model of self-regulation (Muraven & Baumeister, 2000). This model postulates people have a limited quantity of resources available for self-control, that job stressors draw on this limited stock, and that depletion of self-regulatory resources accounts for the subsequent failure to pursue healthy behaviours that require energy and self-control. A resources view explains why exposure to demands (such as an uncivil encounter) may result in poorer self-control performance even after the stress itself has ended (Glass, Singer, & Friedman, 1969). On the basis that healthy behaviours require self-control resources, we propose that experiences of incivility will deplete resources and therefore be associated with a lack of behaviours that require self-regulatory resources, specifically, less frequent exercise and relaxation activities. Abstaining from unhealthy behaviours also requires self-control. Hence, individuals may eat more high fat and sugar foods, and consume more alcohol. Indeed, habits of excessive eating and drinking are demonstrated to be among the most common, problematic failures of self-control (Baumeister, Heatherton, & Tice, 1994).

Outcomes: unhealthy behaviours

The current study focuses on four health behaviours, two that promote health (exercising and relaxation) and two that risk good health (eating more high fat and high sugar foods, and alcohol consumption).

Exercise and relaxation

Empirical evidence clearly indicates regular physical activity is an important part of a healthy lifestyle and a key to disease prevention and physical well-being (Dubbert, 2002). Individuals who exercise experience less physical symptoms and better weight control than those who do not exercise (Ensel & Lin, 2004) and reduced stress (Long & van Stavel, 1995). The importance of regular engagement in exercise was also demonstrated in that the cognitive, psychological, and physical boost was completely lost without regular physical activity (Emery, Shermer, Hauck, Hsiao, & MacIntyre, 2003). Similarly, relaxation techniques reduce tension (i.e., negative affect) and other symptoms of poor well-being (van der Klink, Blonk, Schene, & van Dijk, 2001). The economic consequences of physical inactivity are estimated to account for 1.5% to 3.0% of total direct healthcare expenditures in developed countries (Oldridge, 2008). In the United States, for example, the direct expenditures for cardiovascular disease associated with inactivity were estimated to be \$23.7 billion in 2001 (Wang, Pratt, Macera, Zheng, & Heath, 2004).

However, findings from studies on the relationship between stress and physical activity have been inconsistent: stress has been associated with less physical activity (e.g., Heslop et al., 2001), more physical activity (e.g., Spillman, 1990), and inconsistent physical activity (e.g., Steptoe, Lipsey, & Wardle, 1998).

Unhealthy eating

There is a well-established link between specific dietary practices and physical health. Each year more than \$33 billion in medical costs and \$9 billion in lost productivity resulting from heart disease, cancer, stroke, and diabetes mellitus are attributed to poor nutrition

alone (Roger et al., 2011). The current study looks specifically at intake of foods high in sugar and fat as these are strongly associated with comfort eating (Wansink, Cheney, & Chan, 2003). Dietary fat has long been linked with cardiovascular disease and obesity (Bray & Popkin, 1998). The consumption of sugar from sugar-sweetened beverages has been linked to risks for obesity, diabetes, and heart disease (Fung et al., 2009; Vartanian, Schwartz, & Brownell, 2007). The annual medical burden of obesity has increased to almost 10% of all medical spending (Finkelstein, Trogdon, Cohen, & Dietz, 2009).

It is thought that people may use food as an "escape" from work-related stress (Devine, Connors, Sobal, & Bisogni, 2003). Empirical investigations support this notion, revealing that individuals eat in response to emotional stress (Macht & Simons, 2000). Several studies have reported positive associations between stress and a less healthy diet, as indicated by increased fat intake (Hellerstedt & Jeffery, 1997; Ng & Jeffery, 2003), higher consumption of snacks and fast food (Pak, Olsen, & Mahoney, 2000), and increased intake of soft drink (Steptoe et al., 1998; Spillman, 1990). Indeed, 80% of individuals are believed to change their caloric intake in response to stress, particularly increasing consumption of high fat, sugary foods (O'Connor, Jones, Conner, McMillan, & Ferguson, 2008). However, this evidence is largely related to non-work stressors, so it is important to confirm the link with work-related stressors such as incivility.

Alcohol consumption

Employee alcohol use has been linked to negative individual and organisational consequences. For individuals, even light to moderate drinking promotes risks for cancers of the oral cavity, oesophagus, and larynx, essential hypertension, liver cirrhosis, chronic pancreatitis, and injuries and violence (Corrao, Bagnardi, Zambon, & La Vecchia, 2004). For organisations, alcohol use has been linked to negative attendance outcomes, impaired productivity, work performance problems, and safety concerns (Frone, 2004, 2008; McFarlin & Fals-Stewart, 2002).

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It is widely believed increased alcohol consumption is a common response to work-related stress, however, empirical tests of this "spill over" or "tension-reduction" model have produced inconsistent results (e.g., Cooper, Russell, & Frone, 1990; Cooper, Russell, Skinner, Frone, & Mudar, 1992).

Hypothesis 1a: Those who have experienced higher levels of incivility over the past year will report fewer positive health behaviours (exercise and relaxation activities). Hypothesis 1b: Those who have experienced higher levels of incivility over the past year will report more negative health behaviours (consumption of unhealthy foods and alcohol).

Within-person effects of stress on health behaviours

The research cited above describes how stressors are related to between-person differences in health behaviour. However, little is known about how day to day variations in job stressors influence fluctuations in an individual's engagement in health-related behaviours. To the best of our knowledge, very few studies have addressed variations of interpersonal mistreatment stressors and associated variations in health behaviours, and none have considered incivility as a specific interpersonal stressor. A day-level perspective is necessary for two reasons.

First, job stressors fluctuate from day to day (Ilies, Schwind, & Heller, 2007; van Hooff, Geurts, Kompier, & Taris, 2007) and a growing body of evidence suggests such fluctuations at a within-person level, as identified by diary studies, are important in understanding stress-outcome processes. A recent study shows that there are daily variations in the amount of incivility a person experiences at work (Beattie & Griffin, 2012). Multi-level analyses provide a way of examining whether fluctuations in the stressor account for fluctuations in stress outcomes. For example, Liu, Wang, Zhan, and Shi (2009) showed that daily work stress was significantly related to daily alcohol use and the desire to drink. Given

that *average* drinking level reflects little about the large fluctuations that occur in daily alcohol use (Mohr et al., 2005), it is important to understand the effects of stress at this level.

Second, both mood changes and the depletion of self-regulatory resources exert their effects on individual behaviour most obviously within single days (e.g., Schmeichel & Baumeister, 2004; Teuchmann, Totterdell, & Parker, 1999). It is necessary to analyse the relation between interpersonal stressors, resources for self-regulation, and activities at the day level because between-person analyses and analyses within longer time frames (e.g., month or year level) obscure the processes operating within individuals in their daily lives (cf. Jones, O'Connor, Conner, McMillan, & Ferguson, 2007). Therefore, use of a diary research paradigm to study the relationship between workplace incivility and unhealthy behaviours would better address the within-subject contingencies predicted by stress-related mood self-management and limited resource theories and provide a closer approximation to reality. Thus, this study's aim was to better understand how the interpersonal stressor of incivility affects an individual's health behaviour in general *and* on a daily, or within-person, basis.

Hypothesis 2a: Individuals will participate in fewer positive health behaviours

(exercise and relaxation activities) on days when they experience incivility compared to days when they are not treated uncivilly.

Hypothesis 2b: Individuals will participate in more negative health behaviours

(consumption of unhealthy foods and alcohol) on days when they experience incivility

compared to days when they are not treated uncivilly.

Moderating processes

Experiencing strain in response to stress is integral to several models of employee psychological health, such as the job demands—control model (Karasek, 1979), the job demands—resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), and the effort—rewards imbalance model (Siegrist, 1996). These models of work-related stress also

converge with the assumption that various vulnerability factors and psychosocial resources may exert important stress-exacerbating or stress-buffering influences. Individuals who have more coping resources are projected to be less stressed when facing stressful events than those with fewer resources (Hobfoll, 2002; Seligman & Csikszentmihalyi, 2000). However, the few studies that have investigated the effect of incivility on individual wellbeing (e.g., Cortina et al., 2001, 2002) have not empirically examined the mechanisms driving these outcomes. Previous research into health behaviours also emphasizes the role of risk factors in determining individuals' vulnerability to stress-induced unhealthy habits, such as alcohol use (Frone, 1999, 2003). Therefore, a second major aim of the current study is to examine a moderator of the incivility-health behaviour relationship. Core selfevaluation (a personal resource) is investigated as a potential moderator of the between person relationship and also as a cross-level moderator of the within-person relationships.

Personal resource: core self-evaluation

Core self-evaluation (CSE) is a broad dispositional trait indicated by self-esteem, generalised self-efficacy, locus of control, and emotional stability (Judge, Locke, & Durham, 1997). Individuals with high core self-evaluations appraise themselves in a consistently positive manner across situations, holding positive beliefs about their self-worth, capability to succeed and ability to control their life/environment, and tending to focus on the positive versus negative aspects of themselves (Bono & Judge, 2003; Judge et al., 1997). These fundamental beliefs reflect key components of a person's view of the world and their ability to function successfully in that world, and so should be a particularly relevant personal resource in shaping reactions to stressful events (Cozzarelli, 1993).

In the stress process, subjective self-appraisals are important because stress reactions are likely to be more profound when individuals believe they do not have sufficient personal resources to cope with threats (Fleishman, 1984; Kobasa, 1979; Lee & Ashforth, 1996). Individuals with higher CSE positively view their worthiness, competence, and capabilities,

and so are likely to be more confident they can exert control over potential stressors and respond successfully to challenging situations (Greenberg et al., 1992; Taylor & Brown, 1988). Overall, individuals with high CSE are likely to be less stressed by stressful events, resulting in fewer negative emotional and behavioural reactions to stressors, whereas individuals who are lower in CSE may perceive stressors as more overwhelming (Harris, Harvey, & Kacmar, 2009). We examine this in relation to health behaviour, using CSE as a between person and cross-level moderator.

Hypothesis 3: The relationships between incivility and unhealthy behaviours at both the between-person and within-person level will be moderated by the target individual's core self-evaluation. These relationships will be stronger for people with low CSE compared to those with high CSE.

Method

Participants

Participants were employees of a security company undertaking customer service, screening, and administrative roles either in the field or in the corporate head office. Of the 323 participants who answered the initial survey, 130 completed at least one of the eight diary surveys (see Table 1 for numbers completing each of the eight diary surveys). On completion of the diary surveys, participants were given the opportunity to enter a prize draw. Of the diary survey participants, 60.8% were male, 35.4% female, and 3.9% did not specify gender. Participants were aged between 19 and 69 years (M = 42.84, SD = .42) and had been employed at the company between 3 months and 20 years (M = 4.43yrs, SD = .13).

[Insert Table 1 about here]

Design

This research was designed as a longitudinal diary study, with two types of data collected. Between-person (Level 2) data were collected from an initial survey of demographic, work, personal, and health behaviour measures. Following this, within-person

(Level 1) data were collected using "diary surveys". Participants were asked to complete eight daily surveys after work, which measured incivility experienced and the four health behaviours undertaken each day. Two day-level diary surveys were completed per week over four consecutive weeks. In keeping with common diary study methodology (Ohly, Sonnentag, Niessen, & Zapf, 2010), participants were sent a text message or email each week reminding them to complete their surveys.

Measures

Incivility

Level 2 (between-person) incivility was measured in the initial survey using the Workplace Incivility Scale (WIS; Cortina et al., 2001). The WIS is a seven-item, psychometrically sound, general measure of workplace incivility (Martin & Hine, 2005). Responses to items asking how frequently participants experienced uncivil behaviour (e.g., "Put you down or was condescending to you") over the previous 12 months were recorded on a 5-point frequency scale, ranging from 1 (never) to 5 (very often). The mean of the items (α = .93) provided a retrospective baseline level of incivility during the last 12 months. This measure of Level 2 incivility will be referred to as "general incivility".

Level 1 (daily) incivility was measured in the diary surveys with 20 items from the Interpersonal Treatment at Work Scale (Burnfield, Clark, Devendorf, & Jex, 2004) and the Uncivil Workplace Behaviour Questionnaire (Martin & Hine, 2005), for example "Spoke to you in an aggressive tone of voice", "Blamed you or others for their mistakes", "Not consulted you when you should have been involved". Participants were asked to indicate whether they had experienced any such encounters at work that day on a "yes" or "no" scale. The number of affirmative responses was summed to give a daily incivility score.

Outcomes

Exercise, relaxation, unhealthy eating. Exercise, relaxation, and unhealthy eating behaviours were measured at both Levels 1 and 2 using items adapted from the physical

activity, stress management, and nutrition subscales of the Health Promoting Lifestyle Profile II (HPLP II; Walker & Hill-Polerecky, 1996). Four items assessed exercise (e.g., "Exercised vigorously for 20 or more minutes"). Three items assessed relaxation (e.g., "Take some time for relaxation"). Intake of foods high in fat and sugar was measured using two items, including "Foods high in sugar (e.g., sweets)".

Level 2 (between-person) health behaviours were measured in the initial survey by asking participants how often they engaged in each behaviour in a typical week using a 5-point Likert scale (1 = never, 5 = everyday). An overall mean score for each health domain was calculated, with Cronbach's alphas of .73, .67, and .73 for the exercise, relaxation, and nutrition subscales, respectively. In the diary surveys (Level 1), participants indicated if they engaged in the exercise, relaxation, and nutrition behaviours that day (1 = "yes", 0 = "no"). Means were calculated to create daily exercise, relaxation, and unhealthy eating scores.

Alcohol consumption. Two questions measured Level 2 (between-person) alcohol intake. Firstly, a screening question determined if (and how often) participants' drank alcohol (from 0 "I don't drink alcohol", to 7 "everyday"). Secondly, participants reported the number and type of drinks (beer, wine, and spirits) they typically consumed when drinking. General alcohol intake was calculated by averaging the number of drinks typically consumed in a sitting. In the diary surveys participants reported the type (beer, wine, and / or spirits) and quantity of alcoholic beverages they consumed that day. Daily (Level 1) alcohol intake was calculated by averaging the quantity of the different alcoholic drinks. This variable was skewed and so converted into a binary measure (see data analysis section below for further detail).

Moderator

Core self-evaluation. The 12-item Core Self-Evaluation Scale (CSES; Judge, Erez, Bono, & Thoresen, 2003) was used in the initial (Level 2) survey. The CSES measures four core traits – self-esteem, generalised self-efficacy, neuroticism, and locus of control – but

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displays a unitary factor structure justifying a combined score (Judge et al., 2003). Items, including "I am confident I get the success I deserve in life", were rated on a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree). Coefficient alpha was .81.

Analytic strategy

Between-person data

The distribution of general incivility (between-person measured in initial survey) was positively skewed (skewness = 1.38), which is a common finding in research on incivility and other interpersonal mistreatment constructs (e.g. Miner, Settles, Pratt-Hyatt, & Brady, 2012; Penney & Spector, 2005). A square-root transformation was therefore computed to normalise scores before correlations with health behaviours were computed.

Day-level data

The hypothesised daily relationships operate across the two different levels: the first included the daily, repeated measures of health behaviours. The second level of analysis included the general measure of health behaviours, CSE, and relative incivility. Given the nesting of Level 1 variables (within-person) in Level 2 variables (between-individual), multilevel modelling techniques were required (Hofmann, Griffin & Gavin, 2000). The mixed model procedure in SPSS was used for the normally distributed and continuous dependent variables, (daily exercise, daily relaxation, and daily unhealthy eating). Daily alcohol intake was positively skewed (skewness = 5.21), and therefore transformed into a binary variable, 0 = "no intake" 1 = "some intake". Of the 130 participants who completed at least one diary survey, 80 were non-drinkers or failed to answer the question, and so were excluded from subsequent day-level alcohol analyses. The SPSS genlinmixed procedure was used for this dichotomous dependent variable.

First, unconditional means models demonstrated that a substantial portion of the variance in the outcome variables could be attributed to variance within persons, justifying analysis at this level. Within-individual variance was 40.0% for daily exercise, 47.5% for

daily relaxation, 47.7% for daily unhealthy eating behaviours, and 24.5% for daily alcohol consumption. The intraclass correlation coefficients (ICC; proportion of variance due to between-person variation) were .60 for exercise, .52 for daily relaxation, .52 for daily unhealthy eating, and .75 for daily alcohol consumption.

Several models were then examined sequentially to test the hypothesised withinperson main and interactive effects. All models included random intercepts. Because
participants completed their diary surveys on different days throughout each week, the diary
data was not recorded at equally spaced time intervals. To account for this, *time* was treated
as a categorical variable and specified as a repeated factor, which allowed different patterns
of residuals for repeated measures to be examined. The possible effects of *work setting*(field vs. corporate site), which varied in terms of work duties, work schedules, and built
environment, were accounted for by treating this variable as a fixed factor. Including *work*setting was also important in order to meet the underlying assumption of regression-type
analyses that all relevant variables are included in the model.

For each daily health behaviour model, the respective general (Level 2) health behaviour was included as a control, for example, general exercise was included in the daily exercise models.

The distribution of daily incivility was positively skewed (skewness = 2.97) so a square-root transformation was used to create a between- and within-person measure of daily incivility. The between-person variable was an average of each person's daily incivility scores and was included in the multilevel analyses for completeness. The within-person daily incivility variable was centred at each individual's mean, removing any between-individual variance (Ilies et al., 2007). The main effect of daily incivility on daily healthy behaviours therefore represented only within-subject effects without possible confounding of between-subject individual differences and also ensured the cross-level moderation truly reflected the impact of between-subject differences on the within-subject

associations. All Level 2 variables (general health behaviours and core self-evaluation) were grand mean centred.

Results

Between-person main effect of general incivility

There was a significant negative relationship between general incivility and general relaxation (r = -.25, p < .001), as predicted by Hypothesis 1a, and a significant positive relationship between general incivility and general unhealthy eating (r = .16, p < .01), as predicted by Hypothesis 1b. However, there were no significant correlations between general incivility and general exercise, general alcohol consumption, or days per week participants consumed alcohol (r = -.01, -.01, and .10 respectively), and so these results provided only partial support for Hypotheses 1a and 1b.

Within-person main effect of daily incivility

Table 2 presents the means, standard deviations, and correlations for the within-person analyses. Table 3 presents multilevel modelling parameter estimates for within-subject main effects of daily incivility in predicting daily exercise, relaxation, unhealthy eating, and alcohol consumption. Note, the inclusion of CSE and the interaction between CSE and incivility made little difference to the parameters for the direct effects model, therefore only the final model statistics are reported.

Daily incivility did not directly predict daily exercise, daily relaxation, daily unhealthy eating, or daily alcohol consumption at the within-person level. Thus, Hypothesis 2a — which proposed that individuals would participate in fewer positive health behaviours (exercise and relaxation activities) on days when they experienced incivility — and Hypothesis 2b — which anticipated that individuals would participate in more negative health behaviours (consumption of unhealthy foods and alcohol) on days when they experienced incivility — were not supported. Not surprisingly, general exercise, general relaxation, and general unhealthy eating as reported in the initial survey (i.e., Level 2

variables) were significant predictors of these behaviours on a day to day level, although general alcohol intake (Level 2) was not a significant predictor of daily alcohol consumption.

[Insert Tables 2 and 3 about here]

Moderation of between-person effects

Core self-evaluation (CSE) did not moderate the relationships between general incivility and general exercise, general relaxation, general unhealthy eating, or general alcohol consumption.

Cross-level moderation of within-person effects

As can be seen in Table 3, core self-evaluation (CSE) was a significant cross-level moderator of the effect of within-person daily incivility on daily relaxation, and of within-person daily incivility on daily unhealthy eating. As illustrated in Figures 1 and 2, using values one SD above and below the mean (Cohen, Cohen, West, & Aiken, 2003), people with lower levels of CSE reported reduced daily relaxation and increased unhealthy eating when faced with daily incivility. People with higher levels of CSE actually reduced daily unhealthy eating when faced with daily incivility but it had no effect on their relaxation. These results provide partial support for Hypothesis 3. In both the relaxation and unhealthy eating models there was also a significant direct effect of CSE on the respective daily health behaviour.

In contrast, CSE was not a significant cross-level moderator of the within-person relationship between daily incivility and daily exercise or daily alcohol consumption. CSE had a significant main effect on daily alcohol intake but not on daily exercise.

[Insert Figures 1 and 2 about here]

Discussion

The current study extends incivility literature beyond the boundaries of the workplace by examining associations with health behaviours, specifically exercise and relaxation, unhealthy eating, and alcohol consumption. We investigated these relationships at a between-person level, assessing whether a summary report of incivility experienced over the previous year was related to general level of health behaviours, and at the within-person level, examining the extent to which incivility on a given workday predicted health behaviours on the same day. We also investigated whether between-person differences in a personal resource (core self-evaluation) changed the effect of incivility on outcomes.

Tests of between-person relationships showed significant, albeit modest, relationships between general incivility and some health behaviours. Individuals who experienced more incivility over the past 12 months generally participated in fewer relaxation activities and consumed more unhealthy "comfort" foods. However, exercise and alcoholic consumption were not related to incivility.

The subsequent diary study provided high temporal resolution, linking specific experiences of interpersonal mistreatment with negative affect and overcame the problem of retrospective ratings, which would likely be subject to memory flaws (Bolger, Davis, & Rafaeli, 2003). In that data we also identified significant relationships between daily incivility and the extent a person engaged in both relaxation and unhealthy eating on that day. However, these effects were only significant for those with low CSE.

One possible explanation for why CSE acts as a boundary condition is that incivility did not harm the sense of personal worth or create a sense of stress for those with high core self-evaluations so the encounter was unlikely to affect their subsequent health behaviours. Perhaps they were confident enough to attribute the uncivil incident as being entirely the instigator's problem so not something to be concerned about. On the other hand, people with low core self-evaluations may interpret uncivil incidents as confirmation of their poor self-opinions, altering their affect and mood, which in turn reduces healthy behaviour. These results provide further support for the JD-R model (Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001), which asserts psychosocial resources provide important stress-buffering influences. This finding is also in keeping with the limited resource model of self-regulation

(Muraven & Baumeister, 2000): participants with higher CSE have more resources available for self-control and so they are more likely to pursue healthy behaviours that require energy and discipline or willpower and abstain from unhealthy behaviours.

Although not all the hypothesised relationships with health behaviours were significant, the results support Cooper, Russell, and Frone's (1990; also see Frone, 2008) argument that the direct influence of work-related stress on coping behaviours is likely to manifest over the course of hours rather than months.

The findings that certain people engage in unhealthy behaviours in response to stressful, uncivil encounters also provides support for both the mood self-management theory (Zillman & Bryant, 1985) and the limited resource model of self-regulation (Muraven & Baumeister, 2000). Unhealthy eating and being sedentary may bring people pleasure in the short term or deplete their limited self-regulatory resources, resulting in subsequent failure to pursue healthy behaviours or abstain from unhealthy behaviours, which require energy and self-control.

CSE was not a significant moderator of the effect of daily incivility on alcohol and exercise. In terms of alcohol consumption, this may have been due to a lack of power, because large sample sizes are required to detect moderating effects (Aiken & West, 1993) and only 50 of the 130 participants drank alcohol. Nevertheless, our results are consistent with previous studies, which have found high stress was associated with a higher fat diet but not with alcohol intake (Ng & Jeffery, 2003). With regard to exercise, other environmental factors – such as the weather, work or personal commitments, and the individual's health – may present additional barriers to partaking in exercise, and thereby diminish the moderating effect of CSE.

Limitations

The use of self-report measures potentially inflated relationships between the study variables, raising concerns about common-method variance (Podsakoff, MacKenzie, Lee, &

Podsakoff, 2003). Although a problem for prior diary survey designs (e.g., Sonnentag, Binnewies, & Mojza, 2008; Mojza, Sonnentag, & Bornemann, 2011), using person-centred scores in the within-person analyses eliminated the potential influence of response tendencies stemming from individual differences (e.g., negative affectivity). Future studies might include reports of significant others in the analyses or other objective measures of the outcome variables. Indeed, it is crucial for the development of the field to include in research models objective measures that play a role in business (Bakker & Demerouti, 2007).

Practical implications and future research

Practically, the current findings highlight the need for intervention programs designed to assist employees in managing interpersonal stressors at work, thereby reducing the negative effects of workplace incivility. The cross-sectional results in particular suggest that people with higher core self-evaluation maintain positive daily health behaviours – partaking in relaxation and refraining from unhealthy eating – which are known to reduce tension (i.e., negative affect) and other symptoms of poor well-being (van der Klink, Blonk, Schene, & van Dijk, 2001), and have well established links to good physical health (e.g., Roger et al., 2011). Facilitating the development of CSE is likely to improve employees' ability to choose adaptive, helpful health responses when faced with stressful situations and thereby minimise the negative impact of incivility.

Organisations should implement "no tolerance" policies related to interpersonal mistreatment and clear procedures for dealing with such incidents, as well as educating employees about the process for responding to and reporting uncivil behaviour, and the support they can expect to receive (Pearson et al., 2000).

Future research should aim to extend the current results by identifying other variables that moderate the incivility processes. For example, immediate responses like distraction and rumination may directly influence vulnerability to negative outcomes by either

tempering (in the case of distraction) or heightening (in the case of rumination) an individual's response to interpersonal stressors. The reciprocal link between mental and physical health (Robbins, Ford, & Tetrick, 2012) also needs more research to determine if these outcomes interact dynamically following interpersonal mistreatment. As part of this investigation, additional health outcomes could be considered. For example, smoking was responsible for \$96 billion in direct medical costs and \$97 billion in lost productivity costs per year between 2000 and 2004 (Centers for Disease Control and Prevention, 2008).

In summary, this study is the first to examine the between- and within-subject associations between incivility and employee health behaviours. By taking a multi-level perspective, this study offered a unique opportunity to examine the effect of daily incivility on employees' experiences, as well as providing empirical evidence on how individual (between-person) factors interact to influence outcomes of workplace incivility. The present findings support extant research that suggests that the association between stress and disease may be mediated in part by unhealthy behaviours. The individual and organisational costs of employee ill health mean it is in both parties best interest to work together to improve employee health.

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Workplace incivility and health behaviours

Table 1: Completion Rate of Diary Surveys

Diary Number	1	2	3	4	5	6	7	8
Number of Completed Surveys	130	122	112	108	102	100	97	92

Workplace incivility and health behaviours

Table 2: Means, Standard Deviations, and Correlations of Level 1 and Level 2 Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Level 1: Within-Person Measures																
1. Time (nominal variable)				01	05	.01	.04	04								
2. Daily Incivility (within-person)	-1.63	2.55	.23**		02	.07*	09**	06								
3. Daily Exercise Activity	0.28	0.30	03	01		.28**	06	01								
4. Daily Relaxation Activity	0.62	0.38	.10	.13	.28**		13**	06								
5. Daily Unhealthy Eating	1.82	0.70	.01	20*	04	14		.07								
6. Daily Alcohol Consumption (binary)			.03	04	10	12	.08									
Level 2: Between-Person Measures																
7. Work Setting (binary)			08	40**	05	13	.00	.11								
8. Experienced Incivility (between-person)	0.97	1.06	20*	92**	.05	17	.15	.03	.49**							
9. General Exercise Activity	0.01	0.85	04	02	.64**	.16	.01	08	.04	.04						
10. General Relaxation Activity	0.01	0.72	04	.13	.22*	.41**	09	05	.06	14	.34**					
11. General Unhealthy Eating	-0.01	0.66	.06	.00	02	05	.57**	02	17	04	03	15				
12. General Alcohol Consumption	0.00	1.69	01	23*	.01	19*	.09	.10	.37**	.31**	01	16	.06			
13. General Days per Week Drink Alcohol	0.93	0.88	01	.09	01	.07	.01	.57**	.c	09	04	09	06	.28*		
14. Core Self-Evaluation	3.70	0.54	02	.08	.15	.36**	19*	15	11	13	.17	.19*	10	08	05	

Note: Correlations below the diagonal represent between-subject correlations (N = 130). To calculate the between-subject correlations, within-subject variables (i.e., daily incivility and daily health behaviours) were averaged across days. Correlations above the diagonal represent within-subject correlations (N = 863). * p < .05. ** p < .01. c = cannot be computed because at least one of the variables is constant.

Workplace incivility and health behaviours

Table 3: Multilevel Estimates for Models Predicting Daily Health Behaviours from Daily Incivility

		Exercis	e		Relaxati	on	Uı	nhealthy I	Eating	Alcohol			
	В	SE	t	В	SE	t	В	SE	t	В	SE	t	
Level 1													
Intercept	0.24	0.04	6.11**	0.62	0.05	11.46**	1.78	0.09	19.06**	0.01	0.01	-4.21**	
Time 2 (Time 1=reference)	0.02	0.02	1.07	0.02	0.03	0.58	-0.09	0.06	-1.45	1.70	1.21	0.75	
Time 3	-0.02	0.03	-0.71	0.00	0.04	-0.11	0.00	0.07	0.04	1.90	1.41	0.86	
Time 4	0.00	0.03	0.16	-0.01	0.04	-0.32	0.08	0.07	1.10	0.36	0.32	-1.14	
Time 5	0.00	0.03	0.16	0.02	0.04	0.56	-0.03	0.07	-0.44	1.11	0.89	0.12	
Time 6	0.00	0.03	0.07	0.01	0.04	0.23	0.15	0.07	2.20*	1.30	1.02	0.34	
Time 7	-0.02	0.03	-0.75	0.01	0.04	0.15	0.02	0.07	0.23	0.59	0.50	-0.63	
Time 8	-0.06	0.03	-2.03*	-0.02	0.04	-0.50	0.01	0.07	0.15	0.20	0.18	-1.73	
Daily Incivility (within person)	0.01	0.01	1.07	-0.01	0.01	-0.91	-0.02	0.02	-0.97	0.76	0.16	-1.32	
Level 2 – Direct Effects													
Daily Incivility Aggregated (between person)	0.03	0.03	1.19	-0.05	0.04	-1.18	0.03	0.07	0.45	0.34	0.26	-1.39	
Work Setting (Field)	0.06	0.04	1.54	0.05	0.05	0.90	0.03	0.09	0.35	14.81	17.78	2.25*	
General Health Behaviour (control)	0.19	0.02	9.63**	0.15	0.03	4.52**	0.45	0.06	7.48**	1.05	0.26	0.19	
Core Self-Evaluation (CSE)	0.02	0.03	0.74	0.19	0.05	4.03**	-0.17	0.08	-2.10*	0.11	0.12	-2.06*	
Cross-level Interaction Effect													
CSE x Daily Incivility (within person)	0.00	0.01	0.00	0.03	0.02	2.11*	-0.06	0.03	-2.08*	0.61	0.18	-1.66	

Note: N = 863 for day-level measures, N = 130 for individual-level measures. * p < .05, ** p < .01.

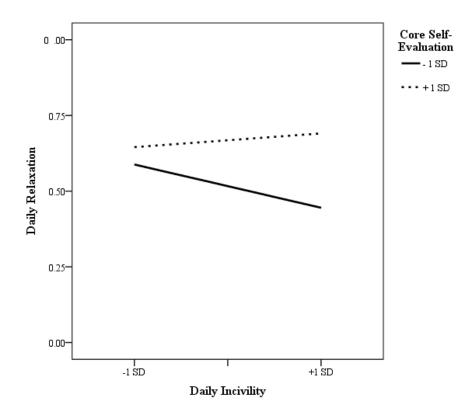


Figure 1: Core self-evaluation (CSE) as a moderator of the relationship between daily incivility and daily relaxation.

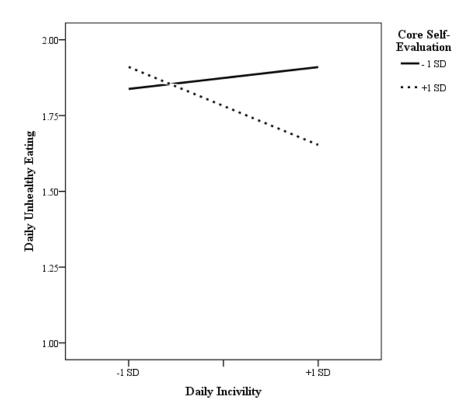


Figure 2: Core self-evaluation (CSE) as a moderator of the relationship between daily Incivility and daily unhealthy eating.

Workplace incivility: Extending research to the day-level

CHAPTER 5:

Examining How Individuals Respond to Incivility Across Incidents and the Factors that Influence Choice of Response

The third and final paper presented in this thesis examines individuals' *immediate* responses to experiences of workplace incivility. One recent study by Cortina and Magley (2009) suggests that people use a multifaceted array of strategies in response to being treated uncivilly, including support seeking (i.e., sought formal organisational support from supervisors), detachment (i.e., did little in the way of responding), minimisation (i.e., ignored the behaviour or assumed the person meant no harm), pro-social conflict avoidance (i.e., avoided interacting with or upsetting the instigator and sought informal social support from family/ friends), and assertive conflict avoidance (i.e., confronted the instigators about the inappropriate behaviour at some point). However, typical of most of the extant literature (e.g., Cortina et al., 2001; Lim et al., 2008; Spector & Fox, 2002), the Cortina and Magley (2009) study relied on a cross-sectional research design and treated responses to interpersonal mistreatment as a between-person difference. As outlined in Chapter 1, this standard approach to measurement has limitations, particularly for looking at responses to uncivil events. Firstly, the data are retrospective, so potentially affected by memory biases (Sato & Kawahara, 2011). Secondly, it requires people to summarise their experiences of incivility across a relatively long period of time, and therefore it is unknown if incivility has an immediate or only an accumulative effect. Thirdly, between-person cross-sectional studies raise concerns about common-method variance (Podsakoff et al., 2003). Finally, the retrospective and typically cross-sectional nature of the data poses questions about causality.

Examining within-person differences in responses to incidents of incivility is the third major aim of this thesis because an individual's cognitive appraisals and behavioural

responses are likely to mediate or moderate the longer-term individual and organisational outcomes, such as stress and job satisfaction (Bordia, Restubog, & Tang, 2008).

A key finding of the paper presented in this thesis is that there are substantial withinperson differences in the way individuals responded to incidents of workplace incivility
across time. Little research has examined what factors influence the choice of response as a
reaction to workplace mistreatment. As a stressor, incivility is proposed to trigger an
appraisal of the situation, which in turn determines the response chosen by the person in
reaction to the event (Cortina & Magley, 2009). However, little is actually known about
individuals' internal, psychological reactions to experiences of uncivil behaviour or the
general manner in which targets of interpersonal mistreatment react to and manage their
experiences.

Building on the finding that there are substantial within-person differences in the way people respond to incivility, I proposed that three sets of factors would influence a person's choice of response: 1) characteristics of the incident; 2) characteristics of the instigator; and 3) characteristics of the target. This proposal was empirically tested with two variables from the first set (who was perceived to be the cause of the incident and severity of the incident), and one from both the second set (instigator status relative to the target) and the third set (neuroticism). Note – although the first two papers in this thesis examined the multi-dimensional construct core self-evaluation (CSE), the bulk of stress literature has examined one component of this construct: neuroticism (or emotional stability). In this third paper, I narrowed the focus to trait-based neuroticism as a pure personality measure. Clearly, characteristics of the incident and instigator may change from incident to incident, while characteristics of the target, at least the personality factor chosen in this study, are stable individual differences. The multi-level design of this research means neuroticism acts as a cross-level direct effect and a cross-level moderator of the within-person relationships. The hypotheses of the study can be summarised in Figure 5.1.

The paper is currently in a second stage of review with the *Journal of Occupational* and *Organizational Psychology*, following a request to "revise and resubmit". I am the first author and my principal supervisor, Barbara Griffin, is the second author of this paper. My contribution to the research and paper was: Concept = 65%; Data collection = 100%; Data analysis = 100%; Writing = 70%; Total = 80%.

An adapted version of this paper was accepted and presented as a poster at the 28th Annual Conference of the Society for Industrial and Organizational Psychology, held in Houston, Texas in April 2013.

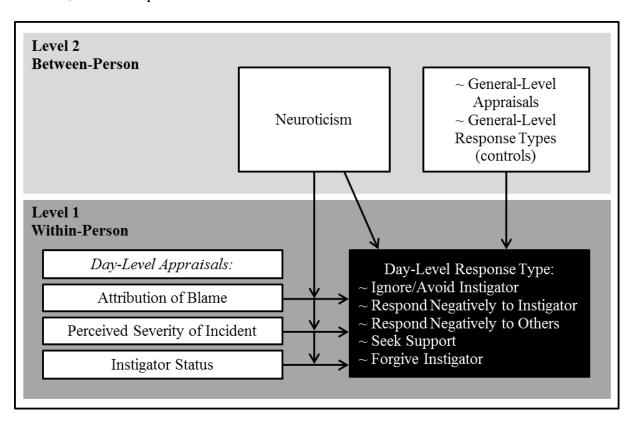


Figure 5.1: Examining the relationships between incivility and health behaviours at the within-person level

Workplace incivility: Extending research to the day-level

Paper 3:

Appraisals of, and responses to, incivility at work: A diary study

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This study investigated employees' behavioural and cognitive responses to incivility, a form of interpersonal mistreatment, across time. Having established substantial within-person differences in the way individuals responded to incidents, we examined how a target's appraisal of incivility affected their subsequent responses. Perceived severity of the critical incident significantly predicted whether or not a target engaged in negative behaviour toward the instigator, negative behaviour toward others, support seeking, and forgiveness. Neither the hierarchical status of the instigator relative to the target, nor the target's attributions of blame for the specific incident significantly predicted an individual's responses to that incident. We also investigated a between-person variable, trait-based neuroticism, which significantly predicted three response categories: ignore/ avoid the instigator, respond negatively to the instigator, and seek support. Neuroticism was also a significant moderator of the within-person relationship between the severity of daily incivility and daily ignore/ avoid the instigator responses, and the within-person relationship between the severity of daily incivility and daily forgive the instigator responses. The results are discussed in terms of their practical implications for understanding how and why individuals respond to acts of incivility at work.

Keywords: incivility; interpersonal mistreatment; attribution; blame; forgiveness; revenge; diary study.

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Introduction

Workplace incivility is a form of interpersonal mistreatment that has attracted increasing research attention over the last decade. It is defined as low intensity behaviour with ambiguous intent to harm (Andersson & Pearson, 1999) and includes incidents that range from what is perceived as a mild slight to general rudeness or disrespect (Cortina & Magley, 2003). As such, incivility has been considered a type of daily hassle or chronic stressor (Lim et al., 2008; Penney & Spector, 2005).

Incivility has been shown to lead to an array of negative individual and organisational outcomes, including psychological distress, depression, and anxiety (Caza & Cortina, 2007; Cortina, Magley, Williams, & Langhout, 2001), increased physical health problems (Lim & Cortina, 2005; Lim, Cortina, & Magley, 2008), greater job stress (Cortina, 2008), reduced task performance and creativity (Pearson, Andersson, & Porath, 2000; Porath & Erez, 2007), lower job satisfaction, increased job withdrawal (Cortina et al., 2001; Lim & Cortina, 2005; Lim et al., 2008), and higher turnover (Pearson, Andersson, and Porath, 2005). Such outcomes, which have been the focus of most of the existing research, are longer term outcomes and create significant ongoing problems for individual targets and their organisations. There has been somewhat less research examining peoples' *immediate* responses to incidents of incivility, or even other forms of interpersonal mistreatment in the workplace. People are particularly sensitive to violations of interpersonal norms (Mikula, Petri, & Tanzer, 1990) and immediate responses to a personal offence are important because these may be mediators or moderators of the longer-term individual and organisational outcomes described above. That is, how people respond to incivility might determine what happens next.

Most of the research on how individuals respond to interpersonal offences such as incivility, has focused on revenge or other types of aggressive reactions (e.g., Bradfield & Aquino, 1999; Skarlicki & Folger, 1997; Tripp & Bies, 1997), although some has also

considered forgiveness and reconciliation in response to workplace victimization (Aquino, Tripp, & Bies, 2001, 2006). However, these responses have typically been studied in isolation and researchers acknowledge that there are other possible reactions (Aquino et al., 2001, 2006).

Cortina and Magley (2009) examined patterns of responses to incivility and found that people used a multifaceted array of strategies, including support seeking (i.e., sought formal organisational support from supervisors), detachment (i.e., did little in the way of responding), minimization (i.e., ignored the behaviour or assumed the person meant no harm), pro-social conflict avoidance (i.e., avoided interacting with or upsetting the instigator and sought informal social support from family/ friends), and assertive conflict avoidance (i.e., confronted the instigators about the inappropriate behaviour at some point). However, typical of most of the extant literature (e.g., Cortina et al., 2001; Lim et al., 2008; Spector & Fox, 2002), their study relied on a cross-sectional research design and treated responses to interpersonal mistreatment as a between-person difference.

We are not aware of any research that has considered if there are within-person differences in responding and yet it is quite possible that people don't react to uncivil incidents in a consistent way. Further, if there are within-person differences, what determines how people respond to a particular incident? To answer these questions, this study links specific instances of incivility with specific responses by using a longitudinal events sampling technique, focusing on the most severe or critical incident participants experienced on a given day over a period of four consecutive weeks. Within-person investigations are an important extension to the existing literature because researchers have shown that processes between persons do not necessarily correspond to processes within persons (Affleck, Zautra, Tennen, & Armeli, 1999), and both theory and data suggest that appraisal and coping are situation specific (e.g., Lazarus & Folkman, 1984). Indeed, the importance of this methodology was highlighted in a study investigating biases in reports of

coping that found global retrospective reports of coping performed rather poorly when compared with daily, event-specific reports of coping (Todd, Tennen, Carney, Armeli, & Affleck, 2004).

Theoretical background

How an offended party responds in reaction to incivility may largely depend on how the offence is interpreted, particularly because by definition uncivil behaviour is of low intensity and the instigator may not intend to harm the target.

The transactional model of stress and coping (Lazarus & Folkman, 1984), provides a theoretical framework for explaining this interpretive cognitive process and how it relates to people's responses to personal offences and mistreatment. The theory asserts that individuals evaluate and make a judgment about the potential threat or significance of an event as stressful, positive, controllable, challenging or irrelevant (primary appraisal). If deemed to be a stressor, the individual makes a secondary appraisal, assessing their cognitive, emotional, or physical resources and subsequent options for responding (Cohen, 1984; Lazarus, 1991). This framework is widely used to explain how negative events lead to different individual responses to address the stressor or the concomitant negative emotion (cf. Cooper, Dewe, & O'Driscoll, 2001; e.g., Sakurai & Jex, 2012). Thus, to understand pathways by which incivility leads to immediate responses (and later to negative organisational and individual outcomes, such as undermining employees' well-being), we must first understand peoples' appraisals of these stressors.

Appraisal processes are receiving attention in emerging scholarship on aggressive and antisocial work behaviour, with results indicating that efforts to cope with workplace harassment depend heavily on appraisals (e.g., Bergman, Langhout, Palmieri, Cortina, & Fitzgerald, 2002). There are several factors that may influence an individual's appraisal and subsequent response to an interpersonal wrongdoing (Smith & Kirby, 2009). Explaining how one's perception is affected by both the social context and by individual differences has

been a key theoretical contribution of Social Information Processing (SIP) theories. According to the early SIP perspective (Salancik & Pfeffer, 1978), an individual's perception is, in part, shaped by the social context. This is because context selectively directs perceivers' attention to certain information cues, which in turn impact their interpretation of others' behaviour. Individual differences in the perception of social stressors has been central to the more contemporary version of SIP (Crick & Dodge, 1994), which explains how people perceive, interpret, and mentally generate responses to provocation by others. This more recent model has been applied to understanding the effect of dispositional hostility at work (Dyck Flory, Matthews, & Owens, 1998). Such studies indicate that certain individuals possess a social information processing bias, which can exist at all stages from perception to response generation.

In this paper we consider both contextual factors (characteristics of the uncivil incident and of the instigator) and an individual difference factor related to the target.

Contextual characteristics may vary from day to day, depending on the particular incident or instigator, while target factors are stable characteristics.

Characteristics of the incident

Two incident characteristics are examined in this study: who or what is to blame for the incident and the perceived severity of the particular incident (both within-person factors).

Who is to blame? Attribution theory (Heider, 1958; Jones & Davis, 1965) suggests that whenever people experience unexpected or unwanted behaviour by others, they look for ways to explain such conduct. Individuals evaluate the situation to determine whether the instigator, themselves, or some other external factor caused the event and, based on this evaluation, decide how much responsibility to attribute to the instigator (Bowling & Beehr, 2006). The causal attributions individuals assign to certain events in their lives in turn affect the responses to those events (Kelley & Michela, 1980; Weiner, 1979, 1985). For example, Bowling and Beehr (2006) argue that responses enacted when the target believes they are

responsible for the abuse are unlikely to be the same as when the target believes the instigator or the organisation as a whole is responsible for the abuse.

Severity of the incident. The target's appraisal of the severity of an uncivil offence is likely to influence what response they engage in. In their model of forgiveness in close relationships, McCullough and colleagues posited that the perceived severity of an offence is a key factor that may play an essential role in translating offender behaviours into victim emotional and behavioural reactions (McCullough, Worthington, & Rachal, 1997; McCullough et al. 1998). The more severe an event is perceived to be, the more likely it is to cause rumination and elicit anger and subsequent revenge or avoidance. When an event is perceived as less serious it may be less likely to engender strong emotions and be easier to forgive. Indeed, past research has shown that people believe more severe offences demand more severe responses (Tripp, Bies, & Aquino, 2002). Similarly, Crossley (2009) argued that severity has an impact on response (revenge, avoid, reconcile), albeit via the process of inciting either anger or sympathy. Thus, severity is likely to be an important appraisal that shapes a person's response.

Characteristics of the instigator

A potentially important information cue in the context of incivility and other forms of interpersonal mistreatment is the difference in power between the instigator and target. Power differences exist among employees, the most apparent being position within the organisational hierarchy (job level). The instigator's status, relative to his or her victim, has been identified by past theory and empirical research as being a key contextual factor that influences the process of responding to a workplace offence (e.g., Bies & Tripp, 1996; Heider, 1958; Kim, Smith, & Brigham, 1998). Target appraisals of workplace harassment have been shown to become more negative as harassers become more powerful (e.g., Cortina, Fitzgerald, & Drasgow, 2002; Langhout et al., 2005). However, individuals may feel helpless to fend off the abuse from more senior instigators (Cortina & Magley, 2009;

Thacker, 1996), which in turn influences, or even limits, their response options to a specific offence (Aquino et al., 2006). A victim is likely to be inhibited from seeking revenge when harmed by a superior because the offender is well positioned for counter-revenge (Aquino et al., 2001; Bies, Tripp, & Kramer, 1997; Kim et al., 1998). For example, Aquino, Tripp, and Bies (2001) found victims sought revenge more often when the offender's status was lower than their own. Indeed, the relevance of relative instigator power has been demonstrated to influence revenge, forgiveness, avoidance, and reconciliation strategies used in response to workplace victimization (Aquino et al., 2001, 2006; Bradfield & Aquino, 1999).

Characteristics of the target

Many theories explaining response to stress, including Lazarus' transactional model (Lazarus, 1998; Lazarus & Folkman, 1984), incorporate the role of stable individual differences in accounting for response processes. The personality variable that has received the most attention in this respect is neuroticism, which is defined as a predisposition to experience negative affect (McCrae, 1990). Individuals high on neuroticism evaluate stressful experiences as more undesirable and stressful than others do, and because they have a history of poor coping (O'Brien & DeLongis, 1996), their secondary appraisals of coping efficacy are probably lower. In addition, high neuroticism appears to be associated with greater reactivity to negative appraisals (Gunthert, Cohen, & Armeli, 1999). For example, a recent study found that when work is stressful, men who were higher on neuroticism (i.e., less emotionally stable) showed a negative spill over effect, whereas men who were lower on neuroticism withdrew from social interactions (Wang, Repetti, & Campos, 2011).

However, most studies (e.g., Cortina & Magley, 2009; Wang et al., 2011) examine between-person relationships at a single level of analysis. The multi-level design of the current research means neuroticism will act as a cross-level direct effect and a cross-level moderator of the within-person relationships. Following Lazarus and Folkman's (1984)

theorising, we examine the direct effect of neuroticism on participants' responses and the moderating effect of neuroticism in participants' appraisal-response relationships. In other words, we expect neuroticism to directly affect the responses a person chooses to incidents of mistreatment, but that it will also increase the effect of attributions of blame, perceived severity, and status on choice of response.

Hypothesis 1: There will be within-person differences in how people respond to different instances of incivility.

Hypothesis 2: The within-person differences in responding will be predicted by offence-specific characteristics: characteristics of the incident (who is to blame and perceived severity of the incident) and characteristics of the instigator (relative hierarchical status of the instigator).

Hypothesis 3: The within-person differences in responding will be predicted by a stable characteristic of the target, neuroticism.

Hypothesis 4: Neuroticism will moderate the effect of instigator and incident characteristics on response.

Method

Participants

Participants were employees of a security company undertaking customer service, screening, and administrative roles either in field locations or in the corporate head office. Of the 323 participants who answered an initial survey collecting information on demographics and individual differences, 130 completed at least one of the eight diary surveys. Of this group, 92 people completed all eight diaries, and 100 completed at least six diaries. On completion of the diary surveys, participants were given the opportunity to enter a prize draw. Of the diary survey participants, 60.8% were male, 35.4% female, and 3.9% did not specify gender. Participants were aged between 19 and 69 years (M = 42.84, SD

= .42) and had been employed at the company between 3 months and 20 years (M = 4.43yrs, SD = .13).

Design

This research was designed as a longitudinal diary study. Participants were asked to complete eight daily surveys after work, which measured incivility experienced on the day, the source of the worst uncivil encounter, and appraisals and responses to that event. Two day-level diary surveys were completed per week over four consecutive weeks. In keeping with common diary study methodology (Ohly, Sonnentag, Niessen, & Zapf, 2010), participants were sent a text message or email each week reminding them to complete their surveys. Diary surveys provided within-person data (or Level 1 day to day information). In addition, participants completed an initial one-off survey of demographic, work, and general experiences. This survey provided between-person (or individual or Level 2 information).

Measures

Incivility

Level 2 (between person) incivility, was measured in the initial survey using the Workplace Incivility Scale (WIS; Cortina et al., 2001). The WIS is a seven-item, psychometrically sound, general measure of workplace incivility (Martin & Hine, 2005). Responses to items asking how frequently participants experienced uncivil behaviour (e.g., "Put you down or was condescending to you") over the previous 12 months were recorded on a 5-point frequency scale, ranging from 1 (never) to 5 (very often). The mean of the items (α = .93) provided a retrospective baseline level of "general incivility" experienced over the last year.

Level 1 (daily) incivility was measured in the diary surveys. Employees were provided with 20 examples of uncivil behaviour in the workplace – adapted from the Interpersonal Treatment at Work Scale (Burnfield, Clark, Devendorf, & Jex, 2004) and the Uncivil Workplace Behavior Questionnaire (Martin & Hine, 2005) – and asked to indicate

whether they had experienced any such encounters at work that day on a "yes" or "no" scale. On days when respondents had experienced incivility they described the experience they identified as having bothered them most. This "specific experience" or critical incident technique is consistent with previous research to elicit salient experiences of workplace offences (e.g., Aquino et al., 2006; Cortina & Magley, 2009). This identified 'most severe' incident was then rated in terms of who was to blame, the status of the instigator, the severity of the incident, and the responses made to this incident.

Blame

The extent to which participants blamed themselves or others (the perpetrator or their organisation) for their typical experiences of incivility (Level 2) and their specific uncivil experience (Level 1) was assessed using seven items from Sedgley and Griffin (2012), which were based on Bowling and Beehr's (2006) model identifying these sources of blame. Items included "I did something wrong to deserve the disrespectful behaviour" (self-directed attribution), "It is typical of this person's character" (instigator-directed attribution), and "The organisation allows them to get away with this type of behaviour" (organisation-directed attribution). Items were rated on a Likert-type scale from 1 (strongly disagree) to 5 (strongly agree).

Severity of the incident

A single-item assessed the perceived severity of uncivil encounters typically experienced at work (Level 2) and of specific day-level experiences (Level 1). Single item measures are common in diary research to reduce participant burden (Ohly et al., 2010). Participants were asked to respond to the question "How rude, offensive, or inappropriate did you feel this worst encounter was?" using a 5-point index (1 = a little, 5 = extremely). *Instigator's relative status*

Respondents indicated whether the instigator of their specific day-level experience was a "more senior colleague (e.g., your supervisor)," a "co-worker," or a "customer."

Responses

Respondents described how they typically dealt with experiences of incivility (Level 2), indicating whether (yes = 1, or no=0) they had employed any of 18 responses adapted from Cortina and Magley's (2009) coping behaviours and Bies and Tripp's (1995) potential responses to trust violations. We conducted a principal components analysis with varimax rotation on this set of typical responses, which revealed five response categories that explained 64.5% of the overall variance: 1) ignore/ avoid the instigator, with four items (e.g., "just ignored it"); 2) respond negatively toward the instigator, with three items (e.g., "responded with the same type of behaviour"); 3) respond negatively toward others, with four items (e.g., "took it out on someone else at work"); 4) seek support, with five items (e.g., "talked with a colleague for advice/support"); and 5) forgive the instigator, with two items (e.g., "forgave the person"). We summed the relevant items to create each of these response categories, with Cronbach's alphas of .81, .56, .77, .75, and .65 respectively.

To capture individuals' responses to their nominated worst daily uncivil experience (Level 1) we used the same 18 items and computed the same five response categories so they could be directly compared. We then created a dichotomous indicator of the response strategy (1 = engagement in at least one of the behaviours indicating this response category at least once, 0 = did not use any behaviours within this response factor).

Neuroticism

Trait-based neuroticism was measured in the initial survey (Level 2 data collection) using 10 items from the International Personality Item Pool (IPIP) – Five-Factor Model measure (Goldberg, 1999). Respondents indicated how characteristic each statement was of them on a 5-point scale, where 1 = not at all like me, and 5 = extremely like me. Statements included "I get irritated easily" and "I become overwhelmed by events." The items were averaged to create an overall neuroticism score ($\alpha = .82$).

Data Analysis

The hypothesized relationships involve constructs defined at two different levels (within- and between-person) therefore multilevel modelling techniques were required (Hofmann, Griffin & Gavin, 2000). To account for the dichotomous dependent variables the SPSS genlinmixed procedure was used.

First, unconditional means models examined whether the five response outcome variables differed substantially within persons. The results, which are detailed below, demonstrated a substantial portion of the variance in each response could be attributed to variance within persons, justifying analysis at this level. Second, several models were examined sequentially to test the hypothesized within-person main effects and the betweenperson main and cross-level interactive effects. All models included random intercepts. Because participants completed their diary surveys on different days throughout each week, the diary data was not recorded at equally spaced time intervals. To account for this, time was treated as a categorical variable and specified as a repeated factor, which allowed different patterns of residuals for repeated measures to be examined. The possible effects of work setting (field vs. corporate site), which varied in terms of work duties, work schedules, and built environment, were accounted for by treating this variable as a fixed factor. Including work setting was also important in order to meet the underlying assumption of regression-type analyses that all relevant variables are included in the model. (Note – we ran the analysis with and without the *work setting* control variable(s) and found the results were similar but reported the results with this variable for completeness.)

The Level 2 individual-level predictor variable, trait-based neuroticism, was grand mean centred. The day-level blame attribution and relative hierarchal status predictor variables were dummy-coded to represent the different options: for attributions — "My Fault" (reference category) or "Other's Fault" (Instigator and/ or Organisation); and for status — "More senior colleague" (reference category), "Co-worker," or "Customer." The day-level

predictor variable of incident severity was centred around the respective person mean, thus removing between-subject variation (Bryk & Raudenbush, 1992; Ilies, Schwind, & Heller, 2007). The Level 1 regressions therefore represented only within-subject effects without possible confounding of between-subject effects, and ensured the cross-level moderation truly reflected the impact of between-subject differences on the within-subject associations. A between-person measure of incivility severity was also created by averaging each person's daily incivility severity scores, and was included in the multilevel analyses for completeness, as recommended by Rabe-Hesketh and Skrondal (2012).

Results

As reported in Table 1, the most common response (to 72% of all critical incidents) was to ignore/ avoid the instigator and the least common (to 15% of all critical incidents) was a negative reaction to someone other than the instigator. In 43% of all incidents the target responded negatively to the instigator. Aggregated to the level of the individual, 95% of participants ignored at least one of the acts of incivility they experienced; 84.3% chose to forgive on at least one occasion; and 69.4% sought support from others at least once. While only 36.4% admitted to reacting negatively to someone other than the instigator, 73.6% reacted negatively to the instigator after at least one of the incidents they experienced (with 14.9% reporting that they responded this way to every incident they experienced).

Within-person responses

The unconditional means models demonstrated that a substantial portion of the variance in each of the five responses could be attributed to variance within persons.

Specifically, the within-individual variance was 39.7% for ignore/ avoid the instigator,
58.0% for respond negatively toward the instigator, 46.1% for respond negatively toward others, 53.5% for seek support, and, 37.9% for forgive the instigator. These findings support Hypothesis 1, which predicted that there would be within-person differences in how people respond to different instances of incivility. Correspondingly, the intraclass correlation

coefficient (ICC), which measured the proportion of variance due to between person variation, was .60 for ignore/ avoid the instigator, .42 for respond negatively toward the instigator, .54 for respond negatively toward others, .46 for seek support, and .62 for forgive the instigator.

Within-person appraisal-response relationships

Table 1 presents the means, standard deviations, and correlations. Table 2 presents multilevel modelling parameter estimates for predicting the five different types of daily responses (one analysis per response).

In the final model, the relative status of the instigator compared to the target did not significantly predict any of the five responses. Similarly, an individual's attribution of blame for an offence did not significantly predict their responses to that incident. In contrast, perceived severity of the critical incident significantly predicted all response types except ignore/ avoid the instigator.

Overall, these findings provided only partial support for Hypothesis 2, which proposed that the within-person differences in responding would be predicted by characteristics of the particular event that may vary: characteristics of the incident (who is to blame and perceived severity of the incident), or characteristics of the instigator (relative hierarchical status of the instigator).

[Insert Table 1 about here]

Between-person appraisal-response relationships

Neuroticism was positively associated with three responses: ignore/ avoid the instigator, respond negatively to the instigator, and seek support. Neuroticism did not predict the other two response types. This result provides partial support for Hypothesis 3, which proposed that the within-person differences in responding would be predicted by stable characteristics of the target.

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Table 1 shows neuroticism had a significant positive, albeit small, correlation with severity ratings, suggesting that neuroticism may directly predicts attributions. Neuroticism was also a significant moderator of two non-reactive responses directly relating to the target, specifically, the within-person relationship between the severity of daily incivility and daily ignore/ avoid the instigator responses, and the within-person relationship between the severity of daily incivility and daily forgive the instigator responses. The effect of this moderation is illustrated in Figures 1 and 2, using values one SD above and below the mean for the moderator, as recommended by Cohen, Cohen, West, & Aiken (2003). Figure 1 illustrates how those with low neuroticism had a lower probability of ignoring/ avoiding the instigator the more severely they perceived an uncivil incident, while the probability that those with high neuroticism would to ignore/ avoid the instigator increased as perceived severity increased. Figure 2 shows that the probability that someone with low levels of neuroticism would forgive decreased as perceived severity increased.

Neuroticism did not moderate the effect of within-person daily incivility severity and the other three response types. These findings provide partial support for Hypothesis 4, which proposed that neuroticism would moderate the effect of instigator and incident characteristics on response, with stronger relationships evident for those with higher neuroticism.

Work context was only a significant factor for one response type – choosing to respond negatively to the instigator – where there was a higher probability that participants working in the field responded this way compared to those working in corporate offices.

[Insert Table 2 about here]

[Insert Figures 1 and 2 about here]

Discussion

This study sought to examine whether employees vary their responses to different incidents of incivility experienced across a month. Using multi-level modelling, our results

demonstrated substantial within-person variance in each of five responses: ignore/ avoid the instigator, respond negatively toward others, seek support, and forgive the instigator. That is, it appears that people don't respond to incidents of mistreatment in a totally consistent way. Having established within-person differences in responding, we then investigated different factors that had the potential to explain this within-person variance in responses to incivility at work.

Findings indicated that perceived severity of the critical incident was the only consistent predictor of within-person differences in response types, predicting all responses except ignore/ avoid the instigator. This supports Lazarus and Folkman's (1984, p.24) contention that "how a person construes an event shapes the... behavioral response." The relative status of the instigator compared to the target did not significantly predict responses, and so was less important than expected in light of previous research that has demonstrated instigator power was relevant in influencing revenge, forgiveness, avoidance, and reconciliation strategies used in response to workplace victimization (Aquino et al., 2001, 2006). Our participants worked in an organisation with a fairly flat structure and it is possible that our operationalization of "more senior colleague" – without the option for "more junior colleague" – may account for the difference in results.

Choosing to respond negatively to the instigator was a strategy adopted by participants working in the field with greater probability than those working in corporate offices.

Corporate offices may be more confined environments with the potential for retaliatory behaviour to be observed by a greater number of colleagues. Although we didn't focus on environmental characteristics as a specific factor, this finding does support past research indicating that appraisal of the context is also an important aspect that is likely to affect responses to stress (e.g., Cotton & Hart, 2003).

There were significant between-person differences that affected choice of responses, with neuroticism predicting the probability that someone would ignore/ avoid the instigator,

respond negatively to the instigator, and seek support. Neuroticism was also a significant moderator of the two more passive responses. Those with higher neuroticism were more likely to ignore/ avoid the instigator when incidents were perceived as more severe, which is consistent with previous research showing neuroticism was associated with greater reactivity to negative appraisals (Gunthert, Cohen, & Armeli, 1999). Interestingly, those with lower neuroticism appeared to be *less* likely to do this for severe incidents.

Furthermore, they were also less likely to forgive after a severe incident compared to a mild incident. Although we thought neuroticism would be especially important with regard to the inherently ambiguous behaviours that characterize incivility because neurotic individuals may more readily perceive ambiguous stimuli to be stressful (Bolger & Zuckerman, 1995), and indeed they did rate incidents more as being more severe on average, neuroticism did not moderate other appraisal-response relationships. Given large sample sizes are required to detect moderating effects this may have been due to a lack of power (Aiken & West, 1993).

The results of this study provide rare empirical information regarding Andersson and Pearson's (1999) concept of an 'incivility spiral.' Although the large majority admitted to responding negatively to the instigator on at least one occasion, the most common response was to ignore or avoid the instigator. There was a greater probability of negative responses when an act of incivility occurred in the less confined field settings, when it was perceived as being severe, and when the target had high neuroticism. Further research is required to track linked incidents. The data also showed that participants do not typically limit themselves to just one response to an incident, adding further evidence to Cortina and Magley's (2009) argument that responses occur in combination.

Practical implications

The daily diary design of our research provided a stronger test of causal associations (Totterdell, Hershcovis, & Niven, 2012). Our results illustrate the link between an

individual's appraisals of an uncivil incident and their subsequent responses. Thus, workplace interventions aimed at minimizing the harm caused by perceived mistreatment could focus on teaching employees to understand the impact of their appraisals and re-frame the meaning of what happened. This is known to be a very powerful approach for regulating stress and emotion (Lazarus, 1993). It is also consistent with the transactional model of stress (Lazarus & Folkman, 1984), which proposes that stress can be reduced by helping affected people change their perceptions of stressors, providing them with strategies to help them cope and improving their confidence in their ability to do so. This education and reframing intervention is likely to be particularly suited to cases of incivility because the ambiguity inherent with this behaviour makes it particularly difficult for targets and supervisors to control, but the power to control one's feelings and responses sits with the individual.

Limitations and future research

The nature of the attribution and response constructs being assessed makes them susceptible to self-enhancement biases. However, self-report studies of other sensitive topics such as workplace deviance suggest that employees are willing to admit engaging in undesirable behaviour (Bennett & Robinson, 2000), so respondents may not necessarily have underreported their revenge behaviours for example, or over-reported their willingness to forgive. On a different note, we acknowledge that in studying incivility we may only cover behaviour at the milder end of the interpersonal mistreatment spectrum. For example, research has shown employees appraised workplace incivility as moderately to very frustrating, annoying, bothersome, insensitive, and offensive, but generally not particularly threatening (Cortina & Magley, 2009). Our results may have been stronger if we had examined more serious offences such as bullying. Nevertheless given the high correlations between the various forms of interpersonal mistreatment (e.g., Griffin, 2009; Raver & Barling, 2008), there is considerable debate as to whether they are empirically distinct.

One of the problems of incivility research is that people are asked to retrospectively remember incidents that may have occurred up to five years ago. While our design mitigated some of the disadvantages of this approach, a day-level diary design reduces, but does not entirely remove, recency and saliency effects. In addition, all variables were examined from the perspective of the victim only. The use of self-reports potentially raises concerns about common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), which has been a problem for previous diary survey research (e.g., Sonnentag, Binnewies, & Mojza, 2008; Mojza, Sonnentag, & Bornemann, 2011). Although using person-centred scores in the within-person analyses eliminated the potential influence of response tendencies stemming from individual differences (e.g., negative affectivity), future studies might also include other objective measures of the outcome variables. Indeed, it is crucial for the development of the field to include objective measures, such as absentee and job performance measures, which play a role in business (Bakker & Demerouti, 2007).

Longitudinal daily diary studies enable investigation of the proposed "incivility spiral" (Andersson & Pearson, 1999), whereby individuals retaliate and behaviours increasingly deteriorate. The conceptualization of an incivility spiral is important in linking the immediate behaviour of individuals to longer term outcomes and the behaviour of the organisation as a whole. Future research should examine how appraisal and responses unfold within individuals, across situations, and over time to determine whether response behaviours in turn influence the frequency of uncivil incidents in the longer term or the intensity of interpersonal conflict between the employees, as Andersson and Pearson (1999) have described. For example, if a person reacts negatively toward the instigator on a day, does their stress or organisational commitment increase that day? In this way, immediate responses to interpersonal mistreatment are in fact moderating variables of longer-term individual and organisational outcomes.

Appraisals and responses to workplace incivility

In summary, this study is the first to examine the within-subject variation in coping responses to interpersonal mistreatment and the association between appraisals of incivility and subsequent responses. Considering a cross-level direct effect and cross-level moderator of targets' reactions to interpersonal mistreatment is an important addition to the field as it furthers our understanding of how employees appraise and respond to mistreatment. By adopting a multi-level perspective, this study offered a unique opportunity to examine employees' appraisals of, and reactions to, daily incivility, as well as providing empirical evidence on how individual (between-person) factors interact to influence appraisals of, and reactions to, daily workplace incivility.

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Table 1: Means, Standard Deviations, and Correlations of Level 1 and Level 2 Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
Level 1: Within-Person Measures												
1. Time (nominal variable)												
2. Severity of Daily Incivility (within-person)	.00	.91	05									
3. Attribution of Daily Incivility – My Fault vs. Other's Fault	.03	.17	06	02								
4. Source of Daily Incivility – Customer vs. Supervisor	.38	.49	.13**	.13**	.00							
5. Source of Daily Incivility – Co-Worker vs. Supervisor	.37	.48	04	13**	02	60**						
6. Daily Ignore/ Avoid Instigator Response	.72	.45	04	.08	09	01	.01					
7. Daily Respond Negatively to Instigator Response	.43	.50	04	.18**	06	.02	03	.29**				
8. Daily Respond Negatively to Others Response	.15	.36	04	.10*	02	06	01	.18**	.24**			
9. Daily Seek Support Response	.41	.49	11**	.24**	05	.04	11*	.33**	.47**	.28**		
10. Daily Forgive Instigator Response	.56	.50	14**	09*	.00	03	.03	.47**	.18**	01	.16**	
Variables	M	SD	1	2	3							
Level 2: Between-Person Measures												
1. Work Setting (binary variable)	.57	.50										
2. Severity of Daily Incivility Aggregated (between-person)	2.21	.96	30**									
3. Neuroticism	2.57	.69	12**	.09*								

Note: N = 863 for day-level measures, N = 130 for individual-level measures. * p < .05. ** p < .01.

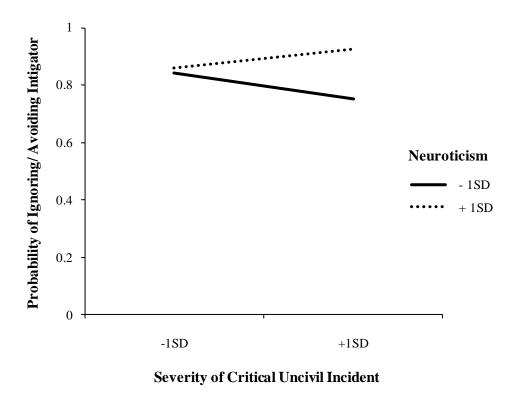
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Table 2: Multilevel Estimates for Models Predicting Responses from Daily Incivility

_	Ignore/ Avoid Instigator			Respond Negatively To			Respo	nd Nego	atively To	Seek Support			Forgive Instigator		
				Instigator			Others								
Variable	B	SE	t	В	SE	t	В	SE	t	В	SE	t	В	SE	t
Level 1															
Intercept	1.34	0.67	2.00*	-0.41	0.44	-0.93	-2.52	0.66	-3.84**	-0.63	0.48	-1.31	3.11	0.59	5.28**
Severity of Daily Incivility	0.05	0.13	0.41	0.43	0.11	3.98**	0.28	0.13	2.25*	0.53	0.10	5.29**	-0.42	0.10	-4.31**
(within-person)															
Attribution of Daily Incivility -	0.41	0.92	0.45	-0.23	0.64	-0.37	0.06	0.87	0.07	0.02	0.61	0.04	-0.16	0.66	-0.25
My Fault															
Source of Daily Incivility -	0.61	0.37	1.65	-0.07	0.27	-0.27	-0.33	0.35	-0.93	0.16	0.27	0.58	0.05	0.29	0.18
Customer															
Source of Daily Incivility -	0.56	0.36	1.56	0.33	0.28	1.18	-0.05	0.36	-0.13	0.01	0.27	0.03	-0.07	0.30	-0.22
Co-Worker															
Level 2 – Direct Effects															
Severity of Daily Incivility	-0.03	0.21	-0.15	0.28	0.13	2.20*	0.50	0.18	2.76**	0.39	0.15	2.69**	-0.72	0.16	-4.42**
Aggregated (between-person)															
Work Setting (Field)	0.01	0.42	0.03	-0.58	0.25	-2.33*	-0.02	0.38	-0.06	-0.11	0.28	-0.37	-0.15	0.32	-0.47
Neuroticism	0.57	0.28	2.04*	0.42	0.17	2.46*	0.26	0.26	0.99	0.40	0.19	2.06*	0.31	0.22	1.42
Level 2 – Interaction Effects															
Neuroticism x Severity of Daily	0.52	0.21	2.48*	-0.15	0.18	-0.82	-0.11	0.20	-0.54	-0.05	0.16	-0.30	0.34	0.16	2.09*
Incivility (within-person)															

Note: Results are presented controlling for *Time*. *Work Setting* (Field) = 0, *Work Setting* (Corporate) = 1.

N = 863 for day-level measures, N = 130 for individual-level measures. * p < .05, ** p < .01.



Neuroticism as a moderator of the relationship between severity of daily incivility and daily ignore/ avoid instigator responses.

Figure 1:

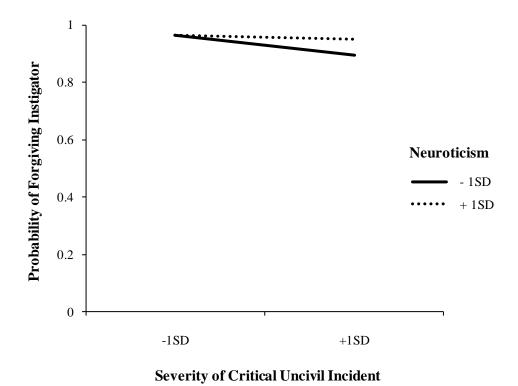


Figure 2: Neuroticism as a moderator of the relationship between severity of daily incivility and daily forgive instigator responses.

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CHAPTER 6:

Discussion & Conclusion

This thesis concludes with a final chapter that summarises the findings of all three papers, drawing together the major themes that have emerged over the progression of the research. I comment on the overall limitations of this body of work as well as future directions for research and the need to devise individual and organisational education programs and interventions that will reduce the incidence of incivility and its impact.

Summary of Findings

The results of analysing the data collected for this thesis confirm that incivility is a widespread problem, with 90.8% of the 130 participants reporting that they experienced incivility over the past year. As with other research (e.g., Caza & Cortina, 2007; Cortina et al., 2001), incivility was associated with increased stress at the general level, that is, reports of the extent of incivility experienced over the prior year related to self-reported general level of stress. I extended the existing literature on outcomes to include health behaviour variables and showed that incivility experienced over the previous year (i.e. between-person) was related to undertaking fewer relaxation activities and consuming more unhealthy foods in general, but not to general exercise levels or alcohol consumption. The null results in relation to alcohol may have been a power issue as a larger than expected proportion of the sample were non-drinkers. In terms of exercise, other environmental factors – such as the weather, work or personal commitments, and the individual's health – may present additional barriers to partaking in exercise, and thereby diminish the moderating effect of CSE. These results may also be because when people are stressed, more established or habitual behaviours increase while behaviours that are relatively new tend to decrease (Cooper, Dewe, & O'Driscoll, 2011). For example, when stress levels are high, an individual trying to begin an exercise routine is likely to struggle, whereas a person who has been exercising for most of their life may workout more. Better measurement to capture

change in the level of participants' health behaviours may clarify the relationship between incivility and unhealthy behaviour. Nonetheless, these findings add to the field.

The major contribution of the papers in this thesis is the extension of incivility research to the within-person level. As revealed in Chapter 1, existing theory and research has been almost exclusively at the between-person level of analysis. Although such studies have made important contributions to our understanding of the effects of incivility at work, this standard approach to measurement is problematic. I addressed these problems by using a longitudinal diary study design, collecting data over a 4-week period. "Diaries" provide a means to examine short-term processes and everyday experiences of working individuals (Ohly, Sonnentag, Niessen, & Zapf, 2010). In addition to capturing within-person day-to-day fluctuations, the diary paradigm is also advantageous in terms of predictive value, reporting accuracy, and statistical power (Gunthert et al., 1999).

I found incivility relationships occur at the within-person level. Participants had higher stress on the days they experienced more incivility. Day-level engagement and several health behaviours – relaxation activities, exercise, diet, and alcohol consumption – were also examined, but these within-person relationships were only significant when between-person (cross-level) moderator variables were accounted for.

Papers 1 and 2 considered both job- and person-related resources as moderators of within-person level relationships. Perceived supervisor support (PSS), a job resource, significantly moderated the within-person relationship between daily incivility and daily stress, such that this relationship was stronger for people with low levels of PSS. Core self-evaluation (CSE), a personal resource, was a significant moderator of the effect of within-person daily incivility on daily engagement, with low CSE individuals reporting reduced daily engagement when faced with daily incivility. CSE was also a significant cross-level moderator of the effect of within-person daily incivility on daily relaxation and daily unhealthy eating, such that people with lower levels of CSE reported reduced daily

relaxation and increased unhealthy eating when faced with daily incivility. These results highlight the harmful effect of incivility on individuals and organisations alike.

In the third paper, I moved the investigation to the area of responses a target chooses to make immediately after an incident of incivility. Responses are likely to be the intermediary between incivility and longer-term outcomes such as stress and work engagement (Bordia et al., 2008). Up until now, researchers (e.g., Aquino, Tripp, & Bies, 2006; Cortina & Magley, 2009) have typically treated responses to interpersonal mistreatment as a between-person difference. I demonstrated that people don't respond to incidents of mistreatment in a totally consistent way. Three broad sets of factors were proposed as determinants of choice of response, namely characteristics of the incident, characteristics of the instigator, and characteristics of the target. Having established substantial within-person differences in the way individuals responded to incidents of incivility at work, variables representing these three factors were investigated as predictors that might explain this variance in response options.

The findings showed a characteristic of the incident (perceived severity) and a characteristic of the target (neuroticism) were significant predictors of different responses. Individual differences in neuroticism, one of the Big Five personality factors (Goldberg, 1981), which captures a dispositional tendency toward emotional instability (Wang, Repetti, & Campos, 2011), also acted as a significant moderator of a within-person relationship. People with higher levels of neuroticism who perceived an uncivil incident as more severe (characteristic of the incident) were more likely to ignore/ avoid the instigator. Interestingly, those with lower neuroticism appeared to be less likely to do this for severe incidents. Furthermore, the probability that someone with lower levels of neuroticism would forgive decreased as the perceived severity of the incident increased. However, there was still substantial within-person variance in response that remained unexplained by the three

proposed factors. Future research should investigate additional variables to determine why and how people respond differently to instances of interpersonal mistreatment across time.

Overall Limitations of the Research and Future Directions

A common finding in research on incivility, and on other interpersonal mistreatment constructs, is that the incidence or frequency of these behaviours is highly skewed in a positive direction (e.g., Miner et al., 2012; Miner-Rubino & Reed, 2010; Penney & Spector, 2005). The research presented in this thesis is one of few analyses to take into account and correct for the skewed nature of incivility data. Future research needs to grapple with this problem in terms of the way incivility is measured, surveys are designed, and the data are analysed.

The items that make up the incivility scales are similar to other interpersonal mistreatment scales, and so participants may not have been responding exclusively to uncivil experiences. As such, the results of this thesis may be generalizable to other forms of interpersonal mistreatment. However, as detailed in the Chapter 2 literature review, incivility is conceptually distinct. For example, in contrast to incivility, bullying examines repeated behaviours and is characterised by its persistence and frequency (Hershcovis, 2011). We do not yet know about the cumulative effect of incivility, and future research would need to examine whether the role of moderating variables differs in instances of random incivility compared to cases of ongoing bullying.

Diary studies require fewer participants to reach appropriate statistical power and although my participant numbers were sufficient (Ohly, Sonnentag, Niessen, & Zapf, 2010), they were still limited. Some individuals did not experience incivility on every day and not all participants completed all eight diary surveys. Although the statistical procedures used dealt with missing data, the smaller samples may have resulted in a lack of power, which could have contributed to the absence of predicted findings, particularly regarding health

behaviours in the second study. Future studies should continue to use diary designs but be more rigorous in the days and times participants reported.

One advantage of the sample used in this research was that participants came from a "blue-collar" workplace, rather than being members of a profession, such as nursing. This is quite rare in the field and is another contribution of this body of work. However, as with almost all research to date, my studies only considered the target employee's perspective. This focus has left the instigator of uncivil behaviour largely unexamined (Estes & Wang, 2008). Future research needs to consider the instigator and even examine the instigator and target perspectives simultaneously.

Lastly, despite the negative consequences of stress, many organisations take no action to address stress levels in their employees (Beehr & O'Driscoll, 2002). Incivility negatively affects people on a daily basis and on a longer term basis, and so practitioners need to devise individual and organisational education programs and interventions that will reduce the incidence of incivility and its impact. The results of this body of work can be used to inform such interventions. For example, supervisors appear to play a pivotal role in minimising the negative impact of incivility and, consequently, of strain on employees. Supervisor support is an environmental resource for individuals, which organisations can influence and develop. Increasing supervisor awareness of incivility, their role in company policies and procedures for dealing with uncivil behaviour, and how their actions can transmit organisational norms into actual practices may be an important strategy for anticipating inappropriate behaviour in the workplace and preventing incivility-induced strain. In addition to implementing "no tolerance" policies related to interpersonal mistreatment and clear procedures for dealing with such incidents, organisations should educate employees about the process for responding to and reporting uncivil behaviour, and the support they can expect to receive (Pearson et al., 2000).

Further, the personal resource core self-evaluation (CSE) appears to be important in minimising the negative impact of incivility and, consequently, of strain on employees. CSE helps people to shape perceptions and interpretations of events and, therefore, helps them to exercise influence over events that affect their lives (Judge, van Vianen, & de Pater, 2004). Thus, CSE is a trait that organisations could consider in their recruitment and selection activities.

In addition, workplace interventions aimed at minimising the harm caused by perceived mistreatment could focus on teaching employees to understand the impact of their appraisals and re-frame the meaning of what happened (see Lazarus, 1993; Lazarus & Folkman, 1984). This education and re-framing intervention is likely to be particularly suited to cases of incivility because the ambiguity inherent with this behaviour makes it particularly difficult for targets and supervisors to control, but the power to control one's feelings and responses sits with the individual. Such approaches should yield positive outcomes for both organisations and their employees.

Conclusion

Workplace incivility is a difficult phenomenon for organisations to recognize or control because such behaviours are low in intensity, not obviously intentional, and targeted employees do not always make formal complaints (Cortina & Magley, 2009). Unlike bullying or sexual harassment, workplace incivility is not illegal, and thus organisations and human resource professionals often do not have policies to address such violations of workplace norms (Pearson & Porath, 2005). However, uncivil workplace behaviour is detrimental to individuals and organisations in a multitude of ways, both measurable and hidden.

The strength of the body of work presented in this thesis is the within-person analytic approach, which addresses the problem of retrospective reporting over a long period of time and goes some way towards addressing causality. This research also adds to the literature on

the more immediate detrimental effects of uncivil behaviour, which can even change the way a person feels on a day to day basis. My findings provide scholars and practitioners with more information about the insidious nature of workplace incivility, how occurrence may be linked to individual and organisational outcomes, and possible interventions that might curtail the frequency of such behaviour – whether instigated by supervisors, employees, or customers. Because daily experiences of incivility were linked to fluctuations in day-level individual and job-related outcomes, this research highlights the need to deal with uncivil behaviour regularly (ideally when incidents occur) to prevent negative outcomes accumulating.

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APPENDIX

Appendix 1: Measures

Independent variables

Incivility

Workplace Incivility Scale (WIS; Cortina et al., 2001). The WIS is a one-dimensional measure consisting of seven items that require respondents to report the frequency with which they have been the target of workplace incivility during a preceding time period. The WIS has high internal consistency among items (α = .84). Cortina et al.'s (2001) work indicates that the scale is internally consistent and exhibits good convergent and concurrent validity, with higher WIS scores predicting decreased job satisfaction and increased perceptions of unfair treatment at work, psychological distress, and job withdrawal (i.e., thoughts and intentions about leaving the organization). The WIS also exhibits good divergent validity by not correlating significantly with extrinsic organizational commitment (i.e., the extent to which motivation to work is based on external rewards such as financial remuneration).

Uncivil Workplace Behaviour Questionnaire (UWBQ; Martin & Hine, 2005). The UWBQ conceptualises workplace incivility as a multidimensional construct by assessing several facets of incivility related to hostility, privacy invasion, exclusionary behaviour, and gossiping. As such, the UWBQ provides an added level of specificity. The UWBQ and all of its subscales have Cronbach's alphas of over .80, indicating high internal consistency among the items (α = .92). The UWBQ is internally consistent and exhibits good convergent, divergent, and concurrent validity (Martin & Hine, 2005). With regard to divergent validity, the UWBQ explains a very small and non-significant amount of variance in extrinsic organizational commitment, having controlled for demographics and job stress.

Blame

Blame was measured using items from Sedgley and Griffin (2012), which were in turn based on Bowling and Beehr's (2006) model identifying sources of blame: attribution to the self, the perpetrator, or the organisation.

Severity of the incident

A single-item assessed the perceived severity of uncivil encounters typically experienced at work (Level 2) and of specific day-level experiences (Level 1). "How rude, offensive, or inappropriate did you feel this worst encounter was?" using a 5-point index (1 = a little, 5 = extremely). Single item measures are common in diary research to reduce participant burden (Ohly et al., 2010).

Dependent variables

Stress

Depression Anxiety Stress Scale (DASS 21; Lovibond & Lovibond, 1995). The stress subscale of the DASS measures levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive and impatient. The scales of the DASS have been shown to have high internal consistency and to yield meaningful discriminations in a variety of settings.

Work engagement

Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003). The shortened UWES consists of nine items that cover the three aspects of the work engagement concept: vigour (e.g., "At my work, I felt bursting with energy"), dedication (e.g., "I was enthusiastic about my job"), and absorption (e.g., "I was immersed in my work"). Confirmatory factor analyses support the three-dimensional structure of the UWES, however these dimensions are closely related. Correlations between the three scales usually exceed .65 (e.g., Demerouti et al., 2001; Salanova et al., 2000; Schaufeli et al., 2002a, 2002b), and values of Cronbach's α for each of the scales range between .80 and .90 (Salanova et al., 2000;

Schaufeli et al., 2002a, 2002b). Indeed, Schaufeli and Bakker (2003) argued that the total score for work engagement may sometimes be more useful because of the moderate to high correlations between the dimensions, which was supported by recent meta-analytic findings (Christian, Garza, & Slaughter, 2011).

Research has shown the UWES to have a median Chronbach's alpha of .92 across ten different countries (Schaufeli, Bakker, & Salanova, 2006). Validity studies that have been carried out with the UWES show that work engagement is indeed negatively associated with burnout, but engagement can be discriminated from workaholism. The phrasing of the current survey was re-worded to assess work engagement on a specific day.

Exercise, relaxation, unhealthy eating

Health Promoting Lifestyle Profile II (HPLP II; Walker & Hill-Polerecky, 1996). The HPLP II has subscales measuring multiple health dimensions, including behaviours relating to nutrition, physical activity, and relaxation (or stress management). Construct validity has been supported by factor analyses that confirm the multi-dimensional structure of the HPLP II. The HPLP II demonstrates convergence with the Personal Lifestyle Questionnaire (r = .678), and non-significant correlations with social desirability. Criterion-related validity has been indicated by significant correlations with concurrent measures of perceived health status and quality of life (r's = .269 to .491). Research has shown high internal consistency for the total scale ($\alpha = .94$), as well as high internal consistency for each of the subscales (α ranging from .79 to .87).

Responses

Possible responses to uncivil incidents were adapted from Cortina and Magley's (2009) coping behaviours, which were in turn drawn from items from Fitzgerald's (1990) Coping with Harassment Questionnaire (CHQ). The CHQ assesses internally focused coping strategies that regulate cognitions and emotions associated with the experience as well as externally focused strategies. Fitzgerald developed these items to assess ways in which

employees respond to workplace harassment, finding average reliability coefficients of .83 and correlations in the appropriate direction with a measure of assertiveness. Although this scale was originally conceived specifically as a harassment-coping measure, item content appeared general enough to capture responses to other types of antisocial work behaviour as well (Cortina & Magley, 2009).

Cross-level moderators

Perceived supervisor support (PSS)

Survey of Perceived Organizational Support (SPOS; Eisenberger, Huntington, Hutchison, & Sowa, 1986). The short version of the SPOS was used to measure PSS replacing 'organisation' with 'supervisor' (as per Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002; Kottke & Sharafinski, 1988). Nearly identical results have been found for the factor analysis of the SPOS as for the SPSS. Reliability analyses have also demonstrated considerable uniformity of responding to the items, with Coefficient alpha .96 for the SPOS, and .98 for the SPSS. The median item-total correlations have been shown to be .81 for the SPOS and .85 for the SPSS. Overall, the SPSS displays psychometric properties that mirror the SPOS. In addition, Rhoades and Eisenberger (2002, p. 699) attest that "Because the original scale is one-dimensional and has high internal reliability, the use of shorter versions does not appear problematic".

Kottke, J.L., & Sharafinski, C.E. (1988). Measuring perceived supervisory and organizational support. *Educational and Psychological Measurement*, 48, 1075-1079. doi: 10.1177/0013164488484024

Core self-evaluation (CSE)

Core Self-Evaluation Scale. The 12-item Core Self-Evaluation Scale (CSES; Judge, Erez, Bono, & Thoresen, 2003) measures four core traits – self-esteem, generalised self-efficacy, neuroticism, and locus of control – but displays a unitary factor structure justifying

a combined score (Judge et al., 2003). Results also indicate that the CSES is reliable and correlates significantly with job satisfaction, job performance, and life satisfaction.

Neuroticism

International Personality Item Pool – Five-Factor Model measure (IPIP; Goldberg, 1999). Trait-based neuroticism was measured using 10 items from the IPIP. Short versions of the IPIP have been shown to have consistent and acceptable internal consistencies across studies (α at or well above .60), similar coverage of facets as other broad Big Five measures, and test-retest correlations that were quite similar to the longer parent measure across intervals of a few weeks and several months (Donnellan, Oswald, Baird, & Lucas, 2006). Moreover, the short IPIP scales have showed a comparable pattern of convergent, discriminant, and criterion-related validity with other Big Five measures. Collectively, these results indicate that a shorter version of the IPIP is a psychometrically acceptable and practically useful measure of the Big Five factors of personality.

Donnellan, M.B., Oswald, F.L., Baird, B.M., & Lucas, R.E. (2006). The Mini-IPIP scales:

Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18(2), 192–203. doi: 10.1037/1040-3590.18.2.192

Appendix 2: Initial Survey



Faculty of Human Science

MACQUARIE UNIVERSITY NSW 2109 AUSTRALIA

Phone +61 (0)2 9850 9729

Email Larissa.Beattle@mq.edu.au

Research Project: Day-Level Workplace Disrespect

Initial Survey

Email Address	
Mobile Phone Number	
Date	

Instructions

- 1. This survey asks about you, your work, and your experiences of rudeness and disrespect at work.
- Please complete the questions by placing a cross in the appropriate box (□) or circling "yes" or "no".
- Once you have completed this survey, please place it in the reply paid envelope provided and mail to the address on the envelope:

Larissa Beattie Human Resources MACQUARIE UNIVERSITY NSW 2109 AUSTRALIA

- 4. Your responses will remain completely anonymous and confidential:
 - Your name will not be asked for, or recorded, anywhere on your surveys.
 - SNP will not know if you have chosen to take part in this study or not.
 - Your email address will only be used to send you the online follow-up surveys.
 - Your mobile phone number will only be used to send you SMS reminders to complete your follow-up surveys.
 - Your personal details (email, mobile phone number, gender, age, etc.) will not be linked to your responses.
- 5. If you have any questions or concerns, please contact Larissa Beattie from Macquarie University on (02) 9850 9729.

Next Steps

 For the next 4 weeks, please complete 2 diary surveys per week. Complete your survey soon after you have finished work for the day.

For each survey returned, you will go in the draw to win \$100 Coles Myer gift vouchers + more!

Thank you for your time!

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About You...

Q1.	Are you		Q8.	What area of the business do you w	ork in?
٦	Male	□.	40.	Corporate Head Office, West Ryde	□ ₀₁
	Female	_,		Canberra Airport – Aviation	□ _∞
		-1		Canberra Branch	_ ₀₃
Q2.	How old are you?			Melbourne	□ _∞
		years		Newcastle Airport – Aviation	□ ₀₅
	•			Newcastle Branch	□ ∞
Q3.	What language do you speak at ho	me?		Security/ Technical	_ ₀₇
40.	English	□0		University of Newcastle	□ ₀₈
	Other	_, □,		University of NSW	□ _∞
				University of Sydney	□ ₁₀
				University of Western Sydney	□ ₁₁
Q4.	What ethnic group do you most re	late to?		University of Wollongong	□ ₁₂
	Oceanian	□₀		Canberra Electronic Services	□ ₁₃
	Aboriginal/ Torres Strait Islander	□,		Canberra Protective Services	□ ₁₄
	North-West European				- 14
	Southern & Eastern European	□3			
	North African & Middle Eastern	□4	Q9.	How many cigarettes do you smoke	on an
	South-East Asian	□5		average day?	_
	North-East Asian	□e		0 – I don't smoke	□ ₀
	Southern & Central Asian	□7		1-5	
	People of the Americas	□s		6 – 10	□ ₂
	Sub-Saharan African	□,		11 – 15	□з
				16 – 20	□4
Q5.	What is the highest level of educat	tion you		21 – 25 (1 pack)	□ ₅
ago.	have achieved?	non you		>25 (more than 1 pack)	□e
	Year 10 or equivalent	□1			
	Year 12 or equivalent		Q10.	Typically, how many days a week do	vou drink
	Tafe	□3	Q10.	alcohol?	you uniik
	Undergraduate Degree	□4		None – I don't drink alcohol	□₀
	Postgraduate Diploma	□₅		1-2	
	Masters/ PhD	□e		3 – 4	\square_2
	•			5 – 6	□з
				7 – Everyday	
Q6.	How long have you worked at SNP				
		years			
			Q11.	When you do drink alcohol, how ma do you have on average?	ny drinks
Q7.	Do you manage people?			Beer number of dri	inks
	Yes	□₀		Winenumber of dri	inks
1	No	□,		Spirits number of dri	inks

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Q12.	In a typical week, do you	Never	Rarely	Sometimes	Most Days	Everyday
1.	Follow a planned exercise program.	□,		□з	□4	□₅
2.	Get enough sleep.	□ ₁		□з	Q 4	□ ₅
3.	Exercise vigorously for 20 or more minutes.	□,		□з	Q 4	□5
4.	Take some time for relaxation.	□1		□₃	□ 4	□₅
5.	Take part in light to moderate physical activity (e.g., sustained walking for 30 – 40 mins).	□ 1		□з	□4	□5
6.	Practice relaxation or meditation.			□ ₃	Q 4	□ ₅
7.	Sleep well.	□1		□з	Q 4	□5
Q13.	On an average day, how often do you eat	Never	1 serve	2-3 serves	4-5 serves	>5 serves
1.	Foods high in fat (e.g., fast food, bacon, sausages, chips, cookies, cakes, muffins, pastries).			□з		□5
2.	Foods high in sugar (e.g., sweets).	□ ₁		□з	□ ₄	□5
3.	Bread, cereal, rice, or pasta.	□1		□₃	□4	□₅
4.	Fruit.	□ ₁		□з	□ ₄	□ ₅
5.	Vegetables.	□ ₁		□з	□4	□ ₅
6.	Milk, yoghurt, or cheese.	□ ₁		□₃	Q 4	□5
7.	Meat, poultry, fish, dried beans, eggs, and nuts.	□1		□з	□4	□5
		•	•			•
Q14.	How often do you experience the following in your workplace	Never	Rarely	Sometimes	Often	Always
1.	I simply have more work to do than can be done in an ordinary day.			□з	□ ₄	□5
2.	I have to make decisions where mistakes could be quite costly.	ū		а	□4	□5
3.	I don't have the help or equipment to get the job done well.			□з	□₄	
4.	I have insufficient training &/or experience to carry out my duties properly.			Вз	□4	□5
5.	I am unable to influence my supervisor's decisions—even when they affect me.	□ ₁		Вз		
6.	I am given freedom to decide how to do my work.	□ ₁		□з	□4	□5
7.	I lack the authority to carry out my job responsibilities.	□ 1	\square_2	□з	□ 4	□5
8.	Clear, planned goals and objectives exist for my job.	□ ₁		□з	□4	□5
9.	I do not fully understand what is expected of me.	□ ₁		□з	□4	□5
10.	I receive conflicting requests from two or more people.	□ ₁	□ 2	□з	□4	□5
11.	Travelling to and from work takes up a substantial part of my day.	□ ₁		Пз	□4	□5
12.	I have significant pressures or difficulties related to my			□₃	 4	□₅

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□₁

□s

13. I currently have significant financial problems or worries.

□₄

2. Sometimes I feel depressed. 3. When I try, I generally succeed. 4. Sometimes when I fail, I feel worthless.	D₄ □₅
3. When I try, I generally succeed. 4. Sometimes when I fail, I feel worthless.	
4. Sometimes when I fail, I feel worthless.	
	□ ₅
5. I complete tasks successfully. □₁ □₂ □₃ [□ ₅
	□ ₅
6. Sometimes, I do not feel in control of my work. □₁ □₂ □₃ [□ ₅
7. Overall, I am satisfied with myself.	□ ₅
8. I am filled with doubts about my competence.	1 4 □5
9. I determine what will happen in my life.	□ ₅
10. I feel in control of my success in my career.	□ ₅
11. I am capable of coping with most of my problems.	□ ₅
12. There are times when things look pretty bleak and hopeless to me.	□ ₄ □ ₅
Q16. How characteristic is each statement of you. I Not At All Not Really Neutral A.L.	ittle Extremely
Like Me Like Me Like	Me Like Me
	1 ₄ 0 ₅
	<u></u>
	<u></u>
	1 ₄ □₅
	1 ₄ □₅
	<u></u>
	1 ₄ □₅
	1 ₄ 0 ₅
	1 ₄ □5
10. Remain calm under pressure.	1 ₄ □5
Q17. How much has each statement applied to you over the past month Some of the A good past month	P
1. I found it hard to wind down.	□4
2. I tended to over-react to situations.	□4
3. I felt that I was using a lot of nervous energy. □₁ □₂ □₃	□4
4. I found myself getting agitated. □₁ □₂ □₃	□4
5. I found it difficult to relax.	□4
I was intolerant of anything that kept me from getting on with what I was doing.	□4
7. I felt that I was rather touchy.	□4
Q18. Overall Strongly Disagree Neutral Ag	ree Stronaly Agree
My work gives me a feeling of personal accomplishment.	□ ₅
2. I like the kind of work I do.	□ ₅
3. Overall, I am satisfied with my job.	□ ₄ □ ₅

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Q19.	How much do you agree/ disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	The most important things that happen to me involve my present job.	٠,		□ ₃	□4	۵,
2.	Most of my interests are centred around my job.	□ ₁		□з	□4	□5
3.	To me, my job is a very large part of who I am.	□ ₁		□з	□4	□5
4.	I am very much personally involved with my job.	□ ₁		□з	□4	□5
5.	My job is a very important part of my life.	□ ₁		□з	□4	□5
6.	My profession is well respected by others.	□ ₁		□з	□ ₄	□5
7.	People/ society values the work my profession does.	□ ₁		□з	□ ₄	□5
8.	I think that working in security is an important role in society.	□ 1		 3	□ ₄	□ ₅
9.	I am proud to describe myself as having a security career when talking to others.	□ ₁	□ ₂	□з	□4	□₅
Q20.	Consider how you feel about SNP.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I would be very happy to spend the rest of my career with SNP.	□ ₁		□ 3	□4	□5
2.	I enjoy discussing SNP with people outside it.	□ ₁	\square_2	□з	□4	□5
3.	I do not feel like part of the family at SNP.	□ 1	\square_2	□з	□4	□ ₅
4.	I do not feel a strong sense of belonging to SNP.			□з	□4	□5
Q21	Think about your supervisor. How much do you agree/ disagree that your supervisor:	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	values your contribution to SNP.	□ ₁		□з	□4	□5
2.	appreciates any extra effort from you.			□₃	□4	□5
3.	would take on board a complaint from you.			□₃	□4	□5
4.	really cares about your well-being.	□ 1		□₃	□4	
5.	would notice if you did the best job possible.	□1		□з	□4	
6.	cares about your general satisfaction at work.	□ ₁		□з		
7.	shows concern for you.	□ ₁		□з	□4	□5
8.	takes pride in your accomplishments at work.	□ ₁		□з	□4	□5
Q22.	During the past 12 months, how often have you been in a situation where anyone has	Never	A Few Times	At Least Once a Month	At Least Once a Week	Very Often
1.	Put you down or was condescending to you.	□ 1	□ 2	□з	□4	□5
2.	Paid little attention to a statement you made or showed little interest in your opinion.	□ ₁		Пз	□4	□₅
3.	Made demeaning or derogatory remarks about you.	□1		□₃	□ 4	□5
4.	Addressed you in unprofessional terms, either publically or privately.	□ 1	□ 2	Пз	□ 4	□5
5.	Ignored or excluded you from professional camaraderie.	□ ₁		□з	□4	□5
6.	Doubted your judgement on a matter over which you have responsibility.	□ ₁		Пз	□4	□₅
7.	Made unwanted attempts to draw you into a discussion of personal matters.	□ 1		□ 3	□4	□₅
8.	Behaved in other disrespectful, rude, or condescending	□ ₁		□з	□ ₄	□₅

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Q23.	During the past 12 months, have you been the target of more or less rudeness and disrespect at work, compared to your colleagues?	Much Less than Other		The Same	A Little More	Much More than Others
			\square_2	□з	\square_4	
			•			
Q24.	In general, how rude, offensive, or inappropriate have you felt this behaviour was?	A Little	Somewhat	Moderately	Very	Extremely
			\square_2	□з	\square_4	
Q25.	In general, why do you think you were treated in this way?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I did something wrong to deserve the disrespectful behaviour.	□1		□з	□ 4	□5
2.	It was because there is something wrong with me.	□1		□₃	□4	□5
3.	It is typical of this person's character.	□1		□з	□4	\square_5
4.	The person was under a lot of stress.	□1		□з	□4	□5
5.	SNP allows them to get away with this type of behaviour.	□ 1		□₃	□4	
6.	It is typical of what is tolerated at SNP.	□ ₁		□з	□4	□5
7.	My job as a security worker is not respected.	□ ₁		□ 3	□4	□5
						_
Q26.	In general, how did you respond to these rude and disrespectful encounters?	Never	Rarely	Sometimes	Often	Always
1.	Tried to avoid/ stay away from the person.	□ ₁		□з		□5
2.	Just ignored it.	□ ₁		□з	□4	□5
3.	Tried not to make the person angry.	□ ₁		□з	□4	
4.	Tried to forget it.	□ 1		□з	□4	
5.	Assumed the person meant no harm/ meant well.	□ 1		□з	□4	
6.	Let the person know I didn't like what had happened.	□ 1		□з	□4	□5
7.	Talked with a friend/ family outside work for advice/ support.	□ ₁		Пз	□4	□5
8.	Talked with a colleague for advice/ support.	□1		□з	□4	□5
9.	Talked with a supervisor/ more senior colleague.	□ 1		□з	□4	
10.	Made a formal complaint.	□1		□з	□4	□5
11.	Responded with the same type of behaviour.	□ 1		□з	□4	□5
12.	Made sure that other colleagues knew about the incident.	□ ₁		□з	□4	□5
13.	Tried to prove the person wrong.	□ ₁		□з	□ ₄	□5
14.	Was in a bad mood at work.	□ ₁	□ 2	□з	Q 4	□5
15.	Took it out on someone else at work.	□ ₁		□з	□,	□5
16.	Was in a bad mood at home.	□ ₁		□₃	□,	□5
17.	Took it out on a friend/ family.	□ ₁		□з	□,	□5
18.	Forgave the person.	□ ₁		□₃	□4	□5

The End.

Thank you for completing this survey!

Your responses will remain completely anonymous and confidential. Please place this survey in the reply paid envelope provided and mail to the address on the envelope.

For each survey returned, you will go in the draw to win \$100 Coles Myer gift vouchers + more!

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 \Box_4

 \square_3

Appendix 3: Day-Level Diary Survey

Workplace incivility: Extending research to the day-level



Faculty of Human Science
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Phone +61 (0)2 9850 9729
Email Larissa.Beattle@mq.edu.au

Research Project: Day-Level Workplace Disrespect

Diary Survey

Survey ID				
Survey Number	1 of 8			
Day and Date		day	1	/ 2011
Time				

Instructions

- For the next 4 weeks, please complete 2 of these diary surveys per week. Complete your surveys soon after you
 have finished work for the day.
- 2. Once you have finished this "diary", place the completed survey in the reply paid envelope provided.
- Once you have completed all 8 "diary" surveys (2 per week for 4 weeks), mail your surveys to the address on the envelope:

Larissa Beattle Human Resources MACQUARIE UNIVERSITY NSW 2109 AUSTRALIA

For each survey returned, you will go in the draw to win \$100 Coles Myer gift vouchers + more!

Thank you for your time!

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Your Experiences Today...

Œ.	Today, has anyone at work:	More senior colleague (e.g. Supervisor)	Co-worker	Customer
1.	Raised their voice while speaking to you.	Yes, / No.	Yes,/No。	Yes, / No.
2.	Used an inappropriate tone when speaking to you.	Yes, / No.	Yes,/No。	Yes, / No.
3.	Spoke to you in an aggressive tone of voice.	Yes / No a	Yes+ / No»	Yes / No.
4.	Swom at you or around you.	Yes, / No.	Yes, / No.	Yes, / No.
5.	Verbally attacked you.	Yes / No a	Yes+ / No»	Yes / No.
6.	Rolled their eyes at you.	Yes, / No.	Yes, / No.	Yes, / No.
7.	Used defensive/ negative body language when annoyed with you (e.g., crossed arms, scowling, stood too close/ over you).	Yes / No a	Yes / No»	Yes / No .
8.	Borrowed things from you without asking.	Yes, / No.	Yes, / No.	Yes, / No.
9.	Touched your things without asking.	Yes, / No.	Yes, / No.	Yes, / No.
10.	Avoided you.	Yes / No a	Yes+ / No»	Yes / No.
11.	Falled to acknowledge you.	Yes, / No.	Yes, / No.	Yes, / No.
12.	Interrupted you.	Yes / No a	Yes+ / No»	Yes / No.
13.	Blamed you or others for their mistakes.	Yes, / No.	Yes, / No.	Yes, / No.
14.	Been unreasonably excessively slow in getting back to you on a work matter without good reason.	Yes / No a	Yes / No a	Yes / No :
15.	Not consulted you when you should have been involved.	Yes, / No.	Yes, / No.	Yes, / No.
16.	Intentionally falled to pass on information you should have been made aware of.	Yes, / No.	Yes, / No.	Yes,/No,
17.	Made inappropriate remarks about you, your gender, your religion, or other characteristic.	Yes, / No	Yes, / No _o	Yes, / No,
18.	Made snide remarks about you.	Yes / No a	Yes / No a	Yes / No a
19.	Talked about you behind your back.	Yes, / No.	Yes, / No.	Yes, / No.
20.	Gossiped about others in front of you.	Yes, / No.	Yes, / No.	Yes, / No.

If "no" to all, go to question 6.

For	questions 2 – 5, think about the most rude o	r disrespectful encounter you experienced today
Q2.	Today, who was your worst encounter with?	☐ ₁ More senior colleague (e.g., your Supervisor)?
		☐₂ Co-worker?
		□ ₃ Customer?

Q3.	How rude, offensive, or	r inappropriate did you f	eel this worst en	oounte	rwas?			
	A Little	Somewhat	Moderately		Ven Dk	y I	Extre	mely ls
		•				•		
04.	Think about your wore	experience foday.	Str	ongly	Disagree	Neutral	Agree	Strongly

Q4.	Think about your worst experience today. Why do you think the person acted in this way?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I did something wrong to deserve the disrespectful behaviour.	ο,		□ _a	□,	
2.	It was because there is something wrong with me.	ο,		ο,		•
3.	It is typical of this person's character.	ο,		ο,		□ °
4.	The person was under a lot of stress.	ο,		ο,		□ _s
5.	SNP allows them to get away with this type of behaviour.	ο,		Пэ		□ _s
6.	It is typical of what is tolerated at SNP.	D ₁		Пэ		□ls
7.	Because my job as a security worker is not respected.	Πı		Па		□ls

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Q6.	How did you respond to this worst encounter today?	(Please cl	rcle 'ye	saor mor)	
1.	Tried to avoid/stay away from the person.	Yes,	1	No a	
2.	Just ignored it.	Yes,	1	No .	
3.	Tried not to make the person angry.	Yes,	1	No ,	
4.	Tried to forget it.	Yes,	1	No.	
5.	Assumed the person meant no harm/ meant well.	Yes.	1	No a	
6.	Let the person know I didn't like what had happened.	Yes,	1	No.	
7.	Talked with a friend/ family outside work for advice/ support.	Yes.	1	No a	
8.	Talked with a colleague for advice/ support.	Yes,	1	No.	
9.	Talked with a supervisor/ more senior colleague.	Yes.	1	No a	
10.	Made a formal complaint.	Yes,	1	No.	
11.	Responded with the same type of behaviour.	Yes.	1	Nov	
12.	Made sure that other colleagues knew about the incident.	Yes,	1	No.	
13.	Tried to prove the person wrong.	Yes,	1	No .	
14.	Was in a bad mood at work.	Yes,	1	No.	
15.	Took It out on someone else at work.	Yes,	1	No.	
16.	Was in a bad mood at home.	Yes,	1	No.	
17.	Took it out on a friend/family.	Yes,	1	No ,	
18.	Forgave the person.	Yes,	1	No.	
		<u> </u>			
QB.	How many olgarettes did you smoke today?				
	0		□.		
	1-5				
	5-10				
	<u> </u>		\square_2		
	11 - 15		\square_3		
	16 - 20		\Box_4		
	21 - 25 (1 pack)				
	>25 (more than 1 pack)	_	П.		
	- 20 (more more ripaces)		Ш,		
Q7.	How many alooholio drinks did you have today?				
	Beer		number of drinks		
	Wine		iber of		
-	Spirits	nun	iber of	drinks	
.3.					
3.					
3. Q8.	Today, dld you	(Please cl	rcie iye	s" or "no")	
Q8.	Today, dld you Follow a planned exercise program.	(Please cl	rcie ilye	s² or ٩no²) No ,	
Q8.			•		
Q8. 1. 2.	Follow a planned exercise program.	Yes,	7	No ,	
Q8. 1. 2. 3.	Follow a planned exercise program. Get enough sleep.	Yes, Yes,	/	No ,	

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(e.g., sustained walking for 30 - 40 mins).

Practice relaxation or meditation.

Sleep well.

Now

No.

Yesy

Yes,

GB.	Today, how many times did you eat	0	1	2-3	4-6	>6
1.	Foods high in fat (e.g., fast food, bacon, sausages, chips, cookies, cakes, muffins, pastries).	Π,			□,	□ _s
2.	Foods high in sugar (e.g., sweets).	D ₁	□ ₂	Пэ	□4	o a
3.	Bread, cereal, rice, or pasta.	D ₁	□ ₂	Пa	D ₄	□s
4.	Fruit.	D ₁	Da	Пэ		□s
5.	Vegetables.	ο,		П		□s
6.	Mlk, yoghurt, or cheese.	ο,		П		□s
7.	Meat, poultry, fish, dried beans, eggs, and nuts.	Π,		□ ₂	Π,	□ _s
Q10.	How strongly do you agree with the following in terms of how you felt today	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	At my work, I felt bursting with energy.	□ ₁	□ 2	Da	D ₄	□s
2.	At my Job, I felt strong and vigorous.	D 1	□ ₂	Пь	П	□s
3.	I was enthusiastic about my job.	□,				□₅
4.	My job inspired me.	ο,		П		
5.	When I got up in the morning, I felt like going to work.	ο,		П	□,	□s
6.	I felt happy when I was working intensely.	ο,	□ ₂	□ ₂	Π,	□s
7.	I was proud of the work that I did.	ο,	□ ₂	□ _a	Π,	□ _s
8.	I was immersed in my work.	Π,	□ ₂	□ _a		□s
9.	I got carried away when I was working.	Π,	D ₂	□ _a		□s
Q11.	How much did each statement apply to you today	Not at all	Some of		ood part he time	Most of the
1.	I found it hard to wind down.	ο.	ο.		۵,	ο,
2.	I tended to over-react to situations.	ο,			<u> </u>	Π,
3.	I felt that I was using a lot of nervous energy.	D ₁			D ₂	D4
4.	I found myself getting agitated.	□ ₁			D ₂	
5.	I found it difficult to relax.	□ ₁			D ₃	□4
6.	I was intolerant of anything that kept me from getting on with what I was doing.	D ₁			Па	□4
7.	I felt that I was rather touchy.	Π,			D ,	Π,
The End. Thank you for completing this survey!						
For each survey returned, you will go in the draw to win \$100 Coles Myer gift vouchers + more! www.mq.edu.au © Larissa Beattle Page 4 of 4						

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Appendix 4: Ethics Approval

Workplace incivility: Extending research to the day-level

Ethics Secretariat <ethics.secretariat@mq.edu.au> Wednesday September 8 2010 Ethics application Reference – 5201000967 – Final approval

Dear Dr Griffin,

Re: "Day-level workplace incivility: The influence of core self-evaluation and role identity in determining attribution and response" (Ethics Ref: 5201000967)

Interim Approval for the SNP arm of the project of the above application was granted by the Executive of the Human Research Ethics Committee on 09th August 2010. This Interim Approval was reviewed by the full Committee at its meeting on 27th August 2010 and was ratified. This Final approval is granted only for the SNP arm of the project.

The following personnel are authorised to conduct this research:

- Dr Barbara Griffin- Chief Investigator/Supervisor
- Dr Benjamin Joseph Searle & Miss Larissa Beattie- Co-Investigators

Please note the following standard requirements of approval:

- 1. The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Human Research (2007).
- 2. Approval will be for a period of five (5) years subject to the provision of annual reports. Your first progress report is due on 08th September 2011.
 - If you complete the work earlier than you had planned you must submit a Final Report as soon as the work is completed. If the project has been discontinued or not commenced for any reason, you are also required to submit a Final Report for the project.
 - Progress reports and Final Reports are available at the following website: http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human _research_ethics/forms
- 3. If the project has run for more than five (5) years you cannot renew approval for the project. You will need to complete and submit a Final Report and submit a new application for the project. (The five year limit on renewal of approvals allows the Committee to fully re-review research in an environment where legislation, guidelines and requirements are continually changing, for example, new child protection and privacy laws).
- 4. All amendments to the project must be reviewed and approved by the Committee before implementation. Please complete and submit a Request for Amendment Form available at the following website:

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human _research_ethics/forms

- 5. Please notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that affect the continued ethical acceptability of the project.
- 6. At all times you are responsible for the ethical conduct of your research in accordance with the guidelines established by the University. This information is available at the following websites:

http://www.mq.edu.au/policy/

http://www.research.mq.edu.au/for/researchers/how_to_obtain_ethics_approval/human _research_ethics/policy

If you will be applying for or have applied for internal or external funding for the above project it is your responsibility to provide the Macquarie University's Research Grants Management Assistant with a copy of this email as soon as possible. Internal and External funding agencies will not be informed that you have final approval for your project and funds will not be released until the Research Grants Management Assistant has received a copy of this email.

If you need to provide a hard copy letter of Final Approval to an external organisation as evidence that you have Final Approval, please do not hesitate to contact the Ethics Secretariat at the address below.

Please retain a copy of this email as this is your official notification of final ethics approval.

Yours sincerely

Dr Karolyn White Director of Research Ethics Chair, Human Research Ethics Committee Workplace incivility: Extending research to the day-level

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