BUT WE'RE HERE TO HELP! POSITIVE BUFFERS OF THE RELATIONSHIP BETWEEN
VICTIM INCIVILITY AND EMPLOYEE OUTCOMES IN FIREFIGHTERS

Michael T. Sliter

A Dissertation

Submitted to the Graduate College of Bowling Green
State University in partial fulfillment of
the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2012

Committee:

Steve Jex, Advisor

Karen Sirum
Graduate Faculty Representative

Anne Gordon

Michael Zickar

ProQuest Number: 10631268

ProQuest 10631268

ABSTRACT

Steve Jex, Advisor

Incivility is becoming increasingly recognized as an important workplace stressor, having been linked to a variety of negative workplace outcomes. Research on incivility has primarily investigated this phenomenon as originating from coworkers, customers, and patients in hospitals/hospices. However, there is little research examining incivility originating from a victim—or the family and friends of this victim—of an emergency situation. Specifically, there is no research examining how victim incivility might affect the emergency service employees. The current study sought to fill this gap in the research by defining and examining the impact of victim incivility on firefighters. The current study additionally sought to identify positive psychological buffers of the relationship between victim incivility and its outcomes. Specifically, trait empathy and work engagement were both examined as potential moderators of this relationship. The results showed that victim incivility predicted exhaustion, physical symptoms, and absenteeism. Additionally, both engagement and empathy buffered some negative outcomes, although empathy actually exacerbated the negative effects of victim incivility on absenteeism. The theoretical and practical implications of the current study are discussed, and areas for future research are proposed.

Dedicated to the brave firefighters of the City of Cleveland.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

In recent years, there have been an increasing number of people employed in the service

industry (Hecker, 2005). This translates to more employees being exposed to stressors that are

often associated with working in service occupations. Particularly, customer mistreatment—

mistreatment initiated by someone external to the organization to whom the organization is

providing a service—is thought to be a particularly powerful stressor for people who work

directly with customers (e.g., Grandey, Kern, & Frone, 2007; Sliter, Jex, Wolford, &

McInnerney, 2010). Service employees have often been shown to be targets of customer verbal

aggression (Grandey et al., 2007), violence (Leblanc & Kelloway, 2002), and incivility (Sliter et

al., 2010). Though verbal aggression and violence have both been shown to negatively impact

employee outcomes, incivility is of particular interest in the current study. Of all forms of

mistreatment, incivility—because it is a less intense form of deviant behavior—is thought to

occur more frequently than all others (Von Dierendrock & Mevisson, 2002), which may result in

incivility having the most negative, long-term impact on employees.

As of now, the research on customer/client incivility has focused on jobs in which

employees are considered to be at-risk of experiencing incivility, such as trolley car drivers (Von

Dierendrock & Mevisson, 2002), bank tellers (Sliter et al., 2010), and call center employees

(Sliter, Pui, Wolford, & Jex, 2010). Although it is true that all of these particular occupations are

at special risk in terms of incivility, another population of workers might also be at-risk of

experiencing outsider incivility: emergency response workers, a category that includes

firefighters. Firefighting is a very stressful occupation in which employees are often exposed to

the public during stressful situations, which might result in high levels of incivility. This

incivility might further exacerbate the stress that firefighters already experience, resulting in a

multitude of negative occurrences. Hence, the initial purpose of this study was to examine the incidence and impact of incivility in this special population. This group numbers approximately 1,148,100 employees in the United States (National Fire Protection Association, 2009), and understanding the impact of this interpersonal stressor can have important implications in stress management and employee counseling for this relatively large group.

In addition to examining the occurrence and effects of incivility in firefighters, I also sought to examine positive psychological buffers of the relationship between incivility and employee reactions. This answered the call and example of multiple researchers (e.g., Yagil, 2008; Rupp & Spencer, 2006; Kern & Grandey, 2009), who have recommended that future research examine individual and situational factors that might exacerbate or ameliorate the negative effects of outsider aggression and incivility. The current study examined two possible buffers of victim incivility: work engagement and trait empathy. Both of these positive psychological constructs have buffering potential for job stressors, and this will be discussed in length below.

First, however, I will discuss the concept of incivility as a construct. From there, I will move to discussing customer/client incivility, and how that is related to victim incivility—the type of incivility experienced by firefighters. Afterwards, I will discuss specific hypotheses in regard to victim incivility. Finally, I will discuss work engagement and trait empathy, examining how they might buffer the relationship between victim incivility and its outcomes.

Incivility as a Construct

Virtually everyone has experienced some form of incivility. A person ignoring you while you are talking, someone neglecting to say "please" or "thank you," or someone neglecting to refill the coffee maker when he/she used the last of the coffee are all examples of incivility

(Andersson & Pearson, 1999). The prevalence and simplicity of incivility makes the construct easy to understand, yet difficult to precisely define. Andersson and Pearson (1999) were the first researchers to define incivility, stating that workplace incivility is a "low intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect" (pp. 457). Incivility is often conceptualized as an interpersonal mistreatment stressor or as a daily hassle (Cortina, Magley, Williams, & Langhout, 2001). These behaviors are characterized by rude, impolite, or discourteous actions. This original research on workplace incivility focuses primarily on incivility perpetrated by coworkers or supervisors.

The key component of this definition that separates incivility from other forms of interpersonal mistreatment is the concept of "ambiguous intent." In a typical case of interpersonal mistreatment, there is a perpetrator (i.e., person committing the misdeed) and a victim (i.e., person who is on the receiving end of the misdeed). Using verbal aggression as an example, the perpetrator shouts at the victim. In this case, intentionality is very clear—the perpetrator intends to psychologically harm the victim. However, in a case of incivility, this clear intentionality is no longer present. For example, an employee says "hello" to a coworker, and the coworker does not respond. The employee might be considered a victim of the coworker, who might be considered the perpetrator of incivility. However, if the employee being "victimized" does not notice, or perceive, this event as incivility, then arguably, no incivility occurred.

By taking individual perception is taken into account, it becomes even more difficult to identify specific instances of incivility. In the above example, whether this person is a true victim of incivility would rely on their personal perceptions. Perception has often been investigated in stress research (e.g., Shirom, 1982), and most models of stress postulate that stressors are a result of perception, which, in turn, is thought to initiate a physiological process that adversely affects a

person's physical health (Greiner, Krause, Ragland, & Fisher, 2004). Without the perception of incivility, then, a person might not experience the adverse outcomes of exposure to this low-level interpersonal mistreatment.

However, though individual perceptions may differ, incivility is a frequently experienced/reported phenomenon in the workplace. For instance, Cortina, Magley, Williams, and Langhout (2001) reported that 71% of 1,180 public-sector workers had encountered some form of coworker incivility. Sliter and colleagues (2010) found that 100% of a sample of bank tellers had reported at least moderate levels of coworker incivility, while Sliter, Pui, Sliter, and Jex (2011) had also found that 100% of a sample of call center employees had experienced at least moderate levels of coworker incivility. So, though perceptions of individual instances of incivility may differ from person to person, it seems that repeat exposure to incivility is detected frequently by employees, increasing the likelihood that incivility will, in fact, negatively impact employees.

In terms of the negative impact of workplace incivility, researchers have recently begun to examine how repeated exposure to uncivil behavior is related to both personal and organizational outcomes. In terms of personal outcomes, workplace incivility has been linked to increased burnout (Laschinger, Leiter, Day, & Gilin, 2009), increased feelings of stress (Penney & Spector, 2005), and decreased psychological well-being (Lim & Cortina, 2005). In terms of organizational outcomes, workplace incivility has been linked to increased subjective withdrawal behavior (e.g., Cortina, Magley, Williams, & Langout, 2001; Lim & Cortina, 2005), decreased job satisfaction (Cortina et al., 2001), and decreases in objective measures of withdrawal and performance (Sliter et al., 2010). Though workplace incivility is a relatively minor form of interpersonal mistreatment, it has a clear impact on employees and organizations. And these

findings are not limited to simply incivility from coworkers; customer or client incivility might be even more damaging.

Client/customer Incivility

Client or customer incivility (which will be referred to as customer incivility from this point on) is similar to workplace (coworker) incivility except that the incivility is perpetrated by a client or customer. A customer refers to a person who is requesting or receiving a service from the organization, someone external to the organization. It was recently defined as "low-intensity deviant behavior, perpetrated by someone in a customer or client role, with ambiguous intent to harm an employee, and in violation of social norms of mutual respect and courtesy" (pp. 468; Sliter et al., 2010). Again, the concept of "ambiguous intentions" is central in separating this construct from other, more severe customer mistreatment behaviors, such as customer verbal aggression. Customer "perpetrators" might be rude or discourteous, but there may not be a clear intention to harm. Examples of customer-perpetrated incivility include incidences where customers act impatient or irritated, neglect to engage in social niceties (e.g., saying "please" or "thank you"), and question the competence of an employee (such as by requesting a manager) (Burnfield, Clark, Devendorf, & Jex, 2004).

The experience of customer incivility, again, is a function of individual perception, perhaps more so than workplace incivility from coworkers. In an incident of workplace incivility, the victim usually knows, and may have a relationship with, the perpetrator, which may moderate whether they perceive incivility or not. However, in an incident of customer incivility, the victimized employee often does not have a prior relationship with the customer, meaning that the perceptions of incivility are colored strictly by that particular event. However, though individual perceptions may differ, it is clear from examining the few available studies on

customer incivility that nearly all service employees report experiencing some level of customer incivility. For instance, Sliter and colleagues (2010) found that 100% of bank tellers had experienced some level of customer incivility during a single month. None of the other research directly measuring customer incivility has reported the prevalence rates; however, simply examining descriptive statistics from these various studies (e.g., Von Dierendrock & Mevisson, 2002; Dormann & Zapf, 2004) indicates that customer-related incivility occurs quite frequently.

Customer incivility is still an emerging construct. As such, few variables have been empirically linked with this customer-related social stressor. The most commonly-researched correlate customer incivility is emotional exhaustion (e.g., Jex, Yugo, Burnfield, & Clark, 2008; Von Dierendrock & Mevisson, 2002; Dormann & Zapf, 2004)—a facet of burnout in which feelings of fatigue develop as a person's emotional energies are drained (Maslach & Jackson, 1986). Furthermore, emotional exhaustion is linked with feelings of helplessness, hopelessness, and entrapment. These studies have supported the proposition that repeated and intense levels of customer incivility tend to result in higher levels of emotional exhaustion. Increased emotional exhaustion has, in turn, been linked to personal and organizational outcomes such as stress and decreased job satisfaction (Wright & Cropanzano, 1998), withdrawal behaviors (Deery, Iverson, & Walsh, 2002), decreased satisfaction with personal relationships, and general declines in mental health (Ramirez et al., 1995).

Sliter and colleagues (2010) further explored the relationship between customer incivility, emotional exhaustion, and customer service performance, using emotional labor as an explanatory mechanism. In this meditational model, people who experienced high levels of customer incivility reacted by faking positive emotions and suppressing negative emotions more frequently, which in turn resulted in higher levels of emotional exhaustion and lowered levels of

customer service performance, though customer incivility had an indirect effect on these outcomes. This explanation was nested in the Conservation of Resources Model of Stress (Hobfoll, 1989; 1990), which, in short, is a model in which people endeavor to protect their cognitive and emotional energies, called resources, through whatever means available.

Customer incivility, as an interpersonal workplace stressor, may act to sap these resources, both directly (through a main effect), and indirectly (through emotional labor). Employees become drained, over time, from consistent exposure to workplace stressors (Hobfoll & Freedy, 1993). This is particularly true when these stressors are interpersonal in nature. Research has supported the proposition that interpersonal stressors are among the most deleterious in the workplace (Laschinger, Leiter, Day, & Gillin, 2009). As Sliter and colleagues (2010) determined, this situation is exacerbated when employees engage in emotional labor. That is, employees must essentially smile in the face of rude and discourteous customers, something that is common in service occupations. These findings have since been replicated (Grandey, Foo, Groth, & Goodwin, 2011).

These display rules, and hence emotional labor, do not necessarily apply in all jobs in which employees work directly with the public. Of interest in the current study are firefighters—members of an occupation in which employees work directly with the general public in stressful and/or dangerous situations. Firefighters continuously risk their lives for victims of these tragedies, which include events such as fires, car accidents, and medical emergencies. They work with "victims" or "patients" of these tragedies, and there are no recorded display rules that firefighters must follow when interacting with these victims. Strictly speaking, firefighters respond to a particular call (e.g., a fire or car accident), and are expected to complete their job regardless of social niceties. This lack of "service with a smile," in addition to simply working

with the public (e.g., Leblanc & Kelloway, 2002) puts firefighters at risk for conflict or incivility from the people that they are, in fact, trying to help.

Victim Incivility

As mentioned above, it is possible that firefighters experience incivility from the individuals—or the family and friends of these individuals—that they are trying to protect, serve, and otherwise help. Though in an extensive literature search, I could locate no information regarding incivility or conflict directed at firefighters from their victims; however, there is some literature suggesting that conflict with victims might be a common occurrence. Leblanc and Kelloway (2002) discuss possible occupational precursors that could potentially expose employees to conflict and violence at work. Firefighting shares many of these job characteristics, including physical care of others, emotional care of others, interactions with the public, decisions that influence other people's lives, exercise security functions (e.g., secure the scene of an accident/fire), exercise physical control over others, interacting with frustrated individuals, work nights or evenings, going to [victims] homes, and contact with individuals under the influence of alcohol, illegal drugs, or medication. The full list of these characteristics is reproduced from Leblanc and Kelloway (2002) in Table 1.

Indeed, there has been many documented cases of firefighters and first response workers facing violence and abuse from their patients. It is estimated that there are 700,000 assaults on paramedics per year, a group that includes firefighters and EMTs (Munding, 2006). This stands in stark contrast to the respect historically given to emergency workers. Pozzi (1998) notes that, historically, even the "bad guys" would not think to harm a firefighter, as they were a respected neutral group. Now, Pozzi notes, firefighters are not given the same level of respect, and she notes several reasons for this. First, firefighters are more strongly affiliated with the

government, which is often not afforded high levels of respect in some areas. Second, people may be frustrated with high healthcare costs, and first responders might bear the brunt of these frustrations. Third, firefighters are increasingly working with people who are high on mind altering drugs, drugs which are oftentimes associated with violent behavior.

Given the findings of LeBlanc and Kelloway (2002) and those of Pozzi (1998) it is clear that firefighting shares many characteristics that increase the risk for violence and conflict, but what about the lower-level interpersonal deviance construct of incivility? Here, I define *victim incivility* as low-level deviant behavior, with an ambiguous intent to harm the target, perpetrated by a victim—or the family and friends of a victim—of a stressful situation in which emergency services have been dispatched. These behaviors are in violation of social norms of mutual respect, courtesy, and appreciation. Examples of these behaviors might be a victim withholding information from a firefighter, the family of a victim arguing with firefighters, or a victim ignoring the instructions of a firefighter.

This construct is similar to customer incivility in that the perpetrator is someone external to the organization, and someone that the employee is attempting to serve. Also similar to both workplace and customer incivility, the intent to harm remains ambiguous. The ambiguous intentions are especially important in the case of victim incivility. As noted in the definition, this type of incivility occurs in situations in which emergency services have been called. This includes residential and commercial fires, car accidents, hazardous material spills, explosions, medical crises (e.g., mild to severe injuries; heart attacks), and large-scale community disasters (McCammon, 1996). Understandably, these situations are both stressful to the firefighters and the victims of these events (e.g., Shepherd & Hodgkinson, 1990), which may result in emotional reactions from both parties.

The emotional, stressful situation with which firefighters interact with their victims presents a perfect situation for the perpetration and perception of incivility. In terms of perpetration of victim incivility, research has shown that, when people are emotional and under high levels of stress, they are more likely to both interpret and react with incivility. For instance, Boice (1996) suggests that emotional professors might initiate incivility in the classroom. Phillips and Smith (2004) found that, when people experience incivility, they react with emotions such as anger and outrage. This emotionality is, in turn, related to perpetration of further incivility. This is consistent with Andersson and Pearson's (1999) theorized spiral of incivility model, in which one incident of incivility can result in negative emotions in the victim, which in turn can result in further perpetration of incivility. More generally speaking, it is likely that experiencing strong negative emotions in an emergency situation (e.g., fear, anger, uncertainty), will result in victims ignoring social niceties and cause an increase in uncivil behavior. For instance, customers who are angry about a product might take their anger out on an employee, though the employee had nothing to do with the product (e.g., Grandey, Dickter, & Sin, 2004). Similarly, victims, or the family/friends of victims, might be scared or angry from an emergency situation, and greet firefighters with incivility.

Because of the strong situational nature of victim incivility, this construct may be even more the result of perception than workplace or customer incivility. Firefighters should understand the risks and demands of the occupation when they are hired and trained, which includes dealing with individuals in emergency situations. Firefighters are occasionally trained to handle people in difficult situations, with some cities even providing empathy training to their firefighters (e.g., Dyrks, Ramirez, Deneft, Penkert, & Meyer, 2009). Because firefighters should know the expectations of their job, and because they are sometimes trained in dealing with

emotional and difficult people, they might not perceive instances of incivility as "uncivil" as often as people in different occupations (e.g., service jobs).

However, it should also be noted that the victims of emergency situations might not always be easy for firefighters to empathize with. Firefighters often have to respond to calls in dangerous, high-crime areas, areas in which heavy drug and alcohol use are prevalent, and areas where the firefighters might not necessarily be welcome. As an example, Kitt (2009) conducted a six person interview-based study on various aspects of the job of firefighters, and how this impacts mental health. One participant noted that, dealing with alcohol and narcotic-influenced individuals, became increasingly difficult over time. He writes:

"So they get high, they'd OD, they get Narced up, they get back to the hospital, and an hour or few later, they're back on the street and they yell at you for wrecking their high and you just want to punch them in the face." (Kitt, 2009; pp. 172).

Kitt (2009) further provides anecdotal evidence that dealing with human suffering simply becomes more difficult for firefighters over time. Empathy may begin to dwindle, especially for firefighters who work in particularly busy or high crime locations. One firefighter noted that he became "abrupt and short" with people rather than responding with compassion due to the accumulation of stress from working with victims over time. This case study of a few firefighters ties in well with the theoretical framework that might explain why victim incivility might be so difficult for firefighters to deal with: Conservations of Resources Theory (COR theory; Hobfoll, 1989).

Conservations of Resources Theory and Victim Incivility

COR theory provides an excellent theoretical framework for understanding the mechanism by which victim incivility might negatively affect firefighters. In this model, people

strive to retain, protect, and build resources. Hobfoll (1989) defines resources as "objects, personality characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, or energies." People have a limited number of resources from which to draw, and the environment can affect both the amount and the strength of these resources. Stressors in the environment sap these resources, and people seek to avoid these stressors in order to conserve resources. Additionally, the environment can facilitate and help to increase resources, such as through social support (Hobfoll, 1988).

The COR model has implications for dealing with social stressors, particularly incivility. Social resources are thought to be key components in the COR model (Hobfoll, 1988; Hobfoll, 2001; Halbeslesben, 2006), and social stressors are among the most damaging to a person's resources. When people are exposed to social stressors for any period of time, their emotional, cognitive, and physical resources become depleted (Halbeslesben, 2006). Incivility is considered to be a social stressor (Andersson & Pearson, 1999; Kern & Grandey, 2009), and the principles of COR theory can therefore be applied to incivility. I propose that victim incivility should also reduce a person's resources, maybe even more so than in situations where a coworker or customer is uncivil.

With victim incivility, the victim (or family/friends of the victim) should be expressing gratitude to the firefighters for helping in a dangerous situation. However, instead, the victim is rude or discourteous, spurning this norm for appreciation and gratitude. The firefighters would likely already be suffering from reduced resources due to the very nature of the job (e. g., physical and emotional demands), and being treated poorly by the very people they are trying to protect would likely serve to be a strong drain on resources. As such, victim incivility should

relate strongly to burnout in firefighters. As mentioned earlier, both coworker and customer incivility have been linked to the emotional exhaustion facet of burnout (e.g., Laschinger, Leiter, Day, & Gilin, 2009; Dormann & Zapf, 2004). Based on the previous findings in regard to incivility, with explanations nested in COR theory, I propose the following:

Hypothesis 1: Victim incivility will positively relate to exhaustion.

Additionally, I expect victim incivility to result in not only negative effects in terms of the psychological health of a firefighter, but also have negatives effects on their physical health. Physical health simply refers to the overall physical well-being of an individual. Workplace stressors have often been linked to physical health, primarily to the experience of physical symptoms. For instance, Spector and Jex (1998) validated the Physical Symptoms Inventory (PSI), which measures physical symptoms that have been associated with stress, such as headaches, stomach pains, and sleeplessness. In examining several samples, Spector and Jex (1998) determined that several stressors were positively related to physical symptoms, such as role conflict, role ambiguity, and number of hours of work per week. This provides initial support that stressors can negatively impact physical health, and this work has since been duplicated with other workplace stressors, such as work overload (Jex & Bliese, 1999), interpersonal conflict (Spector, Chen, & O'Connell, 2000), and perceived injustice (Fox, Spector, & Miles, 2001).

Workplace stressors can affect physical health through a variety of mechanisms. Typically, organizational researchers discuss the psychosomatic model of stress. This model essentially posits that stressors result in that stress results in physical reactions, such as increases in blood pressure or acid reflux (Cortina et al., 2001), or immune suppression (McCraty, Atkinson, & Tomasino, 2003). These symptoms of stress, particularly immune suppression, can

predispose people to experiencing stress-related health outcomes, such as headaches, upset stomachs, or back pain (Spector & Jex, 1998). The proposed link between victim incivility and physical health would fit well into this theoretical model—interpersonal stressors have been shown to be powerful stressors that can exert effects on a person's physical health (Spector et al., 2000).

Additionally, some research has shown that particular occupations, firefighters included, are at-risk in terms of alcoholism and tobacco addiction (e.g., Murphy, Beaton, Pike, & Johnson, 1999). This overuse of alcohol and tobacco is thought to be a result of extreme work stress (Frone, 1999), and these unhealthy behaviors can have an impact on physical health. Victim incivility could potentially lead to drinking, smoking, or other maladaptive coping strategies, which, in turn, could have an effect on physical health. Therefore, another pathway by which victim incivility might affect physical health is through adoption of unhealthy lifestyle habits.

Based on previous research and the psychosomatic model of work stress, I propose:

Hypothesis 2: Victim incivility will positively relate to physical symptoms.

Finally, I propose that victim incivility will not only affect physical and psychological outcomes within employees, but will also impact outcomes that affect organizations financially. Particularly, I will focus on objective employee *withdrawal behavior*. Withdrawal behavior is any purposeful behavior by which an employee endeavors to avoid work, or a reduction in an employee's sociopsychological attraction to or interest in the work or the organization (Bluedorn, 1982). These behaviors can include unnecessary absenteeism, tardiness, and non-work related conversations with other employees (Eder & Eisenberger, 2008). A further distinction can be made between *work* withdrawal and *job* withdrawal. Work withdrawal involves avoidance of work tasks while in the work environment, such as browsing the internet

or retreating to the restroom for an extended period of time to secure a break (Cortina et al., 2002). Job withdrawal involves actual withdrawal from the workplace (such as being absent or late), or intending to avoid or leave that organization (Hanisch & Hulin, 1991). The current study focused on job withdrawal due to its clear relationship with financial cost to the organization. Namely, I focus on objective absenteeism.

There are two theoretical frameworks that explain why victim incivility might relate to absenteeism. First, COR theory continues to provide a useful framework for explaining this relationship. As noted above, whenever a person is suffering from resource depletion as a result of workplace stressors, they will act to conserve and restore resources through a variety of means. One of these resource restoration techniques might be to withdraw from the workplace. Leiter (1991) theorized that employees use absenteeism as a coping mechanism. In general, people who report lowered resources have been shown to report higher withdrawal from the workplace (e.g., Taris, Schreurs, Van Lersel-Van Silfhout, 2001). Staying at home (completely away from workplace stressors) might provide employees with a restoration of lost resources. This could be especially true with victim incivility. Firefighters might need to take some time away from dealing with unappreciative victims to restore their resources, especially since they have no way to avoid this stressor at work.

The second theoretical model that can be used to explain the relationship between victim incivility and withdrawal is the psychosomatic model of stress. The physical symptoms that result from workplace stress can also affect an employees' behavior. Cortina and colleagues (2001) made the point that psychosomatic health outcomes of workplace interpersonal conflict can result in a decline in organizationally-relevant performance outcomes. For instance, interpersonal mistreatment—such as aggression or incivility—can result in anxiety, stress, and

depression, which is turn can lead to decreased performance (Adams, 1988), decreased

satisfaction with work (Jamal, Baba, & Riviere, 1998), and increased absenteeism and tardiness

(Jamal et al., 1998). These psychosomatic health outcomes of interpersonal conflict (through

anxiety and stress) are also associated with chronic physical health symptoms, such as increased

blood pressure (Chapman, Mandryk, Frommer, Edye, & Ferguson, 1990) and cardiovascular

disease (Johnson & Hall, 1988). With increased negative health outcomes, employees are more

likely to need to withdraw from the workplace in order to recover from these physical health

impairments.

Given this model and the findings noted above, it is logical that another way in which

victim incivility might affect withdrawal is through psychosomatic affects on physical health.

Note that this explanation is not incompatible with COR theory. Both theories essentially state

that it is depletion of an employee's personal resources that result in withdrawal. The

psychosomatic model focuses primarily on physical resources, while COR theory focuses

primarily on internal and external "energies" (Hobfoll, 1989) that are cognitive in nature.

However, there may also be a causality in the relationship between these two theories, where

depletion of resources (via COR theory) result in increased physical symptoms (via the

psychosomatic theory of stress), which in turn, results in withdrawal from the workplace to

recover both these cognitive resources, as well as physical recovery. Victim incivility could be

the cause of this initial depletion of resources, and in turn affect health outcomes, resulting in

workplace withdrawal. As such, I propose:

Hypothesis 3: Victim incivility will positively relate to absenteeism.

Hypothesis 4: Physical health will mediate the relationship between victim incivility and

absenteeism.

In addition to examining some of the primary negative outcomes of victim incivility, I also sought to examine potential buffers of the negative effects of victim incivility. Particularly, I took a positive psychology approach (e.g, Peterson & Seligman, 2004) and examine two individual differences that could result in reducing the negative effects of workplace stressors. The individual differences of interest are trait empathy and work engagement, which will be defined and discussed in turn.

Work Engagement

Research on the positive psychological aspects of the workplace has recently become more popular, with researchers examining such constructs as positive psychological capital (Luthans, Avey, & Patera, 2008), the positive psychology of self-esteem (Mruk, 2006), and positive affectivity (the experience of positive emotions in the workplace; Watson, 2002). Another such positive psychology construct that has recently become popular is work engagement. This construct has been heavily-marketed and heavy-measured in the human resource (HR) domain, with external HR companies and consulting organizations spouting the benefits of having an engaged workforce (Macey & Schneider, 2008). A simply Google search on "work engagement" or "employee engagement" yields dozens of consulting firms offering to assess engagement in organizations, with these firms promoting the many benefits of an engaged workplace.

This has not necessarily benefited researchers who are interested in engagement as a psychological construct. Rather, due to the rapid interest in employee engagement, and due to the sheer number of competing definitions, the area of engagement has been a difficult area for researchers to breach (Macey & Schneider, 2008). However, quite recently, efforts have been made to solidify the construct of engagement and create measures that accurately assesses this

construct. Particularly, Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002) and Schaufeli, Bakker, and Salanova (2006) have made strides in the area of work engagement, both in terms of defining and measuring this elusive construct. First, I will define work engagement using the most agreed upon definition, followed by discussing the relationship between engagement and burnout—a common question in the literature that is worth addressing. Next, I will discuss how engagement might be thought of as a positive psychological buffer, and I will transition to discussing the expected relationship between victim incivility and engagement.

Work engagement can be defined as a positive, fulfilling, work-related state of mind that is characterized by three highly related, but distinct factors: vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor refers to when a person experiences high levels of energy and cognitive resilience while at work, the willingness to invest effort at work, and perseverance even when faced with difficult situations at work. Dedication is characterized by feelings of significance, enthusiasm, pride, inspiration, and challenge while at work. This dimension of engagement primarily refers to individuals that have a very strong involvement in the workplace, both cognitively and emotionally. Finally, absorption refers to being fully focused and deeply engrossed in one's work, so much so that a person has difficulty keeping track of time and detaching from one's work.

Engagement and job satisfaction are sometimes used interchangeably, though this is not completely accurate, and may be muddled by overlap of the constructs in terms of measurement (Macey & Schneider, 2008). Strictly speaking, job satisfaction refers to satiation, or meeting certain needs (Erickson, 2005). Engagement, on the other hand, refers to feelings of energy, enthusiasm, and activation. A person can be satisfied with their job (e.g., pay, coworkers)

without necessarily being engaged. The confusion stems from the fact that many measures of satisfaction contain this affective component that would more accurately fit under engagement.

Additionally, engagement is occasionally lumped in with job commitment. Commitment is often conceptualized as a psychological state of attachment or a binding force between a person and an organization (Meyer, Becker, & Vandenberghe, 2004). Macey and Schneider (2008) consider commitment to be an important facet of engagement, but not the same as engagement. As such, one cannot be engaged without being committed, but one can be committed without being engaged. Macey and Schenider (2008) further posit that other similar constructs, such as job involvement and psychological empowerment, measure small, but important, facets of engagement, but the terms are not interchangeable.

Additionally, engagement has occasionally been conceptualized as being the opposite of burnout. Whereas burnout is characterized as a lack of energy, negative attitudes, and feelings of negativity about one's work (e.g., Maslach & Jackson, 1981), engagement is characterized as a surplus of energy, positive attitudes, and engrossment in one's work. Maslach and Leiter (1997) argue that engagement is the polar opposite of burnout, and can therefore be assessed by simply examining scores on burnout measures. That is, people who score low on exhaustion and cynicism (two facets of the Maslach conceptualization of burnout) would be thought to have high energy and be highly involved in the workplace. However, with the dawn of new conceptualizations of burnout (e.g., Demerouti, Bakker, Vardakou, & Kantas, 2003), researchers have begun to challenge this assumption.

For instance, Schaufeli and colleagues (2002) found that the measurement of engagement was statistically distinct from the measurement of burnout when analyzed using confirmatory factor analysis techniques. Demerouti, Mostert, and Bakker (2010) recently examined whether

the constructs of engagement and burnout were fundamentally distinct using multiple measures of burnout (Maslach Burnout Inventory and the Oldenburg Burnout Inventory) and a single validated measure of engagement (Utrecht Work Engagement Scale). The researchers found that engagement dimension of dedication and the burnout dimension of cynicism indicated opposite poles of the same construct, while the engagement dimension of vigor and the burnout dimension of exhaustion tended to be distinct, but correlated constructs. These results support the partial independency of these two constructs, which has implications both in terms of the measurement and conceptualization of engagement.

Conceptually and from a COR theory perspective, engagement might be thought of as having a reserve of cognitive, physical, and emotional resources, whereas burnout is the lack of these resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). As such, people who are engaged with their work generally have more resources to draw from in terms of cognitive, emotional, and physical energies. Additionally, people who are high in engagement are typically characterized by high levels of commitment and identification with their organization (Britt & Bliese, 2003). Given this commitment and the abundance of psychological resources, it is quite possible that work engagement might act as a buffer in the stressor-strain relationship.

Work Engagement as a Buffer

Though work engagement has traditionally been treated as a precursor of organizational outcomes (e.g., productivity), as well as an outcome of workplace practices (e.g., human resource interventions), there is potential for engagement to act as a moderator variable in the relationship between stressors and strains in the workplace. Work engagement being treated as a stress buffer is an area that is generally under-researched (Britt & Bliese, 2003). The buffering hypothesis essentially states that a variable of interest (such as work engagement) weakens or

attenuates the stressor-strain relationship. More specifically, this buffering hypothesis is supported when there is a weaker relationship between the stressors and the strains when the moderator is high, and a stronger relationship between the stressors and strains when the moderator is low.

I sought to examine whether work engagement is a viable buffer of the relationship between victim incivility and its negative outcomes in firefighters. However, before stating specific hypotheses, it is important to discuss and establish a theoretical rationale for understanding just why work engagement might act as a buffer in the stressor-strain relationship. There has been little research in this area, but there are still some theoretical frameworks that might provide an explanation to as why this particular buffering hypothesis might be viable.

Csikszentmihalyi (1990) established a theoretical phenomenon called *flow* that is theoretically related to work engagement. Flow is a concept that describes a state of concentration or complete absorption with a particular task or group of tasks. This concept refers to complete immersion that results in high levels of motivation and positive feelings. One might link flow to a basketball player being "on fire" or a writer being "in the zone." Csikszentmihalyi argues that, when in a state of flow, a person instills their entire being into a task, which results in a concentration so intense that there is little room to concentrate on stressors.

Flow could be likened to an extreme form of engagement (Britt & Bliese, 1999). When a person is in a flow-like state, he/she would not experience much strain as a result of stressors as he/she would simply not focus on these stressors. A basketball player who is "on fire" may notice, but may simply not care, about cat-calls from the stands. A soldier, intent on helping a civilian, would barely register the stress of being stationed at an undesirable post. It stands to reason that less intense forms of engagement—still engaged, but not a flow-like state—would

also provide a partial buffering effect between stressors and strains. To use victim incivility as an example, a firefighter might be so engaged in their work (i.e., securing a victim safely to a backboard) that they would not be able to concentrate on any rude or uncivil comment emanating from a victim or the family/friends of a victim. They might be aware of this incivility, recognize it as rude or discourteous behavior, but the stressor would simply not be strong enough to impact the firefighter's overall well-being because of this extreme engagement. As such, this uncivil behavior would not cause much stress, which would in turn reduce any subsequent burnout, physical symptoms, or workplace withdrawal. In contrast, imagine a highly disengaged firefighter, a person with low energy, little dedication, and no enthusiasm. When this firefighter is exposed to victim incivility, it likely becomes a more salient stressor, resulting in more strain for this firefighter.

As an alternate explanation to the concept of flow, work engagement involves having high levels of cognitive, emotional, and physical resources that emerge as a result of being at work (Demerouti et al., 2001). Having higher levels of resources can potentially act as a buffer in the stressor-strain relationship. For instance, Demerouti, Bakker, Nachreiner, and Schaufeli (2001) proposed the Job Demands-Resources Model (JD-R model), which is a general model that was established for explaining job stress and burnout across multiple, disparate jobs. One assumption of this model is that characteristics of most occupations can be separated into two dimensions: job demands and job resources. Job demands refer to physical, social, or organization aspects of the job that require sustained physical or mental effort and are associated with certain physiological and psychological costs, while job resources refer to physical, psychological, social, or organizational aspects of the job that are functional in achieving work goals, reducing job demands and associated physiological and psychological costs, or stimulating

personal growth and development (Bakker, Demerouti, & Euwema, 2005). Note that the definition is different, but not incompatible, with the COR theory definition of resources provided above (Hobfoll, 1989). Particularly, in the JD-R model, resources could be cognitive or physical energies that reduce job demands and their associated costs. Stated differently, job resources can act as buffers in the relationship between job demands and strains.

The JD-R model has found support for the buffering effects of job resources in the relationship between demands and strains. Bakker and colleagues (2005) found that job resources buffered the negative effects of emotional demands and work overload on burnout. Furthermore, Xanthopoulou and colleagues (2007) examined job resources as a buffer between patient harassment and burnout in 714 Dutch employees from two home care organizations. The researchers found support for this model in that different job resources buffered the relationships between harassment and emotional exhaustion and harassment and cynicism. The job resources examined in these studies were both organizational in nature, such as autonomy and social support, as opposed to those resources that are cognitive and emotional in nature. However, these organizational resources are expected to provide physical, cognitive, and emotional energies to employees, which in turn can act as a buffer.

From examining the JD-R model, it becomes clear how work engagement might serve as a buffer in the stressor-strain relationship, particularly that between victim incivility and its outcomes. When a person has more job resources, regardless of the source, this might act to ameliorate the negative effects of stressors. Work engagement tends to be characterized by a general abundance of cognitive, emotional, and physical resources. As such, being that engaged people have more resources at their disposal, the JD-R model would predict a buffering effect of these resources. Particularly, work engagement should be effective in terms of buffering the

negative effects of victim incivility. As mentioned above, interpersonal stressors (e.g., interpersonal conflict; incivility) are included in the COR model as very damaging in terms of depleting personal resources. However, if engaged people have generally more resources, it would take longer for these resources to become depleted, and hence buffer the negative effects of victim incivility.

In terms of research that supports the assertions of these theories on how engagement might buffer the stressor-strain relationship, Britt and colleagues (Britt, 1999; Britt & Bliese, 2003; Britt, Castro, & Adler, 2005) have taken first steps in determining whether engagement (called "self-engagement in a performance domain" in their research) are viable buffers in the stressor-strain relationship. These studies have been conducted using samples of military personnel, a group which is under high levels of stressors, similar, but distinct from those experienced by firefighters. Britt and colleagues have consistently found that self-engagement buffers the relationship between various stressors associated with military deployment (e.g., days training, work hours, work stress, sleep deprivation) and physical and psychological outcomes. These explanations were similarly nested in theories of flow (Csikszentmihalyi, 1990), and in job and attentional resources (Britt et al., 2005; Britt & Bliese, 2003). One unique finding that is worth noting is that Britt (1999) found that perceptions of work overload were more strongly related to stress and depression when military personnel reported high rather than low self-engagement. That is, in the case of work overload, being highly engaged could actually increase reports of negative outcomes. Given that their definition of engagement is performance oriented, Britt and colleagues (2005) explain this relationship by asserting that general overload actually threatens engagement in another performance domain, as this overload might interfere with performance in this domain. Given that the definition of engagement in the current study is not

necessarily tied to a specific performance domain, but rather with work itself, we do not expect findings similar to those of Britt (1999).

Given this early research support, and framed both in terms of Csikszentmihalyi (1990) concept of flow, as well as the JD-R model, I propose the following:

Hypothesis 5: Work engagement will moderate the relationship between victim incivility and exhaustion, such that the relationship between victim incivility and exhaustion will be weaker for those high in work engagement.

Hypothesis 6: Work engagement will moderate the relationship between victim incivility and physical symptoms, such that the relationship between victim incivility and physical symptoms will be weaker for those high in work engagement.

Hypothesis 7: Work engagement will moderate the relationship between victim incivility and absenteeism, such that the relationship between victim incivility and absenteeism will be weaker for those high in work engagement.

In continuing with the examination of positive psychology variables, I also sought to examine an individual different that might further act to buffer the relationship between victim incivility and its outcomes. Particularly, I sought to examine whether trait empathy would be a viable buffer in terms of victim incivility.

Trait Empathy

Firefighting is often acknowledged as a difficult job, difficulty that is compounded due to the emotional nature of working with fellow human beings who are injured, sick, dying, or dead. This is an emotional challenge that many firefighters struggle with extensively, affecting them both within and outside of the workplace (Kitt, 2009). Particularly difficult for firefighters is their unique relationship with their victim—they must maintain compassionate understanding

with these victims, while still retaining emotional distance so as not to become overwhelmed or burnt out. That is, firefighters must have some level of empathy. Empathy is often a trait that is assumed to be intrinsic with any human service job, such as firefighters or EMTs. However, as with any personality variable, firefighters likely differ in trait empathy, which might have implications on how they react to various workplace stressors, particularly interpersonal stressors such as victim incivility.

Empathy can be defined as the reactions of one person to the observed experiences of another person (Davis, 1983). Davis (1983) notes that empathy consists of both a cognitive and emotional component. An empathetic person both understands (the cognitive component) and feels (the emotional component) what another person is going through. To put it differently, empathy is the ability to "put oneself in another's shoes." Empathy can be conceptualized as both a state and a trait (Davis, 1980). State empathy refers to empathic concerns evoked by particular situations and events, thought of as empathy in the "here and now" (Loggia, Mogil, & Bushnell, 2008). Trait empathy, on the other hand, is a dispositional tendency to respond empathically across all situations. I am particularly interested in trait empathy in the current study. People who are high in trait empathy are generally able to understand and feel the experiences of others across situations, while people who are low in trait empathy are unable to understand the reactions and emotions of others.

High trait empathy is marked by several characteristics that are relevant to the current study. First, people who are high in trait empathy tend to be generally more supportive of others across situations (Trobst, Collins, & Embree, 1994). That is, if someone is sick, injured, or otherwise experiencing distress, an empathetic person is likely provide more emotional support than a person low in empathy. Secondly, people who are high in trait empathy are much more

likely to be forgiving in interpersonal situations than people low in trait empathy (Schimel, Wohl, & Williams, 2006). Third, empathetic individuals tend to be less generally hostile or aggressive (e.g., Berry, Worthington, O'Connor, Parrott, & Wade, 2005), indicating that these people would be less likely to retaliate in the face of uncivil or aggressive behavior. These characteristics of empathetic individuals, as well as other research revolving around the construct, indicate the potential of trait empathy acting as a buffer in the relationship between victim incivility and its outcomes.

Trait Empathy as a Buffer

I propose that trait empathy will act as a buffer in the stressor-strain relationship, particularly by buffering the negative effects of victim incivility. That is, firefighters who are high in trait empathy will be less reactive when experiencing victim incivility when compared to firefighters who are low in trait empathy. As mentioned above, empathy is the ability to understand the reactions of other individuals in as a result of the situation. Though I could locate no research in which empathy has been investigated as a moderator in the interpersonal stressor-strain relationship, this would be a logical proposition based on the definition and our understanding of empathy as a construct.

Research on empathy has consistently demonstrated that, if person is high in empathy and encounters someone in need, they are more likely to help that person than someone low in empathy (Batson, et al., 1997). This tends to span situation and group membership, where an empathetic person would help someone in need, even if that person disliked (Batson, Chang, Orr, & Rowland, 2002). The understanding and concern for the welfare of the individuals in need seems to transcend the immediate situation, where empathetic people focus on the needs of that person rather than on their own personal needs. This research would support the proposition that

trait empathy might buffer the relationship between victim incivility and its outcomes. An empathetic person, if greeted with victim incivility, would understand why the victim—or the family/friends of the victim—is reacting with uncivil behavior. The empathetic person would help despite this incivility, and might not perceive this incivility as a stressor, which would decrease the likelihood of experiencing strain.

Additionally, as noted above, people who differ in levels of trait empathy also differ in their levels of willingness to forgive others. Schimel and colleagues (2006) found that, when people who are high in trait empathy are reminded of their mortality, they are more likely to forgive others for violence than people with low trait empathy. I would expect this same basic principle to apply in terms of firefighters experiencing victim incivility. Firefighters, when working with victims, are constantly being reminded of their own mortality, a natural reaction when working with people who are sick, injured, dying, or dead. As such, consistent with Schimel and colleagues (2006), firefighters high in trait empathy would be more likely to forgive the victims, and families/friends of victims, who are being rude and uncivil. Forgiveness, in general, has recently become linked to a variety of short and long-term outcomes. For instance, in the short term, people who forgive others are more likely to experience reduced physiological symptoms, such as reduced blood pressure (Lawler et al., 2003) and cortisol (stress hormone) activation (Berry & Worthington, 2001). Additionally, people who are more likely to forgive are more likely to be generally healthy (assessed by examining physical symptoms, medications used, sleep quality, fatigue, and somatic complaints; Lawler, Younger, Piferi, Jobe, Edmondson, & Jones, 2005), indicating that forgiveness might buffer the interpersonal stressor-strain relationship. Given that trait empathy is positively related to forgiveness in general (Schimel et

al., 2006), it is likely to empathy would act as a buffer in the interpersonal stressor-strain relationship.

Based on the personality characteristics of empathy and on research nested in the forgiveness literature, I propose:

Hypothesis 8: Trait empathy will moderate the relationship between victim incivility and exhaustion, such that the relationship between victim incivility and exhaustion will be weaker for those high in trait empathy.

Hypothesis 9: Trait empathy will moderate the relationship between victim incivility and physical symptoms, such that the relationship between victim incivility and physical symptoms will be weaker for those high in trait empathy.

Hypothesis 10: Trait empathy will moderate the relationship between victim incivility and absenteeism, such that the relationship between victim incivility and absenteeism will be weaker for those high in trait empathy.

CHAPTER 2: METHOD

Participants and Procedures

Firefighters from a large, Midwestern city were recruited to participate in the current

study. Two weeks prior to the study, a notice was circulated among all firehouses in the city,

alerting firefighters that they will be contacted for a study that was sanctioned by the Chief of the

fire department. Once the study began, the Chief issued a formal departmental order,

encouraging participation and ensuring confidentiality. A total of 685 survey packets were sent

to the home addresses of all firefighters working in suppression (i.e., 24-shift work). The

packets included a letter from the Chief, an informed consent document, the survey, and a

postage-paid return envelope. In the letter from the Chief, a link to an internet survey was

provided in case the participant would prefer filling out the survey online.

The survey consisted of several measures as part of a larger study, including the measures

mentioned below. The online version of the survey provided the measures in a randomized order

to alleviate the effects of fatigue on the results. The hardcopy version of the survey came in one

of four different randomized ordering, also with the goal of alleviating the effects of fatigue.

Participants provided their name and address in order to receive an incentive ($15 Giant Eagle

gift card), and so that their self-report data could be linked to data provided by the fire

department on their absenteeism. The absenteeism data was sent by the fire department two

months following the completion of the data collection.

Of the 685 surveys sent out, 49 were returned due to invalid addresses, resulting in 636

surveys actually being distributed. A total of 185 were returned, resulting in a response rate of

29%. Six surveys were not included in the current study because they were incomplete (i.e.,

missing more than half of the study variables). The final group of 179 participants were all male,

with an average age of 48.0 (*SD* = 6.66). The majority of participants were Caucasian (79%), and have been employed as a firefighter for an average of 20.9 years (*SD* = 6.91). Most participants were ranked as a firefighter (60%), though many lieutenants (27%) and higher ranks participated.

Measures

In this section, all of the measures that were used in the current study are presented. All self-report measures are presented in Appendix A.

Victim Incivility. A victim incivility scale was developed specifically for the current study. In order to develop this scale, I met with a focus group of eight firefighters. After being provided with possible examples, firefighters were asked to think about specific events in which victims and the family/friends of victims were rude, uncivil, or aggressive. The firefighters were given thirty minutes to write down as many incidences as they could think of. Following this, firefighters were given an opportunity to describe some of these incidences out loud to the group. Firefighters were welcome to continue writing down incidences during this group session (as one firefighter sharing an incident might trigger memories in another firefighter). Verbal responses were recorded, and all written responses were collected.

All responses were organized based on the similarity of the responses. A total of 12 items were created. Examples include "Victims ignore instructions I give them" and "Victims are not truthful to me." Based on the responses by the firefighters, separate scales—with the same items—were created for victims and for the family/friends of victims. Each item was rated with a five-point Likert scale, where "1" is "Never" and "5" is "Extremely Often."

An exploratory factor analysis was conducted to determine the factor structure of each scale. First, in examining the victim incivility scale, the first factor explained approximately 52% of the variance, whereas each subsequent factor explained less than 9% of the variance. In

examining the factor loadings using Promax rotation with Kaiser normalization, all 12 items appeared to load on a single factor. A second, weak factor was present, but only four items loaded on this factor, and a pattern was not detected based on these loadings (Table 2). As such, a single factor solution seemed to be the most likely case with the victim incivility scale. This assertion was further supported by a reliability analysis. The scale had a Cronbach's alpha of .91, and no items could have been deleted to improve the internal consistency. Additionally, the item-total correlations were all above .55, indicating unidimensionality of the scale (Table 2).

Second, the factor structure of the family/friend victim incivility scale was examined. Once again, the first factor explained a large amount of variance (61%), whereas subsequent factors explained less than 9% of the variance. Using the same rotation method as above, the items once again seemed to load onto a single factor. Again, there was a weak, second factor present, but without any consistent loading pattern, supporting the single factor solution (Table 3). This scale demonstrated good internal consistency (.92). All items had item-total correlations exceeding .55, once again indicating that a single factor is likely present (Table 3).

Exhaustion. Exhaustion (8 items) was measured using the Oldenburg Burnout Inventory (OLBI; Demerouti, Bakker, Vardakou, & Kantas, 2003). The instructions read "Thinking about the past month, please indicate how strongly you agree or disagree with the following statements." Example items include "There are days when I feel tired before I arrive at work," and "During my work, I often feel emotionally drained." The statements will be rated along a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The scale demonstrated adequate internal consistency (.85).

Physical Symptoms. The physical health of employees was assessed using the Physical Symptom Inventory (PSI; Spector & Jex, 1998). The PSI (18 items) examines somatic health

issues often related to stressors, such as backaches, heartburn, and trouble sleeping. Participants indicated whether they had experienced the 18 health issues in the last 30 days. Participants choose one of the three response options: 1 (No, I didn't), 2 (Yes, I did but did not see doctor), 3 (Yes, I did and I saw doctor). Higher scores on the PSI indicate worse physical health. Internal consistency is not appropriate for an indicator of discrete symptoms and is not reported here.

Work Engagement. Work engagement was measured using the Utrecht Work Engagement Scale (UWES; Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). This scale consists of 17 items that measure three related dimensions of engagement: vigor (6 items), dedication (5 items) and absorption (6 items). Example items include "At my job, I feel strong and vigorous" (vigor), and "I am enthusiastic about my job" (dedication), and "I am immersed in my work" (absorption). Participants are given the following instructions "please indicate how strongly you agree or disagree with the following statements." All items were rated along a five-point Likert scale, with "1" being "strongly disagree" and "5" being "strongly agree." This scale has previously been validated in multiple studies, both in the United States and in European countries (e.g., Bakker, Demerouti, & Schaufeli, 2002; Schutte, Toppinen, Kalimo, & Schaufeli, 2000).

A composite measure of engagement from the three dimensions was computed. This decision was made for a couple of reasons. First, though some research has utilized confirmatory factor analysis (CFA) techniques to empirically support the three dimension factor structure (e.g., Schaufeli & Bakker, 2003), this has not been a consistent finding (e.g., Sonnetag, 2003). Additionally, Schaufeli and Bakker (2003) argue that a composite score for engagement can be very useful based on the moderate to high correlations between dimensions. Based largely

on this recommendation, a composite score was utilized for the current study. The composite score showed adequate internal consistency (.87).

Trait Empathy. Empathy was assessed using the Interpersonal Reactivity Index (Davis, 1980). The complete scale consists of four dimensions, but for the purposes of this study, only two subscales were used: empathetic concern and perspective taking. Empathetic concern refers to the tendency to have feelings of compassion and concern for other people, and refers to the emotional component of empathy (7 items). An example items from this subscale is "I often have tender, concerned feelings for people less fortunate than me." Perspective taking refers to the tendency to adopt the point of view of other people, and refers to the cognitive component of empathy (7 items). An example item from this subscale is "I sometimes find it difficult to see things from the "other guy's" point of view."

Participants were asked the following: "The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate number on the scale at the top of the page." The items were rated on a 5-point scale, with "1" being "does not describe me well," and "5" being "describes me very well." A composite score was used to better indicate trait empathy, and internal consistency was shown to be adequate for the composite measure (.72).

Absenteeism. Data on absenteeism was obtained directly from management of the fire department. Archival records data on absenteeism (i.e., the number of days missed) were provided for each of the 179 participants. Number of days missed were counted by halves; that is, firefighters could receive a 0.5 missed day if half of their shift was missed. Two months of this data was collected was released following data collection, and it was matched to the employee survey data.

Control Variables

Age was used as a control variable—research on age and withdrawal is somewhat split, with some finding that younger people are absent more often (Kossoris, 1948), others finding that older workers engage in more absenteeism (e.g. Martocchio, 1989), and yet others finding identical rates of absenteeism across all ages (Beatty & Burroughs, 1999). Because rate of absenteeism was also not a primary question in this study, I controlled for age.

Additionally, I controlled for negative affectivity (NA), which is the tendency for people to experience negative emotions (Watson, Clark, & Telegen, 1988). The decision to control for NA was made because some researchers argue that people who are high in NA might report, rather than experience, higher levels workplace stressors and negative outcomes (e.g., Burke, Brief, & George, 1993). In order to account for this possibility, I controlled for NA in all analyses. Trait NA was measured using the NA section of the Positive and Negative Affectivity Scale (PANAS; Watson et al., 1988). The 10 items ($a = .87$) are adjectives describing feelings or emotions, and participants respond how often they feel this way in general. These items were rated on a five-point Likert scale, ranging from 1 = very slightly or not at all to 5 = very often.

Analytic Strategy

Hierarchical regression was used to initially test the main effect hypotheses. To test the mediation hypothesis, I used the three-step procedure described by Baron and Kenny (1986). This procedure involves four total steps. First, a significant relationship between the initial variable and the outcome variable must be shown. Secondly, a significant relationship must be shown to exist between the initial variable and the mediator. Third, the mediator variable must continue to affect the outcome variable while controlling for the effects of the initial variable. Finally, to test to determine whether or not the mediation is full or partial, the relationship

between the initial variable and the outcome variable is examined to see if it is reduced after controlling for the mediator variable. If the initial variable is still significant, support is provided for a partially mediated model.

To test the interaction hypotheses, I used a three-step moderated regression procedure. In the first step, control variables were entered. In the second step, the predictor and the moderator variable were entered in the equation. In the final step, an interaction term, computed by multiplying the mean-centered scores (i.e., the mean subtracted from each score) for the predictor and moderator variables, was entered into the equation. The change in R^2 from step 2 to step 3 was examined to determine if there was a significant effect of the moderating variable. Age and NA were controlled for in all analyses.

CHAPTER 3: RESULTS

Descriptive statistics and correlations among all variables are available in Table 4. Both types of victim incivility related in the expected direction with all outcomes. There is a very high correlation between the victim incivility and family/friend victim incivility scales, indicating that there may be overlap between the constructs. NA, a control variable, did have a significant relationship with both types of victim incivility and exhaustion, while age, the other control variable, did not have any significant relationships with other variables.

Hypothesis 1, that victim incivility would positively relate to exhaustion, was fully supported. Both victim incivility ($\beta = .25$, $p < .001$) and family/friend victim incivility ($\beta = .22$, $p < .01$) predicted exhaustion above and beyond the control variables. Hypothesis 2, that victim incivility would positively relate to physical symptoms, was partially supported. Victim incivility significantly related to physical symptoms ($\beta = .16$, $p < .05$), while family/friend victim incivility did not ($\beta = .13$, $p > .05$). Hypothesis 3, that victim incivility would positively relate to absenteeism, was partially supported. Victim incivility significantly related to absenteeism ($\beta = .22$, $p < .01$), while family/friend victim incivility did not ($\beta = .14$, $p > .05$).

Hypothesis 4, that physical symptoms will mediate the relationship between victim incivility and absenteeism, was tested by using the aforementioned mediated regression procedure. Step 1—a significant relationship between the victim incivility (but not family/friend victim incivility) and absenteeism—was already shown to be significant in testing hypothesis 3. Step 2—a significant relationship between victim incivility and physical symptoms—was also shown to be significant in testing hypothesis 2. Step 3—that physical symptoms should continue to explain variance in absenteeism while controlling for victim incivility—was not significant. Therefore, there was no support for this mediating model, and hypothesis 4 was not supported.

Next, all interaction hypotheses were tested using the aforementioned hierarchical regression method. Results from all interaction hypotheses are presented in Tables 5 and 6. Hypothesis 5, that engagement will moderate the relationship between victim incivility and exhaustion, was fully supported. First, the significant interaction term (β = .22, p < .01) of victim incivility and engagement explained an additional 4% of the variance above and beyond the control, independent, and moderator variables. The form of this interaction was graphed and further examined (see Figure 1). A simple slope analysis indicated that the relationship between victim incivility and exhaustion was significantly stronger (β = .41, p < .001) when employees are low in engagement. High engagement, however, seemed to buffer the relationship between victim incivility and exhaustion, as there was no significant increase in exhaustion (β = -.05, p > .05) when engagement was high.

Second, the significant interaction term (β = -.23, p < .001) of family/friend victim incivility and engagement explained an additional 5% of the variance above and beyond the control, independent, and moderator variables. The form of this interaction was graphed and further examined (see Figure 2). A simple slope analysis revealed the same interaction pattern as was found for victim incivility. The simple slopes can be found in Figure 2.

Hypothesis 6, that engagement will moderate the relationship between victim incivility and physical symptoms, was tested next. The significant interaction term (β = -.18, p < .05) of victim incivility and engagement explained an addition % of the variance above and beyond the control, independent, and moderator variables. The form of this interaction was graphed and further examined (see Figure 3). A simple slope analysis showed that the relationship between victim incivility and physical symptoms was stronger (β = .29, p < .01) when employees were low in engagement than when employees were high in engagement (β = .01, p > .05).

The interaction term of family/friend incivility and engagement, however, did not significantly predict additional variance in physical symptoms above and beyond the control, independent, and moderator variables. As such, hypothesis 6 was partially supported.

Hypothesis 7, that engagement will moderate the relationship between victim incivility and absenteeism, was tested. However, neither the victim incivility/engagement, nor family/friend victim incivility/engagement, interaction terms predicted any significant variance in absenteeism above and beyond the controls, independent, and moderator variables. As such, hypothesis 7 was not supported.

Hypothesis 8, that empathy will moderate the relationship between victim incivility and exhaustion, was tested next. The significant interaction term ($\beta = -.23$, $p < .01$) of victim incivility and empathy predicted an additional 5% of variance beyond the control, independent, and moderator variables. The form of this interaction was graph and can be seen in Figure 4. A simple slope analysis indicated that the relationship between victim incivility and exhaustion was stronger ($\beta = .50$, $p < .001$) when empathy was low than when empathy was high ($\beta = .07$, $p > .05$).

Next, I found that the significant interaction term ($\beta = -.22**$, $p < .01$) of family/friend victim incivility and empathy predicted an additional 5% of variance beyond the control, independent, and moderator variables. The form of this interaction was graphed and can be seen in Figure 5. A simple slope analysis showed that the relationship between family/friend victim incivility and exhaustion was stronger ($\beta = .48$, $p < .001$) when empathy was low than when empathy was high ($\beta = -.20$, $p < .01$).

Hypothesis 9, that empathy will moderate the relationship between victim incivility and physical symptoms, was then tested. However, neither the victim incivility/empathy, nor

family/friend victim incivility/empathy, interaction terms predicted any significant variance in physical symptoms above and beyond the controls, independent, and moderator variables. As such, hypothesis 9 was not supported.

Finally, hypothesis 10, that empathy will moderate the relationship between victim incivility and absenteeism, was tested. The significant interaction term ($\beta = .19$, $p < .05$) of victim incivility and empathy predicted an additional 4% of variance in absenteeism beyond the control, independent, and moderator variables. The form of this interaction showed a relationship that was counter to my expectations (Figure 6). The relationship between victim incivility and absenteeism was actually stronger when empathy was low ($\beta = .40$, $p < .01$) than when empathy was high ($\beta = -.04$, $p > .05$).

Next, I found that the significant interaction term ($\beta = .22$, $p < .01$) of family/friend victim incivility and empathy predicted an additional 4% of variance in absenteeism beyond the control, independent, and moderator variables. The form of this interaction was graphed and can be seen in Figure 7. A simple slope analyses revealed the same interaction form as with victim incivility, which once again ran counter to the hypotheses. As such, hypothesis 10 was not supported.

Post-hoc Analyses

In addition to testing the aforementioned hypotheses, some additional analyses were conducted. First, the hypotheses were tested once again using a composite score of both sources of incivility (victim and family/friends of victims). It is possible that, when dealing with multiple victims, the line between the victims and their families/friends becomes blurry, and this distinction may not be clear to firefighters and other emergency service workers. The main effect hypotheses were largely supported using this composite measure, with overall victim

incivility relating significantly and positively to exhaustion (β = .21, p < .01) and absenteeism (β = .20, p < .01), but not physical symptoms (β = .11, p >.05).

When examining engagement as a buffer in the relationship between this composite term of victim incivility and its outcomes, the interaction term was only significant when examining exhaustion as an outcome (β = -.13, p < .05). This interaction term explained approximately 2% of additional variance, and the form of the interaction was similar to those seen in Figures 1 and 2. When examining empathy as a buffer in the relationship between the composite victim incivility terms and its negative outcomes, the interaction term did not predict additional variance in either exhaustion or physical symptoms. The interaction term of victim incivility and empathy did predict additional variance in absenteeism (β = .21, p < .01), but this once again was in the opposite direction of what was hypothesized.

Viewing the results that used the composite term of victim incivility and family/friend victim incivility from a holistic perspective, it seems as if each individual source of incivility were more effective in predicting individual outcomes. That being the case, it seems as if firefighters are able to clearly differentiate between victims and their family/friends, particularly since these sources of incivility were shown to have slightly different outcomes.

A second post-hoc analysis was conducted to better understand the unanticipated interaction between victim incivility and empathy on absenteeism. Given that the trait empathy scale consists of two dimensions—empathetic concern and perspective taking—it is possible that a composite empathy score may have been inappropriate. As such, all of the moderation hypotheses for trait empathy were once again run using the individual dimensions of trait empathy. Of these twelve moderation analyses, only a single one was significant (empathetic concern moderated the relationship between family/friend victim incivility and absenteeism), and

this interaction was still in the unanticipated direction. The lack of significance using these

dimensions of empathy indicates that an overall empathy score might be more appropriate.

CHAPTER 4: DISCUSSION

Due to the costs of interpersonal deviant behavior in the workplace, this topic has become increasingly researched. Workplace incivility, due to its frequency and negative effects, is of particular interest to researchers. Incivility has been investigated as perpetrated by multiple sources (i.e., customers, coworkers, supervisors), and these sources often contribute uniquely to these negative effects. The purpose of the current study was to investigate incivility perpetrated by victims and the families and friends of victims of emergency situations in firefighters.

Both sources of victim incivility appear to occur relatively frequently among firefighters. Analysis revealed that approximately 99% of firefighters have experienced some level of victim incivility. More specifically, 12% (victim) and 16% (family/friend) reported experiencing incivility between never and rarely, 60% (victim) and 61% (family/friend) reported experiencing this incivility between rarely and sometimes, 26% (victim) and 19% (family/friend) reported experiencing this incivility between sometimes and often, and approximately 2% (victim and family friend) experienced this incivility between often and extremely often.

Additionally, the results generally supported the assertion that victim incivility is not only a common occurrence, but can have a negative effect on firefighters. Both victim incivility and friend/family victim incivility were positively related to exhaustion, and victim incivility was positively related to physical symptoms and absenteeism. This highlights the possible costs of victim incivility to both employees and organizations.

Interestingly, though the victim incivility and family/friend victim incivility scales were highly correlated, the scales were differentially related to the outcomes. Perhaps this is a function of salience—firefighters negative experiences with victims are more salient than those with the family/friends of the victims. Firefighters likely have more control over, and can create

more distance from, families and friends. With uncivil victims, however, firefighters are unable create distance, and might have to spend extended periods of time with this rude person.

I theorized that many of the negative main effects of victim incivility likely occur through resource depletion, a model that has often been used by incivility researchers to explain the costs of incivility (Grandey, Foo, Groth, & Goodwin, 2012; Sliter et al., 2010; Giumetti, McKibben, Hatfield, Schroeder, & Kowals, 2012). That is, victim incivility affects exhaustion through resource loss. However, though the main effect hypotheses were primarily supported, resource depletion was not explicitly tested. As such, there are other possible explanations for the results that are worth noting. First, there may be an individual different in the perception of victim incivility that might be driving these relationships. There has been recent work examining how individual differences might play a role in the experience of, and perception of, incivility (e.g., Milam et al., 2010; Sliter, Withrow, & Jex, 2012). And, it is worth noting that, in the current study, NA related positively to victim incivility, and explained some of the variance in the outcomes. It is possible that other individual differences might explain why some people might experience or perceive different amount of incivility and, though NA was controlled for, I cannot rule out other possible individual difference explanations. For instance, perhaps firefighters who are low in agreeableness are more likely, through their actions, provoke incivility from victims. Alternately, perhaps firefighters who are high in trait anger are more likely to perceive victim responses as incivility.

Another possible explanation, which is also noted below in the limitations, is that I cannot rule out the possibility of reverse causality. That is, victim incivility may not be causing the negative outcomes, but rather the negative outcomes are causing—through one manner or another—the incivility. For example, it is possible that firefighters who are exhausted might be

more likely to perceive incivility in their environment. Alternately, firefighters who are experiencing worse physical symptoms might be less tolerant of victims because of the firefighters' own pain. Given the methodology, we cannot rule out these explanations.

Finally, I endeavored to test whether victim incivility affected absenteeism through physical symptoms. Interestingly, this hypothesis was not supported—absenteeism had no relationship with physical symptoms. This finding, though unusual, could be explained from a couple of perspectives. First, the PSI (Spector & Jex, 1998) measures disparate physical symptoms. While a composite score is recommended by the authors of the scale, some physical symptoms may be linked with absenteeism much more than others. For instance, research shows that back pain is significantly linked to absenteeism (Vallfors, 1985), and firefighters, due to the occasional heavy physical workload of the job, are at risk for experiencing back pain (Macfarlane, Thomas, Papageorgiou, Croft, Jayson, & Silman, 1997). As such, it may be that individual physical symptoms may be more predictive of absenteeism than a composite of all physical symptoms. A brief, post-hoc analysis showed that some physical symptoms—back ache, skin rash, sleeplessness, and dizziness—related positively to absenteeism. Of these symptoms, victim incivility related positively to back aches and sleeplessness, so perhaps individual symptoms may partially explain this relationship.

Alternately, this finding may represent a true relationship—perhaps victim incivility does not affect absenteeism through physical symptom, but through some other mechanism. The result show no relationship between exhaustion and absenteeism, but perhaps some other facet of burnout, such as cynicism or reduced feelings of personal accomplishment, might explain this relationship. Of course, given that these facets of burnout were not measured, this is merely speculation, but future research could more closely examine this question.

Engagement as a Moderator

The current study also examined engagement as a moderator in the relationship between victim incivility and its outcomes. The hypotheses on the moderating effects of engagement were partially supported, primarily when looking at exhaustion and physical symptoms as outcomes. The results show that people who are disengaged from the workplace are likely to experience negative effects of victim incivility than people who are highly engaged in their work. That is, engagement might act as a buffer, potentially through some of the theoretical frameworks offered above (and expanded upon below).

These results are generally consistent with the findings of Britt and colleagues (1999; 2003; 2005), who found that self-engagement in a performance domain can act as a buffer in the stressor-strain relationship within military personnel. The current study utilized the some of the same theoretical frameworks—such as flow (Csikszentmihalyi, 1990)—and found similar results. However, the definition of engagement used in the current study was much more broad in nature, encompassing engagement with the overall job as opposed to simple performance. As such, the current findings may be more generalizable to other occupations.

However, not all of the hypotheses examining engagement as a buffer were supported. There may be some reasons for this. First, this may be the result of the length of time used for the absenteeism measure. As noted above, two months of absenteeism data was used, and a simple count of days missed was used. It may be that absenteeism, being a rather unstable variable, was not measured for a sufficient period of time. Both Martocchio (1994) and Cook and Campbell (1979) suggest that three months might be the best length of time for measuring absenteeism, as it seems to strike the best balance in maximizing internal validity and maximizing variance in the objective variable. Alternately, the lack of a significant moderator

effect may simply reflect a true relationship—engagement might not buffer the negative effects of victim incivility on absenteeism. Rather there may simply be a direct link between the two variables.

Empathy as a moderator

Finally, the current study investigated empathy as a moderator in the relationship between victim incivility and its outcomes. Once again, these hypotheses were partially supported, with empathy interacting with victim incivility to explain additional variance in both exhaustion and absenteeism. The victim incivility-empathy interaction was in the predicted direction when examining exhaustion as an outcome variable. That is, trait empathy seemed to buffer the relationship between victim incivility and exhaustion, such that the relationship between victim incivility and exhaustion was weaker for those higher in trait empathy.

However, though empathy was found to significantly moderate the relationship between victim incivility and absenteeism, the form of the interaction was not in the expected direction. As noted in Figures 6 and 7, the relationship between victim incivility and absenteeism as actually *stronger* for those high in trait empathy, which was counter to my predictions. Why might this have been the case?

One possible explanation for these unanticipated findings might have to do with the characteristics of empathetic people. Recall that empathetic people are more likely to feel the stress and emotions of others (Davis, 1980). Perhaps that empathetic people who experience victim incivility feel the emotions of the victims more acutely, and use workplace withdrawal as a method for recovery. As noted above, absenteeism is often considered to be a method for employees to recover from the stress of the workplace (Wright & Cropanzano, 1998). However, this explanation stands in contrast to the findings that empathy acts as a buffer in the relationship

between victim incivility and exhaustion. There may be another unmeasured variable that is impacting this relationship, a variable—other than exhaustion—that causes highly empathetic people to be more likely to withdrawal as a result of victim incivility. This is merely speculation, however, and this question should be investigated more thoroughly in future research.

Theoretical Implications

The current study successfully applied COR theory as a theoretical framework for understanding how victim incivility negatively impacts firefighters. That is, COR theory posits that stressors, particularly social stressors, drains cognitive, physical, and emotional resources. For firefighters, frequency to which they are exposed to victim incivility seems to be associated with resource loss, given the relationship between victim incivility and emotional exhaustion. These findings are consistent with other studies that have nested the relationship between incivility and its outcomes in resource loss (e.g., Sliter et al., 2010; Sliter et al., 2012; Grandey et al., 2011).

Additionally, I sought to extend COR theory, and incorporate the JD-R model, by positing that engagement would act as a buffer in the relationship between victim incivility and its negative outcomes. Little research has investigated engagement as a moderator, despite these possible theoretical frameworks. Essentially, these theories indicate that high levels of personal and workplace resources can buffer the negative effects of stressors. I posited that engagement can act as a resource, and possibly buffer the negative effects associated with victim incivility. The results showed partial support of this assertion, showing that engagement protected employees from experiencing some of the negative effects associated with victim incivility. This buffering effect might manifest in different ways. First, a person may simply have more

resources, and it will take interpersonal stressors longer to wear away at this resource pool.

Second, an employee may not be as likely to be bothered by stressors because they are so

engaged or absorbed in the work that they are doing. The employee might perceive a stressor,

but not be bothered by it. Finally, though this model was not tested in the current study, it is

possible that employees who are highly engaged with their work are less likely to *perceive*

workplace stressors. That is, highly engaged employees will report fewer stressors in the

environment. Though the results of the current study partially supported the buffering model,

future studies could potentially investigate perceptual differences in engaged versus disengaged

employees.

Another theoretical contribution of the current study was to investigate empathy as a

buffer between victim incivility and outcomes.   The results showed that trait empathy protected

employees from some of the negative effects of victim incivility. Previous research on the

characteristics empathetic individuals has shown that empathetic people are more likely to show

concern for people that transcends the immediate situation, and they are more likely to forgive

people in emotional situations (Schimel et al., 2006; Batson et al., 2002). This is particularly

true if an empathetic person is reminded of their own mortality, a reminder that likely looms

large for firefighters due to the very nature of their work. This is an important contribution to the

literature—there is very little overlap between research on empathy and research on the

workplace. The findings of the current study can be applied to many different occupations in

which empathy might play an important role, such as nursing, emergency medical technicians,

and police officers.

However, trait empathy did not buffer the relationship between victim incivility and all

outcomes. That is, the relationship between victim incivility and absenteeism was actually

stronger for those higher in trait empathy. As noted above, empathetic people may use absenteeism as a recovery mechanism, as dealing with rude victims may trigger more stress in empathetic people. However, these results run somewhat contrary to the findings that empathy buffered the victim incivility-exhaustion relationship. For a theoretical perspective, there may be certain resources—specific to empathetic people—that are drained by victim incivility. Identifying these resources, the theoretical mechanism through which empathy exacerbates this relationship, should be a goal of future research.

Practical Implications

The primary practical implication of the current study is that victim incivility can have negative consequences on both firefighters and organizations. The results of the study show that firefighters commonly experience victim incivility, and that this incivility can have harmful, negative consequences. Given these relationships, it appears that understanding victim incivility merits attention from both researchers and management. Particularly, researchers should focus on ways to decrease the negative effects of this type of incivility.

Similar to nurses who experience aggressive/difficult patients (e.g., Laschinger et al., 2009), firefighting organizations have extremely limited control over victims of emergency situation. That being the case, interventions involving victim incivility would need to be antecedent-focused in nature. This could begin at the selection stage. As demonstrated by the current study, trait empathy appears to buffer some of the negative effects of victim incivility. As such, organizations could potentially select empathetic employees into the organization. Little research has examined the efficacy of selection of employees for empathy. Cliffordson (2002) stated that selection of empathy should be of primary importance for caring professionals (e.g., people working with patients). It is unclear, however, how exactly organizations should

select for empathy—whether this should be through an interview, written, or other format.

Cliffordson (2002) found that interviews showed low inter-rater reliability when screening

candidates for empathy, indicating that interviews may not be able to accurately assess empathy.

So, although selection for empathy seems as if it may help reduce negative effects associated

with victim incivility, more research needs to identify the best way to select empathetic

employees into the organization.

Given that selection of empathy may not be practical at this time, firefighting

organizations might consider empathy training. As mentioned above, some fire departments do

have empathy training in place, but this is far from the norm (Dyrks et al., 2009). Empathy

training is much more common in the medical field (e.g., LaMonica, 1976; Poole & Sanson-

Fisher, 1980). There is significant overlap, however, between the medical field and firefighting,

and empathy training could potentially help buffer the negative effects of victim incivility, as

well as have other positive effects such as increased quality of care and reduced anxiety during

victim care (LaMonica, Wolf, Anita, & Marilyn, 1987).

Additionally, the results of the current study indicated that employee engagement might

buffer some of the negative effects of victim incivility. This being the case, organizations could

endeavor to increase employee engagement as a possible solution to the problems associated

with victim incivility. This would have additional benefits to the organization, such as increased

job satisfaction, organizational commitment, citizenship behaviors, and reduced intentions to quit

(Harter, Schmidt, & Hayes, 2002; Saks, 2006). However, despite many popular articles on

increasing employee engagement, there has been little empirical research investing these

methods. Saks (2006) examined some antecedents of employee engagement, and found that

perceived organizational support, particularly, tended to be associated with high levels of

engagement. Saks (2006) recommends that organizations—to improve employee engagement—focus on employees' perceptions of the support provided by the organization. For instance, organizations could enact programs that address employees' needs, concerns, and feelings, such as surveys and focus groups. Or, organizations could demonstrate care and support, such as by allowing flexible schedules. This could potentially increase workplace engagement, which, in turn, would help ameliorate the negative effects associated with victim incivility.

Aside from empathy and engagement-related recommendations, there are other possible options for reducing the negative effects associated with victim incivility. One option might be to explicitly train firefighters in ways to deal with rude, difficult victims, including strategies to diffuse these rude behaviors. Van Jaarsveld, Walker, and Skarlicki (2010) proposed that this training may be effective in dealing with customer incivility. Though the situations in which customer and victim incivility occur are quite difficult, the same training strategies could be utilized. Van Jaarsveld and colleagues (2010) suggest that role-playing might be effective in training employees to deal with customer incivility. Similar role-playing exercises could be utilized—as part of existing training paradigms—to teach firefighters skills in coping with, and diffusing, incivility.

Another recommendation for reducing the negative effects of victim incivility might be to encourage a civil internal workplace. Research suggests that, when employees are emotionally exhausted from dealing with workplace stressors, they invest in coworker relationships as a mechanism to recover (Halbesleben & Bowler, 2007). Sliter and colleagues (2012) suggest that a civil internal workplace environment might act as a buffer in the relationship between external incivility and negative outcomes. With these findings in mind, coworkers and supervisors (i.e., firefighters, lieutenants, captains) should be trained in maintaining a civil, supportive

environment. In the absence of training, internal civility interventions have been shown to reduce a variety of negative employee outcomes in healthcare workers, including burnout, turnover intentions, and satisfaction (Leiter, Laschinger, Day, & Oore, 2011), and these might be effective in reducing negative effects associated with victim incivility.

Strengths and Limitations

The current study has several important strengths. First of all, the study was conducted with a unique, applied sample. Firefighters are notoriously a difficult population to gain access to (e.g., Grundy, 2000), and having the full support of the organization encouraged firefighters to respond honestly. Additionally, this sample is ideal in order to answer this question— firefighters deal with victims/family and friends of victims on a sometimes-daily basis, which increases the possibility that victim incivility would occur.

Another strength of the current study is that multiple methods were used for assessing variables. That is, self-report methodology (victim incivility and some outcomes) were combined with objective measurement of withdrawal, as collected by the fire department. The use of multiple measures decreases concerns related to common method bias (e.g., Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), and also provides evidence of the costs of workplace stressors. That is, by linking victim incivility to increased sick time, it is more obvious to management that experiencing this stressor can have a real, palpable affect on the bottom line of the organization.

A third strength of the current study is that we did not only examine the negative relationship between victim incivility and its outcomes, but also examined possible buffers of this relationship. Namely, trait empathy and work engagement were examined as moderators in the relationship between victim incivility and its outcomes. Examining buffers of incivility is

relatively rare (e.g., Welbourne, 2010), with most researchers focusing on identifying negative relationships rather than determining factors that can ameliorate the negative effects of incivility. Establishing buffers to victim incivility is a first step in creating a potential intervention program, and the results from the current study could be used to inform creation of interventions focused on empathy or engagement.

There are several limitations, however, that need to be addressed in the current study. First, most of the variables of interest (though not all) were measured using self-report measures, which assess self-perceptions that might be inaccurate or biased due to the method of collection (Podsakoff et al., 2003). However, efforts were made to lessen the impact of this bias. First, participants were given statements from both the researchers and management of the Fire Department ensuring confidentiality of responses, which should reduce social desirability biases. Additionally, I statistically controlled for variables that might have systematically affected relationships among study variables (e.g., negative affectivity). Controlling for these variables addresses the concern that some relationships may have been artificially inflated due to perceptual or experiential biases.

The methodology employed in the current study (i.e., cross-sectional survey design) is such that I am unable to rule out the possibility that the criterion variables cause the predictor variables. That is, increased emotional exhaustion or physical symptoms might cause firefighters to *perceive*, rather than experience, higher levels of victim incivility. The assertions made in the current study, however, are informed by predictions based in theory (e.g., COR Theory; psychosomatic model of stress), as well as consistent with the assertions of other research, which supports a causal pattern whereby incivility leads to outcomes (Cortina et al., 2001; Penney & Spector, 2005; Sliter et al., 2011). So, despite being unable to rule out the concept of reverse-

causality, being that these findings are based in theory, I can have relative confidence in the directions of these relationships.

Another possible limitation is that the current study focused on a single occupation: firefighters. Though possibly considered a strength (as noted above), focusing on a single occupation could potentially affect generalization. The demands, training, and exposure of firefighters might differ from those in other emergency service occupations, such as emergency medical technicians and police officers. As such, the likelihood of, and reactions to, victim incivility might differ as well. As noted below, a promising area for future research would be to examine how victim incivility functions in different settings.

Future Directions

Given the findings of the current study, there are several fruitful areas that researchers may choose to pursue along this vein of research. First of all, the current study was conducted with firefighters, and we found that victim incivility can be relatively harmful to people working in this profession. Firefighters, however, are not the only people who work with victims of emergency situations. Rather, emergency medical technicians, police officers, and other first response units work with victims on an almost daily basis. This being the case, future research might examine other related occupations to determine the frequency, and the effects, of victim incivility across these different settings.

Additionally, in the current study, I did not specifically examine the situations in which victims/family and friends of victims might be likely to respond with incivility. It may be that victims are uncivil in situations in which the emergency is relatively minor, such as a fender-bender, mild medical emergency, or an investigation of smoke. Perhaps, victims tend to respond with incivility when the emergency is minor, and dealing with firefighters might be seen as an

inconvenience. Alternately, it may be that victims respond with incivility in more serious

emergency situations—situations in which emotions are playing a large role. This is an empirical

question, and one that could be answered in the future using either a survey study or even a diary

study.

We did find support that there may be some individual difference buffers to the

experience of victim incivility. However, it is somewhat unclear how exactly these buffers

might function. For instance, we found evidence that trait empathy buffered the relationship

between victim incivility and some of its negative outcomes. Hence, a likely model is that

empathetic firefighters perceive victim incivility, but do not experience its negative effects.

Alternately, it may be that empathetic firefighters do not even perceive victim incivility. That is,

due to their understanding and compassionate nature, firefighters high in empathy do not

perceive a victims actions as uncivil, but rather perceive their actions as emotional responses to a

difficult situation. McCrae & Costa (1990) argue that personality traits are central in determining

what appraisals a person makes in regard to environmental stressors. This being the case, it is

important to determine and test alternate models of how personality traits might function in

regard to victim incivility. Do they affect the perception of, or reaction to, the experience of

incivility? Some evidence points to personality traits affecting the perceptions of workplace

incivility (e.g., Sliter, Withrow, & Jex, 2012), and these findings may hold in terms of victim

incivility.

Additionally, the results showed the unanticipated interacting effect of victim incivility

and trait empathy on absenteeism, where the relationship between victim incivility and

absenteeism was *stronger* for those high in trait empathy. This is an interesting finding, and

given the cost of absenteeism to organizations, should be investigated further. Perhaps an

interview approach could initially be used to determine why empathetic people are more likely to withdraw from the workplace when experiencing high levels of victim incivility. Alternately, a diary study could be conducted in which people of varying empathy record their thoughts and feelings after experiencing rude victims. This would give researchers a better idea of what resources are being drained in highly empathetic people as opposed to less empathetic people.

A final, but vital area, for future research is to investigate interventions for dealing with the effects of victim incivility. Interventions for coping with incivility are often proposed (e.g., Pearson, Andersson, & Porath, 2000; Andersson & Pearson, 1999), but, to my knowledge, have rarely been tested in an empirical fashion (see Leiter et al., 2011 for a notable exception). In terms of dealing with victim incivility, possible interventions would have to be antecedent-focused in nature. As mentioned above, some fire departments utilize empathy training (Dyrks et al., 2009), but this is not the norm (and this was has never been utilized for the present sample). Perhaps utilization of empathy training could be effective in reducing the negative effects of victim incivility. This sort of training would focus on reappraising the situation, and a firefighter endeavoring to understand the feelings of the victim. Dyrks and colleagues (2009) suggest that role-playing could be a fruitful avenue by which firefighters could learn empathy.

Alternative methods for intervening in terms of victim incivility may begin at the selection procedure. Firefighters could be selected with empathy in mind, either through measuring empathy directly or indirectly, or through assessing variables known to be related to empathy, such as agreeableness and conscientiousness (Barrio, Aluja, & Garcia, 2004). Another option in terms of selection would be to include a role-playing activity in which a firefighter needs to interact with, and calm down, difficult victims. An activity such as this might give insight into whether a firefighter would know how to deal with incivility, and whether they

would know how to diffuse incivility from others. This could even serve as an indirect measure of empathy.

REFERENCES

Adams, J. D. (1988). A healthy cut in costs. *Personnel Administrator, 33,* 42-47.

Andersson, L., & Pearson, C. (1999). Tit for Tat? The spiraling effect of incivility in the

workplace. *Academy of Management Review, 24*, 452-471.

Ashton, M. C., Lee, K., & Son, C. (2000). Honesty as the sixth factor of personality: Correlations

with machiavellianism, primary psychopathy, and social adroitness. *European Journal of*

Personality, 14, 359-368.

Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2002). The validity of the Maslach Burnout

Inventory - general survey: An internet study. *Anxiety, Stress, and Coping, 15*, 245-260.

Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job

demands on burnout. *Journal of Occupational Health Psychology, 10*, 170-180.

Bakker, A. B., Demeroutie, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job

resources as predictors of absence duration and frequency. *Journal of Vocational*

Behavior, 62, 341-356.

Batson, C. D., Polycarpou, M. P., Harmon-Jones, E., Imhoff, H. J., Mitchener, E. C., Bednar, L.

L. et al. (1997). Is empathy-induced helping due to self-other merging? *Journal of*

Personality and Social Psychology, 73, 495-509.

Batson, C. D., Chang, J., Orr, R., & Rowland, J. (2002). Empathy, attitudes, and action: Can

feeling for a member of a stigmatized group motivate one to help the group? *Personality*

and Social Psychology Bulletin, 28, 1656-1666.

Berry, J. W., & Worthington, E. L., Jr. (2001). Forgivingness, relationship quality, stress while

imagining events, and physical and mental health. *Journal of Counseling Psychology, 55*,

29-35.

Bluedorn, A. C. (1982). The theories of turnover: Causes, effects, and meaning. In Research in the sociology of organizations (pp. 75-128). Greenwich, CT: JAI Press.

Boice, B. (1996). Classroom incivilities. *Research in Higher Education, 37*, 453-485.

Britt, T. W., Castro, C. A., & Adler, A. B. (2005). Self-engagement, stressors, and health: A longitudinal study. *Personality and Social Psychology Bulletin, 31*, 1475-1486.

Britt, T. W., & Bliese, P. D. (2003). Testing the stress-buffering effects of self-engagement among soldiers on a military operation. *Journal of Personality, 71*, 245-266.

Britt, T. W. (1999). Engaging the self in the field: Testing the Triangle Model of Responsibility. *Self and Identity, 2*, 31-45.

Burke, M. J., Brief, A. P., & George, J. M. (1993). The role of negative affectivity in understanding relations between self-reports of stressors and strains: A comment on the applied psychology literature. *Journal of Applied Psychology, 78*, 402-412.

Burnfield, J. L., Clark, O. L., Devendorf, S., & Jex, S. M. (2004, April). *Understanding workplace incivility: Scale development and validation*. Paper presented at the annual meeting of the Society for Industrial Organizational Psychology, Chicago, IL.

Chapman, A., Mandryk, J. A., Frommer, M. S., Edye, B. V., et al. (1990). Chronic perceived work stress and blood pressure among Austrailian government employees. *Scandinavian Journal of Work, Environment, & Health, 16*, 258-269.

Cliffordson, C. (2002). Interviewer agreement in the judgment of empathy in selection interviews. *International Journal of Selection and Assessment, 10*, 198-205.

Cohen, S., Doyle, W. J., Skoner, D. P., Rabin, B. S., & Gwaltney, J. M. (1997). Social ties and susceptibility to the common cold. *Journal of American Medical Association, 277*, 1940-1944.

Corneil, W., Beaton, R., Murphy, S., Johnson, C., Pike, K. (1999). Exposure to traumatic incidents and prevalence of posttraumatic stress symptomology in urban firefighters in two countries. *Journal of Occupational Health Psychology, 4*, 131-141.

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.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience.* New York: Harper and Row.

Dantzer, R., & Kelley, K. W. (1989). Stress and immunity: An integrated view of the relationships between the brain and the immune system. *Life Sciences, 44*, 1995-2008.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*, 113-126.

Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait, multimethod analysis. *European Journal of Psychological Assessment, 19*, 12-23.

Demerouti, E., Mostert, K., & Bakker, A. B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology, 15*, 209-222.

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

Dorman, C., & Zapf, D. (2004). Customer-related social stressors and burnout. *Journal of Occupational Health Psychology, 9*, 61-82.

Dyrks, T., Ramirez, L., Denef, S., Penkert, B., & Meyer, D. (2009). Designing for firefighters—building empathy through live action role-playing. *Proceedings of the 6th Internation aI SCRAM Conference*. Gothenburg, Sweden.

Eder, P., & Eisenberger, R. (2008). Perceived organizational support: reducing the negative influence of coworker withdrawal behavior. *Journal of Management, 34*, 55-68.

Farrell, D., & Stamm, C.L. (1988). Meta-analysis of the correlates of employee absenteeism. *Human Relations*, 41, 211-227.

Fogarty, G., Machin, A. M., Albion, M., Sutherland, L., Lalor, G. L., Revitt, S. (1999). Predicting occupational strain and job satisfaction: The role of stress, coping, and positive and negative affectivity. *Journal of Vocational Behavior, 54*, 429-452.

Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behaviors, 59*, 291-309.

Frone, M. R. (1999). Work stress and alcohol use. *Alcohol Research and Health, 23*, 284-291.

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*, 148-154.

Grandey, A., Foo, S. C., Groth, M., & Goodwin, R. E. (2012). Free to be you and me: A climate of authenticity alleviates burnout from emotional labor. *Journal of Occupational Health Psychology, 17*, 1-14.

Grandey, A. A., Kern, J. H., & Frone, M. R. (2007). Verbal abuse from outsiders versus from insiders: Comparing frequency, impact on emotional exhaustion, and the role of emotional labor. *Journal of Occupational Health Psychology, 12*, 63-79.

Grandey, A. A., Dickter, D. N., & Sin, H. (2004). The customer is *not* always right: customer aggression and emotion regulation of service employees. *Journal of Organizational Behavior, 25*, 397-418.

Grandey, A. A., & Cropanzano, R. (1999). The conservation of resources model applied to work-family conflict and strain. *Journal of Vocational Behavior, 54*, 350-370.

Grant, S., & Langan-Fox, J. (2006). Occupational stress, coping, and strain: The combined/interactive effect of the Big Five traits. *Personality and Individual Differences, 41*, 719-732.

Greiner, B. A., Krause, N., Ragland, D., Fisher, J. M. (2004). Occupational stressors and hypertension: A multi-method study suing observer-based job analysis and self-reports in urban transit operators. *Social Science and Medicine, 59*, 1081-1094.

Hackett, R. D. 1989. Work attitudes and employee absenteeism: A synthesis of the literature. *Journal of Occupational Psychology,* 62: 235–248.

Halbesleben, J. R. B., & Bowler, M. (2007). Emotional exhaustion and job performance: The mediate role of motivation. *Journal of Applied Psychology, 92*, 93-106.

Halbesleben, J.R.B. (2006). Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology, 91(5),* 1134-1145.

Hanisch, K.A., & Hulin, C.L. (1991). General attitudes and organizational withdrawal: An evaluation of a causal model. *Journal of Vocational Behavior, 39(1),* 110-128.

Harter, J. K., Schmidt,F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*, 268-279.

Hecker, D. (2005). Occupational employment projections to 2014. *Monthly Labor Review, 128*(11), 70-101.

Hobfoll, S.E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W.B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 115-129). Washington, DC: Taylor & Francis.

Hobfoll, S. E. (1988). *The ecology of stress*. New York: Hemisphere.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*, 513-524.

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*, 337-370.

Hobfoll, S.E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W.B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 115-129). Washington, DC: Taylor & Francis.

Jamal, M., Baba, V., & Riviere, R. (1998). Job stress and well-being of moonlighters: The perspective of deprivation or aspiration revisited. *Stress Medicine, 14*, 195-202.

Jex, S. M., Yugo, J. E., Burnfield-Geimer, J. L., & Clark, O. (under review). Moderators of the effects of customer-based incivility on psychological health.

Jex, S. M., Bliese, P. D. (1999). Efficacy beliefs as a moderator of the impact of work-related stressors: A multilevel study. *Journal of Applied Psychology, 84*, 349-361.

Johnson, J. V, & Hall, E. M. (1988). Job strain, work place social support, and cardiovascular disease: A cross sectional study of a random sample of the Swedish working population. *American Journal of Public Health. 78,* 1336-1342.

Katz, R. C., Santman, R., & Lonero, P. (1994). Findings on the Revised Morally Debatable Behaviors Scale. *The Journal of Psychology*, *12*, 15-21.

Keane, A., Ducette, J., & Adler, D. (1985). Stress in ICU and non-ICU nurses. *Nursing Research, 34*, 231-236.

Kern, J. H., & Grandey, A. A. (2009). Customer incivility as a social stressor: The role of race and racial identity for service employees. *Journal of Occupational Health Psychology, 14*, 46-57.

Kitt, L. R. (2009). Breaking the silence: Insights into the impact of being a firefighter on men's mental health. Unpublished master's thesis. The University of British Columbia. Vancouver, Canada.

Kobasa, S. C., & Puccetti, M. C. (1983). Personality and social resources in stress resistance. *Journal of Personality and Social Psychology, 37*, 839-850.

Kokkinos, C. M. (2007). Job stressors, personality, and burnout in primary school teachers. *British Journal of Educational Psychology, 77*, 229-243.

Kreft, I., & De Leeuw, J. (1998). *Introducing multilevel modeling*. London: Sage Publications.

LaMonica, E. L., Carew, D., Winder, A., Haase, A., & Blanchard, K. (1976). Empathy training as the major thrust of a staff development program. *Nursing Research, 25*, 447-451.

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

Lawler, K. A., Younger, J. W., Piferi, R. L., Jobe, R. L., Edmondson, K. A., Jones, W. H. (2005). The unique effects of forgiveness on health: An exploration pathways. *Journal of Behavioral Medicine*, *28*, 157-167.

Lawler, K. A., Younger, J. W., Piferi, R. L., Billington, E., Jobe, R., Edmondson, K., et al. (2003). A change of heart: Cardiovascular correlates of forgiveness in response to interpersonal conflict. *Journal of Behavioral Medicine, 26*, 519-525.

LeBlanc, M. M., & Kelloway, E. K. (2002). Predictors and outcomes of workplace violence and aggression. *Journal of Applied Psychology, 87*, 444-453.

Leiter, M.P. (1991). Coping patterns as predictors of burnout: The function of control and escapist coping patterns. *Journal of Organizational Behavior, 12(2),* 123-144.

Leiter, M. P., Laschinger, H. K., Spence, D. A., & Oore, D. G. (2011). The impact of civility interventions on employee social behavior, distress, and attitudes. *Journal of Applied Psychology, 96*, 1258-1274.

Loggia, M. L., Mogil, J. S., & Bushnell, M. C. (2008). Empathy hurts: Compassion for another increases both sensory and affective components of pain perception. *Pain, 136*, 168-176.

Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning and Education, 7*, 209-221.

Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology, 1*, 3-30.

Maddi, S. R., & Hess, M. (1992). Hardiness and success in basketball. *International Journal of Sports Psychology, 23*, 360-368.

Maddi, S. R., & Kobasa, S. C. (1984). *The Hardy Executive: Health Under Stress*. Homewood, IL: Dow Jones Irwin.

Macfarlane, G. J., Thomas, E., Papageorgiou, A. C., Croft, P. R., Jayson, M., & Silman, A. J. (1997). Employment and physical work activities as predictors of future low back pain. *Spine, 22*, 1143-1149.

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

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

McCammon, S. (1996). Emergency medical service workers: Occupational stress and traumatic stress. In D. Paton & J. Violanti (Eds.), *Traumatic stress in critical occupations* (pp. 58-86). Springfield, IL: Charles C. Thomas.

McCrae, R. R., & Costa, P. T., Jr. (1990). *Personality in adulthood*. New York: Guilford Press.

McCraty, R., Atkinson, M., Tomasino, D. (2003). Impact of a workplace stress reduction program on blood pressure and emotional health in hypertensive employees. *The Journal of Alternative and Complementary Medicine, 9*, 355-369.

Mruk, C. J. (2006). *Self-Esteem Research, Theory, and Practice: Toward a Positive Psychology of Self-Esteem*. New York: Springer.

Munding, H. M. (2006). Violence against firefighters: Angels of mercy under attack. *U. S. Fire Administration.*

National Fire Protection Association (2010, October). The U.S. Fire Department profile through 2009. NFPA, Quincy, MA.

Pearson, C., Andersson, L., & Porath, C., L. (2000). Assessing and attacking workplace

    incivility. *Organizational Dynamics, 29*, 123-137.

Podsakoff, P.M., MacKenzie, S.B., Lee, J., & Podsakoff, N.P. (2003), "Common method biases

    in behavioral research: A critical review of the literature and recommended remedies",

    Journal of Applied Psychology, Vol. 88, pp. 879-903.

Phillips, T., & Smith, P. (2004). Emotional and behavioural responses to everyday incivility:

    Challenging the fear/avoidance paradigm. *Journal of Sociology, 40*, 378-399.

Peterson, C., & Seligman, M. E. P. (2004). *Character Strengths and Virtues: A Handbook and

    Classification*. Washington, D.C.: Oxford University Press.

Poole, A. D., & Sanson-Fisher, R. W. (1980). Long-term effects of empathy training on the

    interview skills of medical students. *Patient Counseling and Health Education, 2*, 125-

    127.

Pozzi, C. (1998). Exposure of pre-hospital providers to violence and abuse. *Journal of

    Emergency Nursing, 24*, 320-323.

Pui, S. Y., Sliter, M. T., Wolford, K. A., & Jex, S. (2010). The role of workplace hostility in

    employee well-being and performance. *Pilot Research Project Final Report*. Prepared for

    submission to the National Institute for Occupational Safety and Health Pilot Research

    Training Program of the University of Cincinnati Education and Research.

Raudenbush, S.W., Bryk, A.S, & Congdon, R. (2004). HLM 6 for Windows [Computer

    software]. Lincolnwood, IL: Scientific Software International, Inc.

Rini, C. K., Dunkel-Schetter, C., Wadhwa, P. D., & Sandman, C. A. (1999). Psychological

    adaptation and birth outcomes: The role of personal resources, stress, and sociocultural

    context in pregnancy. *Health Psychology, 18*, 333-345.

Rupp, D. E., & Spencer, S. (2006). When customers lash out: The effects of customer interactional injustice on emotional labor and the mediating role of discrete emotions. *Journal of Applied Psychology, 91*, 971-978.

Sak, A. M. (2006). Antecedent and consequences of employee engagement. *Journal of Managerial Psychology, 21*, 600-619.

Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*, 71-92.

Schaufeli, W. B., & Bakker, A. B. (2003). UWES —Utrecht Work Engagement Scale: Test manual. Department of Psychology, Utrecht University, Utrecht, available at: www.schaufeli.com.

Schimel, J., Wohl, M. J. A., & Williams, T. (2006). Terror management and trait empathy: Evidence that mortality salience promotes reactions of forgiveness among people with high (vs. low) trait empathy. *Motivation and Emotion*, *30*, 217-227.

Schutte, N., Toppinen, S., Kalimo, R., & Schaufeli, W. B. (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*, 53-66.

Sgoutas-Emch, S. A., Cacioppo, J. T., Uchino, B. N., Malarkey, W., Pearl, D., Kiecolt-Glaser, J. K., et al., (1994). The effects of an acute psychological stressor on cardiovascular, endocrine, and cellular immune response: A prospective study of individuals high and low in heart rate reactivity. *Psychophysiology, 31,* 264-271.

Shirom, A. (1982). What is organizational stress? A facet analytic conceptualization. *Journal of Occupational Behavior, 3*, 21-37.

Sliter, M. T., Withrow, S. A., & Jex, S. M. (May, 2012). Was it rude? Investigating perceptions

    of incivility and retaliatory behavior. Poster accepted at the 27th annual conference of the

    Society for Industrial-Organizational Psychology, San Diego, CA.

Sliter, M. T., Sliter, K. A., & Jex, S. (2012). The employee as a punching bag. The effect of

    multiple sources of incivility on withdrawal and performance. *Journal of Organizational*

    Behavior, 33, 121-139.

Sliter, M. T., Pui, S. Y., Sliter, K. A., & Jex, S. (2011). The differential effects of interpersonal

    conflict from customers and coworkers: Trait anger as a moderator. *Journal of*

    Occupational Health Psychology, 16, 424-440.

Sliter, M.T., Jex, S., Wolford, K.A., & McInnerney, J. (2010). How rude! Emotional labor as a

    mediator between customer incivility and employee outcomes. *Journal of Occupational*

    Health Psychology, *15*, 468-481.

Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: a new look at the

    interface between non-work and work. *Journal of Applied Psychology, 88*, 518-528.

Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors

    and strain: interpersonal conflict at work scale, organizational constraints scale,

    quantitative workload inventory, and physical symptoms inventory. *Journal of*

    Occupational Health Psychology, 3, 356-367.

Spector, P. E., Chen, P. Y., O'Connell, B. J. (2000). A longitudinal study of relations between

    stressors and job strains while controlling for prior negative affectivity and strains.

    Journal of Applied Psychology, 85, 211-218.

Sumerlin, J. R., & Bundrick, C. M. (1996). Brief Index of Self-Actualization: A measure of

    Maslow's model. *Journal of Social Behavior and Personality, 11*, 253-271.

Taris, T. W., Schreurs, P. J. G., & Van Lersel-Van Silfhout, I. J. (2001). Job stress, job strain, and psychological withdrawal among Dutch university staff: towards a dual process model for the effects of occupational stress. *Work & Stress, 15,* 283-296.

Trobst, K. K., Collins, R. L., & Embree, J. M. (1994). The role of emotion in social support provision: Gender, empathy, and expressions of distress. *Journal of Social and Personal Relationships, 11*, 45-62.

Vallfors, B. (1985). Acute, subacute, and chronic low back pain: clinical symptoms, absenteeism, and working environment. *Scandinavian Journal of Rehabilitation Medicine, 11*, 1-98.

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*, 1486-1504.

Von Dierendonck, D., & Mevissen, N. (2002). Aggressive behavior of passengers, conflict management behavior, and burnout among trolley car drivers. *International Journal of Stress Management, 9*, 345-355.

Watson, D. (2002). Positive affectivity: The disposition to experience pleasurable emotional states. In C. R. Snyder, & S. J. Lopez (Eds.). *Handbook of Positive Psychology* (pp. 106-120). New York: Oxford University Press.

Wright, T.A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of performance and voluntary turnover. *Journal of Applied Psychology, 83(3),* 486-493.

Woodard, C. R. (2004). Hardiness and the concept of courage. *Consulting Psychology Journal: Practice and Research, 56*, 173-185.

Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., et al., (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology, 22*, 766-786.

Yagil, D. (2008). When the customer is wrong: A review of research on aggression and sexual harassment in service encounters. *Aggression and Violent Behavior, 13*, 141-152.

Table 1. Job characteristics identified as potentially increasing employee risk for conflict and violence (Leblanc & Kelloway, 2002)

1	Physical care of others	15	Serve alcohol
2	Emotional care of others	16	Exercise security functions
3	Interact with the public	17	Exercise physical control over others
4	Deny the public a service or request	18	Supervise others
5	Decisions that influence other people's lives	19	Interact with frustrated individuals
6	Work alone during the day	20	Discipline others
7	Work alone during the evening/night	21	Deliver items of values
8	Oversee or administer other people's money	22	Collect items of value
9	Dispense drugs	23	Work nights or evenings
10	Handle valuables	24	Go to clients' homes
11	Exchange money with the public	25	Handle weapons other than guns
12	Guard valuables	26	Contact with individuals under the influence of alcohol
13	Handle guns	27	Contact with individuals under the influence of illegal drugs
14	Sell alcohol	28	Contact with individuals under the influence of medication

Table 2. Factor loadings and item-total correlations for the victim incivility scale.

Items	Factor 1	Factor 2	Item-Total Correlations
Victims ignore instructions I give them.	.69	.39	.62
Victims change their stories while talking to me.	.72	.38	.66
Victims question my competence.	.69		.61
Victims say rude things.	.76		.70
Victims act like they know better than I do.	.74		.67
Victims don't show appreciation (e.g., say please and thank you.)	.70		.63
Victims try to talk over me.	.78		.73
Victims won't move out of my way when I am trying to work.	.78		.71
Victims raise their voice at me.	.75		.69
Victims are not truthful with me.	.67		.61
Victims get too close to me when talking.	.63	-.58	.56
Victims walk away from me while I'm talking.	.75	-.40	.69

Factor Extraction Method: Promax with Kaiser Normalization
Factor 1 explained 52% of the variance
Factor 2 explained 8.9% of the variance

Table 3. Factor loadings and item-total correlations for the family/friend victim incivility scale.

Items	Factor 1	Factor 2	Item-Total Correlations
Family and/or friends of victims ignore instructions I give them.	.82		.78
Family and/or friends of victims change their stories while talking to me.	.79	.37	.75
Family and/or friends of victims question my competence.	.72	-.45	.66
Family and/or friends of victims say rude things.	.80		.76
Family and/or friends of victims act like they know better than I do.	.80		.75
Family and/or friends of victims don't show appreciation (e.g., say please and thank you.)	.64	.50	.58
Family and/or friends of victims try to talk over me.	.86		.83
Family and/or friends of victims won't move out of my way when I am trying to work.	.85		.81
Family and/or friends of victims raise their voice at me.	.79		.74
Family and/or friends of victims are not truthful with me.	.78	.43	.73
Family and/or friends of victims get too close to me when talking.	.72		.67
Family and/or friends of victims walk away from me while I'm talking.	.79		.73

Factor Extraction Method: Promax with Kaiser Normalization
Factor 1 explained 61.0% of the variance
Factor 2 explained 8.9% of the variance

Table 4. Descriptive statistics and correlations among all study variables.

Measure	M	SD	1	2	3	4	5	6	7	8	9
1. Age	48.00	6.66	-	-	-	-	-	-	-	-	-
2. NA	1.72	.51	-.06	.87	-	-	-	-	-	-	-
3. Victim Incivility	2.59	.63	-.24**	.24**	.91	-	-	-	-	-	-
4. FF Victim Incivility	2.47	.68	-.23**	.17*	.88**	.92	-	-	-	-	-
5. Exhaustion	2.20	.50	-.12	.21**	.30**	.26**	.85	-	-	-	-
6. Physical Symptoms	1.28	.21	-.02	.08	.17*	.14	.52**	-	-	-	-
7. Absenteeism	1.17	1.22	-.09	-.06	.21**	.14	-.04	-.01	-	-	-
8. Engagement	3.46	.54	-.01	-.11	-.08	-.09	-.53**	-.30**	.09	.87	-
9. Empathy	2.79	.52	-.09	.04	.14	.13	-.20**	-.12	-.04	.27**	.72

* Indicates significance at the .05 level
** Indicates significance at the .01 level
Values on the diagonal indicates internal consistency

Table 5. Hierarchical regression tests for engagement as a moderator between victim incivility and its outcomes.

	Dependent variable: Exhaustion					
	Victim Incivility			FF Victim Incivility		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Age	-.11	-.07	-.05	-.11	-.08	-.05
NA	.20**	.10	.13*	.20**	.12	.16*
Victim Incivility		.22***	.23***			
FF Victim Incivility					.18**	.20**
Engagement		-.51***	-.43***		-.51***	-.41***
Victim Incivility X Engage			-.22**			
FF Victim Incivility X Engage						-.23***
R^2	.06	.37	.41	.06	.35	.40
ΔR^2		.31***	.04**		.29***	.05***

	Dependent variable: Physical Symptoms					
	Victim Incivility			FF Victim Incivility		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Age	-.01	.01	.03	-.01	.00	.02
NA	.08	.02	.04	.08	.03	.06
Victim Incivility		.14	.15*			
FF Victim Incivility					.11	.12
Engagement		-.29***	-.22**		-.29***	-.22**
Victim Incivility X Engage			-.18*			
FF Victim Incivility X Engage						-.15
R^2	.01	.11	.13	.01	.10	.12
ΔR^2		.10**	.02*		.09***	.02

	Dependent variable: Absenteeism					
	Victim Incivility			FF Victim Incivility		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Age	-.09	-.03	-.03	-.09	-.05	-.06
NA	-.06	-.10	-.10	-.06	-.07	-.08
Victim Incivility		.24**	.24**			
FF Victim Incivility					.15	.15
Engagement		.09	.09		.08	.05
Victim Incivility X Engage			.01			
FF Victim Incivility X Engage						.07
R^2	.01	.06	.06	.01	.04	.04
ΔR^2		.05**	.00		.03	.00

n = 179; beta weights provided are in their standardized form

Table 6. Hierarchical regression tests for trait empathy as a moderator between victim incivility and its outcomes.
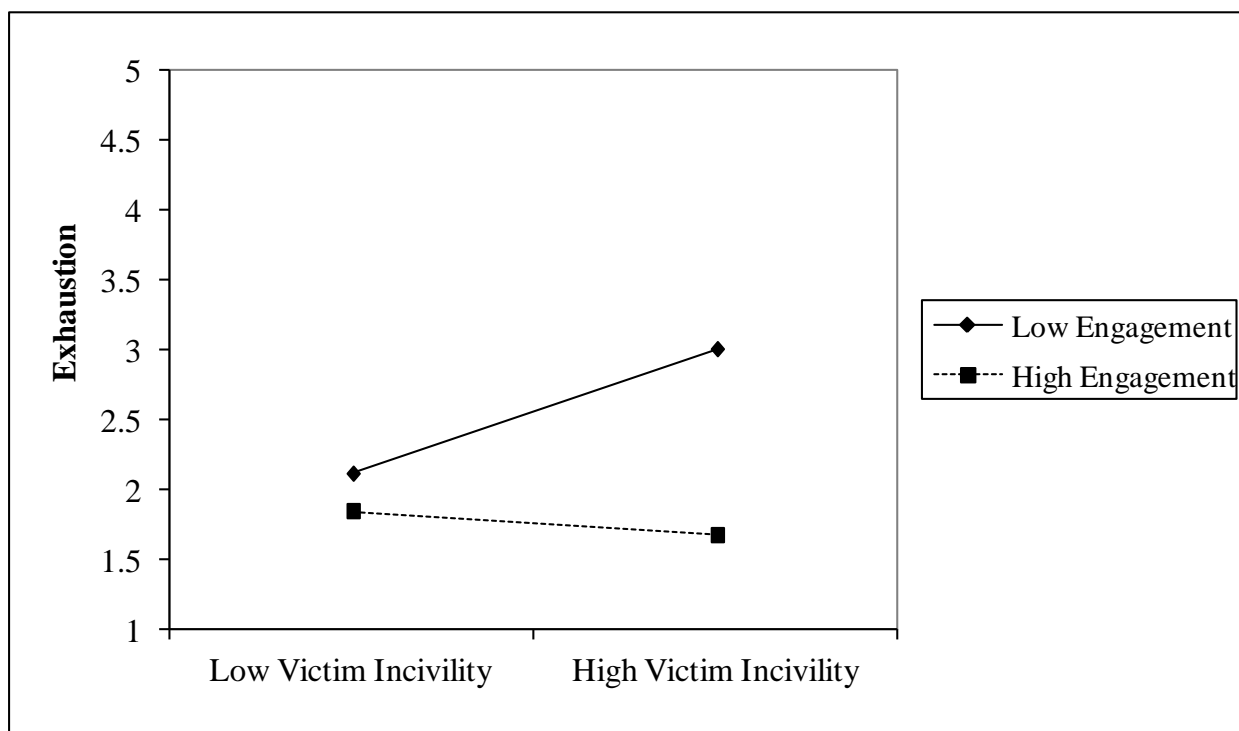
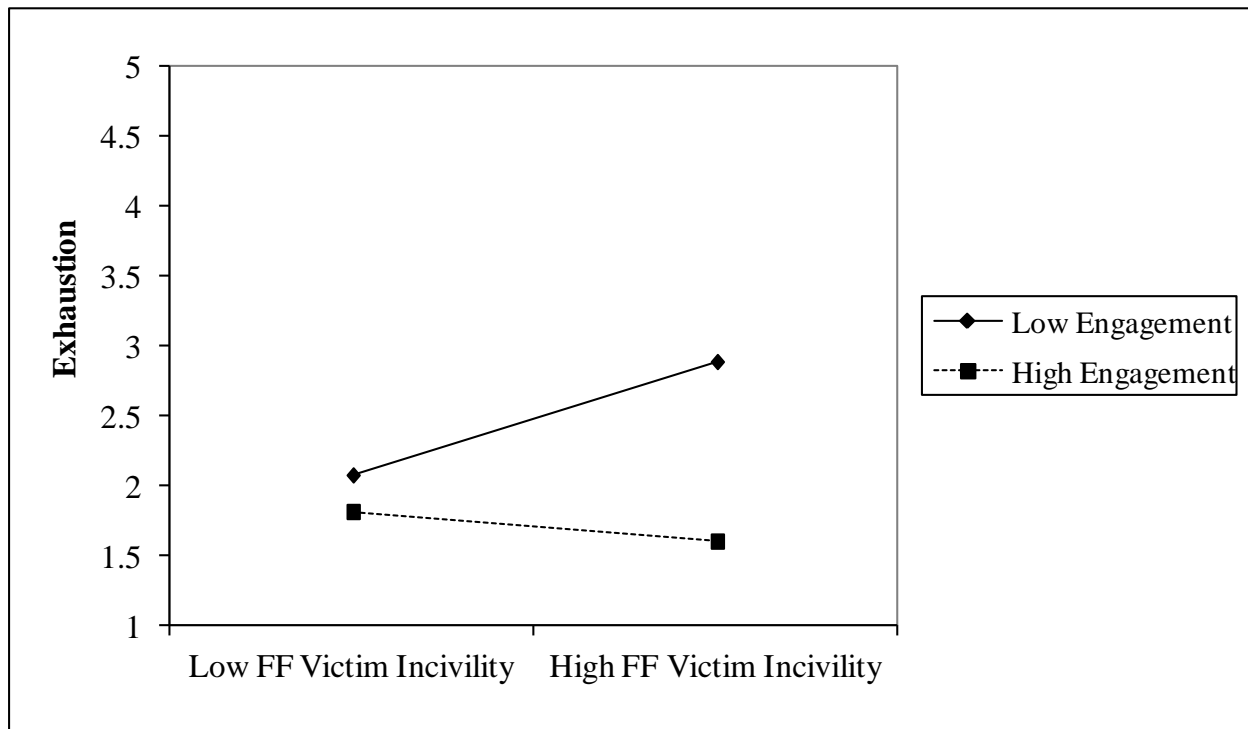|	Victim Incivility			FF Victim Incivility		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Age	-.10	-.06	-.02	-.10	-.06	-.03
NA	.20**	.14*	.14	.19**	.17*	.17*
Victim Incivility		.28***	.28***			
FF Victim Incivility					.25**	.27**
Empathy		-.25**	-.23**		-.24**	-.20**
Victim Incivility X Empathy			-.23**			
FF Victim Incivility X Empathy						-.22**
R^2	.05	.17	.22	.05	.15	.20
ΔR^2		.12***	.05**		.10***	.05**
	Dependent variable: Physical Symptoms					
	Victim Incivility			FF Victim Incivility		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Age	-.01	.02	.03	-.01	.01	.02
NA	.08	.04	.04	.08	.06	.06
Victim Incivility		.18*	.18*			
FF Victim Incivility					.14	.15
Empathy		-.15*	-.14		-.14	-.13
Victim Incivility X Empathy			-.07			
FF Victim Incivility X Empathy						-.09
R^2	.01	.05	.05	.01	.04	.05
ΔR^2		.04*	.00		.03	.01
	Dependent variable: Absenteeism					
	Victim Incivility			FF Victim Incivility		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Age	-.09	-.05	-.08	-.09	-.06	-.10
NA	-.08	-.12	-.12	-.08	-.10	-.10
Victim Incivility		.22**	.22**			
FF Victim Incivility					.15	.13
Empathy		-.06	-.09		-.05	-.09
Victim Incivility X Empathy			.19*			
FF Victim Incivility X Empathy						.22**
R^2	.01	.06	.09	.01	.03	.08
ΔR^2		.05*	.04*		.02	.04**

n = 179; beta weights provided are in their standardized form

Figure 1. The moderating effect of engagement on the relationship between victim incivility and exhaustion.
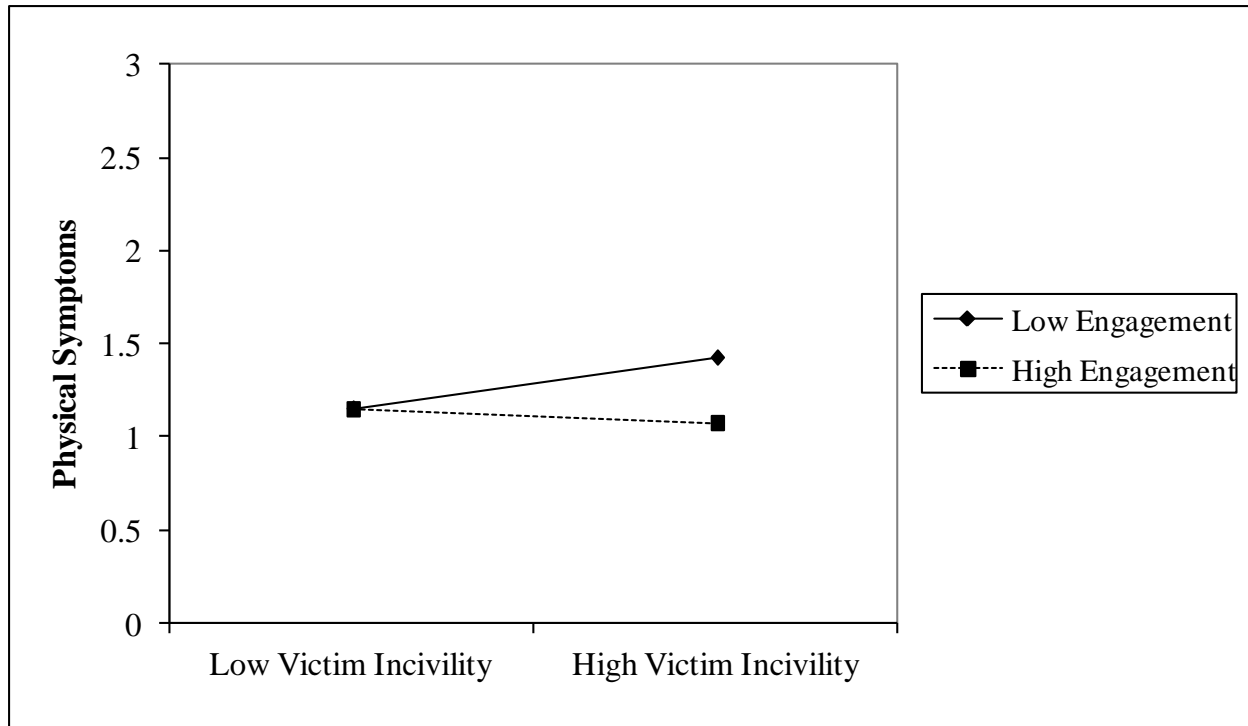

Slope for high engagement: $\beta = -.05$, $p > .05$; Slope for low engagement: $\beta = .41$, $p < .001$.

Figure 2. The moderating effect of engagement on the relationship between family/friend victim incivility and exhaustion.
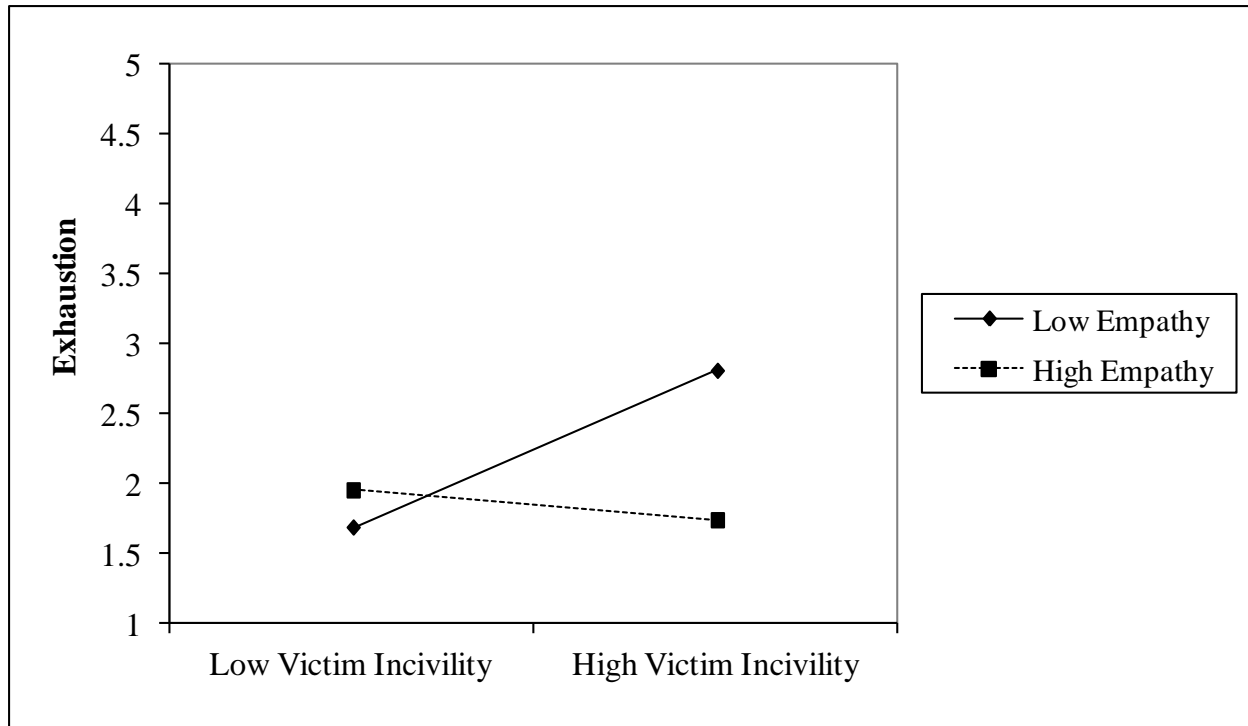

Slope for high engagement: $\beta = .02$, $p > .05$; Slope for low engagement: $\beta = .39$, $p < .001$.

Figure 3. The moderating effect of engagement on the relationship between victim incivility and physical symptoms.
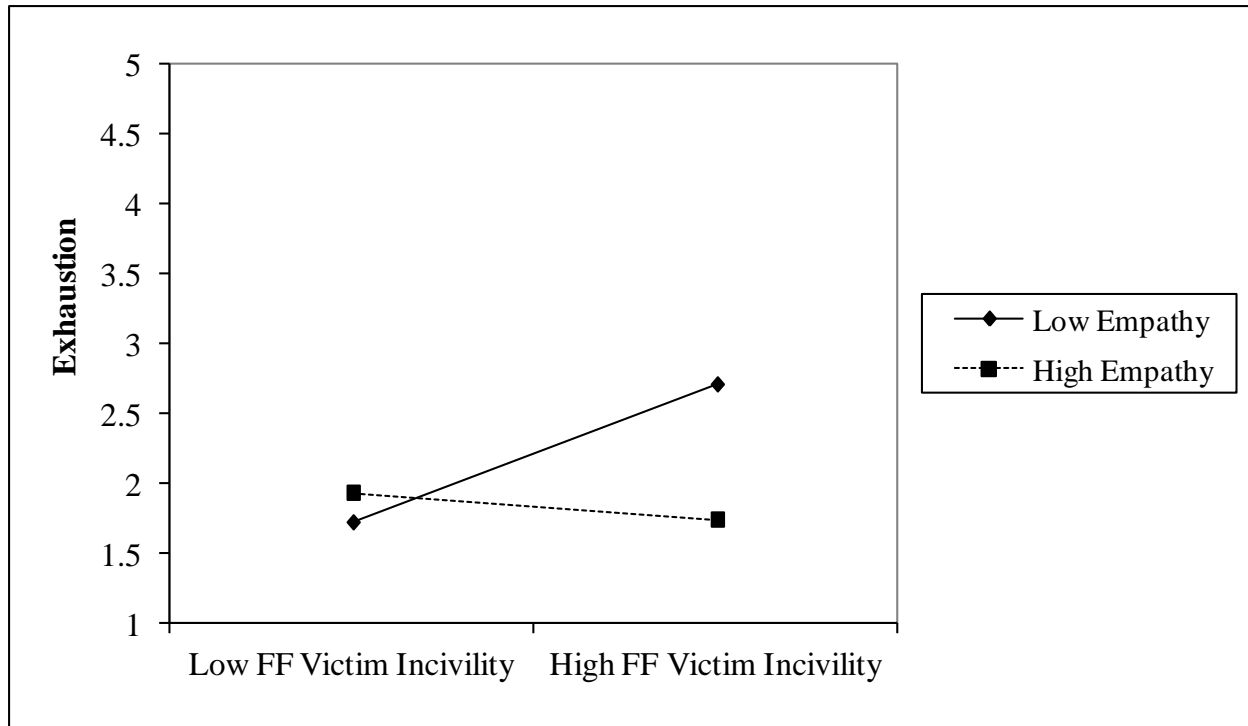

Slope for high engagement: $\beta = .01$, $p > .05$; Slope for low engagement: $\beta = .29$, $p < .01$.

Figure 4. The moderating effect of empathy on the relationship between victim incivility and exhaustion.
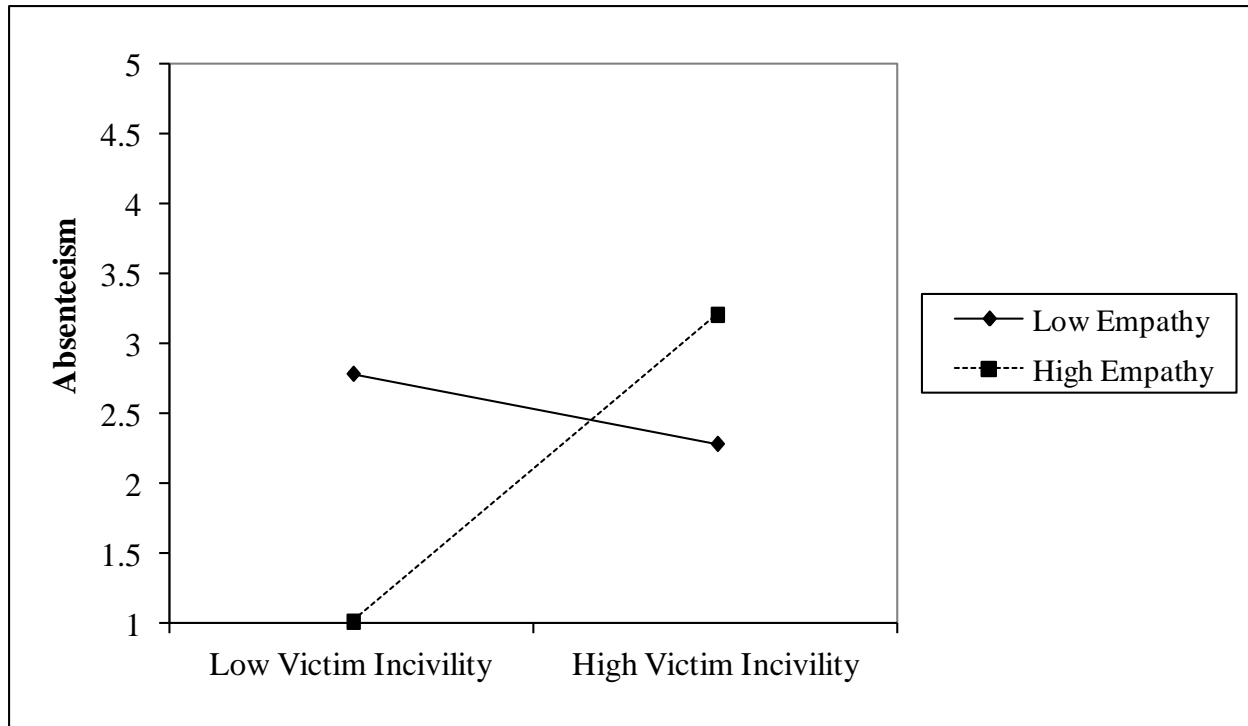

Slope for high empathy: β =-.07, p > .05; Slope for low empathy: β = 50, p < .001.

Figure 5. The moderating effect of empathy on the relationship between family/friend victim incivility and exhaustion.
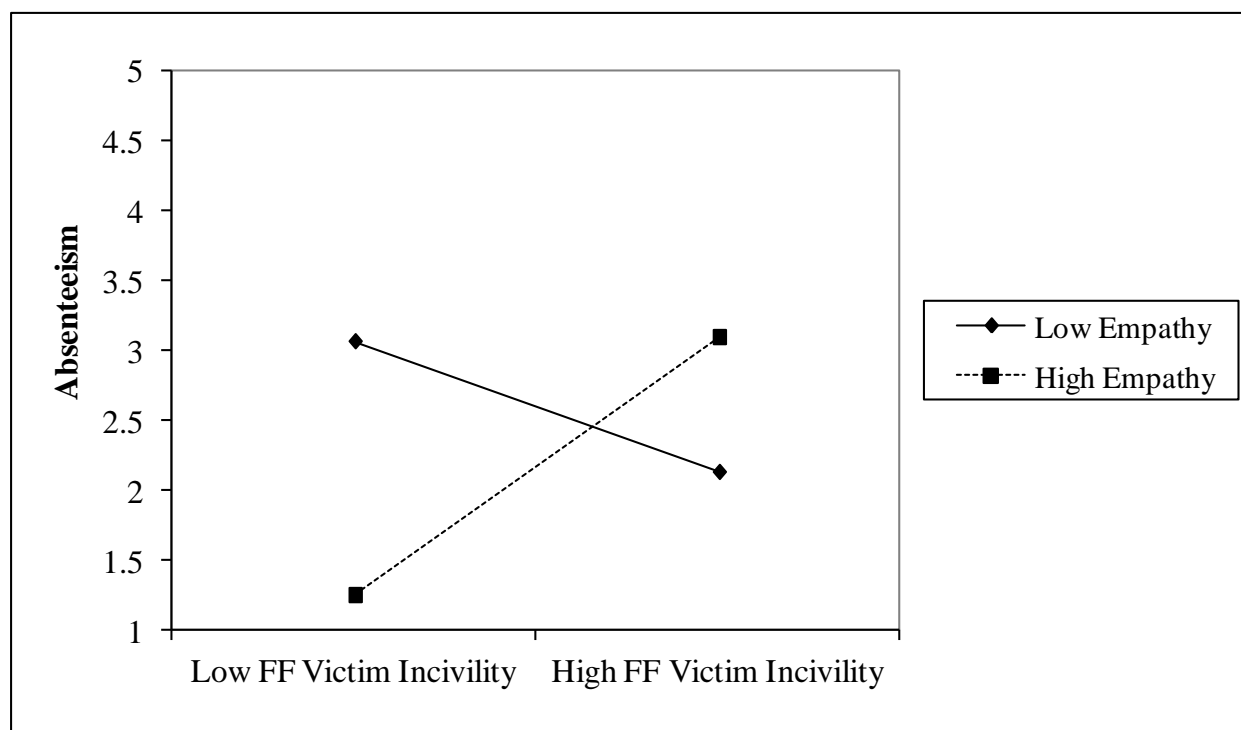

Slope for high empathy: β = -.20, p < .01; Slope for low empathy: β = .48, p < .01.

Figure 6. The moderating effect of empathy on the relationship between victim incivility and absenteeism.

Slope for high empathy: β = .40, p < .001; Slope for low empathy: β = -.04, p > .05.

Figure 7. The moderating effect of empathy on the relationship between family/friend victim incivility and absenteeism.

Slope for high empathy: β = .33, p > .01; Slope for low empathy: β = -.08, p > .05.

APPENDIX A: MEASURES

Demographic Items

Thank you for participating in this study. Please pay close attention to each question provided and answer each question as honestly as possible by placing a mark in the provided space. Please take care in filling out this form.

1. Age (in years): _____

2. Sex (Please Check One):   [   ] Male   [   ] Female

3. Race (Please Check One):

    [   ] 1. African-American

    [   ] 2. White/Caucasian (non-Hispanic)

    [   ] 3. Asian/Pacific Islander

    [   ] 4. Middle Eastern/West Asian

    [   ] 5. Native American

    [   ] 6. Hispanic/Latino

    [   ] 7. Multi-Racial

    [   ] 8. Other_____

4. Years as a firefighter: _____
5. Job Title (please circle one): Firefighter   Lieutenant   Captain   Battalion chief

Victim Incivility Scale

Thinking about your experiences *during the past month*, please indicate how strongly you agree or disagree with the following statements

1: Never   2: Rarely   3: Sometimes   4: Often   5: Extremely Often

 1   Victims ignore instructions I give them.
 2   Victims change their stories while talking to me.
 3   Victims question my competence.
 4   Victims say rude things.
 5   Victims act like they know better than I do.
 6   Victims don't show appreciation (e.g., say please and thank you.)
 7   Victims try to talk over me.
 8   Victims won't move out of my way when I am trying to work.
 9   Victims raise their voice at me.
10   Victims are not truthful with me.
11   Victims get too close to me when talking.
12   Victims walk away from me while I'm talking.

Family/friend Victim Incivility Scale

 1   Family and/or friends of victims ignore instructions I give them.
 2   Family and/or friends of victims change their stories while talking to me.
 3   Family and/or friends of victims question my competence.
 4   Family and/or friends of victims say rude things.
 5   Family and/or friends of victims act like they know better than I do.
 6   Family and/or friends of victims don't show appreciation (e.g., say please and thank you.)
 7   Family and/or friends of victims try to talk over me.
 8   Family and/or friends of victims won't move out of my way when I am trying to work.
 9   Family and/or friends of victims raise their voice at me.
10   Family and/or friends of victims are not truthful with me.
11   Family and/or friends of victims get too close to me when talking.
12   Family and/or friends of victims walk away from me while I'm talking.

APPENDIX B: ACCOMPANYING MATERIALS

Cover Letter

(On City of Cleveland Letterhead and Signed)

Dear Firefighter,

The Cleveland Fire Department is partnering with Doctor Steve Jex and PhD candidate Michael Sliter of **Bowling Green State University** to assist in the completion of a research project. This project will investigate your stress experience at work, as well as your physical and mental health. This project will help researchers better understand how frequently firefighters are exposed to certain stressors, as well as how firefighters deal with these stressors. Personally, you will benefit from a monetary incentive for completing the project.

The project consists of completing surveys at two time points. Enclosed you will find the first survey, as well as a return envelope. Please fill out the survey, providing as honest and accurate information as possible, and return it to the researchers. *Alternately, you can take the survey online using this link*: **http://www.surveygizmo.com/s3/705884/Firefighter-Survey-Time1**.

We want to specifically note that the Fire Department will not know how any one person responds to the survey—your responses will only be viewed by the researchers. The Fire Department will receive a report summarizing the responses, but your data will otherwise be confidential. You will be providing your name and address to the researchers for the purposes of receiving your incentive.

<u>The Fire Department encourages your participation in this research project</u>. More information on the project, including the protection of identity and liability concerns, can be found on the following Informed Consent page. Please contact the researchers if you have any questions.

Sincerely,

_____

Timothy J. O'Toole, Assistant Chief/Executive Officer
Cleveland Division of Fire

DIVISION OF FIRE
HEADQUARTERS COMMUNICATION

NUMBER:	CLASS: NOTICE	DATE: January 3, 2012

SUBJECT: Research Project – Workplace stressors

The Cleveland Fire Department has been approached by Phd. candidate Michael Sliter of **Bowling Green State University** (Son of Firefighter Jim Sliter - Rescue 2)**,** in conjunction with Doctor Steve Jex, to assist in a research project. The research will examine the interaction between chronic (e.g., interpersonal conflict, sleep disturbances) and traumatic stressors (e.g., dealing with danger; death) on how that affects employee well-being. This project will help researchers better understand how frequently firefighters are exposed to certain stressors, as well as how firefighters deal with these stressors. A small monetary incentive will be provided by the researchers for those who elect to participate.

Although the Division of Fire will receive final results of the research project, the specifics of who participated and what their specific responses were will not be shared with the Division. Your responses will only be viewed by the researchers. The Fire Department will receive a report summarizing the responses, but your data will otherwise be confidential.

Members assigned to 24 hour shifts will receive a survey and instruction mailed to their home address. Please note that the Division has NOT provided home addresses of employees to the researchers. The envelopes will be addressed within the Division of Fire but all other costs are assumed by the surveyors. Members electing to participate may be required to share their address with the researches if they choose to participate for the purpose of receiving an incentive.

The Fire Department encourages your participation in this research project. More information on the project, including the protection of identity and liability concerns, can be found in the documents that you will receive in the mail. Please contact the researchers if you have any questions.

By Order of:

Paul Stubbs, Chief
Division of Fire

PS/pjk

REMOVE FROM FILE: December 31, 2011
COMMENTS: None

APPENDIX C: HSRB APPROVAL DOCUMENTS

(Next 2 pages)

BGSU
Bowling Green State University

HSRB MEMBERSHIP
2009-2010

Colleen Mandell, HSRB Chair
Intervention Services
372-7280
mandell@bgsu.edu

D. Wayne Bell, M.D.
Wood Health Corp.
353-6225
dwaynebellmd@dacor.net

Cheryl Conley
Alzheimer's Assn., NW Ohio
419-537-1999
conleyc@bgsu.edu

L. Fleming Fallon, Jr., M.D.
Public & Allied Health
372-8316
ffallon@bgsu.edu

Rodney Gabel
Comm. Sciences & Disorders
372-2515
rgabel@bgsu.edu

Mary Hare
Psychology
372-2526
mlhare@bgsu.edu

Hillary Harms
Office of Research Compliance
372-7716
hsrb@bgsu.edu

Montana Miller
Popular Culture
372-0184
montanm@bgsu.edu

Amy Morgan
Kinesiology
372-0596
amorgan@bgsu.edu

Jeanne Novak
Intervention Services
372-7293
jnovak@bgsu.edu

Erin Smith
Psychology
372-4396
esmith@bgsu.edu

Ruben Viramontez Anguiano
Family & Consumer Sciences
372-6490
rubenv@bgsu.edu

May 6, 2010

TO: Steve Jex
Psychology

FROM: Hillary Harms, Ph.D.
HSRB Administrator

RE: HSRB Project No.: H10E234FFB

TITLE: *The Interaction of Chronic and Traumatic Stressors and Coping Strategies on Employee Outcomes*

You have met the conditions for approval for your project involving human subjects. **As of May 6, 2010, your project has been granted final approval by the Human Subjects Review Board (HSRB).** This approval expires on March 2, 2011. You may proceed with subject recruitment and data collection.

The final approved version of the consent document(s) is attached. Consistent with federal OHRP guidance to IRBs, **the consent document(s) bearing the HSRB approval/expiration date stamp is the only valid version and you must use copies of the date-stamped document(s) in obtaining consent from research subjects.**

You are responsible to conduct the study as approved by the HSRB and to use only approved forms. If you seek to make any changes in your project activities or procedures (including increases in the number of participants), please send a request for modifications immediately to the HSRB via this office. Please notify me, in writing (fax: 372-6916 or email: hsrb@bgsu.edu) upon completion of your project.

Good luck with your work. Let me know if this office or the HSRB can be of assistance as your project proceeds.

Comments/ Modifications:
The original, stamped consent document is coming via campus mail.

C:

Research Category: FULL BOARD REVIEW

Research on Stressors and Health in the Fire Department
Informed Consent

Dear Participant,

You are invited to participate in a research study that will examine the stressors that you experience at work, as well as your physical and mental health. The major purpose of this study is to try to better understand how experiencing daily and traumatic stressors might affect your well-being, as well as how you might cope with these stressors. This study will benefit research in general by showing how employee stressors might compound, and be able to give recommendations on how to best cope with these stressors. Personally, you will benefit from the participation in two ways. First, you will benefit financially by receiving $65 total for participating in two surveys ($25 for the first survey, and $40 for the second survey). Secondly, you will benefit by having your experiences and attitudes confidentially shared with the management of the fire department.

Your participation in the study is simple and straightforward. After consenting to participation, you will fill out a survey. This survey will consist of several measures that will ask you about stressful aspects of your work and about your responses to these working conditions. At the end of the survey, we will ask you for your name and address in order to mail you your gift card for responding. However, your responses are STRICTLY CONFIDENTIAL—management of fire department will not know how any one person responds. Each of the two surveys will take approximately 30-40 minutes to complete. Following the completion of the first survey, we will contact you six months later to complete another survey.

We will also be collecting from the fire department your sick time used and the number of runs your house has per month. We are interested to see if these numbers are related to outcomes and coping strategies. Again, though this information will initially be paired with your name, it will be kept *confidential*. Only Steve Jex and Michael Sliter of Bowling Green State University will have access to your name information—not the fire department.

As mentioned, all information that you submit will be kept strictly **confidential**. Every effort will be taken to protect the identify of all participants. Each person will be assigned a participant ID number, and the name data will be separated from your response data. All of the name data and completed surveys will only be available to the primary researchers and kept in a locked file cabinet in a locked office. Any publications resulting from this project will not personally identify you in any way.

There is potential risk of psychological discomfort while completing this survey, as we will ask you to recall traumatic events in the workplace. You should be aware of that risk before agreeing to participate. If you do experience undue stress as a result of this project, you are welcome to contact your 24 hour Employee Assistance Program provided to you through your employment in the City of Cleveland.

The City of Cleveland and its affiliates are to be held harmless in the event of any negative occurrences as a result of this study. Additionally, the distribution of the survey is not to affect daily operations of the Fire Department, and you are not to be paid through the city for completing the survey, but will be compensated

for your involvement through a grant funded by the National Institute for Occupational and Health and Safety. Additionally, you are to fill out the survey during non-work hours.

Your participation in this study is **completely voluntary** and you may withdraw from the study at any time without penalty. Deciding to participate or not participate in the study will not impact your relationship with the City of Cleveland in any way. You also have the right to have all of your questions answered regarding this project as well as a copy of the results, if interested.

If you do have any questions regarding this study, feel free to contact me, Steve Jex, at sjex@bgsu.edu. If you have questions about the conduct of this study, or your rights as a research participant, you may contact the Chair of Bowling Green State University Human Subjects Review Board at (419) 372-7716 or hsrb@bgnet.bgsu.edu.

By signing below, you are indicating that you have read the above information and that you consent to participate in the study. You may keep a copy of this form for your records.

Thank you again for your participation!

_____

Participant Name

Steve M. Jex, Ph. D.
Department of Psychology
201 Psychology Building
Bowling Green State University
Bowling Green, OH 43402-0232
Phone: (419)372-2301
Email: sjex@bgsu.edu
Fax: (419) 372-6013
www.bgsu.edu/departments/psych

Michael Sliter, M. A.
Department of Psychology
214 Psychology Building
Bowling Green State University
Bowling Green, OH 43402-0232
Phone: (419) 372-8247
E-mail: msliter@bgnet.bgsu.edu
Fax: (419) 372-6013
www.bgsu.edu/departments/psych