Attachment, Burnout, and Civility in Hospital Co-workers at Two Time Points

by

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Abstract

This thesis probes the existence of a moderating relationship of attachment anxiety on the paths between incivility/civility and burnout. 77 employees of a Western Canadian hospital completed a questionnaire (Maslach Burnout Inventory–General Scale, Straightforward Incivility Scale, Civility Scale, Short Work Attachment Measure) at two time points, approximately six months apart. Analyses tested whether paths from the independent variables of co-worker and/or supervisor incivility at Time One to dependent variables of cynicism, exhaustion, and/or professional efficacy at Time Two were moderated by attachment anxiety. Analyses failed to demonstrate the majority of expected associations. However, they revealed the relationship of exhaustion and cynicism with civility was negative for those lower in attachment anxiety and positive for those higher in attachment anxiety. They also revealed that the relationships between cynicism and exhaustion and attachment anxiety were negative for those lower in attachment anxiety and slightly positive for those higher in attachment anxiety.

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"Don't do what you want. Do what you don't want.
Do what you're trained not to want. Do the things that scare you the most."
- Chuck Palahniuk, Invisible Monsters

Dedication

This thesis is dedicated to Dr. Maryanne Fisher, without whose motivation and encouragement I would not have considered a graduate career in clinical psychology. I continue to be grateful to Dr. Fisher for getting me here, for exposing me to the wider research community, for giving me the strength of a thousand Gellies, and for being a wonderful and inspiring woman.

Attachment, Burnout, and Civility in Hospital Co-workers at Two Time Points

A promising strategy for explaining relationships of workplace qualities with burnout lies in the moderating effects of employees' personal characteristics such as attachment. Past research supports relationships between attachment and burnout (e.g., Littman-Ovadia, Oren & Lavy, 2013; Ronen & Baldwin, 2010) as well as between incivility and burnout (e.g., Sulea, Filipescu, Horga, Orţan, & Fischmann, 2012; Taylor, Bedeian, Cole, & Zhang, 2014). The aim of this thesis is to expand upon the current research regarding the relationships between interpersonal attachment, work-related burnout, and incivility in the workplace by defining a model of burnout that incorporates attachment anxiety. Specifically, this thesis explores the potential moderating impact of attachment anxiety on the relationship of burnout with incivility and civility at two time points.

Much of the current research related to attachment and burnout uses a cross-sectional design, as opposed to a longitudinal, or two wave, methodology. This thesis will survey employees at two time points, in an effort to address factors that contribute to and prevent burnout in a healthcare context. The estimated number of Canadians employed in health care and social assistance professions is over two Million (12.8% of employed Canadians) (Statistics Canada, 2015). Burnout may be particularly relevant to the health care field, due to the high likelihood of encountering work-related stress when employed in this setting (Robertson & Perry, 2010). Indeed, the current literature describes an elevated rate of burnout among individuals employed in the health care field, generally indicating that a moderate to high level of the three aspects of burnout are present in the population (e.g., Chang, Eddins-Folensbee, & Coverdale, 2012; Ndetei et al., 2008). This

heightened level of burnout suggests that research is needed to craft effective burnout prevention and interventions for the health care field.

The literature describes incivility interventions that report successful outcomes (e.g., Kirk, Schutte, & Hine, 2011; Leiter, Laschinger, Day, & Oore, 2011). For example, a recent systematic review of workplace bullying and incivility intervention research concluded that the most effective of the interventions focused on incivility as opposed to bullying, and generated support for the positive effect of organizational-level interventions on incivility (Hodgins, MacCurtain, & Mannix-McNamara, 2014). Interpersonally, increasing workgroup civility has lowered the burnout dimension of cynicism (Nicholson, Leiter, & Laschinger, 2014), illustrating the relevance of interpersonal factors as they relate to burnout for informing intervention strategies. Results of this study are expected to inform future intervention strategies by providing insight into personal demands and resources that may impact burnout outcomes. Interventions that are designed appropriately for the health care organizations will improve the ability of these organizations to engage employees for greater productivity and innovation.

Existing literature relevant to burnout follows, defining the construct using Maslach's (2004) model. Research surrounding the role of interpersonal relationships and how they relate to burnout outcomes is explored. This thesis continues with a discussion of the literature concerning attachment, including a review of attachment theory (Bowlby, 1969/1982). Further theoretical foundation is laid by presenting a summary of sociometer theory (Brase & Guy, 2004) and how it relates to individual processing of the occupational environment. This literature review focuses on the construct of attachment

using a continuous scale (e.g., Leiter, Day & Price, 2015) and concludes with a summary of research findings. Following the literature review are the current research hypotheses and their bases.

Burnout

Burnout is a response to chronic job stressors (Maslach, 2004). It is a syndrome characterized by exhaustion (lack of energy), cynicism (rejection of involvement), and professional inefficacy (lack of efficacy regarding work activities) (Maslach, 2004). Exhaustion is a term used in a variety of ways, one of which is as a medical syndrome (Fukuda et al., 1994). Further, exhaustion is identified as the defining feature of burnout (e.g., Shirom, 2005). However, burnout is not fully characterized by exhaustion alone; if it was there would be no need for the identification of burnout as a distinct construct apart from exhaustion. The addition of the cynicism and inefficacy dimensions of burnout justifies its identification as a phenomenon distinct from chronic exhaustion. Efficacy in the context of burnout refers to employees' own appraisals of their personal ability to do the work they are asked to do. Cynicism reflects the extent to which people are involved with or dedicated to their work and the people who are a part of it (e.g., clients, colleagues, supervisors; Maslach & Leiter, 1997). Cynicism is a social construct mediated by the relationships and interactions that employees experience through their work. As cynicism is a social construct, the social world is key to the study of burnout and to research exploring how various types of relationships interact with workplace outcomes such as job satisfaction, turnover intentions, and organizational commitment. Supporting this assertion, research has found social relationships in the workplace to be a significant mediating factor in relationship to individual levels of strain, health, and

burnout (Day & Leiter, 2014). Furthermore, Halbesleben and Buckley (2006) found that more supportive conversations (i.e., acts of civility) were associated with less exhaustion and cynicism and fewer supportive conversations were associated with more exhaustion and cynicism.

Researchers have generated literature regarding the psychological work-related mechanism of burnout for over four decades. Many of these researchers have found organizational risk across various settings (see Maslach, Schaufeli, & Leiter, 2001; Schaufeli & Enzmann, 1998). This research has led to the identification of six key domains of work life that may impact burnout: workload, control, reward, community, fairness, and values (Maslach & Leiter, 1997, 1999). A model proposed by Leiter and Maslach (2004) asserts that the greater the perceived disparity between an individual and his or her job in terms of degree of fit in these areas of work life, the greater the likelihood of burnout. In the same way, when the nature of the job is in harmony with the nature of the individual, there is a greater likelihood of work engagement.

Employees enter any occupational role with their own resources; in their roles they are met with the resources provided by their specific occupational environment. Employees draw on these resources when they face various inevitable job demands. These demands may be quantitative and easily identified, such as workload, or may be more qualitative in nature, such as emotional demands (van Veldhoven, De Jonge, Broersen, Kompier, & Meijman, 2002). The broader stress literature established that as demands increase, the chance that a stressor will lead to negative outcomes also increases (e.g., Lavee, McCubbin, & Olson, 1987). The Conservation of Resources Theory (Hobfoll, 2001) suggests that dealing with demands causes individuals to use up energy

resources, and as a result, lessens individuals' ability to cope with future demands. For example, within the framework of the Conservation of Resources Theory and the Job Demands-Resources Model (JD-R; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker 2004), employees who are dealing with emotional demands in the workplace in the form of perceived hostility from a supervisor may deplete their resources by trying to cope with these demands, thus leaving them less able to cope with their workload. Hobfoll's (2001) theory suggests that a high level of job demands can lead to health impairment (e.g., burnout), whereas a high level of job resources buffers against the same problem.

There is well-established support for the Conservation of Resources Theory theory in the current literature. For example, researchers have found that job demands, such as workload and emotional demands, are associated with negative outcomes such as absenteeism (De Lange, Taris, Kompier, Houtman, & Bongers, 2003). In line with these findings, results of a meta-analysis suggest that workload is negatively associated with psychological and physical well-being, as well as with organizational commitment (Bowling, Alarcon, Bragg, & Hartman, 2015). Furthermore, Huang, Wang, and You (2016) found that personal resources such as self-efficacy, self-esteem, and optimism mediate the negative effect of workload on emotional exhaustion and depersonalization. Although personal resources are of particular interest to the current thesis, organizational resources are not to be overlooked. For example, employees who are actively encouraged to utilize their personal strengths on the job are better positioned to cope with job demands **(**van Woerkom, Bakker, & Nishii, 2016).

Pines (2004) was among the earliest researchers to suggest burnout research and interventions should include greater emphasis on personal factors such as adult attachment. Past research has mainly focused on organizational factors external to the individual, such as leadership and perceived organizational support (Bobbio & Manganelli, 2015); however, the important role that individual factors play has not been completely overlooked (Zapf & Einarsen, 2011). The inclusion of personal demands and resources in the Conservation of Resources Theory (Hobfoll, 2001) has been supported in the literature (e.g, Guglielmi, Simbula, Schaufeli, & Depolo, 2012; Lorente, Salanova, Martı´nez, & Schaufeli, 2008). Furthermore, a meta-analysis revealed relationships between burnout and several personality characteristics, including emotional stability, positive affectivity, and negative affectivity (Alarcon, Eschelman, & Bowling, 2009). This further supports future research on individual factors that may play a role in the relationships between burnout and occupational stressors. Similarly, the relationships between received cyber incivility and burnout are stronger for individuals with higher levels of neuroticism (Giumetti, McKibben, Hatfield, Schroeder, & Kowalski, 2012). Although personality appears to be an important construct to examine in relationship to burnout, it should be noted that attachment shows significant predictive power above that of the Big Five personality traits (Noftle & Shaver, 2006).

Pines (2004) asserted that it is a reasonable assumption that most individuals characterized by anxious or avoidant attachment will enter a workplace with unrealistic expectations, make more negative appraisals of burnout-causing environmental factors (e.g., received incivilities), and be less likely to cope with such factors constructively. In contrast, low anxious or avoidant attachment in employees has been directly linked to the

use of helping behaviours benefiting supervisors and co-workers (Falvo, Favara, Di Bernardo, Boccato, & Capozza, 2012). Employees in workplaces of today hold the expectation of respectful treatment by management, colleagues, and customers (Cortina, 2008), yet still report received incivility at work (Pearson, Andersson, & Porath, 2005). Research has shown patterns of unpleasant interactions with supervisors and co-workers are related to the three aspects of burnout (exhaustion, cynicism, and professional inefficacy; Leiter, & Maslach, 1988), offering further support for the assertion that incivilities that may occur in these relationships are integral to a complete understanding of burnout.

When conceptualizing a cognitive model of burnout, Ohue, Moriyama, and Nakaya (2011) found irrational beliefs associated with burnout, including those of dependence, problem avoidance, and helplessness. In response to observed workplace behaviours such as these, some researchers advocate for the application of clinical theory and practices to organizational problems and contexts, offering further support for exploration of attachment as it may relate to burnout (Hazan & Shaver, 1990; Kets de Vries, 1980).

Workplace Incivility

Workplace incivility is defined as " … low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others" (Andersson & Pearson, 1999, p. 457). Workplace incivility differs from high intention behaviour such as bullying and aggression in that high intention behaviours are related more to a quality of an individual rather than of a quality of a workplace social

environment (Leiter, 2012). Workplace incivility occurs frequently and may impact individual and organizational performance negatively (Estes & Wang, 2008).

In a laboratory setting, individuals exposed to uncivil stimuli responded with more incivility, as compared to individuals exposed to civil stimuli (Francis, Holmvall, & O'Brien, 2015). Findings were similar in other cross-sectional research, concluding that incivility experiences predict incivility perpetration (Gallus, Bunk, Matthews, Barnes-Farrell, & Magley, 2014). These findings suggest that the more incivility that is received by an individual, the more incivility that person will instigate, highlighting how problematic incivility can be in a workplace as it follows a feedback loop.

Overall, most of the literature describes established relationships of incivility and civility with a variety of measures, but very few studies have established directional causation through intervention or day-to-day diary studies. For example, Wing, Regan, and Laschinger (2015) found that a higher level of structural empowerment was associated with fewer mental health problems in a sample of new nursing graduates. In their sample, increased received incivility was associated with an increased rate of mental health problems such as depressive symptoms. Furthermore, investigation of day-by-day incivility outcomes found them to be negatively related to after-work situational wellbeing, suggesting that workplace incivility experiences have outcomes that spill over into individual home lives (Nicholson & Griffin, 2015). Researchers suggest that the problems presented by received incivility may be much larger than realized and may carry major consequences for people, organizations, and society (Porath, Foulk, & Erez, 2015). Furthermore, research by Leiter, Price, and Laschinger (2010) concluded that Generation X nurses (i.e., nurses born between the years 1961 and 1981) reported more

negative experiences at work than Baby Boomer nurses (i.e., nurses born between the years 1943 and 1960), indicating that the problem may differ across generations. That is, generational differences may be associated with distinct challenges in workplace social cultures. Findings such as these highlight the need for further exploration of the interactions between workplace incivility and burnout, as the problem may be getting worse instead of better over time.

Researchers have demonstrated a link between the experience of an uncivil incident at work and an individual's responses concluding that received incivility, regardless of the perpetrator, often leads to an array of negative individual and organizational outcomes, including psychological distress and anxiety, greater job stress, reduced task performance and creativity, lower job satisfaction, increased job withdrawal, and higher turnover (Beattie & Griffin, 2014). Some research suggests that supervisor incivility may be a particularly strong predictor of negative outcomes. For example, whereas co-worker incivility only had significant negative relationships with recovery, supervisor incivility had significant negative relationships with both recovery and stress (Jiménez, Dunkl, & Peibl, 2015). Furthermore, supervisor-perpetuated incivility was perceived by individuals as being more uncivil, when compared to incivility perpetuated by co-workers (Sliter, Withrow, & Jex, 2015). Similar results were replicated in a laboratory setting, where participants reported higher negative affect and lower levels of energy following exposure to supervisor incivility, as compared to supervisor support. Participants who were exposed to supervisor incivility were also less engaged and performed worse on math tasks than participants exposed to co-worker incivility (Giumetti et al., 2013). Demonstrating again how supervisor incivility may differ from

co-worker incivility, Cortina and Magley (2009) found that employees who reported experiencing frequent incivility from powerful instigators (e.g., supervisors) tended to appraise uncivil encounters more negatively overall. Supervisor social support may also serve as a buffer, moderating the relationships between negative emotions resulting from received incivility and work effort outcomes (Sakurai & Jex, 2012). Beattie and Griffin (2014) drew similar conclusions from a diary study, in which high as compared to low supervisor support was related to reduced participant stress levels on days they reported increased received incivility. These findings further highlight the importance of employee-supervisor interactions in occupational settings. The current thesis will therefore investigate incivility experiences using measures of co-worker and supervisor incivility separately, so as to provide insight into outcomes associated with these different incivility perpetrators.

Responses to the stressor of received incivility may include a variety of coping strategies including support seeking, minimization, and detachment. For example, Cortina and Magley (2009) suggest that coping reactions are dependent on individual appraisals of the act, duration of the act, and the organizational disparity of power between those involved in the incivility act. This relationship between coping reaction choices and the power differences between the target and instigator of the uncivil act further highlights the importance of employee perceptions of received incivility. Cortina and Magley's (2009) suggestion that individual appraisals of received incivility relate to coping strategy choice is relevant to this thesis by supporting the assertion that individuals vary in their appraisals. This thesis will explore the question of why and how these differences occur.

Workplace Civility

Civility is defined as demonstrating respect for others (Andersson & Pearson, 1999) and has been a major target of workplace interventions aimed at reducing burnout (Awa, Plaumann, & Walter, 2010). Civility interventions described in the literature focus on replacing uncivil behaviour with re-established or new patterns of civility (Hanrahan, & Leiter, 2014). Research on the effectiveness of such workplace interventions has been promising. For example, Leiter, Laschinger, Day, and Oore (2001) found significantly more improvements in cynicism in a group who received a six-month intervention focused on civility, respect, and engagement as compared to a non-intervention group. Furthermore, one year following an intervention designed to enhance workplace civility, improvements in workplace civility, received supervisor incivility, and distress have continued after the intervention (Leiter, Day, Oore, & Laschinger, 2012).

Civility has not been arbitrarily targeted as a focus of interventions aimed at reducing burnout; rather, this focus is a result of research supporting relationships between civility and burnout, as well as theoretical support found in the Job Demands–Resources model (Demerouti et al., 2001, Schaufeli & Bakker 2004). Civility is a type of social support that has been identified as job resource (Lutgen-Sandvik & Sypher, 2009). Laschinger, Finegan, and Wilk (2009) found that general workplace civility was negatively associated with burnout in a sample of working, recently graduated, nurses. Further investigation of relationships between burnout dimensions and civility has identified cynicism specifically as having relationships with civility (Day & Leiter, 2014). Leiter and Maslach (1988) originally established the relationship between cynicism and co-worker incivility as a negative correlation after finding that pleasant

contact with co-workers was negatively related to cynicism. Furthermore, Cortina and Magley (2009) found frequent incivility from co-workers to be associated with coping through the use of detachment, a characteristic of cynicism (Maslach & Leiter, 1997). More recently, directionality has been identified in this relationship, highlighting the job resource of co-worker civility as a protective factor that prevents an employee from becoming increasingly cynical towards their work (Nicholson et al., 2014). Interestingly, civil, pleasant contact from co-workers and supervisors may relate to cynicism differently depending on the actor. Leiter and Maslach (1988) found that co-worker civility was negatively related to depersonalization (the dimension of burnout in human service burnout parallel to cynicism in the general burnout construct), whereas supervisor civility was not, suggesting that co-worker civility may protect against burnout more than supervisor civility. As described, the current literature demonstrates relationships between civility and cynicism, identifying civility as a protective factor. Despite these associations becoming more clear with directionality in the relationship established (Nicholson et al., 2014), questions have been raised regarding differences between co-worker and supervisor civility. Most researchers have chosen to focus only on the construct of incivility in their research. In response, the current thesis is designed to contribute to the available literature informing civility-related burnout interventions by investigating differences between perceptions of both workplace civility and workplace incivility relevant to burnout outcomes.

Attachment Theory

Bowlby (1969/1982) formulated a theory of attachment, suggesting that pressures throughout our evolutionary history have caused secure individuals to evolve a desire to

turn to others in times of distress. Under his theory, turning to others during these times increases the likelihood of survival and coping with distress. Bowlby (1969/1982) asserted that the relationships individuals establish with their primary caregivers (i.e., attachment figures) during infancy impact the social interactions individuals have throughout adulthood. Attachment theory holds that the development of these early caregiver relationships is impacted by the availability and responsiveness of our individual attachment figures. Bowlby (1969/1982) asserts that how these relationships develop is a key factor related to personality development and the shaping of individual beliefs about the self, especially in relationship to the social world. Beyond infancy, individuals develop internal working models of how the self and others deal with distress that are affected by how successful they are in using others as a secure base to resolve distress. These early attachment experiences become schematic representations that reflect beliefs and expectations about oneself and others (i.e., social worlds) and in turn affect perceptions, emotions and behaviours (Collins & Feeney, 2004). Attachment theory suggests the development of supportive relationships is a means of coping with stress. It asserts that individuals' ability to build these relationships with those around them may have an impact on wellbeing by directly affecting individual resources to cope with regular and irregular stressors (Bowlby, 1982; Mikulincer & Shaver, 2007).

Given that attachment is thought to shape individual beliefs about the self and others, it is easy to see how individual differences in attachment could influence behaviours (e.g., coping strategy choices resulting from received work place incivility). Past conceptualization of adult attachment has been grounded in different frameworks. Bowlby (1969) originally introduced the term attachment (1969) as an all or nothing

process (i.e., secure versus insecure attachment) whereas later research produced by Ainsworth (1964, 1967) demonstrated individual differences in attachment qualities. Ainsworth and Bell (1970) investigated the nature of attachment behaviours and styles of attachment in order to determine security of attachment in infants and originally identified three main attachment styles, secure, insecure avoidant, and insecure ambivalent/resistant. Self-report measures of adolescent attachment (e.g., Armsden & Greenberg, 1987; West, Rose, Spreng, & Adam, 2000) have traditionally assessed attachment using the insecure attachment constructs described in Bowlby's Attachment theory (1969/1982) whereas personality and social psychology researchers have generally relied on the categorical classifications (e.g., Brennan, Clark, & Shaver, 1998; Colins & Read, 1990) or focused more generally on relationship orientation (Bartholomew & Horowitz, 1991).

The question of which conceptual approach is more appropriate when studying attachment was addressed in a 1996 study exploring 14 adult attachment self-report measures resulting in the Experiences in Close Relationships Scale (ECR; Brennan et al., 1998). Each measure included in the study was best explained through two dimensions of anxiety and avoidance, regardless of the measure's initial conceptual framework. Relying on a two dimensional model of attachment, researchers have achieved increasing psychometric advances (Crowell, Fraley, & Shaver, 2008). Furthermore, validation of the Experiences in Close Relationship-Relationship-Structures scale (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011) in adolescents revealed two oblique factors across anxious and avoidant domains (Bartholomew & Horowitz, 1991). Most current

attachment research identifies two continuous dimensions of attachment anxiety and avoidance (e.g., Leiter, Day, Price, 2015).

Anxious attachment is related to negative working models of the self, generally as a result of lack of consistency in the responsiveness of attachment figures. Individuals characterized by anxious attachment orientations fear rejection, need approval, worry about interpersonal relationships, and monitor their environment in efforts to seek attention and support (Bowlby, 1969/1982). When under stress, individuals high in anxious attachment rely on hyperactivating strategies that overemphasize distress cues and negative feelings, proximity-seeking reactions, leading to increased self-perceptions of vulnerability and over-interpreting of threats (Diamond & Hicks, 2004). These types of strategies could lead individuals high in anxious attachment to interpret the actions of others as being more uncivil as compared to appraisals made by those who are not characterized by high anxious attachment.

Avoidant attachment is related to negative working models of others, generally as a result of experienced withdrawal by the attachment figure. Individuals characterized by high avoidant attachment tend to rely on deactivating strategies that involve the down-regulation of emotions and the denial or suppression of distress. Avoidant types rely on themselves, as they feel an emotional distance from others and have formed perceptions of those around them as unreliable (Berant, Mikulincer, & Florian, 2001). The types of strategies employed by individuals high in attachment avoidance can lead to a gradual depletion of their inner resources over time, as they lead individuals high in avoidance to work alone and solve problems without any help (Richards & Schat, 2011).

Many studies have shown high anxious and avoidant attachment to be negatively associated with well-being and positively associated with global distress (e.g., Hazan & Shaver, 1990; Joplin, Nelson, & Quick, 1999; Shaver & Mikulincer, 2002; 2009). The application of these patterns is supported in the social and personality psychology literatures (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987), offering further support for the investigation of how attachment may moderate individual relationships in other relationship contexts such as the work environment. In the two dimensional model, scoring low on both avoidant and anxious attachment is conceptually related to secure attachment.

Individuals lower in anxious and avoidant attachment tend to have more positive views about themselves, others, and their social worlds, as compared to those higher in anxious or avoidant attachment. Individuals who are more securely attached are more likely to be comfortable with intimacy, to feel others are available when needed, to be more trusting, to be willing to stand up for their beliefs, to be able to control the outcomes in their lives, and to adapt their behaviour as a result of their environment (Collins & Read, 1990). The literature identifies secure attachment as a positive psychological strength that has important implications for the workplace (Simmons, Gooty, Nelson, & Little, 2009).

Attachment in the Workplace

Research demonstrates both anxious and avoidant oriented types employ non-adaptive strategies for coping with stress, leaving them vulnerable to burnout (Ronen & Mikulincer, 2009). Avoidant and anxious individuals tend to have a more negative outlook and, as a result, are less likely to trust others, and unsurprisingly are more likely

to believe that human nature is complex and difficult to understand (Collins & Read, 1990). As a result of their insecure working models of attachment, avoidant and anxious individuals will engage in more negative behaviours than securely (i.e., non-anxious/non-avoidant) attached individuals in response to burnout-causing environmental factors; anxiously attached individuals tend to obsess over such factors, whereas those with high avoidant attachment tend to avoid them through withdrawal (Mikulincer & Florian, 1995). Indeed, concerning turnover, those higher in anxious or avoidant attachment perceive their relationships with organization members as less positive and thus feel lower levels of desire to stay in their job, as compared to those lower in anxious and avoidant attachment (Richards & Schat, 2011).

Pines (2004) argued that adults who are lower in anxious and avoidant attachment have an inner resource that allows them to positively appraise stressful experiences so as to cope with them constructively, whereas adults higher in anxious or avoidant attachment are more likely to make negative appraisals and employ poor coping strategies. Due to these functional differences, attachment should be considered an important part of social relationships at work, because of potential influence on the quality of adult social relationships and individual appraisals of stressful experiences. Researchers have found that individuals lower in anxious and avoidant attachment scored lower on measures of burnout (Yang & Zhu, 2011). Furthermore, fewer psychological, psychosomatic, or physical symptoms of illness, and more feelings of competence and being challenged at work, feeling secure with their job, and liking their co-workers were reported by individuals lower in anxious and avoidant attachment, as compared to individuals higher in anxious or avoidant attachment (Hazan & Shaver, 1990).

Hypotheses

This thesis explores moderation by individual differences in attachment on the strength of relationships of uncivil and civil workplace interactions with burnout by surveying participants using a baseline survey at Time One and a follow-up survey six months later at Time Two. Four hypotheses, each broken down into three sub-hypotheses, are made. These hypotheses describe the expected relationships between variables.

Research indicates correlational relationships between received incivility and burnout. For example, a study of weekly employee survey data suggested that changes in received incivility correlated positively with burnout and turnover intentions (Taylor, Bedeian, Cole, & Zhang, 2014). Further supporting relationships between received incivility and burnout, a cross-sectional design investigating nurse-supervisor incivility perceptions found relationships between incivility perceptions and the burnout-relevant constructs of job satisfaction, organizational commitment, and turnover intentions (Laschinger, Leiter, Day, & Oore, 2009). Similarly, a cross-sectional study of supervisor and co-worker incivility found that received incivility predicted lower organizational commitment and employee satisfaction (Reio, 2011). Furthermore, hospital workers who reported more incivility in their units showed a stronger stressor-strain relationship than those who reported less incivility in their units, suggesting that incivility moderates the relationship between stressors and strain for hospital workers, with this relationship being stronger when incivility is high and weaker when incivility is low (Oore et al., 2010). Several studies have identified relationships between received incivility and the burnout dimensions of cynicism, exhaustion and professional inefficacy. For example, a cross-

sectional study of interpersonal maltreatment (e.g., abusive supervision, ostracism, undermining, incivility) by Sulea, Filipescu, Horga, Orţan, and Fischmann (2012) found interpersonal maltreatment to be positively associated with all three burnout dimensions of exhaustion, cynicism, and professional inefficacy. Interpersonal maltreatment has clear overlap with the construct of incivility, as many of the dimensions that comprise interpersonal maltreatment as conceptualized by these researchers (e.g., ostracism, undermining) are viewed as types of incivility by other researchers (Hershcovis, 2011). Similarly, a cross-sectional field study by van Jaarsveld, Walker, and Skarlicki (2010) found customer incivility toward employees was associated with employee emotional exhaustion. It is clear that the literature indicates correlational relationships between incivility and burnout-relevant constructs such as turnover intentions, job satisfaction, organizational commitment, and employee satisfaction. Furthermore, it indicates the three burnout dimensions of exhaustion, cynicism, and professional inefficacy to have correlational relationships with received incivility.

There is little evidence in the literature to support directionality concerning the relationships between received incivility and burnout. The lack of evidence to support either received incivility or burnout preceding the other justifies the exploration of these constructs in both causality directions. For this reason, both causal directions will be explored. Incivility can potentially spiral, as individuals exhibit incivility toward others in response to experienced incivility (Andersson & Pearson, 1999). For this reason, instigated incivility is included in analyses testing the path from burnout to incivility, as it is likely that high burnout may contribute to maintenance of this spiral through increased acts of individual instigated incivility. Instigated incivility is not included in analyses

testing the paths from incivility to burnout, as it is unlikely that instigated incivility will impact the available demands and resources of the individual incivility actor (i.e. participant) in the same way that it will impact the available demands and resources of the receiver of an act of incivility.

The relevance of attachment theory to burnout is directly supported in recent research. For example, Ronen and Baldwin (2010) found attachment anxiety to be positively related to burnout, perceived stress, and hypersensitivity to social rejection in a longitudinal study of hotel workers. These findings support the assertion that individuals high in attachment anxiety may be hypersensitive to incivilities and thus more likely to label an interaction as uncivil as compared to their less anxiously attached counterparts. Furthermore, a cross-sectional study by Leiter, Day and Price (2015) found that adding the attachment dimensions of anxiety and avoidance to a model of burnout as a function of workload, value congruence, and co-worker incivility significantly improved its fit. These findings indicated that employees with high attachment anxiety tended to be more closely involved in work relationships and processes, and that they experienced more strain from social encounters.

Findings are expected to replicate the basic correlations found by Leiter, Day, and Price's (2015) cross-sectional design. The expected replications include a positive relationship of attachment anxiety with received workplace incivility, as well as a positive relationship of attachment anxiety with the three burnout dimensions of exhaustion, cynicism and professional inefficacy. Replication of these research findings using a two wave design will generate further support for the theory that employees with high attachment anxiety experience more strain following an incivility experience.

As a result of negative relationships between civility and the general construct of burnout (Laschinger et al, 2009), civility has been highlighted as an important part of many burnout interventions (Awa et al., 2010). Most early research investigating associations between civility and burnout highlights the dimension of cynicism (e.g., Maslach & Leiter, 1997). Recently, Nicholson, Leiter, and Laschinger (2014) demonstrated support for the Job Demands-Resources model by finding that lower co-worker civility predicts higher cynicism at a one-year follow-up. Nicholson, Leiter, and Laschinger's research is of particular interest as it is unique in that it identifies directionality in these relationships. Although no empirical support for relationships between civility and professional efficacy or civility and exhaustion were found in the literature, this lack of relevant literature may be because past research has focused more heavily on the study of incivility, rather than civility, potentially overlooking certain relationships between civility and burnout.

The analyses introduce attachment anxiety and attachment avoidance as moderators to add precision to the anticipated main effects. Anxious attachment is expected to moderate positive relationships between received incivility and the burnout dimensions of cynicism, exhaustion and negative relationships with professional efficacy, in that the relationships between received incivility and these burnout dimensions will be stronger when anxious attachment is high and weaker when anxious attachment is low. In other words, individuals lower in attachment anxiety will have weaker relationships of incivility with burnout as compared to individuals higher in attachment anxiety. Similarly, anxious attachment is expected to moderate relationships of the burnout dimensions of exhaustion, cynicism, and professional efficacy with civility.

Researchers have found that attachment moderates the relationships between the experience of a critical incident and burnout (Vanheule & Declercq, 2009). Furthermore, structural equation modeling supports relationships between high attachment anxiety or avoidance and increased job burnout, with the link between high anxiety and burnout being partially mediated by lower appraisals of team cohesion (Ronen & Mikulincer, 2009). The literature clearly supports the importance of social relationships and attachment to burnout. However, this support is limited in its reach, as most research has used a cross-sectional methodology, with fewer studies investigating the hypothesized relationships using longitudinal, or two wave, designs. Furthermore, the moderating effect that attachment anxiety may have on the path between incivility and burnout in a typical health care organizational setting has yet to be directly investigated in the literature. A systematic review of research focusing specifically on health and human service worker populations found consistent results: attachment anxiety is associated with higher levels of burnout (West, 2015).

It is expected that relationships will be found between attachment anxiety and civility due to differences in perception between those higher, as compared to those lower, in attachment anxiety. Sheinbaum et al. (2015) found that participants in their study with higher attachment anxiety reported higher perceived social rejection in daily life than those with lower attachment anxiety. Individuals low in attachment anxiety may benefit more from civility than their high attachment anxiety counterparts, as they are more likely to interpret their work relationships as positive and thus be more willing to accept civility it at face value. Furthermore, Lower anxious or avoidant attachment in employees has been directly linked to the use of helping behaviours benefiting

supervisors and co-workers (Falvo et al., 2012); increased civility on the part of those lower in anxious attachment may in turn stimulate experiences of reciprocal civility. It is expected that overall, increased civility will be associated with less cynicism, but that this association will be weaker for those high in attachment anxiety and stronger for those low in attachment anxiety. It is expected that higher burnout will be associated with decreased civility overall. However, the negative relationship between civility and burnout will be stronger as attachment anxiety increases as individuals higher in attachment anxiety will be more impacted by burnout due to their tendency to have a more negative outlook (Collins & Read, 1990), leading to a greater decrease in civility perceptions, than individuals lower in attachment anxiety.

Findings were more consistent as to attachment anxiety and burnout as compared to attachment avoidance and burnout. Some studies in this review found similar results for avoidant attachment (e.g., Falvo et al., 2012; Pines, 2004) and burnout, and some did not (e.g., Burrell et al., 2009; Racanelli, 2005). Findings such as these suggest that individuals characterized by high attachment anxiety may be more likely than those characterized by low attachment anxiety to process an interpersonal interaction as a rejection, and thus may be more vulnerable to burnout than their low attachment anxiety counterparts. These findings also raise questions about differences between anxious and avoidant attachment and their respective relationships with burnout. For this reason, attachment avoidance will be investigated as a potential moderator through exploratory analyses.

Although there is not sufficient support for the hypothesis that attachment avoidance moderates relationships between received incivility and burnout, there is

sufficient support to justify investigating attachment avoidance through exploratory analyses. For example, Littman-Ovadia, Oren and Lavy (2013) found a significant negative relationship between avoidance and work engagement, as well as between avoidance and career commitment, in a cross-sectional sample of employed Israelis. Furthermore, these researchers found attachment avoidance and anxiety both correlated significantly with work burnout and with emotional distress. No published research currently exists that investigates the potential moderating impact of attachment anxiety or avoidance on the path between burnout and civility.

For each of the following hypotheses, Time One data of each outcome measure is entered as a predictor, factoring out the auto-correlation inherently present due to the within-subjects design.

Hypothesis One (a): Higher incivility at Time One (i.e., higher co-worker and supervisor incivility) will predict increased burnout at Time Two (i.e., higher cynicism, exhaustion, and lower professional efficacy).

Hypothesis One (b): Higher attachment anxiety at Time One will predict increased burnout at Time Two (i.e., higher cynicism, exhaustion, and lower professional efficacy).

Hypothesis One (c): Attachment anxiety will moderate the relationship of Time One incivility with Time Two burnout. Higher incivility will be associated with increased burnout overall. However, the positive relationship between incivility and burnout will be stronger as attachment anxiety increases.

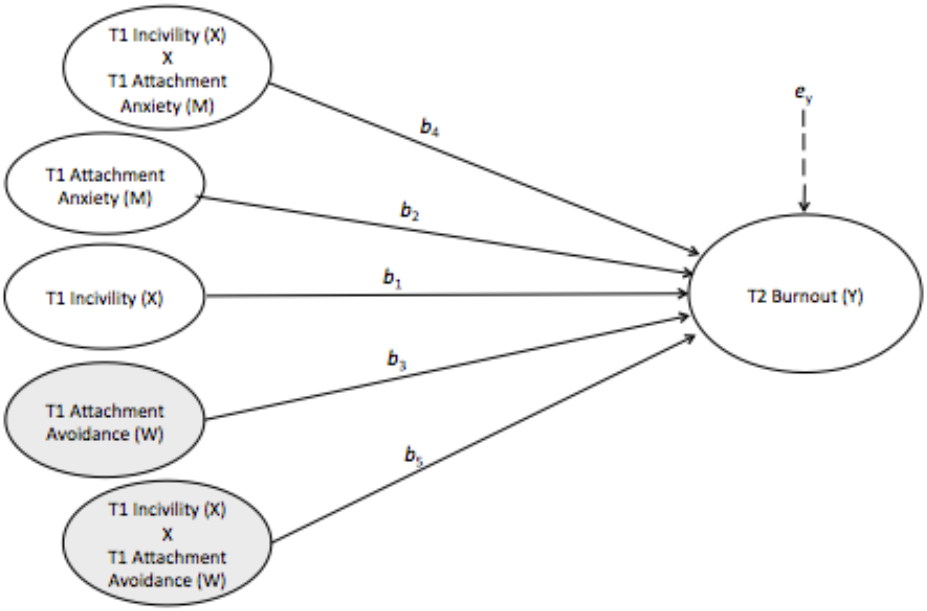

Figure 1. H1 model: Attachment and incivility predicting burnout. Grey background indicates that attachment avoidance (W) was used for exploratory analysis only.

Hypothesis Two (a): Higher burnout at Time One (i.e., higher cynicism, exhaustion, and lower professional efficacy) will predict increased incivility at Time Two (i.e., higher co-worker supervisor, and instigated incivility).

Hypothesis Two (b): Higher attachment anxiety at Time One will predict increased Incivility at Time Two (i.e., higher co-worker, supervisor, and instigated incivility).

Hypothesis Two (c): Attachment anxiety will moderate the relationship of Time One burnout with Time Two incivility. Higher burnout will be associated with increased incivility overall. However, the positive relationship between burnout and incivility will be stronger as attachment anxiety increases.

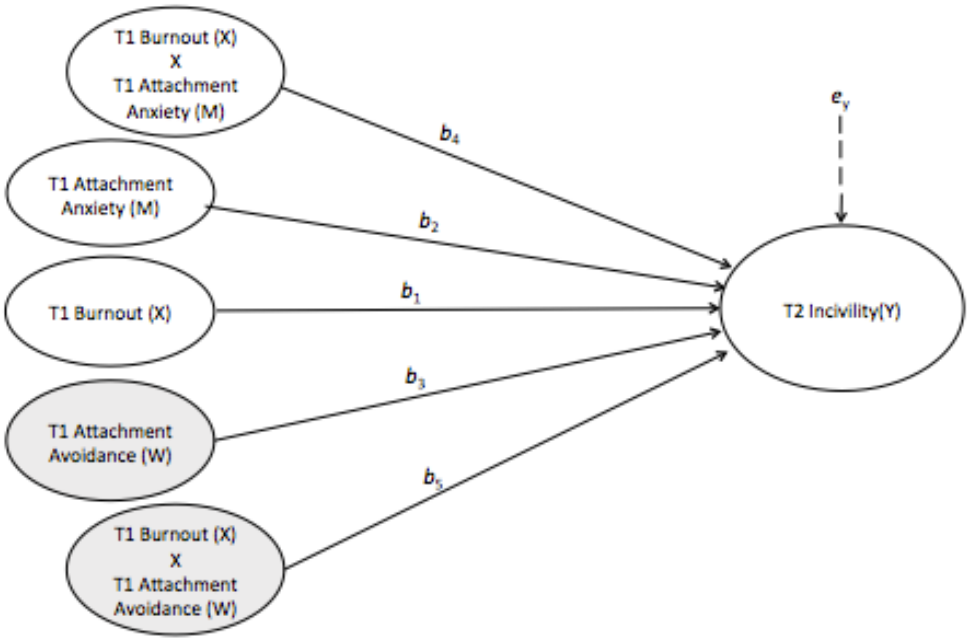

Figure 2. H2 model: Attachment and burnout predicting incivility. Grey background indicates that attachment avoidance (W) was used for exploratory analysis only.

Hypothesis Three (a): Higher civility at Time One will predict decreased levels of burnout at Time Two (i.e., lower cynicism, exhaustion, and lower professional efficacy).

Hypothesis Three (b): Higher attachment anxiety at Time One will predict increased burnout at Time Two (i.e., higher cynicism, exhaustion, and lower professional efficacy).

Hypothesis Three (c): Attachment anxiety will moderate the relationship of Time One Civility with Time Two burnout. Higher civility will be associated with decreased burnout overall. However, the negative relationship between civility and burnout will be weaker as attachment anxiety increases.

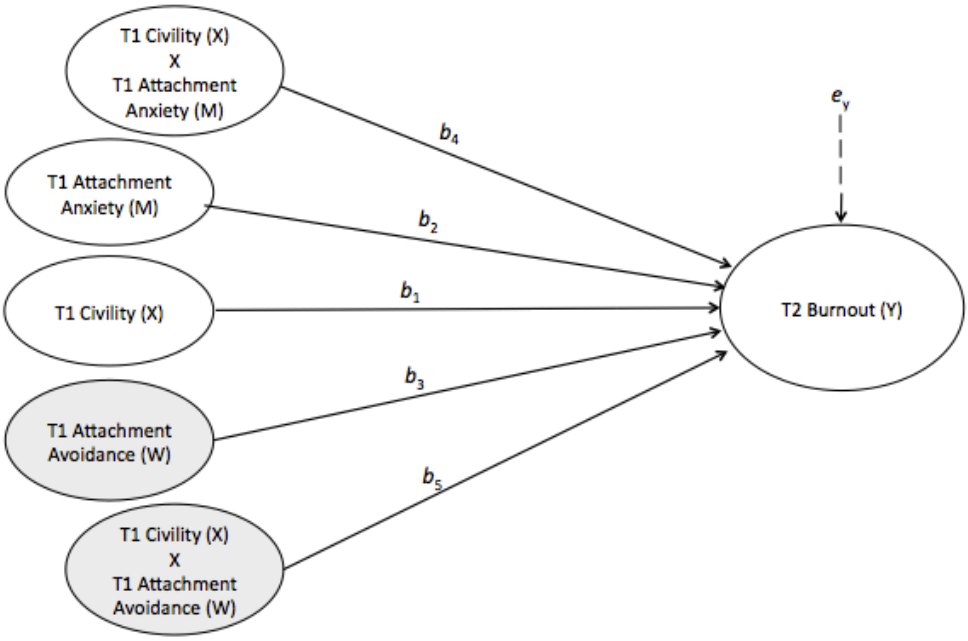

Figure 3. H3 model: Attachment and burnout predicting incivility. Grey background indicates that attachment avoidance (W) was used for exploratory analysis only.

Hypothesis Four (a): Higher burnout at Time One (i.e., higher cynicism, exhaustion, and lower professional efficacy) will predict decreased civility at Time Two.

Hypothesis Four (b): Higher attachment anxiety at Time One will predict decreased civility at Time Two.

Hypothesis Four (c): Attachment anxiety will moderate the relationship of Time One burnout with Time Two civility. Higher burnout will be associated with decreased civility overall. However, the negative relationship between civility and burnout will be stronger as attachment anxiety increases.

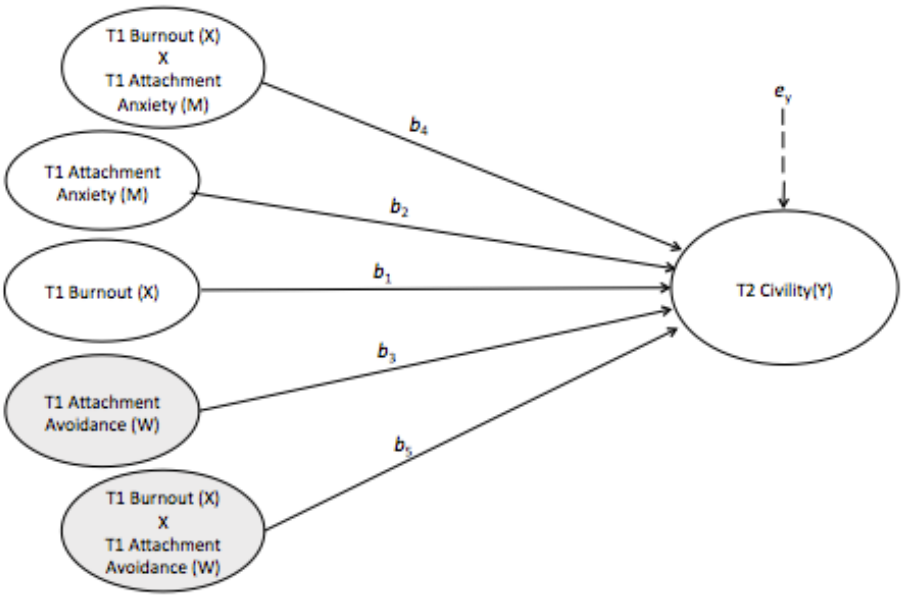

Figure 4. H4 model: Attachment and burnout predicting incivility. Grey background indicates that attachment avoidance (W) was used for exploratory analysis only.

The current literature offers much support through cross-sectional designs for the anticipated main effects; however, it is much less supportive of the moderation hypotheses, with limited published research in this area. This thesis will contribute to the literature by extending existing cross-sectional research by replicating findings using the current methodology and investigating change over time by controlling for baseline. Beyond these main effects, this thesis will extend the reach of the current literature by investigating the hypothesis that attachment anxiety moderates the path between received incivility, and civility, respectively, to burnout dimensions of cynicism, exhaustion and professional efficacy. Contributions to the literature will also be made through exploratory analyses involving attachment avoidance.

Methods

Participants

All participants in this thesis were employees of a single hospital in Western Canada. Participants were recruited for a larger survey via postings at the hospital site, on the hospital intranet, and via an email sent to all hospital employees. Recruitment materials included a link for the survey and outlined the purpose and goals of the project and how to participate. Participants for the study were identified by accessing the questionnaires of their own volition and meeting the necessary criteria for participation (i.e., being a current employee of the hospital). Participants were asked to complete the same survey twice, approximately six months apart.

The data from participants who did not respond to both the Time One and Time Two surveys were not be included in the analyses. In total, data from 77 participants were included in analyses, with 66 (85.7%) participants being female and 11 being (14.3%) male. The mean participant age was 42.45 years, with a standard deviation of 10.41, a minimum of 24 years and a maximum of 65 years.

Since May 2014, employees at the hospital had the option of joining a group of fellow employees volunteering to promote engagement in the workplace. Individuals are selected for this program on a regular basis, based on supervisor and peer nominations and individual interest. To ensure that a large number of highly engaged workers did not skew the distribution, demographic information concerning employee involvement with this engagement program was collected. Approximately one third of participants were members of this engagement program (31.2%; $n = 24$) and two thirds were not involved (68.8%; $n = 53$). This distribution is favorable for the purposes of analysis, as it suggests

that the recruitment process did not exclusively attract engaged employees and will allow for exploration of differences between employees who received intervention by virtue of being in this group and those who did not receive intervention as they were not members of this group.

The majority of participants (61%; *n* = 47) were employed full-time at the hospital. The remaining participants were employed part-time (32.5%; *n* = 25), as casual employees (3.9%; *n* = 3), and as temporary employees (2.5%; *n* = 2). One participant did not report their employment status. The mean length of participants' employment in their current occupation was 13.86 years, with a minimum of 0 years and a maximum of 40 years. and a standard deviation of 10.68 years. The mean number of hours that participants worked in a typical week at Time One was 37.41, with a minimum of 7.5 hours, a maximum of 60 hours, and a standard deviation of 7.91. The mean number of hours that participants worked in a typical week at Time Two was 38.33, with a range of 53.0 and a standard deviation of 7.19. Participants were asked how many work days they missed due to illness or injury in the past year. The mean number of days missed was reported as 9.73 (range = 0-190; SD = 23.12) at Time One and 8.9 (range = 130; SD = 21.46) at Time Two. Participants reported the number of days worked despite illness or injury in the past year, indicating the mean number of such days to be 7.29 (range = 180; SD = 10.48) at Time One and 5.64 (range = 0-60; SD = 10.48) at Time Two.

Measures

The data that will be used in the analyses were gathered from several measures as part of a larger survey. The measures that will be used in the analyses are described below.

Demographics survey. The demographics survey included basic demographic questions such as gender and age. Data gathered through this survey were used during statistical analysis to explore significant differences among groups. Specifically, differences between participants who were involved in the engagement promotion program at the hospital between Time One and Time Two were explored. Additional demographic items relevant to the study were included (e.g., "How long have you worked in your occupation?" and "How many hours do you work in an average week?")

Maslach Burnout Inventory – General Scale (MBI-GS). The MBI-GS (Schaufeli & Leiter, 1996) is the most recent version of the MBI. This 16-item measure was designed for use with employees in a wide range of occupations, in contrast to the original version that was restricted to human services and education. The three subscales of the MBI generate scores for the burnout dimensions of exhaustion, cynicism and professional efficacy. Exhaustion scores reflect the extent of feelings of being emotionally extended and exhausted by one's work. The exhaustion subscale is comprised of the average score across items 1, 2, 3, 4, and 6 of the MBI. Cynicism scores reflect the extent of unfeeling and impersonal responses toward one's work. The cynicism subscale is comprised of the average score across items 8, 9, 13, 14, and 15 of the MBI. Professional efficacy scores reflect feelings of competence and achievement in one's work, with low scores reflecting high professional inefficacy. The professional efficacy subscale is comprised of the average score across items 5, 7, 10, 11, and 12 of the MBI. Each item was rated along a seven-point Likert type scale (0 = *Never* to 6 = *Daily*).

Psychometric properties for the MBI have been found to be to be very satisfactory and stable. Cronbach alphas for the MBI from the current study were all .80 or above and are presented along with subscale means and standard deviations in Table 1. The literature demonstrates that the MBI subscales have evidence of good reliability. Internal consistency is reported as above the 0.70 criterion (cynicism, $\alpha = 0.73$ to exhaustion, $\alpha = 0.91$) and the dimensions measured by the MBI are correlated; Cynicism has been found to be related to exhaustion ($r = 0.44$-0.61) and to personal efficacy ($r = -0.38$-0.57) (Schaufeli, Leiter, Maslach, & Jackson, 1996). Furthermore, the three-factor structure of the MBI has not only been supported in the normative sample, but also across other settings, including cross-culturally (Schutte, Toppinen, Kalimo, & Schaufeli, 2000).

The Straightforward Incivility Scale (SIS). The SIS (Leiter & Day, 2013) is a modified version of the incivility scale of Cortina, Magley, Williams and Langhout (2001). The SIS is comprised of three, five-item workplace incivility subscales that provide ratings of self-assessed supervisor incivility (average score across items 1-5), self-assessed co-worker incivility (average score across items 6-10), and self-assessed own instigated incivility (average score across items 11-15) (Leiter & Day, 2013). These scales provide information about staff assessments of disrespectful, rude or condescending behaviour in their workplace by asking about the frequency of workplace incivility in the previous month. Two of the subscales ask respondents to assess the behaviour of their co-workers and front line manager, respectively, providing ratings of received incivility. The third subscale asks respondents to assess their own behaviour and thus provides ratings of instigated, rather than received, incivility. The subscales of supervisor and co-worker incivility will be used to test model fit for both Hypothesis One

and Two, whereas the instigated incivility subscale will be used to test model fit only for Hypothesis Two.

Supporting the validity of these three subscales, principal component factor analysis of the items on the SIS resulted in three distinct groups, with factor coefficients ranging from .60 to .90. Furthermore, reliability of the SIS has been supported in the literature (Supervisor $\alpha = .90$; Co-worker $\alpha = .95$; Instigated $\alpha = .84$) (Leiter & Day, 2013). Cronbach's alphas for the SIS from the current study were all above .80 and are presented along with subscale means and standard deviations in Table 1. Each of the 5 items on the three subscales was rated using a seven-point Likert type scale (0 = *never* to 6 = *daily*). A sample item from the dimension of front line manager incivility is "behaved without consideration for you".

Civility Scale (Osatuke, Moore, Ward, Dyrenforth, & Belton, 2009). The civility scale used in this thesis is adapted from the eight item civility scale which measures aspects of workplace civility through employee ratings of their environment. Original scale items were derived from a study through the Veterans Health Association in 2004 using the Organizational Assessment Inventory (OAI) (Osatuke, at al., 2009). The OAI is comprised of questions where respondents rate particular characteristics of their workgroup climate. Exploratory and confirmatory factor analyses of the 2004 OAI data revealed a group of items that later formed the Civility scale (Meterko, Osatuke, Mohr, Warren, & Dyrenforth, 2007, 2008). Meterko and colleagues (2007, 2008) demonstrated that the items showed high consistency, as they loaded on a single factor, at face value could be interpreted to reflect the construct of civility, and generated quantitative evidence that supports its validity.

Item-to-scale correlations ranged from .67 to .83 for the eight items and the eight-item measure had a high Cronbach's alpha (.93). The civility scale used in the current study is comprised of five of the original eight items from this scale. These items were rated on a Likert-type scale from 1 (*strongly disagree)* to 5 (*strongly agree*), with a middle option (*neither agree nor disagree)*. Scale mean score and standard deviation is presented in Table 1. The reduction of this scale from 8 to 5 items did not seem to impact its reliability with Cronbach's Alphas for the Civility Scale from the current study being .89 at Time One and .87 at Time Two. A sample item from the Civility Scale is, "The people I work with can be relied on when I need help".

Short Work Attachment Measure. Leiter, Price, and Day (2013) adapted The Relationship Questionnaire (Bartholomew & Horowitz, 1991) to create the ten-item Short Work Attachment Measure. Whereas Bartholomew and Horowitz's original measure relies on a four-category model, this thesis explores the construct of attachment as a continuous dimension. Existing literature supports the conceptualization of attachment using a two-dimensional approach (i.e., high versus low avoidance of intimacy and anxiety over abandonment) (Fraley et al., 2011). The Short Work Attachment Measure is appropriate for the purposes of this thesis, as Leiter, Price, and Day (2013) used principal components analysis with varimax rotation to demonstrate the presence of two distinct subscales of anxiety and avoidance within their measure. The results defined two clearly distinct factors, in which all factor loadings were .55 or greater and the largest cross loading was only .24. Using these subscales, the Short Work Attachment Measure generates scores for attachment anxiety and attachment avoidance. The attachment anxiety subscale is comprised of the average score across items 4, 6, 8, 9, and 10 of the

Short Work Attachment Measure. The attachment avoidance subscale is comprised of the average score across items 1, 2, 3, 5, and 7 of the Short Work Attachment Measure. Cronbach's alpha reliability coefficients reported in the literature for the Short Work Attachment Measure have indicated that both subscales have good internal consistency (attachment anxiety, five items, α =.775; attachment avoidance, five items, α =.783) (Leiter, Price, & Day, 2013). Cronbach's Alpha for the Short Work Attachment Measure from the current study were all .62 or above and are presented along with subscale means and standard deviations in Table 1. Each item was rated using a 5-point Likert type scale (1 = *not at all like me* to 5 = *very much like me*). A sample item from the attachment anxiety subscale is, "Others are often reluctant to be as close as I would prefer at work." A sample item from the attachment avoidance subscale is, "I don't need close friendships at work."

Procedure

The questionnaires were presented using LimeSurvey online survey software. Participants completed the questionnaires at locations of their choosing, where they were able to access the Internet. The Time One survey began collecting data in April and the Time Two survey began collecting data in September of 2015. There were approximately six months in between the administration of the Time One and the Time Two surveys.

The survey process received approval from two ethics review boards (one at Acadia University and one at the relevant health authority). The survey included a click-through informed consent process prior to survey presentation (see appendix B). The informed consent form included information about the purpose of the study, the participant's role in the study, confidentiality, and use of the data. Participants were

requested to create a unique personal identification number (PIN) when they first completed a survey. Participants entered their PIN when accessing the Time Two survey, so as to link their Time One and Time Two survey responses.

The Time One and Time Two questionnaires were identical and consisted of a demographics survey and several measures designed to assess burnout, attachment and individual incivility experiences as described in the measures section above. These measures were presented to participants in the same order they have been presented in this thesis.

Results

Following recommendations by Hayes (2009), the statistical analysis tested the fit between the data and the hypothesized models using PROCESS, an SPSS macro add-on. Relying on the principles of ordinary least squares regression, direct effects were estimated and interpreted, interactions between variables were probed, and the hypothesized moderation models were tested. All variables were entered on the same step. The hypothesized models assume linearity and allow for the evaluation of the difference in slopes between high and low attachment anxiety participants.

All variables are presented in Table 2 along with their means, standard deviations, and ranges. Note that all variables were centered prior to analysis, to reduce possible multicollinearity and aid in interpretation of possible interactions. Time One and Time Two Cronbach alphas and bivariate correlations are presented in Table 1.

Table 1
Cronbach Alphas and Bivariate Correlations Between Variables

	Alpha T1 (T2)	1	2	3	4	5	6	7	8	9
1. Attachment Anxiety	.66 (.66)	**.58****	-.08 (.00)	.14 (.29*)	.26* (.28*)	-.26* (-.37**)	.07 (.22)	.43** (.19)	.30* (.18)	-.17 (-.14)
2. Attachment Avoidance	.78 (.62)	-.08	**.62****	-.10 (.01)	.04 (.04)	-.15* (-.24*)	-.12 (-.13)	.03 (.09)	.07 (.06)	-.05 (-.21)
3. Exhaustion	.93 (.93)	.20	-.05	**.79****	.46** (.62**)	.03 (-.09)	.34** (.37**)	.28* (.35**)	.29* (.17)	-.42** (-.33**)
4. Cynicism	.84 (.87)	.29*	.10	.51**	**.80****	-.41** (-.24*)	.43** (.36**)	.34** (.38**)	.28* (.08)	-.50** (-.46**)
5. Professional Efficacy	.80 (.85)	-.28*	-.23*	-.06	-.27*	**.72****	-.04 (-.06)	-.12 (-.03)	-.11 (-.26*)	.19 (.30**)
6. Supervisor Incivility	.82 (.96)	.21	-.14	.42**	.46**	.03	**.58****	.16 (.40**)	.40** (.20)	-.46** (-.48**)
7. Co-worker Incivility	.92 (.85)	.06	.24*	.17	.22	.05	.03	**.51****	.40** (.40**)	-.53** (-.49**)
8. Instigated Incivility	.74 (.58)	.23	.05	.26*	.25*	-.09	.14	.49**	**.40****	-.29* (-.28*)
9. Civility	.89 (.87)	-.05	-.25*	-.35**	-.40**	.22	-.37**	-.38**	-.16	**.68****

Note: The upper triangle comprises correlations among cross-sectional T1 and (T2) variables. The bold diagonal and the lower triangle comprises correlations across the two time points with the T1 variables represented by row and the T2 variables represented by column.
*$p < .05$; **$p < .01$

Table 2
Variable Descriptive Statistics

Variable	N		Mean		Standard Deviation		Range of Possible Scores	
	T1	T2	T1	T2	T1	T2	Low	High
Attachment Anxiety (n=4)	76	66	2.05	2.18	0.78	0.76	1	5
Attachment Avoidance (n=5)	76	62	2.64	2.61	0.89	0.85	1	5
Exhaustion (n=5)	76	77	2.42	2.35	1.40	1.49	0	6
Cynicism (n=5)	76	77	1.65	1.72	1.35	1.36	0	6
Professional Efficacy (n=6)	76	77	4.18	4.03	1.05	1.15	0	6
Supervisor Incivility (n=5)	76	77	0.48	0.55	0.78	1.18	0	6
Co-worker Incivility (n=5)	76	77	0.85	0.80	1.13	0.95	0	6
Instigated Incivility (n=5)	76	77	0.23	0.23	0.35	0.38	0	6
Civility (n=5)	89	76	3.71	3.70	0.83	0.75	1	5

Note: The *n*= for the variable column indicates the number of items in the construct.

At Time One, approximately one third of participants were involved in an optional workplace program designed to promote occupational engagement and protect against burnout. This program was in its third year at the time of data collection and was not specifically evaluated in the current study. Although the purposes of the current thesis were not to evaluate this program, to ensure that no significant differences existed between these groups (i.e., those involved in the voluntary engagement program versus those not involved in the voluntary engagement program) variables identified in the hypotheses were probed using one-way between-groups ANOVAs. No significant differences were found. These results suggest that membership in this group is not

associated with better burnout outcomes and highlight the need for research that will inform future burnout interventions for the healthcare field.

In the current moderation analysis, each independent variable is continuous; therefore, its relationships with other variables are evaluated through the slope of the regression line. When a moderation effect is present, the slope of the regression line differs at every value of the moderator. A key part of this moderation analysis is the measurement of incivility-burnout relationships for different values of attachment anxiety. In the analysis, the moderator itself is continuous, and thus there are an infinite number of values at which to plot the effect of the independent variable. Cohen and Cohen (1983) have suggested that three values of the moderator be used: the mean, the value one standard deviation above the mean, and the value one standard deviation below the mean. This convention, popularized by Aiken, West, and Reno (1991), is applied to the current analyses. Specifically, separate lines of regression will be generated from the regression equation to represent incivility-burnout relationships at relatively high (1 SD above the mean) and relatively low (1 SD below the mean) levels of attachment anxiety.

Attachment avoidance was included in all analyses on an exploratory basis. No significant effects regarding attachment avoidance were revealed; therefore, for the sake of brevity, these results are not presented or discussed further in the results. Possible explanations as to why moderating effects of attachment avoidance were not revealed will be presented in the exploratory discussion section.

Hypothesis One

The model of Hypothesis One is illustrated in Figure 1. In the analyses, incivility serves as the independent variable, represented by co-worker incivility (X_1) and

supervisor incivility (X_2), and burnout serves as the dependent variable, represented by cynicism (Y_1), exhaustion (Y_2), and professional efficacy (Y_3). Attachment anxiety (M) and attachment avoidance (W) were uncorrelated (see Table 1) and were entered simultaneously as moderating variables. The analyses test whether the paths between co-worker (X_1) and/or supervisor incivility (X_2) and cynicism (Y_1), exhaustion (Y_2), and/or professional efficacy (Y_3), are moderated by attachment anxiety (M). In other words, the analyses investigate whether the relationship between the independent and dependent variables depends on the level of individual attachment anxiety or avoidance. Cynicism at Time One is expected to autocorrelate with cynicism at Time Two, due to the longitudinal within-subject design. This same autocorrelation effect is expected for the variables of exhaustion and professional efficacy. Due to the expected relationships, the analysis explores if received incivility at Time One explains a significant amount of variance in each of the variables of cynicism, exhaustion, and professional efficacy at Time Two, after accounting for their autocorrelation.

As can be seen in Tables 3 and 4, Hypothesis One was not supported. Contrary to relevant hypotheses, incivility, attachment anxiety, and their interaction were not significant predictors of the dimensions of Time Two burnout, over and above Time One measures; the only exception was supervisor incivility, which significantly predicted exhaustion.

Table 3
Burnout Dimensions Predicted from Supervisor Incivility and Attachment Anxiety

Predictor	*Cynicism* *β*	*Exhaustion* *β*	*Professional Efficacy* *β*
T1 Control	.76****	.79****	.79****
Supervisor Incivility	.25	.37*	.09
Attachment Anxiety	-.17	.09	-.03
Supervisor Incivility x Attachment Anxiety	-.18	.00	-.12
R^2	.67	.67	.53
F	23.85****	23.46****	13.15****

Note: *$p < .05$; ****$p < .0001$

Table 4
Burnout Dimensions Predicted from Co-worker Incivility and Attachment Anxiety

Predictor	*Cynicism* *β*	*Exhaustion* *β*	*Professional Efficacy* *β*
T1 Control	.85****	.86****	.79****
Co-worker Incivility	.12	-.03	.09
Attachment Anxiety	-.18	.19	-.13
Co-worker Incivility x Attachment Anxiety	-.25	-.17	.13
R^2	.69	.66	.57
F	26.27****	22.65****	15.36****

Note: ****$p < .0001$

The researcher concludes that, after accounting for autocorrelation across Time One and Time Two, the analyses failed to demonstrate that the relationship of received incivility with the burnout dimensions of exhaustion, cynicism, and professional efficacy depends on the level of attachment anxiety.

Hypothesis Two

The model of Hypothesis Two is illustrated in Figure 2. In the analyses, burnout serves as the independent variable, represented by cynicism (Y_1), exhaustion (Y_2), and professional efficacy (Y_3) and incivility serve as the dependent variables, represented by co-worker incivility (X_1), supervisor incivility (X_2), and instigated incivility (X_3). Attachment anxiety (M) and attachment avoidance (W) are again entered simultaneously as moderating variables. The analyses test whether the paths between these independent and dependent variables are moderated by attachment anxiety (M). In other words, the analyses investigate whether the relationship between the independent and dependent variables depends on the level of individual attachment anxiety or avoidance. The analyses explore if cynicism, exhaustion, and professional efficacy at Time One explain a significant amount of variance in co-worker, supervisor, or instigated incivility at Time Two, after accounting for autocorrelation. Direct effects between burnout and incivility, as well as between attachment anxiety and incivility, were investigated in addition to the moderation term.

As can be seen in Tables 5, 6, and 7, hypotheses were not supported. Contrary to relevant hypotheses, the dimensions of burnout, attachment anxiety, and their interaction were not significant predictors of incivility, over and above Time One measures.

Table 5
Supervisor Incivility Predicted from Exhaustion and Attachment Anxiety

Predictor	*Supervisor β*	*Co-worker β*	*Instigated β*
T1 Control	.81****	.34****	.48***
Exhaustion	.03	.13	-.01
Attachment Anxiety	-.12	.10	-.04
Exhaustion x Attachment Anxiety	-.15	.05	-.05
R^2	.36	.30	.21
F	6.61****	5.04***	3.04**

Note: **$p < .01$; ***$p < .001$; ****$p < .0001$

Table 6
Co-Worker Incivility Predicted from Cynicism and Attachment Anxiety

Predictor	*Supervisor β*	*Co-worker β*	*Instigated β*
T1 Control	.90***	.39***	.45***
Cynicism	-.02	.06	-.01
Attachment Anxiety	-.09	.08	-.02
Cynicism x Attachment Anxiety	-.12	-.07	-.05
R^2	.38	.31	.20
F	7.02****	5.17***	2.80*

Note: *$p < .05$; ***$p < .001$; ****$p < .0001$

Table 7
Instigated Incivility Predicted from Professional Efficacy and Attachment Anxiety

Predictor	*Supervisor* *β*	*Co-worker* *β*	*Instigated* *β*
T1 Control	.90****	.39****	.46***
Professional Efficacy	.01	.03	-.08
Attachment Anxiety	-.15	.11	-.09
Professional Efficacy x Attachment Anxiety	-.08	.05	-.02
R^2	.35	.28	.24
F	6.33****	4.38***	3.56**

Note: **$p < .01$; ***$p < .001$; ****$p < .0001$

The researcher accepts the null hypothesis and concludes that, after accounting for autocorrelation across Time One and Time Two, the analysis failed to demonstrate that the relationship of the burnout dimensions of exhaustion, cynicism, and professional efficacy with incivility depends on the level of attachment anxiety.

Hypothesis Three

The model of Hypothesis Three is illustrated in Figure 3. In the analyses, civility serves as the independent variable and burnout serves as the dependent variable, represented by cynicism (Y_1), exhaustion (Y_2), and professional efficacy (Y_3). Attachment anxiety (M) and attachment avoidance (W) were entered simultaneously as moderating variables. The analyses test whether the paths between civility (X) and cynicism (Y_1), exhaustion (Y_2), and/or professional efficacy (Y_3), were moderated by attachment anxiety (M). Cynicism at Time One was expected to autocorrelate with cynicism at Time Two, due to the longitudinal within-subject design. This same autocorrelation effect was expected for the variables of exhaustion and professional

efficacy. Due to the expected relationships, the analysis explores if received civility at Time One explained a significant amount of variance in each of the variables of cynicism, exhaustion, and professional efficacy at Time Two, after accounting for their autocorrelation.

As can be seen in Table 8, overall the hypotheses were not supported; civility, attachment anxiety, and their interaction were generally not significant predictors of the dimensions of Time Two burnout, over and above Time One measures, with the exception of the burnout dimension of cynicism.

Contrary to expectations, Time One attachment anxiety and Time One civility were not significantly associated with cynicism at Time Two, after accounting for Time One cynicism (see Table 8). As hypothesized, a significant interaction was revealed between civility and attachment anxiety in predicting cynicism, suggesting that the relationship of civility with cynicism does depend on the level of attachment anxiety. However, contrary to expectations that regardless of attachment anxiety a negative relationship between civility and burnout would be revealed, with this relationship growing stronger as attachment anxiety increases, results indicated that the relationship between civility and cynicism was negative for those low in attachment anxiety and positive for those high in attachment anxiety. Simple slopes for the relationship between civility and cynicism are presented in Figure 5 for low (-1 standard deviation below the mean) and high (+1 standard deviation above the mean) levels of attachment anxiety. No evidence was generated to support the hypothesis that the relationship between civility and exhaustion or between civility and professional efficacy depends on the level of attachment anxiety. Implications of these findings are reviewed in the discussion section.

Table 8
Burnout Dimensions Predicted from Civility and Attachment Anxiety

Predictor	*Cynicism* *β*	*Exhaustion* *β*	*Professional Efficacy* *β*
T1 Control	.84****	.84****	.75****
Civility	-.07	-.02	.10
Attachment Anxiety	-.20	.11	-.02
Civility x Attachment Anxiety	.41**	.20	-.06
R^2	.70	.65	.55
F	26.89****	21.39****	13.89****

Note: **$p < .01$; ****$p < .0001$

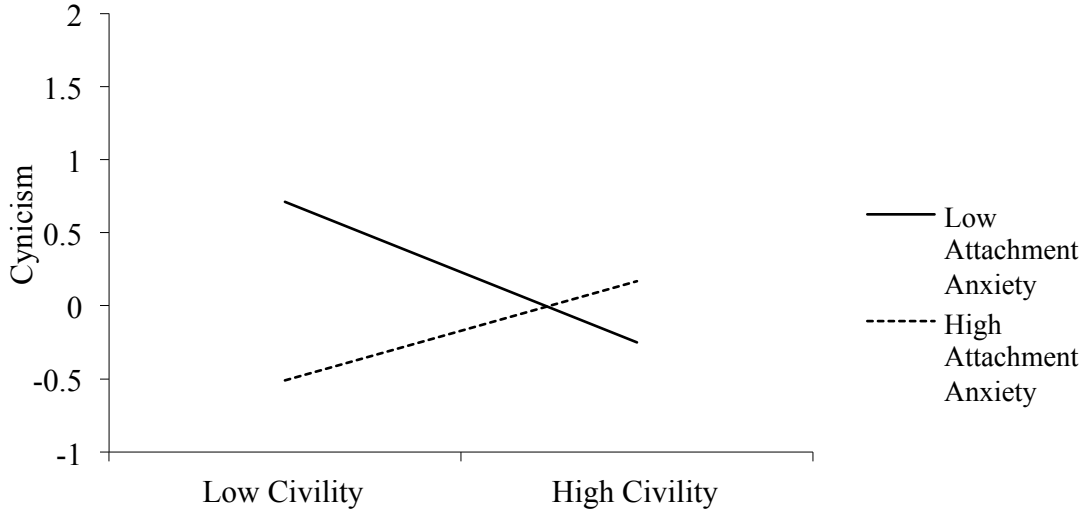

Figure 5. Two-way interaction Civility x Attachment anxiety predicting Cynicism.

Hypothesis Four

The model of Hypothesis Four is illustrated in Figure 4. In the analyses, burnout serves as the independent variable, represented by exhaustion (X_1), cynicism (X_2), and professional efficacy (X_3), and civility (Y) serves as the dependent variable. Attachment

anxiety (M) and attachment avoidance (W) were entered simultaneously as moderating variables. The analyses test whether the paths between exhaustion (X_1), cynicism (X_2), professional efficacy (X_3) and civility (Y), were moderated by attachment anxiety (M). In other words, the analyses investigate whether the association between the independent variables and civility depended on the level of individual attachment anxiety or avoidance. Civility at Time One was expected to autocorrelate with civility at Time Two, due to the longitudinal within-subject design. Due to this expected relationship, the analysis explores if received incivility at Time One explained a significant amount of variance in civility at Time Two, after accounting for Time One civility.

Time One attachment anxiety and Time One cynicism were not significantly associated with civility at Time Two, after accounting for Time One civility (see Table 9). However, a significant interaction was revealed between cynicism and attachment anxiety in predicting civility, suggesting that the relationship between cynicism and civility depends on the level of attachment anxiety. It was expected that higher cynicism would be associated with decreased civility, with the overall negative relationship between cynicism and civility becoming weaker as attachment anxiety increases; however, the relationship between cynicism and civility was (very slightly) positive at high levels of attachment anxiety and negative at low levels of attachment anxiety. Simple slopes for this relationship between cynicism and civility are presented in Figure 6 for low (-1 standard deviation below the mean), and high (+1 standard deviation above the mean) levels of attachment anxiety.

Contrary to expectations, Time One attachment anxiety and Time One exhaustion were not significantly associated with civility at Time Two, after accounting for Time

One civility. However, a significant interaction was revealed between exhaustion and attachment anxiety in predicting civility, suggesting that the relationship of exhaustion with civility does depend on the level of attachment anxiety. Contrary to expectations, but similar to results generated from testing of the relationship between cynicism, attachment anxiety, and civility, the relationship between exhaustion and civility was positive at high levels of attachment anxiety, but negative at low levels of attachment anxiety. Simple slopes for the relationship between exhaustion and civility are presented in Figure 7 for low (-1 standard deviation below the mean) and high (+1 standard deviation above the mean) levels of attachment anxiety.

Time One attachment anxiety and Time One professional efficacy were not significantly associated with civility at Time Two after accounting for Time One civility. The interaction between professional efficacy and attachment anxiety was not significant, suggesting that the relationship of professional efficacy with civility does not depend on the level of attachment anxiety.

Table 9
Civility Predicted from Burnout Dimensions and Attachment Anxiety

Predictor	*Cynicism* *β*	*Exhaustion* *β*	*Professional Efficacy* *β*
T1 Control	.59****	.60****	.61****
Burnout Dimension	-.05	-.04	.02
Attachment Anxiety	.08	.11	.08
Burnout Dimension x Attachment Anxiety	.15**	.12*	-.10
R^2	.57	.54	.51
F	14.74****	13.29****	11.67****

Note: *$p < .05$; **$p < .01$; ****$p < .0001$

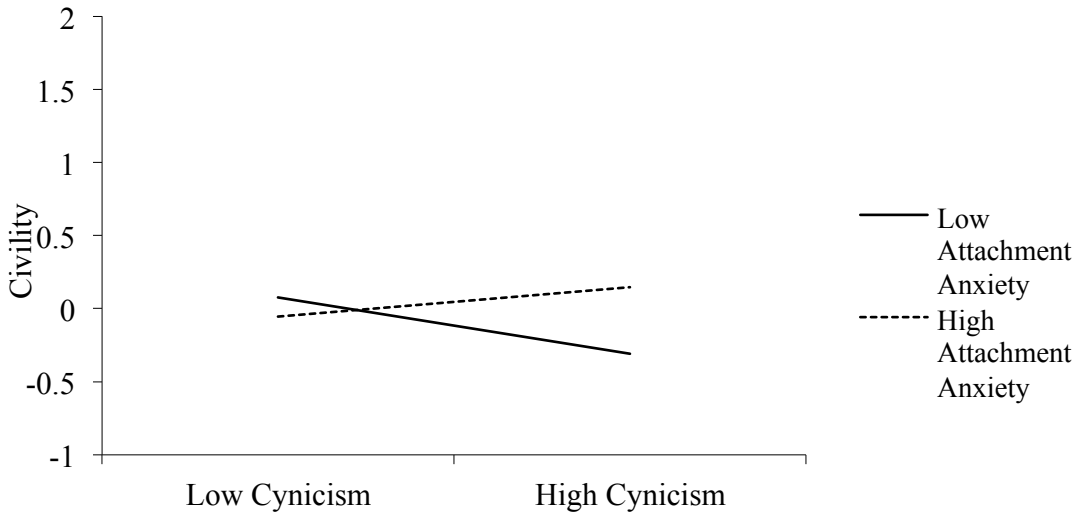

Figure 6. Two-way interaction, Cynicism x Attachment anxiety predicting Civility.

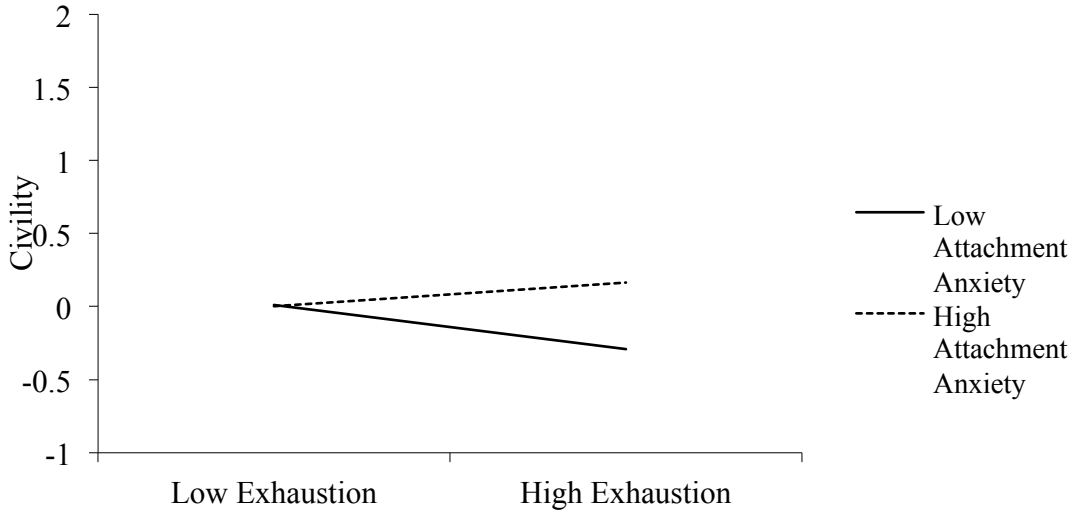

Figure 7. Two-way interaction, Exhaustion x Attachment anxiety predicting Civility.

The researcher rejects the null hypothesis and concludes that, after accounting for autocorrelation across Time One and Time Two, the relationships between both exhaustion and cynicism and civility depends on the level of attachment anxiety, as had been predicted. Contrary to expectations, however, those who are high in attachment anxiety seem to be faring better than those who are low in attachment anxiety at higher levels of burnout. No evidence was found to support the hypothesis that the relationship between professional efficacy and civility depends on the level of attachment anxiety. Implications of these findings are reviewed in the discussion section.

In sum, testing of Hypotheses One and Two did not generate support for relationships between incivility and burnout dimensions. Testing of Hypothesis Three indicated that the association between civility and later cynicism was moderated by attachment anxiety. This interaction did reflect the anticipated pattern; the relationship between civility and cynicism was negative for those low in attachment anxiety and positive for those high in attachment anxiety, suggesting that higher civility is associated

with lower burnout reports for those low in attachment anxiety, but has more limited associations for those high in attachment anxiety. No significant effects were observed for the relationships between attachment anxiety, civility, and later exhaustion or professional efficacy. Testing of Hypothesis Four indicated that the relationships between exhaustion and cynicism and later civility are moderated by attachment anxiety. However, these interactions did not reflect the anticipated pattern. Surprisingly, the relationships between exhaustion and civility, as well as between cynicism and civility, were positive at high levels of attachment anxiety and negative at low levels of attachment anxiety, suggesting that in high-burnout contexts high attachment anxiety is associated with more perceived civility than low attachment anxiety. A moderation effect was not observed for the relationship between professional efficacy and later civility.

Exploratory Analyses

For exploratory purposes, model fit for Hypotheses One and Two was tested using the Time One and Time Two cross-sectional data for all participants ($N = 77$). Table 1 shows high autocorrelations between Time One and Time Two variables, indicating that much of the explainable variance was accounted for before entering any predictor variables in the two wave analyses. Due to the very large amount of variance accounted for by Time One control variables, it was difficult for any additional predictors to emerge as significant. It was therefore anticipated that probing the concurrent data to assess the cross-sectional relationships between incivility, burnout dimensions, and attachment anxiety that have been revealed through past research (e.g., Leiter et al., 2015) might be of value. Therefore, all analyses already described were repeated twice more, once using Time One measures of attachment, civility/incivility, and burnout, and once

using Time Two measures of each construct. These analyses are exploratory. Only significant findings are reported and discussed below. Note that these exploratory cross-sectional analyses also explored potential moderating effects of attachment avoidance. Consistent with results of the main analyses, no significant moderating effects of attachment avoidance were revealed.

Indirect support was generated for Hypothesis One when probing the Time One data to investigate whether the relationship between supervisor incivility and exhaustion depended on the level of attachment anxiety, and when using Time Two data to investigate whether the relationship between incivility (supervisor and coworker) and cynicism depended on the level of attachment anxiety.

T1 Exhaustion. Results presented in Table 10 indicated that Time One supervisor incivility was positively associated with Time One exhaustion, as hypothesized. The interaction between supervisor incivility and attachment anxiety was also significant, suggesting that the relationship of supervisor incivility with exhaustion depended on the level of attachment anxiety, as was expected. Contrary to expectations, however, the relationship between supervisor incivility and exhaustion was (slightly) negative at high levels of attachment anxiety, and positive at low levels of attachment anxiety. Simple slopes for the relationship between supervisor incivility and exhaustion are plotted for low (1 SD below the mean) and high (1 SD above the mean) levels of attachment anxiety in Figure 8.

T2 Cynicism. As hypothesized, greater Time Two supervisor incivility and greater attachment anxiety were both associated with higher Time Two cynicism. The interaction between supervisor incivility and attachment anxiety was also significant,

suggesting that the relationship of supervisor incivility with cynicism depends on the level of attachment anxiety, as was expected. Furthermore, the relationship between supervisor incivility and cynicism was always positive. Surprisingly, however, those with low levels of attachment anxiety showed stronger connections between supervisor incivility and cynicism, not weaker relationships, as had been expected. Simple slopes for the relationship between supervisor incivility and cynicism are plotted for low (1 SD below the mean) and high (1 SD above the mean) levels of attachment anxiety in Figure 9.

Table 10

T1 Exhaustion Predicted from T1 Supervisor Incivility and Attachment Anxiety and T2 Cynicism Predicted from T2 Supervisor Incivility and Attachment Anxiety

Predictor	*β Exhaustion*	*β Cynicism*
Supervisor Incivility	.53**	.60****
Attachment Anxiety	.28	.39*
Supervisor Incivility x Attachment Anxiety	-.64**	-.41**
R^2	*.22*	*.29*
F	4.06**	5.61**

Note: *$p < .05$; ** $p < .01$; **** $p < .0001$

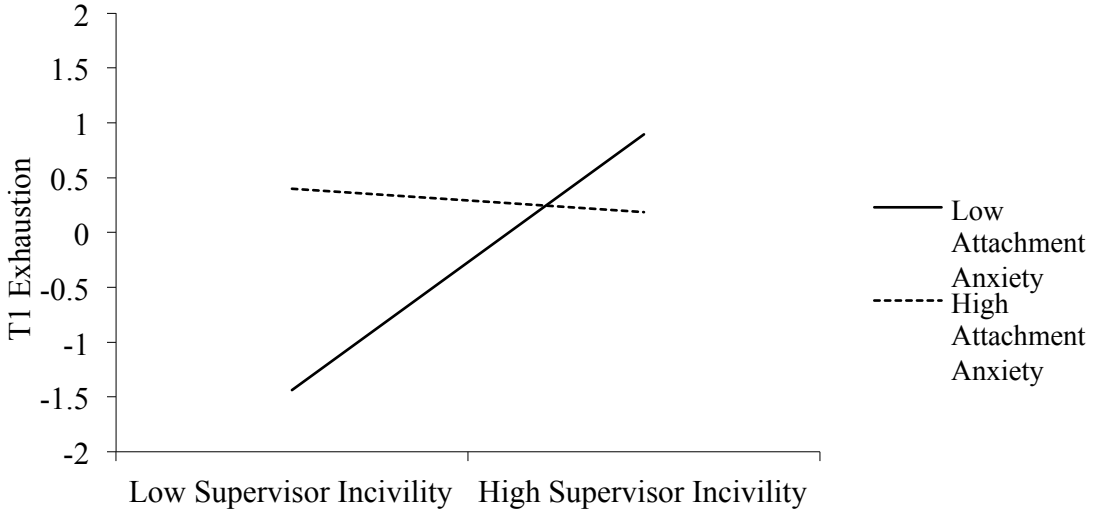

Figure 8. Two-way interaction T1 Supervisor incivility x Attachment anxiety predicting T1 Exhaustion.

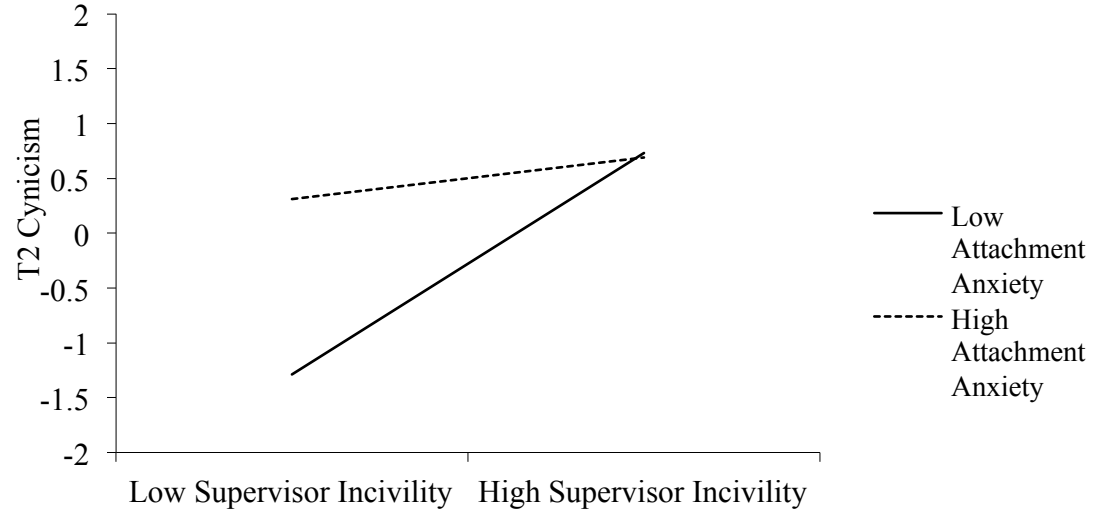

Figure 9. Two-way interaction T2 Supervisor incivility x Attachment anxiety predicting T2 Cynicism.

Results presented in Table 11 indicate that both greater Time Two attachment anxiety and greater Time Two co-worker incivility were associated with greater Time Two cynicism, as expected. The interaction between Time Two co-worker incivility and Time Two attachment anxiety was also significant, suggesting that the relationship of co-worker incivility with cynicism depends on the level of attachment anxiety, as was

expected. Contrary to expectations, however, the relationship between co-worker incivility and cynicism was flat at high levels of attachment anxiety and positive at low levels of attachment anxiety. Simple slopes for the relationship between co-worker incivility and cynicism are plotted for low (1 SD below the mean) and high (1 SD above the mean) levels of attachment anxiety in Figure 10.

Table 11
T2 Cynicism Predicted from T2 Co-worker Incivility and Attachment Anxiety

Predictor	*β*
Co-worker Incivility	.60**
Attachment Anxiety	.38*
Co-worker Incivility x Attachment Anxiety	-.54**
R^2	.28
F	5.50**

Note: * $p < .05$; ** $p < .01$

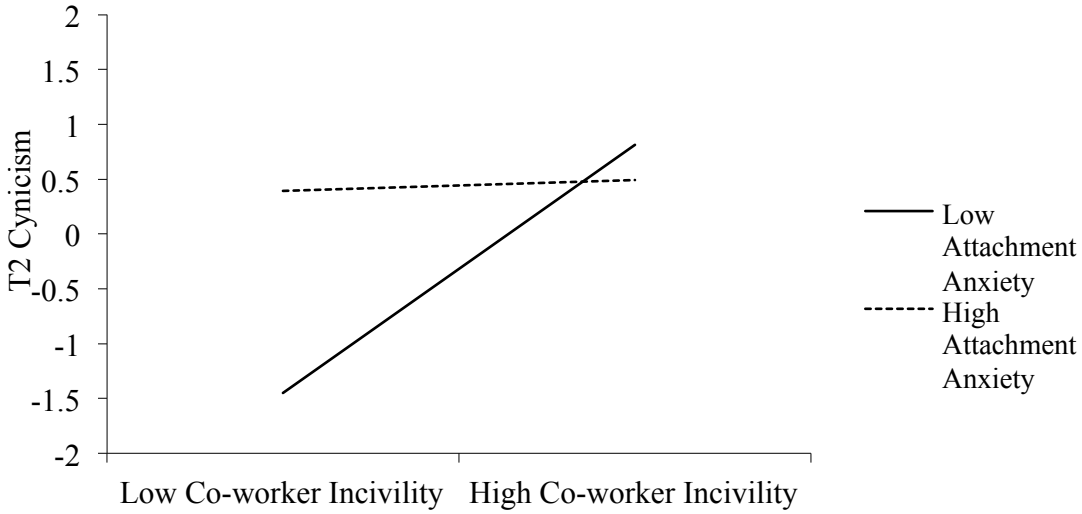

Figure 10. Two-way interaction T2 Co-worker incivility x Attachment anxiety predicting T2 Cynicism.

Although no other significant interactions were found and thus these results are not presented, several significant main effects that were in the predicted directions were revealed. Main effects revealed through exploratory analyses demonstrated positive associations between attachment anxiety and exhaustion and between attachment anxiety and cynicism, and a negative association between attachment anxiety and professional efficacy, as hypothesized. Surprisingly, some positive associations were revealed between attachment anxiety and professional efficacy, rather than the expected negative associations. In line with expectations, positive associations were demonstrated between attachment anxiety and co-worker incivility, as well as between attachment anxiety and instigated incivility. Additionally, main effects demonstrated positive associations between incivility and exhaustion, incivility and cynicism, exhaustion and incivility, and between cynicism and incivility. In summary, significant main effects revealed through cross-sectional analyses, in general, suggest patterns of greater incivility being associated with greater burnout, greater burnout being associated with greater incivility, greater attachment anxiety being associated with greater burnout, and greater attachment anxiety being associated with greater incivility.

Exploratory cross-sectional analyses offer some support for the theory that the relationship between incivility and burnout depends on the level of individual attachment anxiety. However, support was minimal, as relationships for all variables involved in the hypothesized analyses were probed and the only significant cross-sectional relationships of this kind were revealed between Time One attachment anxiety, supervisor incivility, and exhaustion, between Time Two attachment anxiety, supervisor incivility, and cynicism, and between Time Two attachment anxiety, co-worker incivility, and cynicism.

Furthermore, no support was generated for the anticipated effect of low attachment anxiety; instead, exploratory results suggested that individuals higher in attachment anxiety may actually be less attuned to their environment as they reported less impact of incivility.

Discussion

The purpose of this thesis was to examine the existence of a moderating relationship of attachment anxiety on the paths between incivility and civility with burnout. This thesis built on previous research by Leiter, Day, and Price (2015), in which a cross-sectional design found a positive relationship of attachment anxiety with received workplace incivility as well as a positive relationship of attachment anxiety with the three burnout dimensions of exhaustion, cynicism, and professional inefficacy. The current research design positioned itself to extend these earlier research findings and uniquely contribute to the burnout and attachment literature by using a two wave design to replicate these relationships.

Testing of Hypothesis One found that no significant relationships were revealed to support the model presented in Hypothesis One other than supervisor incivility, which significantly predicted exhaustion. Similarly, testing of Hypothesis Two revealed no significant relationships to support the model presented in Hypothesis Two. Surprisingly, these results did not replicate the main effects found by Leiter, Day, and Price (2015). There are several possible reasons why the Hypotheses One and Two were not supported, including low reported incivility, a lack of available post autocorrelational variance, and confounds resultant from potential characteristics unique to the participant pool; these are discussed further in the limitations section. Despite limited results, the significant

relationship between supervisor incivility and exhaustion should not be overlooked as it supports assertions in past literature that supervisor incivility may uniquely contribute to burnout outcomes (Jiménez et al, 2015; Sliter et al, 2015).

Testing of Hypothesis Three revealed the moderating impact of attachment anxiety on the path from civility to cynicism; however, contrary to expectations, the relationship between civility and cynicism was negative for those low in attachment anxiety and positive for those high in attachment anxiety (see figure 5). It was expected that the overall association between civility and cynicism would be negative, but weaker for those high in attachment anxiety and stronger for those low in attachment anxiety. The expectation that participants lower in attachment anxiety would be more impacted by civility and thus report lower levels of cynicism in high civility contexts than their higher attachment anxiety counterparts was supported by results. However, results suggest that civility may impact cynicism outcomes differently for those high in attachment anxiety versus those low in attachment anxiety. Surprisingly, those low in attachment anxiety appear to be more vulnerable to cynicism in low civility contexts, compared to those high in attachment anxiety, suggesting that civility interventions are likely to lower burnout reports for those low in attachment anxiety but may have limited impact for those high in attachment anxiety.

Results indicated that at low levels of civility, those who are low in attachment anxiety are considerably more cynical than those who are high in attachment anxiety. It was predicted that those low in attachment anxiety would fare better, as they generally employ better coping mechanisms (Pines, 2004). Individuals higher in attachment anxiety may have different expectations related to civility in the workplace. They may not expect

good treatment, as they have always interpreted the support they have received as unreliable (Pines, 2004). In contrast, individuals lower in attachment anxiety may expect better treatment and therefore may be more impacted in low civility contexts, because they hold positive expectations and may be surprised and feel that these expectations are violated in low civility contexts. Individuals higher in attachment anxiety may be less attuned to their environment and therefore report less burnout in low civility contexts because they may not expect others to be consistently civil due to a history of interpreting situations negatively (Pines, 2004). Surprisingly, high civility is actually associated with slightly more cynicism in individuals high in attachment anxiety. Perhaps individuals high in attachment anxiety are not trusting or accepting civility that is offered. Indeed, anxiously attached individuals tend to be less trusting (Collins & Read, 1990) and perceive their working relationships as less positive than those lower in attachment anxiety (Richards & Schat, 2011).

Testing of Hypothesis Four revealed some interesting interactions regarding how attachment anxiety and burnout dimensions predict civility. Attachment anxiety did moderate relationships between cynicism and civility, as well as between exhaustion and civility; however, contrary to expectations, the relationship between cynicism and civility was positive at high levels of attachment anxiety and negative at low levels of attachment anxiety (see figures 6 and 7). Results contradicted the expectation that participants higher in attachment anxiety would more impacted by burnout and thus report lower levels of civility at high levels of burnout variables. Instead, those high in attachment anxiety appeared to be relatively unaffected in terms of civility as levels of burnout increased. These findings were unexpected and stood in opposition to Hypothesis Four.

Interestingly, individuals lower in attachment anxiety reported similar levels of civility at low levels of exhaustion as individuals higher in attachment anxiety; however, individuals lower in attachment anxiety reported significantly lower levels of civility at high levels of exhaustion than individuals higher in attachment anxiety. Similarly, individuals higher in attachment anxiety reported significantly higher levels of civility than those lower in attachment anxiety at high levels of cynicism.

When the current findings are considered alongside the related literature, contradictions are evident, as results indicate that high attachment anxiety may be beneficial to civility outcomes. For example, Leiter, Day and Price (2015) found attachment anxiety to be correlated with experienced and instigated workplace incivility, exhaustion, and cynicism, findings that directly contradict the current results. Due to lack of literature demonstrating the observed associations, alternative explanations should be considered.

Picardi, Caroppo, Toni, Bitetti, and Maria (2005) found that attachment anxiety was correlated with harm avoidance. These findings suggest that employees high in attachment anxiety are likely to behave in ways that limit experiences of incivility. Incivility can potentially spiral into increasingly aggressive behaviors, as individuals exhibit incivility toward others in response to experienced incivility (Andersson & Pearson, 1999). Those with Anxious attachment orientations fear rejection (Bowlby, 1969/1982), and thus may act to break the incivility spiral through behaviours aimed at harm avoidance. These actions would be in line with efforts to avoid future harm, as they may be more likely to fear rejection if they respond with incivility those lower in attachment anxiety.

One alternative explanation as to why high attachment anxiety may be associated with higher civility reports under conditions of high exhaustion and/or high cynicism may be that the participants higher in attachment anxiety utilize more reassurance seeking behaviour under these conditions than their lower attachment anxiety counterparts. Specifically, when exhaustion or cynicism is high, participants higher in attachment anxiety may be more likely to speak out to coworkers and supervisors about their concerns or needs, whereas those lower in attachment anxiety may be more likely to garner less "special treatment" in the form of civility, due to their preferred behavioural patterns. Indeed, research has demonstrated a link between high attachment anxiety and excessive reassurance seeking behaviour (Shaver, Schachner, & Mikulincer, 2005) and strategies involved in successful burnout recovery have been reported to include identity reinforcement through mechanisms such as seeking reassurance, understanding causes, and seeking support (Bernier, 1998). Thus, high attachment anxiety may have revealed weaker relationships between high exhaustion and civility and high cynicism and civility due to an increase in reassurance seeking behaviour leading to an increase in civility for individuals with higher attachment anxiety, who are more likely to employ such identity reinforcement strategies than their lower attachment anxiety counterparts.

Civility is recognized in the literature as a protective factor against burnout and other negative health care provider outcomes (Leiter et al., 2011). Furthermore, a structured intervention process, CREW (Civility, Respect, and Engagement at Work; Osatuke, et al., 2009), has even been identified that has generated results supportive of improved civility positively affecting burnout outcomes. Despite the obvious importance of civility to complete understanding of the processes that may contribute to protection

and recovery from burnout, little is known about the processes responsible for the reported effect of civility (i.e., increased civility leading to improved burnout outcomes), with no published research identifying the internal mechanisms responsible. Current findings may provide direction for future research hoping to provide insight into these processes, as they identify a subset group (i.e., participants with high attachment anxiety) who appear to engage in these processes more when under high burnout conditions. Results also raise questions around the effectiveness of civility interventions for all groups, as results of Hypothesis Three suggest that civility interventions are associated with lower burnout reports for those low in attachment anxiety, and a limited impact for those high in attachment anxiety. Although these results were surprising, this was the first study to investigate the moderating relationship of attachment anxiety using a two wave model and the insight that the current results provide should not be overlooked by future researchers.

Exploratory Analyses

For exploratory purposes, attachment avoidance was entered into all analyses as a potential moderator between variables. No significant moderating impact of attachment avoidance was revealed. It has been suggested that high attachment avoidance may protect individuals from the impact of various organizational demands and resources (e.g., experienced incivility or civility). Richards and Schat (2011) suggest that employees high in attachment anxiety tend to be more closely involved in work relationships and processes than those high in attachment avoidance. They assert that this increased involvement leads those high in attachment anxiety to experience more strain when participating in social encounters. In contrast, their high attachment avoidance

counterparts are less likely to be closely involved and thus experience less impact from interpersonal interactions. Indeed, individuals higher on attachment avoidance are compulsively self-reliant, and thus, they prefer to avoid close friendships or emotional involvement with others (Bartholomew, 1990). Furthermore, they are motivated by a negative view of people but also by distrust (Collins & Read, 1990) and they prefer to keep a safe emotional distance from others when stressed (Mikulincer & Florian, 1995). Although in personal contexts avoidance is likely to be associated with isolation or loneliness (Bowlby, 1969), Bartholomew (1990) has argued that in the workplace avoidance may limit the impact of interactions with others, as high attachment avoidance is likely suited to formal interactions within the constraints of workplace roles. A more avoidantly attached individual may be likely to limit the potential for negative (i.e., uncivil), as well as positive (i.e., civil), effects of workplace relationships, due to distance generated from a reliance on self and a lack of emotional connection with their coworkers (Bartholomew, 1990). This explanation may provide insight into the lack of significant exploratory results regarding the moderating impact of attachment avoidance on the paths between burnout dimensions and civility/incivility, as it suggests being more avoidantly attached may simply limit the impact of external interpersonal factors.

For exploratory purposes, model fit for Hypotheses One and Two was tested using all Time One and Time Two cross-sectional data. Time One data demonstrated relationships between supervisor incivility, attachment anxiety, and exhaustion, and Time Two data demonstrated relationships between supervisor incivility, attachment anxiety, and cynicism, as well as between co-worker incivility, attachment anxiety, and cynicism. Although limited support was generated for Hypotheses One and Two through the main

analyses, the exploratory cross-sectional analyses do suggest both anxiety and incivility are important predictors of burnout. Surprisingly, no significant associations were revealed between incivility, attachment anxiety, and professional efficacy.

In general, significant main effects revealed through cross-sectional analyses suggest patterns of greater incivility being associated with greater burnout, greater burnout being associated with greater incivility, greater attachment anxiety being associated with greater burnout, and greater attachment anxiety being associated with greater incivility. These patterns were anticipated and offer support to the literature describing relationships between incivility and burnout (e.g., a positive association of incivility with exhaustion (Jaarsveld et al., 2010), a negative association of incivility with engagement (Giumetti et al., 2013), and a positive relationship of attachment anxiety with the three burnout dimensions of exhaustion, cynicism and professional inefficacy (Leiter et al,, 2015)). Surprisingly, some positive associations were revealed between attachment anxiety and professional efficacy, rather than the expected negative associations. A potential explanation for these results may be that individuals who are high in attachment anxiety overcompensate through increased efforts at work. Individuals higher in attachment anxiety may be more likely to cope with workplace demands by working harder in their workplaces to garner the approval they seek, and protect against the rejection they fear, more so than their lower attachment anxiety counterparts (Bowlby, 1969/1982). An increase in effort may have led to an increase in work performance and thus an increase in received civility such as praise for a job well done. The coping strategies employed by individuals higher in attachment anxiety may positively impact efficacy over and above the predicted negative impact of anxious attachments tendency

toward more self-doubt (e.g., Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987).

Surprisingly, cross-sectional analyses generated only limited support for the hypothesized moderation; however, a significant two-way interaction was revealed between supervisor incivility and attachment anxiety related to exhaustion using the Time One data, and a significant two-way interaction was revealed between supervisor incivility and attachment anxiety related to cynicism using the Time Two data. These findings offer indirect support for the hypothesis that the relationship between supervisor incivility and burnout dimensions is associated with the level of attachment anxiety. Contrary to expectations, moderating associations revealed through exploratory analyses reflected that the relationships were stronger when attachment anxiety was low and weaker when attachment anxiety was high. Interestingly, although similarly elevated levels of cynicism and exhaustion were reported when higher levels of incivility were reported, at low levels of incivility, individuals high in attachment anxiety reported significantly more burnout than individuals low in attachment anxiety. The relationship between attachment anxiety and cynicism is of interest, as it suggests that although individuals high in attachment anxiety may be less affected in general by variations in experiences of incivility, they may be at more risk of burnout overall, as they report higher burnout in low supervisor incivility contexts compared to their low attachment anxiety counterparts. Individuals high in attachment anxiety may be sensitive to the impact of even mild incivility, leading them to overinterpret its effects and generate higher burnout reports even in low incivility contexts. Indeed, high attachment anxiety individuals have reported feeling more distressed following a conflict than their lower attachment anxiety counterparts (Campbell, Simpson, Boldry, & Kashy, 2005) and higher

attachment anxiety has been found to be associated with stronger reactions to rejection (Besser & Priel, 2009).

The stronger associations between incivility and burnout for individuals low in attachment anxiety, and weaker associations for individuals high in attachment anxiety suggest that individuals low in attachment anxiety may be more responsive to incivility than those high in attachment anxiety. Individuals higher in attachment anxiety may have different expectations related to incivility in the workplace, due to a tendency to interpret situations negatively (Pines, 2004). Thus, they may not expect good treatment, as they have always interpreted the support they have received as unreliable. In contrast, individuals lower in attachment anxiety may expect better treatment and therefore may be more impacted by incivility, because they hold positive expectations that are violated in uncivil contexts. Individuals higher in attachment anxiety may be less impacted oby incivility, as they do not hold these same positive expectations.

Exploratory results highlight the importance of the supervisor role and provide direction for future studies that investigate burnout outcomes. The significant relationships between Time One supervisor incivility and exhaustion and Time Two supervisor incivility and cynicism are of interest, as they support past assertions that supervisor incivility may have a unique effect on burnout (e.g., Giumetti et al., 2013; Jiménez et al., 2015). Indeed, literature has suggested that supervisor incivility in particular may negatively impact recovery and stress (Jiménez et al., 2015), energy levels (Giumetti et al., 2013), and appraisal of uncivil encounters (Cortina & Magley, 2009). Furthermore, the same incivility perpetrated by a supervisor may be perceived by individuals as being more uncivil than when perpetuated by other coworkers (Sliter et al.,

2015). However, results suggest that association between supervisor incivility and burnout outcomes for those high in attachment anxiety may be minimal compared to supervisor incivility's association with burnout outcomes for those low in attachment anxiety, indicating that the association between supervisor incivility and burnout may be moderated by individual factors (i.e., attachment anxiety). Results generate some indirect support for past research suggesting that supervisor incivility has unique relationships with burnout, and that it may be of particular importance when it comes to forming a full understanding of burnout and the role different incivility actors play in burnout outcomes (e.g., Jiménez et al, 2015).

Analyses demonstrated a significant difference in cynicism reports for high versus low attachment anxiety when incivility (supervisor and co-worker) is low, in that high attachment anxiety is related to significantly higher cynicism reports when compared to low attachment anxiety when incivility is low. These findings suggest that individuals high in attachment anxiety were experiencing higher levels of burnout regardless of perceived incivility, whereas individuals low in attachment anxiety are impacted more by incivility and thus report similarly high levels of burnout as their those reporting high attachment anxiety under high incivility conditions. Results suggest that although individuals high in attachment anxiety may report less of an increase in burnout as incivility increases, they may be at more risk of burnout in low supervisor incivility contexts compared to their low attachment anxiety counterparts. When considering how these findings relate to the assertions of Pines (2004) that most individuals characterized by anxious attachment will enter a workplace with unrealistic expectations, make more negative appraisals of burnout-causing environmental factors (e.g., received incivilities),

and thus be less likely to cope with such factors constructively, it is interesting to note that those high in attachment anxiety trend toward reports of higher cynicism than their low attachment anxiety counterparts, regardless of reported levels of supervisor and co-worker incivility. Perhaps the tendency of anxiously attached individuals to have a more negative outlook (Collins & Read, 1990) contributes to a depletion of personal resources, leaving them more vulnerable to burnout over time regardless of perceived incivility. Indeed, Huang, Wang, and You (2016), found that personal resources such as self-efficacy, self-esteem, and optimism mediate the negative effect of workload on emotional exhaustion and depersonalization, offering support for this explanation.

Despite generating limited significant results, the current thesis offers a useful contribution to the current literature. Findings highlight the importance of personal resources and demands to a complete understanding of burnout, as well as the potential importance of the supervisor role. Although it was anticipated that probing of the data through cross-sectional analyses would generate support for Hypotheses One and Two by demonstrating a moderating effect of attachment anxiety on the paths between incivility and burnout, only limited support was generated.

Limitations

The current research may be impacted by some limitations with the potential to impact the likelihood of significant findings and the overall quality of results. Although no power issues were anticipated, the small sample size (N=77) may have limited analyses. Table 1 shows autocorrelations were high between Time One and Time Two variables, indicating that much of the explainable variance was accounted for before entering any predictor variables. The general absence of significant effects and the

counter-intuitive interactions that were found may be due to a lack of high quality post auto correlational variance available to reveal associations through this research design. This limitation suggests that future research needs 200 or more participants. Furthermore, despite appearing to be somewhat diverse, the participant pool may have been too similar. Recruitment was targeted at one single hospital and thus confounding variables may have been introduced due to use of a single site. In particular, the hospital's ongoing engagement initiatives may have effects on staff at large, resulting in a unique hospital culture. Research has demonstrated that workplace culture can have very meaningful effects on burnout outcomes (Montgomery, Todorova, Baban, & Panagopoulou, 2013) and the possibility that the hospital from which participants were drawn for this research has a unique workplace culture that affected research outcomes should not be overlooked. If confounding variables were present, the extent of legitimate generalization of results would be limited.

Results may be limited by overall low reliability of the Short Work Attachment Measure. Research has demonstrated good internal consistency for the Short Work Attachment Measure attachment anxiety and attachment avoidance subscales (Leiter, Price, & Day, 2013). However, current results revealed that Cronbach alpha of the subscales was not particularly high (between .62-.78). This calls in to question the overall reliability of the measure and suggests that it may not adequately measure the constructs of attachment anxiety and avoidance.

This study is also limited by an omission on the demographics questionnaire. Participants were not asked to provide their job titles so as to help ensure anonymity and thus accurate responding. This information may be vital to a complete understanding of

results. For example, individuals working as surgeons may be more likely to experience job resources such as knowledge, autonomy, and a supportive environment than their entry level clerical participant counterparts. Hypothetically, if the majority of low attachment anxiety participants were working entry-level clerical positions and the majority of high attachment anxiety participants were working as surgeons in the hospital, participant differences in available job resources may have impacted results. It has been suggested that job resources like these motivate employees and positively relate to engagement (Nahrgang, Morgeson, & Hofmann, 2011). Demographic questions such as, "How many hours do you work in a typical week?" were used to mitigate this limitation and determine if the sample had a regular distribution in terms of other job characteristics. No concerns were raised during this preliminary data analyses; however, the unknown distribution of job type for the sample may be limiting interpretation of the results.

Floor effects may have limited results as overall participants provided low reports of incivility. The possible range of incivility scores was 0-6. The highest mean reported score for any of the incivility subscales was for Time One co-worker incivility; however, the mean score on this subscale was merely 0.85. In order to study the impact of incivility, there must be some incivility present and this requirement may not have been met using this particular sample. The overall low reported levels of incivility potentially prevented any impact resultant from fluctuations in incivility from being revealed.

The methods used in this thesis may have limited its research findings. Online delivery of the questionnaire may have resulted in low quality responses. Participants were offered minor compensation for their time; as a result, participants may have only

completed the survey to gain compensation, leading to faking or random responding. However, as compensation was minimal, faking or random responding is only a slight possibility. The delivery method of the questionnaire may have limited accurate responding. Participants may not have received enough reassurance that their identities and responses would be protected. There may have been some motivation to respond in a socially desirable manner if participants were concerned their participation may impact their employment. This limitation may explain the weaker associations between civility and burnout for individuals higher in attachment anxiety revealed through testing of Hypothesis Four, as they may have been more concerned due to fear of rejection (Diamond & Hicks, 2004).

The time lag of five or six months from Time One to Time Two may not have corresponded to the time frame of relationships among civility, incivility, attachment, and burnout. Dormann and Griffith (2015) have suggested that a methodological issue in longitudinal research models may be that in some situations interactions among constructs occur shorter or longer time periods than are investigated. It may be that the interactions among these constructs occur over a few days and thus relationships are not apparent when investigated using a six-month time lag. By the time the Time Two assessment occurred, other events, not captured in the Time One survey, had influenced the outcome variables. Alternatively, the relationships among these constructs could occur more slowly, requiring a year or two to unfold in a work setting. In either case, the time frame for this analysis may have been ill-suited to capture the relevant relationships.

In summary, several limitations have been identified that may have impacted results, including methodological issues. For example, the research design and the size of

the participant pool may have limited the ability of the study to identify significance. The lag time of five to six months from Time One to Time Two may have not been appropriate to capture the interactions among the analyzed constructs. Furthermore, a lack of high quality post auto correlational variance appears to have limited the analyses. These limitations likely explain the lack of expected results revealed through the main analyses. However, they are limited in their application to the exploratory two wave analyses. Further limitations that may have impacted all analyses (main and exploratory) include the participant pool, which may have been unique as it was drawn from one specific hospital; furthermore, job type was not explored through demographic questioning, which may have revealed further characteristics unique to the participant pool (e.g., all food service employees versus all surgeons). Despite these limitations, the current thesis offers insight for future research, particularly that which will rely on a longitudinal design.

Future Work

In an effort to address some of the limitations to the current research and to further explore the relationships between incivility, civility, burnout, and attachment, future research is recommended. Future research in this area will contribute to the limited literature surrounding attachment's relationships with burnout and has the potential to improve future burnout interventions.

Future research may investigate what personal resources and demands may be unique to high attachment anxiety individuals that may leave then more vulnerable to burnout over time regardless of external resources and demands. Exploratory analyses revealed patterns suggestive of the expected tendency for high attachment anxiety to be

related to higher burnout. Due to a lack of published literature exploring the inner resources and demands related to attachment that may be relevant to burnout outcomes, it is recommended that this group's potential unique resources and demands be explored. An example of such potential demands may be the tendency of anxiously attached individuals to have a more negative outlook (Collins & Read, 1990) and the relationship between attachment and unhelpful patterns of rumination (Lanciano, Curci, Kafetsios, Elia, & Zammuner, 2012). A potential resource may include the tendency of anxiously attached individuals to engage in excessive reassurance seeking behaviour (Shaver et al, 2005) or other yet unidentified mechanisms that may be impacting the relationship between incivility and burnout for those high in attachment anxiety. Individuals higher in attachment anxiety may fare worse than their counterparts when under high civility and/or low-incivility conditions due to a depletion of personal resources stemming from these demands. Their tendency to have a more negative outlook may cause them to be less accepting of civility that is offered. Additionally, their tendency to engage in unhelpful patterns of rumination or to potentially engage in too much reassurance seeking behaviour may cause them to fare worse in conditions that individuals lower in attachment anxiety fare well in. It is likely that individuals struggling with these demands would benefit from a cognitive behavioural based intervention focused on thought restructuring therefore such an intervention should be considered in the future, specifically if targeting individuals higher in attachment anxiety.

Future researchers who investigate the construct of incivility would be well served to include civility in their research as well. Despite the investigation of both incivility and civility seeming redundant, the current study demonstrates how these two

constructs may not represent two sides of the same factor. The variables of incivility and civility can provide insight when explored simultaneously that may not be present if one of the two is chosen over the other. In past research, incivility has been the construct of choice when investigating the quality of workplace interactions (i.e., Laschinger et al., 2009; Lewis & Malecha, 2011**).** However**,** researchers have called upon the wider burnout research community to explore the construct of civility itself (i.e., Leiter et al., 2001) as most successful interventions have been centered around generating more civility rather than simply lowering incivility in the workplace (i.e., Osatuke et al., 2009). The current thesis highlights this need.

It is also recommended that future research investigate the potential impact that supervisor incivility may have, over and above other sources of incivility on burnout. Results support a longitudinal link between supervisor incivility and exhaustion, supporting the suggestion made by several researchers that supervisor incivility may make unique contributions to burnout outcomes (Jiménez et al., 2015; Sliter et al., 2015). It is recommended that supervisor incivility be investigated as a separate construct from coworker or general workplace incivility, in an effort to generate information about these potentially important relationships. If the impact of supervisor incivility is vastly more detrimental than incivility from other sources, it would likely be more effective and cost efficient for burnout interventions that are implemented in the Canadian health care system to focus on supervisor civility rather than coworker civility.

Finally, in an effort to clarify the results generated by Hypothesis Four, it is recommended that future research explore relationships between attachment and the reassurance seeking behaviour of individuals as it relates to burnout. Results of this thesis

suggest that individuals higher in attachment anxiety garner more civility in high burnout contexts than do individuals lower in attachment anxiety. Furthermore, in low civility contexts, individuals higher in attachment anxiety report more burnout (i.e., cynicism) than individuals lower in attachment anxiety. However, individuals higher in attachment anxiety are impacted less by civility, reporting higher burnout than their low attachment anxiety counterparts in high civility contexts. The current literature supports a link between reassurance seeking behaviour and both attachment anxiety (Shaver et al., 2005) and reassurance seeking behaviour and engagement (Bernier, 1998). Current burnout interventions such as the CREW program (Osatuke et al., 2009) are likely to be better positioned to generate increasingly positive outcomes if they continue to refine themselves based on the needs of the variety of different hospital staff participating in burnout intervention programing.

Several areas for future research have been presented. This thesis highlights a need for future research to explore inner resources and demands and how these relate to attachment, specifically attachment anxiety and the potential resource of reassurance seeking behaviours. It also highlights the potential importance of the incivility actor, suggesting that supervisor-perpetrated incivility may impact certain individuals differently or more intensely than co-worker perpetuated incivility. Results support past assertions that civility should be included in future research, rather than continuing the literature's focus on the impacts of incivility in the workplace. Indeed, civility interventions may be well informed by future research investigating how such intervention outcomes relate to attachment.

Conclusion

This appears to be the first study to investigate the moderating relationships of attachment anxiety between incivility, civility and later burnout using two time points. Findings were inconsistent with the hypotheses, as significant moderating relationships revealed were not as anticipated. It was expected that individuals higher in attachment anxiety would fare worse in all contexts than individuals lower in attachment anxiety. However, the results suggest that individuals higher in attachment anxiety fare comparatively better in traditionally "bad" contexts (i.e., high incivility, low civility) whereas individuals lower in attachment anxiety fare comparatively better in traditionally "good" contexts (i.e., low incivility, high civility). Results suggest that inner resources and demands related to attachment that may be relevant to burnout outcomes. Individuals higher in attachment anxiety may fare worse under traditionally "good" conditions due to a depletion of personal resources stemming from these demands. Potential demands such as their tendency to have a more negative outlook (Collins & Read, 1990), to engage in unhelpful patterns of rumination (Lanciano et al., 2012), and to engage in too much reassurance seeking behaviour (Shaver et al, 2005) would likely benefit from a cognitive behavioural based intervention focused on thought restructuring.

Several limitations have been identified that may have impacted study results, such as the potential uniqueness of the participant pool and lack of available post autocorrelational variance. As such, it is recommended that future research take these limitations into consideration (e.g., draw participants from multiple Canadian hospital sites).

Understanding the relationships between attachment, burnout, and protective factors against burnout has the potential to benefit employees in all occupations, not only the health care industry upon which the current research focuses. A better understanding of these relationships, as well as of personal resources and demands, will inform intervention strategies that can be used to improve individuals work place well-being and, in turn, overall well-being.

References

Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, California: Sage.

Ainsworth, M. D. S. & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child Development*, *41*(1), 49-67.

Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationships between personality variables and burnout: A meta-analysis. *Work & Stress*, *23*(3), 244-263.

Andersson, L. M. & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, *24*(3), 452-471.

Armsden, G. C. & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, *16*(5), 427–454.

Awa, W. L., Plaumann, M., & Walter, U. (2010). Burnout prevention: A review of intervention programs. *Patient Education and Counseling*, *78*(2), 184-190.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, *7*(2), 147-178.

Bartholomew, K. & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, *61*(2), 226.

Beattie, L. & Griffin, B. (2014). Accounting for within-person differences in how people respond to daily incivility at work. *Journal of Occupational and Organizational Psychology*, *87*(3), 625-644.

Berant, E., Mikulincer, M., & Florian, V. (2001). Attachment style and mental health: A 1-year follow-up study of mothers of infants with congenital heart disease. *Personality and Social Psychology Bulletin, 27*(8), 956–968.

Bernier, D. (1998). A study of coping: successful recovery from severe burnout and other reactions to severe work-related stress. *Work & Stress*, *12*(1), 50-65.

Besser, A. & Priel, B. (2009). Emotional responses to a romantic partner's imaginary rejection: The roles of attachment anxiety, covert narcissism, and self-evaluation. *Journal of Personality*, *77*(1), 287-325.

Bobbio, A., & Manganelli, A. M. (2015). Antecedents of hospital nurses' intention to leave the organization: A cross sectional survey. *International Journal of Nursing Studies*, *52*(7), 1180-1192.

Bowlby, J. (1982). *Attachment and loss*. New York, New York: Basic Books.

Bowling, N. A., Alarcon, G. M., Bragg, C. B., & Hartman, M. J. (2015). A meta-analytic examination of the potential correlates and consequences of workload. *Work & Stress*, *29*(2), 95-113.

Brase, G. L. & Guy, E. C. (2004). The demographics of mate value and self-esteem. *Personality and Individual Differences*, *36*(2), 471-484.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult romantic attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York, NY: Guilford Press.

Burrell, L., McFarlane, E., Tandon, D., Fuddy, L., Duggan, A., & Leaf, P. (2009). Home visitor relationship security: Association with perceptions of work, satisfaction, and turnover. *Journal of Human Behavior in the Social Environment*, *19*(5), 592-610.

Campbell, L., Simpson, J. A., Boldry, J., & Kashy, D. A. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology*, *88*(3), 510.

Chang, E., Eddins-Folensbee, F., & Coverdale, J. (2012). Survey of the prevalence of burnout, stress, depression, and the use of supports by medical students at one school. *Academic Psychiatry*, *36*(3), 177-182.

Cohen, J. & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences. Hillsdale, NJ: Erlbaum.

Collins, N. L. & Feeney, B. C. (2004). Working models of attachment shape perceptions of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology, 87*(3), 363-383.

Collins, N. L. & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, *58*(4), 644-663.

Cortina, L. M. (2008). Unseen injustice: Incivility as modern discrimination in organizations. *Academy of Management Review, 33*(1), 55–75.

Cortina, L. M. & Magley, V. J. (2009). Patterns and profiles of response to incivility in the workplace. *Journal of Occupational Health Psychology*, *14*(3), 272-288.

Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, *6*(1), 64-80.

Day, A. & Leiter, M. P. (2014). The good and bad of working relationships: Implications for burnout. In M. P. Leiter, A. B. Bakker, & C. Maslach (Eds.), *Burnout at Work* (pp. 56–79). London: Psychology Press.

De Lange, A. H., Taris, T. W., Kompier, M. A. J., Houtman, I. L. D., & Bongers, P. M. (2003). "The very best of the millennium": Longitudinal research and the demand-control-(support) model. *Journal of Occupational Health Psychology*, *8*(4), 282–305.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499-512.

Diamond, L. M. & Hicks, A. M. (2004). Psychobiological perspectives on attachment: Implications for health over the lifespan. In J. A. Simpson, & W. S. Rholes (Eds.), *Adult attachment: New directions and emerging issues* (pp. 240–263). New York, NY: Guilford.

Dormann, C. & Griffin, M. A. (2015). Optimal time lags in panel studies. *Psychological Methods, 20*(4), 489-505.

Estes, B. & Wang, J. (2008). Workplace incivility: Impacts on individual and organizational performance. *Human Resource Development Review*, *7*(2), 218-240.

Falvo, R., Favara, I., Di Bernardo, G. A., Boccato, G., & Capozza, D. (2012). Attachment styles in organizations: A study performed in a hospital. *TP-Testing, Psychometrics, Methodology in Applied Psychology*, *19*(4), 263-279.

Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The Experiences in Close Relationships—Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, *23*(3), 615-625.

Francis, L., Holmvall, C. M., & O'Brien, L. E. (2015). The influence of workload and civility of treatment on the perpetration of email incivility. *Computers in Human Behavior*, *46*(1), 191-201.

Fukuda, K., Straus, S. E., Hickie, I., Sharpe, M. C., Dobbins, J. G., & Komaroff, A. (1994). The chronic fatigue syndrome: A comprehensive approach to its definition and study. *Annals of Internal Medicine, 121*(12), 953-959.

Gallus, J. A., Bunk, J. A., Matthews, R. A., Barnes-Farrell, J. L., & Magley, V. J. (2014). An eye for an eye? Exploring the relationship between workplace incivility experiences and perpetration. *Journal of Occupational Health Psychology*, *19*(2), 143-154.

Giumetti, G. W., Hatfield, A. L., Scisco, J. L., Schroeder, A. N., Muth, E. R., & Kowalski, R. M. (2013). What a rude e-mail! Examining the differential effects of incivility versus support on mood, energy, engagement, and performance in an online context. *Journal of Occupational Health Psychology*, *18*(3), 297.

Giumetti, G. W., McKibben, E. S., Hatfield, A. L., Schroeder, A. N., & Kowalski, R. M. (2012). Cyber incivility@ work: The new age of interpersonal deviance. *Cyberpsychology, Behavior, and Social Networking*, *15*(3), 148-154.

Guglielmi, D., Simbula, S., Schaufeli, W. B., & Depolo, M. (2012). Self-efficacy and workaholism as initiators of the job demands-resources model. *Career Development International*, *17*(4), 375-389.

Halbesleben, J. R. & Ronald Buckley, M. (2006). Social comparison and burnout: The role of relative burnout and received social support. *Anxiety, Stress, and Coping*, *19*(3), 259-278.

Hanrahan, M., & Leiter, M. P. (2014). Workplace mistreatment: Recent developments in theory, research, and interventions. *Wellbeing: A complete reference guide*, *3(1)*, 263-294.

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, *76*(4), 408-420.

Hazan, C. & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology, 59*(2), 270–280.

Hazan, C. & Shaver, P.R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*(3), 511-524.

Hershcovis, M. S. (2011). "Incivility, social undermining, bullying… oh my!": A call to reconcile constructs within workplace aggression research. *Journal of Organizational Behavior*, *32*(3), 499-519.

Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, *50*(3), 337– 421.

Hodgins, M., MacCurtain, S., & Mannix-McNamara, P. (2014). Workplace bullying and incivility: A systematic review of interventions. *International Journal of Workplace Health Management*, *7*(1), 54-72.

Huang, J., Wang, Y., & You, X. (2016). The job demands-resources model and job burnout: The mediating role of personal resources. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues*, *35*(4), 562-569.

Jiménez, P., Dunkl, A., & Peibl, S. (2015). Workplace incivility and its effects on value congruence, recovery-stress-state and the intention to quit. *Psychology*, *6*(14), 1930-1939.

Joplin, J. R., Nelson, D. L., & Quick, J. C. (1999). Attachment behavior and health: Relationships at work and home. *Journal of Organizational Behavior, 20*(6), 783-796.

Kets De Vries, M. F. R. (1980). *Organizational paradoxes*. Oxfordshire: Travistock Publications Limited.

Kirk, B. A., Schutte, N. S., & Hine, D. W. (2011). The effect of an expressive writing intervention for employees on emotional self efficacy, emotional intelligence, affect, and workplace incivility. *Journal of Applied Social Psychology*, *41*(1), 179-195.

Lanciano, T., Curci, A., Kafetsios, K., Elia, L., & Zammuner, V. L. (2012). Attachment and dysfunctional rumination: The mediating role of emotional intelligence abilities. *Personality and Individual Differences*, *53*(6), 753-758.

Laschinger H.K.S., Finegan J., & Wilk P. (2009) New graduate burnout: The impact of professional practice environment, workplace civility, and empowerment. *Nursing Economics, 27*(6), 377–383.

Laschinger, H. K., Leiter, M., Day, A., & Oore, D. G. (2009). Workplace empowerment, incivility, and burnout: Impact on staff nurse recruitment and retention outcomes. *Journal of Nursing Management*, *17*(3), 302-311.

Lavee, Y., McCubbin, H. I., & Olson, D. H. (1987). The effect of stressful life events and transitions on family functioning and well-being. *Journal of Marriage and the Family*, *49*(4), 857– 873.

Leiter, M. P. (2012). *Analyzing and theorizing the dynamics of the workplace incivility crisis*. Amsterdam: Springer.

Leiter, M. P. & Day, A. (2013). *Straightforward Incivility Scale Manual*. Technical Document: Centre for Organizational Research, Acadia University.

Leiter, M. P., Day, A., Oore, D. G., & Laschinger, H. K. (2012). Getting better and staying better: Assessing civility, incivility, distress, and job attitudes one year after a civility intervention. *Journal of Occupational Health Psychology*, *17*(4), 425-434.

Leiter, M. P., Day, A., & Price, L. (2015). Attachment styles at work: Measurement, collegial relationships, and burnout. *Burnout Research*, *2*(1), 25-35.

Leiter, M. P., Laschinger, H. K. S., Day, A., & Oore, D. G. (2011). The impact of civility interventions on employee social behavior, distress, and attitudes. *Journal of Applied Psychology*, *96*(6), 1258.

Leiter, M. P. & Maslach, C. (1988). The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behavior*, *9*(4), 297-308.

Leiter, M. P., & Maslach, C. (2004). Areas of worklife: A structured approach to organizational predictors of job burnout. In P. Perrewé & D. C. Ganster, (Eds.), *Research in occupational stress and well being* (Vol. 3, pp. 91- 134). Oxford, UK: Elsevier.

Leiter, M. P., Price, L. & Day, A. (2013). *Short Work Attachment Measure Manual*. Technical Document: Centre for Organizational Research, Acadia University.

Leiter, M. P., Price, S. L., & Laschinger, H. K. (2010). Generational differences in distress, attitudes and incivility among nurses. *Journal of Nursing Management*, *18*(8), 970-980.

Littman-Ovadia, H., Oren, L., & Lavy, S. (2013). Attachment and autonomy in the workplace: New insights. *Journal of Career Assessment*, *21*(4), 502-518.

Lorente, L., Salanova, M., Martı´nez, I. and Schaufeli, W.B. (2008). Extension of the job demands-resources model in the prediction of burnout and engagement among teachers over time. *Psicothema*, *20*(3), 354-60.

Lutgen-Sandvik, P., & Sypher, B. D. (2009). *Destructive organizational communication: processes, consequences, and constructive ways of organizing*. New York, New York: Routledge.

Maslach, C. (2004). Different perspectives on job burnout. *Psyccritiques, 49*(2), 168-170.

Maslach, C. & Leiter, M. P. (1997). *The truth about burnout*. San Francisco: Jossey Bass.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. In S. T. Fiske, D. L. Schacter, & C. Zahn-Waxler (Eds.), *Annual Review of Psychology*, *52*(1), 397-422.

Meterko, M., Osatuke, K., Mohr, D., Warren, N., & Dyrenforth, S. (2007). Civility: The development and psychometric assessment of a survey measure. In M. Nagy (Moderator), *Measuring and assessing workplace civility: Do "nice" organizations finish first?* Symposium presented at the 67th annual meeting of the Academy of Management, Philadelphia.

Meterko, M., Osatuke, K., Mohr, D., Warren, N., & Dyrenforth, S. (2008). *Civility: The development and psychometric assessment of a survey measure*. Unpublished manuscript.

Mikulincer, M. & Florian, V. (1995). Appraisal of and coping with a real-life stressful situation: The contribution of attachment styles. *Personality and Social Psychology Bulletin*, *21*(4), 406-414.

Mikulincer, M. & Shaver, P. R. (2007). *Attachment in adulthood: structure, dynamics, and change*. New York, NY: Guilford Press.

Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, *96*(1), 71-94.

Ndetei, D. M., Pizzo, M., Maru, H., Ongecha, F. A., Khasakhala, L. I., Mutiso, V., & Kokonya, D. A. (2008). Burnout in staff working at the Mathari psychiatric hospital: Original article. *African Journal of Psychiatry*, *11*(3), 199-203.

Nicholson, T. & Griffin, B. (2015). Here today but not gone tomorrow: Incivility affects after-work and next-day recovery. *Journal of Occupational Health Psychology*, *20*(2), 218-225.

Nicholson, R. M., Leiter, M. P., & Laschinger, H. K. (2014). Predicting cynicism as a function of trust and civility: A longitudinal analysis. *Journal of Nursing Management*, *22*(8), 974-983.

Noftle, E. & Shaver, P. (2006). Attachment dimensions and the Big Five personality traits: Associations and comparative ability to predict relationship quality. *Journal of Research in Personality*, *40*(2), 179–208.

Ohue, T., Moriyama, M., & Nakaya, T. (2011). Examination of a cognitive model of stress, burnout, and intention to resign for Japanese nurses. *Japan Journal of Nursing Science*, *8*(1), 76-86.

Oore, D. G., Leblanc, D., Day, A., Leiter, M. P., Laschinger, H. S., Price, S. L., & Latimer, M. (2010). When respect deteriorates: Incivility as a moderator of the stressor-strain relationship among hospital workers. *Journal of Nursing Management*, *18*(8), 878-888.

Osatuke, K., Moore, S. C., Ward, C., Dyrenforth, S. R., & Belton, L. (2009). Civility, Respect, Engagement in the Workforce (CREW) Nationwide Organization Development Intervention at Veterans Health Administration. *The Journal of Applied Behavioral Science*, *45*(3), 384-410.

Pearson, C., Andersson, L., & Porath, C. (2005). Workplace incivility. In S. Fox & P. E. Spector (Eds.), *Counterproductive Work Behavior: investigations of Actors and Targets* (pp. 177–200). Washington, DC: American Psychological Association.

Picardi, A., Caroppo, E., Toni, A., Bitetti, D., & Maria, G. (2005). Stability of attachment related anxiety and avoidance and their relationships with the five factor model and the psychobiological model of personality. *Psychology and Psychotherapy: Theory, Research and Practice*, *78*(3), 327-345.

Pines, A. M. (2004). Adult attachment styles and their relationship to burnout: A preliminary, cross-cultural investigation. *Work & Stress*, *18*(1), 66-80.

Porath, C. L., Foulk, T., & Erez, A. (2015). How incivility hijacks performance: It robs cognitive resources, increases dysfunctional behavior, and infects team dynamics and functioning. *Organizational Dynamics*, *44*(4), 258-265.

Racanelli, C. (2005). Attachment and compassion fatigue among American and Israeli mental health clinicians working with traumatized victims of terrorism. *International Journal of Emergency Mental Health, 7*(2), 115-124.

Reio, T. G. (2011). Supervisor and co-worker incivility: Testing the work frustration-aggression model. *Advances in Developing Human Resources*, *13*(1), 54-68.

Richards, D. A. & Schat, A. C. H. (2011). Attachment at (not to) work: Applying attachment theory to explain individual behavior in organizations. *Journal of Applied Psychology, 96*(1), 169-182.

Robertson, N. & Perry, A. (2010). Institutionally based health care workers' exposure to traumatogenic events: Systematic review of PTSD presentation. *Journal of Traumatic Stress*, *23*(3), 417-420.

Ronen, S. & Baldwin, M. W. (2010). Hypersensitivity to social rejection and perceived stress as mediators between attachment anxiety and future burnout: A prospective analysis. *Applied Psychology: An International Review*, *59*(3), 380-403.

Ronen, S. & Mikulincer, M. (2009). Attachment orientations and job burnout: The mediating roles of team cohesion and organizational fairness. *Journal of Social and Personal Relationships*, *26*(4), 549-567.

Sakurai, K. & Jex, S. M. (2012). Co-worker incivility and incivility targets' work effort and counterproductive work behaviors: The moderating role of supervisor social support. *Journal of Occupational Health Psychology*, *17*(2), 150.

Schaffer, H. R. (1996) The onset of fear of strangers and the incongruity hypothesis. *Journal of Child Psychology and Psychiatry*, *7*(2), 95-106.

Schaufeli W.B. & Bakker A.B. (2004) Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293–315.

Schaufeli, W. B. & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London: Taylor & Francis.

Schaufeli, W.B., Leiter, M.P., Maslach, C. and Jackson, S.E. (1996). MBI General Survey. *Maslach Burnout Inventory Manual* (3rd ed.). In Maslach, C., Jackson, S.E., & Leiter, M.P. (Eds.). Palo Alto, CA: Consulting Psychologists Press.

Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. (2000). The factorial validity of the Maslach Burnout Inventory General Survey (MBI GS) across occupational groups and nations. *Journal of Occupational and Organizational Psychology*, *73*(1), 53-66.

Shaver, P. R. & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment & Human Development, 4*(2), 133-161.

Shaver, P. R. & Mikulincer, M. (2009). Attachment theory and attachment styles. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 62-81). New York, NY: Guilford Press

Shaver, P. R., Schachner, D. A., & Mikulincer, M. (2005). Attachment style, excessive reassurance seeking, relationship processes, and depression. *Personality and Social Psychology Bulletin*, *31*(3), 343-359.

Sheinbaum, T., Kwapil, T. R., Ballespí, S., Mitjavila, M., Chun, C. A., Silvia, P. J., & Barrantes-Vidal, N. (2015). Attachment style predicts affect, cognitive appraisals, and social functioning in daily life. *Frontiers In Psychology*, *6(1), 1-10.*

Shirom, A. (2005). Reflections on the study of burnout. *Work & Stress*, *19*(3), 263-270.

Simmons, B. L., Gooty, J., Nelson, D. L., & Little, L. M. (2009). Secure attachment: Implications for hope, trust, burnout, and performance. *Journal of Organizational Behavior*, *30*(2), 233-247.

Sliter, M., Withrow, S., & Jex, S. M. (2015). It happened, or you thought it happened? Examining the perception of workplace incivility based on personality characteristics. *International Journal of Stress Management*, *22*(1), 24-45.

Statistics Canada. (2015) Table 282-0008 - Labour force survey estimates (LFS), by North American Industry Classification System (NAICS Distribution of employed people, by industry, by province (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick), CANSIM. Retrieved March 16, 2016 from Statistics Canada.

Sulea, C., Filipescu, R., Horga, A., Orţan, C., & Fischmann, G. (2012). Interpersonal mistreatment at work and burnout among teachers. *Cognition, Brain, Behavior: An*

Interdisciplinary Journal, *16*(4), 553-570.

Taylor, S. G., Bedeian, A. G., Cole, M. S., & Zhang, Z. (2014). Developing and testing a dynamic model of workplace incivility change. *Journal of Management*, *43*(3), 645-670.

Vanheule, S. & Declercq, F. (2009). Burnout, adult attachment and critical incidents: A study of security guards. *Personality and Individual Differences*, *46*(3), 374-376.

van Jaarsveld, D. D., Walker, D. D., & Skarlicki, D. P. (2010). The role of job demands and emotional exhaustion in the relationship between customer and employee incivility. *Journal of Management*, *36*(6), 1486-1504.

van Veldhoven, M., De Jonge, J., Broersen, S., Kompier, M., & Meijman, T. F. (2002). Specific relationships between psychosocial job conditions and job-related stress: A three-level analytic approach. *Work & Stress*, *16*(3), 207–228.

van Woerkom, M., Bakker, A. B., & Nishii, L. H. (2016). Accumulative job demands and support for strength use: Fine-tuning the job demands-resources model using conservation of resources theory. *Journal of Applied Psychology*, *101*(1), 141-150.

West, A. L. (2015). Associations among attachment style, burnout, and compassion fatigue in health and human service workers: A systematic review. *Journal of Human Behavior in the Social Environment*, *25*(6), 571-590.

West, M., Rose, S., Spreng, S., & Adam, K. (2000). The adolescent unresolved attachment questionnaire: The assessment of perceptions of parental abdication of caregiving behavior. *The Journal of Genetic Psychology: Research and Theory on Human Development*, *161*(4), 493–503.

Wing, T., Regan, S., & Laschinger, H. K. (2015). The influence of empowerment and

incivility on the mental health of new graduate nurses. *Journal of Nursing Management*, *23*(5), 632-643.

Yang, H. & Zhu, J. (2011). Relationship between attachment type and work stress, job burnout in counselors. *Chinese Journal of Clinical Psychology*, *19*(1), 110-112.

Zapf, D. & Einarsen, S. (2011). Individual antecedents of bullying: Victims and perpetrators. *Bullying and harassment in the workplace. Developments in Theory, Research and Practice*, 177–200.

Appendix A

Survey

PIN ID

The following three questions are used to generate a private PIN - a unique "stamp" on each set of answers that **does not reveal the identity** of the person who wrote those answers. Please be assured that you will stay anonymous - the PIN uses information known only to you. The PINs will be used only by the research team, not by anyone in your organization - a further level of protection for you. The most important thing about the PIN is that it remain the same each time you take the survey.We recommend you write your PIN down somewhere private where you can find it next month.

Please provide the **first three letters** of **your mother's maiden name**: ☐☐☐

Please provide the **last three digits** of your **home phone number**: ☐☐☐

Please provide just the **day** of your birth (the **dd** in the mm/dd/yyyy): ☐☐

Age: ☐☐

Gender: ○ Male

○ Female

Employment Status:

○ Full Time

○ Part Time

○ Casual

○ Temporary

○ Other:

How long have you worked…?

- in your occupation: ☐☐ years ☐☐ months

How many hours do you work **in an average week**? ☐☐ Hrs

In the past 12 months, how many days were you away from work because of your own illness or injury? (Counting each full or partial day as 1 ☐☐☐

Days

In the past 12 months, how many days did you work despite an illness or injury because you felt you had to? (counting each full or partial day as ☐☐☐

days

Maslach Burnout Inventory – General Scale Maslach, Jackson, & Leiter (1996) Please indicate how often, if ever, you have experienced these work related feelings.	*0=Never* *1=Sporadically* *2=Now and Then* *3=Regularly* *4=Often* *5=Very Often* *6=Daily* Total Items=16* *Items not included due to copyright restrictions

Question/Scale	Variable Names (**bold**) & Value Labels (*italics)*
Workplace Incivility Scale (New) Modified ***Staff Assessing Co-Workers** Leiter and Day (2012) Over the past month, how often have your co-workers behaved in the following ways?	*0=Never* *1=Sporadically* *2=Now and Then* *3=Regularly* *4=Often* *5=Very Often* *6=Daily* Total Items=5
Ignored you.	**NWSC1**
Excluded you.	**NWSC2**
Spoke rudely to you.	**NWSC3**
Behaved rudely to you (e.g. gestures, facial expressions, etc.).	**NWSC4**
Behaved without consideration for you.	**NWSC5**
Workplace Incivility Scale (New) Modified ***Staff Assessing Own Behaviour** Leiter and Day (2012) Over the past month, how often have you behaved in the following ways?	*0=Never* *1=Sporadically* *2=Now and Then* *3=Regularly* *4=Often* *5=Very Often* *6=Daily*

Question/Scale	Variable Names (**bold**) & Value Labels (*italics)*
	Total Items=5
Ignored others	**NWSO1**
Excluded others	**NWSO2**
Spoke rudely to others	**NWSO3**
Behaved rudely (e.g., gestures, facial expressions etc.) to others	**NWSO4**
Behaved without consideration for others	**NWSO5**
Workplace Incivility Scale (New) Modified ***Staff Assessing FLM** Leiter and Day (2012) Over the past month, how often has your manager behaved in the following ways?	*0=Never* *1=Sporadically* *2=Now and Then* *3=Regularly* *4=Often* *5=Very Often* *6=Daily* Total Items=5
Ignored you.	**NWSS1**
Excluded you.	**NWSS2**
Spoke rudely to you.	**NWSS3**
Behaved rudely to you (e.g. gestures, facial expressions, etc.).	**NWSS4**
Behaved without consideration for you.	**NWSS5**

Question/Scale	Variable Names (**bold**) & Value Labels (*italics)*
Civility Scale Osatuke et al. (2009) Please answer all of the following questions thinking about your experiences over the past six months. ***Your work group refers to the group you indicated in the first section of this survey.*** Please indicate the extent to which you agree with the following statements:	*1=Strongly disagree* *2=Disagree* *3=Neither Agree nor Disagree* *4=Agree* *5=Strongly Agree* Total Items=11
People treat each other with respect in my work group.	**CIV1**
Disputes or conflicts are resolved fairly in my work group.	**CIV3**
The people I work with can be relied on when I need help.	**CIV5**
Differences among individuals are respected and valued in my work group.	**CIV7**
Managers work well with employees of different backgrounds in my work group.	**CIV8**

Question/Scale	Variable Names (**bold**) & Value Labels (*italics)*
Trust Cook & Wall (1980) The following statements express opinions that people might hold about the ***confidence*** and ***trust*** that can be placed in one's co-workers, supervisors and senior management. Please indicate the extent to which you agree with the following statements:	*1=Strongly disagree* *2=Disagree* *3=Neither Agree nor Disagree* *4=Agree* *5=Strongly Agree* Total Items=9

Question/Scale	Variable Names (**bold**) & Value Labels (*italics)*
My Manager is sincere in his/her attempts to meet the workers' point of view.	**TRST1**
I can trust the people I work with to lend me a hand if I needed it.	**TRST2**
I feel quite confident that my supervisor will always try to treat me fairly.	**TRST4**
Most of my co-workers can be relied upon to do as they say they will do.	**TRST5**
Senior management at my organization is sincere in its attempts to meet the workers' point of view.	**TRST6**
I feel quite confident that the organization will always try to treat me fairly.	**TRST7**
Most of my fellow workers would get on with their work even if supervisors were not around.	**TRST8**

Question/Scale	Variable Names (**bold**) & Value Labels (*italics)*
Attachment/Relationship Styles (collected subset) Bartholomew & Horowitz (1991)	*1=Not at all like me* *2=[no label]*

Question/Scale	Variable Names (**bold**) & Value Labels (*italics)*
Please rate the extent to which you think each description corresponds to you.	*3=Somewhat like me* *4=[no label]* *5=Very much like me* Total Items=13
A close friendship is a necessary part of a good working relationship.	**REL1**
I don't need close friendships at work.	**REL2**
I worry about having close relationships with other people at work.	**REL4**
I like to have close personal relationships with people at work.	**REL5**
Maintaining a professional distance from others is a necessary part of a good working relationship. I worry that close friendships at work lead to conflicts of interest.	**REL6** **REL7**
Others are often reluctant to be as close as I would prefer at work.	**REL11**
I worry that others don't value me as much as I value them.	**REL12**
I make close friendships at work.	**REL14**

Question/Scale	Variable Names (**bold**) & Value Labels (*italics)*
I work hard at developing close working relationships.	**REL15**
I fear that friends at work will let me down.	**REL16**
I worry that I won't measure up to other people at work.	**REL17**
I'm afraid to reveal too much about myself to people at work.	**REL18**

Appendix B

Survey Information Letter

Introduction

We are inviting you to take part in our research study. This form provides information about the study. You do not have to take part in this study. Taking part is entirely voluntary (your choice). Clicking "I Agree" at the end of this page provides informed consent for the survey. You may decide not to take part or you may withdraw from the study at any time during the survey.

Why are the researchers doing this study?

We are conducting this research study to compare the experiences of healthcare workers who are trained in work engagement and those who are not. We are specifically interested in examining experiences of healthcare workers who have self-identified as engagement radicals/advocates and promote team engagement actions in their areas.

How will the researchers do the study?

This stage of the research study involves two surveys. The first survey will be available online for completion between March 2nd and March 27th. The second survey will be available online for completion between April 22nd and May 15th. All surveys will be taken online by clicking a link that will be sent to you via email. The types of questions that will be asked include your perceptions of your workplace (stress, mistreatment, sense of community etc.) and individual outcomes (job satisfaction, burnout, job attitudes, etc.).

What I will be asked to do?

We are asking individuals who respond to our email to complete a survey twice over the course of March and April 2015. Taking part in each survey should take approximately 15 minutes of your time. Clicking "I Agree" at the bottom of this page demonstrates that you understood to your satisfaction the information about the research study and represents your consent to participate in the study. All data will be automatically sent to the research site, the Centre for Organizational Research and Development, at Acadia University. You may withdraw your responses from the project within 30 days of completing the survey by contacting lisa.speigel@acadiau.ca. It is important to note that the responses vary between questions, for example, some questions will ask you how much you agree with particular statements on a 5-point scale, while others will ask you how much you agree with a particular statement on a 7-point scale. Please review the responses options for each question.

What are the burdens, harms, and potential harms?

There are no anticipated burdens, harms or potential harms for participation in this study. Your participation is completely confidential, identifying information with corresponding data will not be shared with (name of hospital organization omitted for privacy reasons). Any questions or concerns you may have about this study can be directed to Lisa Speigel at the Centre for Organizational Research development at lisa.speigel@acadiau.ca. Additionally, if you feel any negative effects from reflecting on and reporting your experiences at work you can access www.workengagement.com for resources to help alleviate the effects of workplace stress. Alternatively, you may refer to your Employee Assistance Plan representative if you need to talk to someone further about these issues.

Benefits to you if you participate in the study

There are no known benefits to you associated with your participation in this research. However, participating in the research study will help researchers and practitioners better understand the efficacy of workplace engagement training.

What alternatives to participation do I have and can I withdraw from the study?

Before deciding to participate, you should know that you do not have to take part in the study. Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time.

Will the study cost me anything and, if so, how will I be reimbursed?

You will not incur any costs from participating in this survey. You will be compensated for your participation in each of the surveys you complete over the course of the research study. For each survey you complete, you will receive $4. If you complete both surveys you will receive a $2 bonus, totally $10. You will be given the amount of money earned at the end of the research project in the form of an Amazon.ca gift card.

How will I be informed of the study results?

If you would like a copy of the research results (available in the fall, 2015), please indicate so in the area provided on the survey.

How will my privacy be protected?

The surveys will not ask for any identifying information and the results will not be presented to (name of hospital organization omitted for privacy reasons) with potentially identifying information linked; only grouped data will be presented.

You will be asked to create a personal identification number the first time you complete the survey and to enter that exact PIN the next time you complete the survey. The PIN will be used so that we can track your responses from one survey to the next. In addition, in order to track your participation and award you the correct compensation amount, we will be linking your PIN to your email address. Linking your PIN to your email address is necessary so that we will be able to contact you at the end of the project to provide you with your Amazon.ca gift card. There will only be one document linking your email address to your PIN, it will only be accessible by the Acadia University research coordinator for the purposes of distributing compensation and will not be shared with other members of the research team or (name of hospital organization omitted for privacy reasons). No one from (name of hospital organization omitted for privacy reasons) will see the individual linked responses. It is important that you use the same PIN for all surveys you complete.

All online data is submitted via a survey software server located in Germany. Data will be exported from this server and will be stored on a COR&D department network drive on Acadia University's network system. This network drive is accessible only to COR&D staff. Once the study is completed, the computer files will be transferred to an external hard drive to be stored in the same secured location as the paper data at COR&D. Paper data will be shredded at COR&D and all computer files will be securely deleted (i.e., files will be overwritten following deletion).

Study records will be stored in a locked area and will be destroyed 5 years post publication. All data will be collected by members of the research team and will only be accessed by members of our research team. All data will be stored in a locked cabinet in a secure room. Representatives of the Research Ethics Board at Acadia University may contact you or require access to your study-related records to monitor the conduct of the researchers.

If you choose to complete the survey on employer-owned equipment (such as a lap-top or computer belonging to your organization) the data provided in this survey may legally be accessible to your employer. The privacy and confidentiality provisions taken by the research team at the COR&D will not change if you complete the survey on employer-owned equipment or your own personal equipment; however, we cannot guarantee that your employer will not access information submitted on their equipment.

Contacts for study questions or problems

If you have any further questions about this study, please feel free to contact Dr. Michael Leiter at 902-585-1671. We would very much appreciate your participation in this research project.

What are my research rights?

Clicking "I Agree" demonstrates that you understood to your satisfaction the information about the research study and represents your consent to participate in the study. It is important to know however, that by consenting to participate in the study you are not waiving your rights to legal recourse from harm. If you have any questions about your rights as a research participant or the conduct of the study, you may contact the Chair of

the Acadia Research Ethics Board (REB): Dr. Stephen Maitzen at 902.585.1407 or smaitzen@acadiau.ca.

Sincerely,

Dr. Michael Leiter

Principal Investigator

Acadia University