A Thesis

Submitted to the Faculty

of

Xavier University

in Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

by

Rylan Heischman

July 7, 2017

Approved:

Kathleen J. Hart, PhD, ABPP

Kathleen J. Hart, Ph.D., ABPP Chair, Department of Psychology

Mark S. Nagy

Mark S. Nagy, Ph.D. Thesis Chair

Before You Send That: Comparing the Outcomes of Face-to-Face and Cyber Incivility

Thesis Committee

Chair	Mark S. Nagy, Ph.D. Associate Professor of Psychology				
Member	Eric M. Barrett, M.A. Adjunct Professor of Psychology				
Member	Jeff Levey, M.A. Business Systems Analyst at Jacobs				

#### Acknowledgements

I want to thank Dr. Mark Nagy, who has worked with me this past year and a half to make this document what it is. His guidance and support have helped me write this thesis and develop as a professional throughout my time here at Xavier University. Meetings with Mark were always an enjoyable, casual time, with life/career advice sprinkled in.

I would also like to thank the rest of my committee, Eric Barret and Jeff Levey, for volunteering their time to help this document be the best it can be. Eric and Jeff have helped me with my thesis and my development as a professional. Their career advice has helped give me direction for life after grad school.

Dr. Morrie Mullins and Dr. Dalia Diab deserve thanks as they provided great inspirations for my thesis work. They have encouraged me to research several potential thesis topics, helped refine my ideas, and were always a joy to work with.

I also want to thank my parents, Mike and Diana, who supported me whenever they could and whenever I needed it. They rooted for me every day since I moved to Cincinnati, and have been a constant inspiration to move forward.

i

Page

Acknowledgements	i
Table of Contents	ii
List of Tables	iii
List of Appendices	iv
Abstract	V
Chapter	
I. Review of the Literature	1
II. Rationale and Hypotheses	14
III. Methods	
IV. Results	25
V. Discussion	29
VI. Summary	
References	
Appendices	

List of Tables	
Table	Page
1. Descriptive Statistics, Correlations, and Alpha Coefficients	26

# List of Appendices

Appen	dix Pag	ge
A.	Modified Workplace Incivility Scale 2001 (face-to-face)5	7
B.	Modified Workplace Incivility Scale 2001 (cyber)5	8
C.	Shirom-Melamed Burnout Measure5	9
D.	Overall Job Satisfaction6	i0
E.	Turnover Intentions	51
F.	Absenteeism6	52
G.	Neuroticism6	53
H.	Demographics6	4
I.	IRB Letter of Approval	55
J.	IRB Letter of Modification Approval	6
K.	MTurk Interface	57
L.	MTurk Interface (second administration)6	i8
M.	Informed Consent	59
N.	Informed Consent (second administration)7	71
0.	Debrief Form	73

#### Abstract

The increasing use of information and communication technologies has allowed for a new type of incivility known as cyber incivility. This study investigated the incidence and outcomes of incivility committed face-to-face and online. Incivility has been associated with job satisfaction, burnout, turnover intentions, and neuroticism. This study compared the correlations of face-to-face and cyber incivility with the aforementioned organizational outcomes. Data were collected from 231 participants who completed an online survey asking about the aforementioned work outcomes and face-to-face and cyber incivility. Demographic information such as age, race, gender, job tenure, supervisory responsibilities, and average number of hours worked per week was also collected. Pearson Product-Moment correlations revealed that face-to-face and cyber incivility were both significantly correlated with each of the work outcomes consistent with previous research. Fisher's r-to-z transformations showed that face-to-face incivility was more strongly correlated with job satisfaction, burnout, turnover intentions, and neuroticism than cyber incivility. Both face-to-face and cyber incivility have negative implications for organizations and should be addressed.

## **Chapter I**

## **Review of the Literature**

Technology is increasingly used in organizations to communicate among supervisors, coworkers, and subordinates. The use of information and communication technologies (ICT), such as emails or text messages, to keep in touch with one's workplace has become routine. Lim and Teo (2009) found that email was the second most used form of communication between workers and supervisors overall, and email was the most used form of communication for 30% of their sample. With the increased use of these technologies to correspond, problems can arise from malicious messages or the misinterpretations of benign messages. This set of unpleasant behaviors though ICTs is referred to as "cyber incivility" (Giumetti et al., 2013).

Incivility is a form of deviant behavior that has been studied in recent years (e.g. Chui & Dietz, 2014; Cortina & Magley, 2003). Uncivil behaviors are characterized as rude, with disregard for others. Uncivil behaviors are historically thought to occur inperson, or face-to-face (Giumetti, McKibben, Hatfield, Schroeder, & Kowalski, 2012). However, at the time of this research, few studies have directly investigated incivility in non-face-to-face situations, such as ICT situations, or cyber incivility (e.g. Giumetti et al., 2012; Lim & Teo, 2009). Because technology is being integrated at work, and because ICTs may have a real influence on how people feel and communicate with others (Settanni & Marengo, 2015), it is important to study the prevalence of cyber incivility and compare it to general incivility.

## Incivility

Andersson and Pearson (1999) developed a commonly used definition of incivility: "low-intensity, deviant behavior with ambiguous intent to harm the target in violation of norms for respect in social interactions" (p. 457). Several parts of this definition must be clarified. Incivility is a set of low-intensity behaviors, meaning that targets or observers may not notice any acts of incivility. These acts also have an ambiguous intent to harm, so if they are noticed, targets or observers may not view them as uncivil. A target of incivility may or may not believe that an instigator is acting uncivilly, which can make incivility difficult to assess. The same applies to observers; they may or may not believe an instigator is uncivil towards a potential target (Chui & Dietz, 2014). Chui and Dietz (2014) found that observer perceptions of incivility were influenced by the target's reaction. Participants watched a woman targeted by two male instigators, then judged the situation based on the events. Those who saw the target react by walking away and crying judged the interaction to be more harmful than participants who saw the target laugh off the uncivil behavior (Chui & Dietz, 2014). This indicates that observers may not be sure whether or not an act is uncivil, so they may look to the potential target for a reaction that either confirms or disconfirms the incivility. Regardless of ambiguity, one must keep in mind that incivility violates norms of respect and is unacceptable.

"Deviant behavior" characterizes incivility in that the actions taken by the instigator violate social norms (Andersson & Pearson, 1999). The definition explicitly

2

states that norms for respect are violated, meaning that there is offensive behavior whether or not it is noticed by observers or targets. The deviant behavior can be statements such as rumors, physical impositions such as unfriendly body language, or unpleasant facial expressions. Those who are targeted by incivility may feel more negatively about their job, and may experience feelings of burnout (Babenko-Mould & Laschinger, 2014; Laschinger, Cummings, Wong, & Grau, 2014).

Incivility and burnout. Burnout is comprised of emotional exhaustion, cynicism, and inefficacy (Lundgren-Nilsson, Jonsdottir, Pallant, & Ahlborg, 2012). When people experience burnout, they also experience lower job satisfaction (Lee & Ashforth, 1996), lower organizational commitment (Lee & Ashforth, 1996), and higher absenteeism (Jourdain & Chênevert, 2015). Those who experience burnout emotionally distance themselves from their coworkers and clients, and separate themselves from their own work; this is known as depersonalization (Lee & Ashforth, 1996).

Incivility and burnout have been studied extensively with nurse samples. Babenko-Mould and Laschinger (2014) found that fourth year nursing students suffered aspects of burnout (emotional exhaustion and cynicism) depending on the source of incivility. Nursing students suffered from emotional exhaustion when they were targets of incivility from instructors and experienced both increased cynicism and emotional exhaustion when they were targets of incivility from staff nurses. Elmblad, Kodjebacheva, and Lebeck (2014) investigated the rates of incivility from a sample of registered nurses in Michigan and found that incivility predicted burnout, and noted that incivility may lower the quality of healthcare while increasing its cost. Laschinger, Leiter, Day, and Gilin (2009) examined incivility among nurses at various hospitals. They found that incivility was positively correlated with burnout and turnover intentions. Incivility was also negatively correlated with job satisfaction, organizational commitment, and feelings of empowerment. Laschinger et al. (2014) also studied incivility and leadership among Canadian nurses and found that nurses who experienced incivility also experienced burnout and lower job satisfaction. D'ambra and Andrews (2014) conducted a meta-analysis of nursing samples and found that new nursing graduates were vulnerable to being targets of incivility. These new nurses, being targets of incivility, often suffered lower job satisfaction, and hospitals that had a culture "needing improvement" retained 12% less nurses than hospitals with healthy environments after nurses completed their residency programs (D'ambra & Andrews, 2014).

To combat the negative effects of incivility with nurses, researchers have suggested implementing an empowering workplace and social support for nurses (D'ambra & Andrews 2014; Laschinger et al., 2009; Laschinger et al., 2014). Thomas and Velthouse (1990) characterize empowerment as having a perception of impact and meaning in one's work, having competence at tasks, and having choices of how tasks will be carried out. Laschinger et al. (2014) stated that empowerment involves having opportunities to learn and grow, having access to information and support, and having the resources needed to perform job tasks. A sense of empowerment has been negatively correlated with workplace incivility, burnout and turnover intentions and positively correlated with job satisfaction (Laschinger et al., 2014). **Incivility and job satisfaction.** In Laschinger et al.'s (2014) study of Canadian nurses and incivility, they found that not only were feelings of incivility positively correlated with feelings of burnout, but incivility was also negatively correlated with job satisfaction. In a sample of federal judicial circuit employees, Lim and Cortina (2005) found that incivility negatively correlated with work satisfaction, coworker satisfaction, supervisor satisfaction, and overall job satisfaction.

Incivility has also been related to satisfaction in other contexts, including students' satisfaction at universities (Marchiondo, Marchiondo, & Lasiter, 2010; Wright & Hill, 2015). Marchiondo et al. (2010) asked nursing students whether they had been targets of incivility from faculty. They found 88% of their sample had been targets of incivility at least once. Sixty-one percent of the targeted participants wrote specific examples of the incidents that had a lasting effect on them. The authors also found that job dissatisfaction was positively correlated with instances of incivility from instructors, most of which occurred in the classroom. When students perceived that professors were uncivil to them, they were negatively affected by the uncivil behavior even if it happened their first year in the program (Marchiondo et al., 2010). Morrow, McElroy, and Scheibe (2011) found that "one does not have to actually experience incivility for it to have negative effects" (p. 1218), but observers of incivility suffer as well.

Reio and Ghosh (2009) measured incivility from the perspective of the instigators. They sampled 402 workers from several industries and found that those who engaged in incivility had lower job satisfaction and poorer physical health. Interestingly, despite its lack of social desirability, 54% of participants admitted to engaging in uncivil behavior. Blau and Andersson (2005) found that "instigated workplace incivility is distinct from experienced workplace incivility," (p. 603) meaning that targets and instigators have different experiences with incivility. Blau and Andersson (2005) found that instigated incivility was negatively correlated with job satisfaction. These studies also show that employees will admit to engaging in incivility. This willingness to admit to engage in incivility is often a response to perceived incivility, which is commonly referred to as the incivility spiral.

**Incivility spiral.** Along with defining incivility, Andersson and Pearson (1999) described how incivility can lead to subsequent incivility in what they dubbed the "incivility spiral." They proposed that when someone perceives themselves to be the target of uncivil behavior, they will reciprocate with incivility of their own. This reciprocal behavior is thought to cause other incivility which may spread the incidence of incivility across an organization, creating a culture of incivility. The incivility spiral is related to the thermodynamics of revenge (Bies, Tripp, & Kramer, 1997), which states that an offensive action can spark "revenge cognitions and emotions [that] can create a *heating-up* process within the victim or observer" (p.20). This heating-up can lead to feelings of fatigue and an "explosive act of revenge" (Bies et al., 1997, p.31) that may spark further conflict. Given the correlates of incivility, such as lower job satisfaction (Reio & Ghosh, 2009), higher burnout (Elmblad et al., 2014), and higher turnover (Lim & Teo, 2009), an incivility spiral could create substantial costs to an organization.

Cortina and Magley (2003) found evidence to support Andersson and Pearson's (1999) proposition of an incivility spiral. They found that when employees felt they had been mistreated, they found ways to retaliate against the offender or the organization (Cortina & Magley, 2003). Beattie and Griffin (2014) also found support for the incivility

6

spiral. Participants completed diary surveys twice a week after their work shifts documenting uncivil incidents for four consecutive weeks. The diaries detailed how the event was perceived and what actions were taken in response. The authors noted that the most common responses consisted of ignoring or avoiding the instigator, but 73.6% of participants responded negatively to the instigator after one incident (Beattie & Griffin, 2014). This is evidence that the incivility spiral can occur in organizations.

## **Cyber Incivility**

Not only can incivility occur face-to-face, it can also occur in online contexts, a relatively new medium. As stated earlier, incivility is positively correlated with burnout (Babenko-Mould & Laschinger, 2014; Elmblad et al., 2014), and negatively correlated with job satisfaction (D'ambra & Andrews, 2014; Morrow et al., 2011), and poorer health (Lim & Cortina, 2005; Reio & Ghosh, 2009). Yet, these correlations have all been found with in-person interactions, and most of the existing incivility research focuses exclusively on in-person, or face-to-face, incivility (Giumetti et al., 2012). Information and communication technological (ICT) interactions have several factors that separate them from in-person interactions (Suler, 2004), and the incivility associated with both types of interactions may be different as well. Given the prevalence of ICT interaction between workers and their supervisors (Lim & Teo, 2009), incivility must be further investigated in that context.

Andersson and Pearson's (1999) definition of incivility applies beyond physical contexts. Incivility can be committed in other formats such as information and communication technological (ICT) formats such as, instant messaging, emails, and text messages. Deviant behaviors that violate organizational norms over these mediums are

7

"cyber incivility" (Giumetti et al., 2013). Cyber incivility differs from face-to-face incivility in that it lacks some of the nonverbal cues that face-to-face interactions have (Byron, 2008). Cyber incivility is a relatively recent phenomenon due to the increased use of emails and instant messaging in the workplace.

Information and communication technologies (ICT). As previously stated, Lim and Teo (2009) provided evidence that ICTs such as email are used by many job incumbents and are sometimes used more than face-to-face interaction with supervisors. Given the widespread use of ICTs in the workplace and the paucity of cyber incivility research, it is imperative that research be conducted specifically for cyber incivility. It may be intuitive to apply face-to-face incivility research to ICT contexts, but doing so does not take into consideration the differences between the contexts.

One difference between face-to-face communication and ICT communication is that the latter often contains more ambiguity (Byron, 2008). Ambiguous messages communicated using ICTs may have a high chance to be misinterpreted as uncivil, in part because email does not convey the nonverbal information that is essential to understanding the author's intent (Byron, 2008), making the interpretation of anything but the literal meaning of messages difficult. Kruger, Epley, Parker, and Ng (2005) found that participants overestimated their ability to both convey and interpret emotions such as sarcasm in emails. Kruger et al. (2005) also found that participants overestimated others' ability to convey and interpret emails they sent. This suggests that people are overconfident in their interpretations of messages because they believe they can accurately interpret emotions from ICT messages. Overall, people commonly do not interpret the intended message. This misinterpretation of messages may cause perceptions of incivility when no harm was intended. Considering the research of Francis, Holmvall, and O'brien (2015), the incivility spiral can occur in cyber contexts, which suggests that the inherent ambiguity in ICT messages may have a higher chance to be interpreted as uncivil and start an incivility spiral.

Suler (2004) found evidence of another difference between face-to-face interactions and those within an ICT context: Individuals may be less concerned about acting civilly towards others when they are not physically communicating with others. Because individuals may be less concerned with acting civilly in ICT communications, these interactions may be hostile more often than face-to-face interactions (Suler, 2004). Suler (2004) described multiple factors that contribute to intentionally uncivil behaviors online including dissociative anonymity, where people are not associated with their actions; minimization of authority, where people have no implicit authority that would usually be presented in dress or body language; and dissociative imagination, where people may not fully realize they are communicating with others who may be affected by what is said. These factors combine to what Suler (2004) described as the "online disinhibition effect," meaning that one is less inclined to refrain from engaging in uncivil behaviors when dealing with others online. Given the online disinhibition effect along with the higher chances for misinterpretations using ICTs, it seems reasonable that cyber incivility may occur more frequently than face-to-face incivility.

Research comparing the rates of face-to-face and cyber incivility is difficult to find. Privitera and Campbell (2009) found both rates of face-to-face bullying and cyber bullying at work, which are more extreme behaviors than incivility. Participants completed a questionnaire containing items about various negative acts they had experienced in the prior 6 months. Participants used a 5-point Likert-type scale to indicate the frequency with which each act occurred (1 indicating *never* and 5 indicating *daily*). Participants were also given an option to self-identify as bullying victims. This design allowed the researchers to investigate the rate at which bullying behaviors, faceto-face and cyber, were occurring and the rates at which victims correctly identified themselves as bullying victims. Thirty-four percent of the participants reported being victims of face-to-face bullying, and about one third of those victims (11% of their total sample) were targeted in cyber bullying as well. This may be counterintuitive given the online disinhibition effect (Suler, 2004) and the increased ambiguity of ICT messages (Byron, 2008), but Privitera and Campbell (2009) state that the sample consisted of manufacturing workers who may have had limited access to email or cell phones and therefore limited the workers' exposure to cyber incivility.

Privitera and Campbell (2009) also found that when they changed the criteria for cyber bullying to include a less than monthly basis, they found that rates of cyber bullying rose from 11% to over half of their sample. Thirty-four percent of participants indicated that they experienced negative acts on a daily or weekly basis, yet 82% of these participants (28% of the total sample) failed to correctly identify as bullying victims. This failure to identify oneself as a bullying victim despite the frequency of negative incidents is evidence that victims may not realize they are targeted or that someone means to do them harm. It is also possible that participants were experiencing incivility, and thus, did not identify as victims of bullying, but would have identified as victims of incivility if given the option. Given that incivility is less extreme than bullying, it should take more

frequent and more intense negative acts to identify as a victim of bullying than it would take to identify as a victim of incivility.

**Outcomes of cyber incivility.** Giumetti et al. (2012) sampled from university staff and business school alumni to test the effects of supervisor cyber incivility. They found that supervisor cyber incivility was positively correlated with burnout, absenteeism, and turnover intentions, the same type of outcomes often associated with face-to-face incivility (Elmblad et al., 2014; Laschinger et al., 2009). Neuroticism was positively correlated with perceptions of cyber incivility in one of the samples (Giumetti et al., 2012). Giumetti et al.'s (2012) study shows that the effects of face-to-face incivility may apply in an ICT context because their results are consistent with other research in non-ICT contexts such as Milam, Spitzmueller, and Penney (2009) who found that neuroticism positively correlated with perceptions of incivility.

In another study that investigated cyber incivility in an experimental setting, Giumetti et al. (2013) had a sample of undergraduates complete mathematical tasks while corresponding with a supervisor via email. Participants would receive either supportive (i.e. civil) messages or uncivil messages from the supervisor. Participants who received uncivil emails from the supervisor performed worse on the mathematical tasks than participants who received supportive emails. Participants receiving uncivil emails also displayed signs of negative affect and lower engagement in the tasks provided. Hence, the results of the Giumetti et al. (2013) study demonstrate that cyber incivility can reduce performance and decrease the engagement towards tasks.

For better or worse, cyber incivility is likely to be a global issue. Lim and Teo (2009) assessed cyber incivility for 192 finance and banking employees in Singapore.

They found that those who experienced incivility from their supervisors had lower levels of job satisfaction and organizational commitment. Those who endured cyber incivility also had a significantly higher chance of wanting to leave their organization than those that did not. These outcomes of cyber incivility are similar to the outcomes of in-person incivility found in North America such as decreased job satisfaction (D'ambra & Andrews, 2014) and increased feelings of burnout (Laschinger et al., 2014).

**Cyber incivility spiral.** Consistent with the research on incivility in non-ICT situations, there is evidence to suggest that the incivility spiral may also exist in ICT scenarios. Francis et al. (2015) conducted an experiment with undergraduates who completed in-basket tasks. Participants received an email from a confederate that was either civil or uncivil. Participants were more likely to send uncivil responses if they received an uncivil email. This study shows that the incivility spiral can potentially occur in the context of ICTs, but more research is necessary.

When taken together, it is evident that the perception of incivility, be it face-toface or via ICT, has the potential to reduce job satisfaction (D'ambra & Andrews, 2014), and increase burnout (Giumetti et al., 2012; Laschinger et al., 2009), absenteeism (Giumetti et al., 2012; Wright & Hill, 2015), and turnover intentions (D'ambra & Andrews, 2014; Giumetti et al., 2012). Although there has been a considerable amount of research on face-to-face incivility (Chui & Dietz, 2014; Elmblad et al., 2014), the research on the cyber aspect of incivility is only just commencing. Although the evidence thus far suggests that cyber incivility may also be costly to organizations in terms of job satisfaction (Lim & Teo, 2009), burnout (Giumetti et al., 2012), turnover (Lim & Teo, 2009), absenteeism (Giumetti et al., 2012), and lower performance (Giumetti et al., 2013), what is not known is the difference in the incidences of face-to-face incivility and cyber incivility. It is also unknown if the magnitude of the relationships with face-to-face incivility is the same as it is in ICT. Hence, this study will investigate the magnitude of these relationships and the rates of incivility in both contexts.

#### **Chapter II**

## **Rationale and Hypotheses**

Face-to-face incivility has been linked to lower job satisfaction. Laschinger et al. (2009) examined incivility rates among nurses at various hospitals and found that higher rates of incivility were associated with rates of lower job satisfaction. A later study by Laschinger and colleagues (2014) found that feelings of incivility were negatively correlated with job satisfaction. Further, it is not only victims of incivility that suffer from low job satisfaction, as instigators of incivility also experience from lower job satisfaction (Blau & Andersson, 2005).

Cyber incivility has also been associated with lower job satisfaction. Lim and Teo (2009) assessed cyber incivility for 192 employees of finance and banking in Singapore and found that those who were targeted by their supervisors had lower levels of job satisfaction and organizational commitment.

In an information and communication technology (ICT) context, ambiguous messages can be misinterpreted to appear uncivil because email does not convey the nonverbal information that is essential to understanding the author's intent (Byron, 2008). Kruger et al. (2005) found that participants overestimated their ability to both convey and interpret emotions such as sarcasm in emails, which may lead to emails having benign content to be interpreted as uncivil. It is therefore reasonable conclude that incivility may be higher in an ICT context than face-to-face. Hence, the following are hypothesized: *Hypothesis 1a: Face-to-face incivility will be negatively correlated with job satisfaction.* 

Hypothesis 1b: Cyber incivility will be negatively correlated with job satisfaction. Hypothesis 1c: The correlation between cyber incivility and job satisfaction will be significantly greater than the correlation between face-to-face incivility and job satisfaction.

Face-to-face incivility has also been linked to burnout in several studies. Nursing students suffered burnout when they experienced incivility from instructors or staff nurses (Babenko-Mould & Laschinger, 2014). Elmblad et al. (2014) investigated the rates of incivility from a sample of registered nurses in Michigan and found that incivility predicted burnout. Indeed, across many samples of nurses, incivility has repeatedly predicted burnout (D'ambra & Andrews, 2014; Laschinger et al., 2009; Laschinger et al., 2014).

Giumetti et al. (2012) found that supervisor cyber incivility was positively correlated with burnout from a sample of university staff and business school alumni. In a lab setting, cyber incivility negatively influenced both engagement and affect in mathematical tasks, which could be related to burnout (Giumetti et al., 2013). Finally, the research by Byron (2008) indicated that ICT messages contain more ambiguity than faceto-face messages, and the research of Kruger et al. (2005) detailed how people underestimate the impact of that ambiguity on correctly interpreting the intent of the message. Based on these findings, the following are posited:

*Hypothesis 2a: Face-to-face incivility will be positively correlated with burnout. Hypothesis 2b: Cyber incivility will be positively correlated with burnout.*  *Hypothesis 2c: The correlation between cyber incivility and burnout will be significantly greater than the correlation between face-to-face incivility and burnout.* 

Incivility has also been found to be related to turnover intentions. Laschinger et al. (2009) found that in their sample of nurses, feelings of incivility were positively correlated with turnover intentions. In a cyber incivility context specifically, Giumetti et al. (2012) found that supervisor cyber incivility positively correlated with staff turnover intentions. In a sample of financial workers in Singapore, Lim and Teo (2009) found that those who were victims of cyber incivility were more likely to leave the organization. Based on this research, and the research of Byron (2008) and Kruger et al. (2005), the following hypotheses are proposed.

*Hypothesis 3a: Face-to-face incivility will be positively correlated with turnover intentions.* 

Hypothesis 3b: Cyber incivility will be positively correlated turnover intentions. Hypothesis 3c: The correlation between cyber incivility and turnover intentions will be significantly greater than the correlation between face-to-face incivility and turnover intentions.

Milam et al. (2009) found that coworker and self-reports of neuroticism positively correlated with perceptions of incivility in face-to-face situations. Giumetti et al. (2012) found that self-reported neuroticism positively correlated perceptions of supervisor cyber incivility. Given the research by Byron (2008) and Kruger et al. (2005) describing the ambiguity of ICT communications, it is reasonable to conclude that those with high neuroticism may interpret ambiguous messages more negatively than those low on neuroticism. Therefore, Hypothesis 4 states:

*Hypothesis 4a: Face-to-face incivility will be positively correlated with neuroticism.* 

*Hypothesis 4b: Cyber incivility will be positively correlated with neuroticism. Hypothesis 4c: The correlation between cyber incivility and neuroticism will be significantly greater than the correlation between face-to-face incivility and neuroticism.* 

Although there is no known research comparing the instances of face-to-face and cyber incivility at the time of this study, Privitera and Campbell (2009) found a link between rates of face-to-face bullying and cyber bullying, which are more extreme behaviors than incivility. Thus, this study will investigate the extent to which the rates of ICT and face-to-face incivility are related. This study will also explore the relationship that face-to-face and cyber incivility have with absenteeism as an exploratory investigation.

## Chapter III

## Methods

## **Participants**

Data were collected from workers on Amazon's Mechanical Turk (MTurk). This is a crowdsourcing internet marketplace that allows workers to complete human intelligence tasks (HITs) for small monetary rewards. Burhmester, Kwang, and Gosling (2011) noted that MTurk allows for valuable, inexpensive data. Respondents were 25 years or older and resided in the United States. Respondents also worked at least 35 hours a week to ensure they had frequent workplace exposure.

Respondents who successfully completed the survey were initially compensated \$0.40. There were two quality checks, one in the burnout section and one in the neuroticism section of the survey. If participants did not successfully pass both quality checks, they did not receive payment and their data were not utilized in the analyses.

Cohen (1992) suggested guidelines to determine appropriate sample sizes given statistical analyses, alpha levels, and desired power levels. For this study, at least 177 participants were needed to observe a medium effect size at a .05 alpha level to achieve a power of .80. A total of 114 responses were received, which is less than the 177 suggested by Cohen (1992), so the survey was re-administered to MTurk with an increased compensation of \$.60 in order to increase the amount of participants. Participants who had already completed the survey were rewarded a bonus of \$.20 so all participants were equally rewarded. An additional 240 responses were obtained in the second administration. Of the 354 total responses collected, 30 responses were eliminated because participants had already taken the survey, 20 responses were deleted because they were incomplete, and 60 responses were rejected because participants failed quality checks. After these omissions, the sample was 244 participants.

The mean absenteeism rate due to personal illness was 3.20 days, (SD = 6.21). The mean absenteeism rate due to other causes was 7.92 days, (SD = 16.71). Any participants whose absenteeism was greater than three standard deviations from the mean (i.e., 21.82 for absenteeism due to personal illness and 58.04 for absenteeism due to other causes) were excluded from analyses as outliers. Nine participants were rejected due to their absenteeism rates being outliers. Four participants were also excluded because 90% of their answers were the same (answering "1" and answering "0" were considered the same because they were the first choices in their respective scales).

The final sample consisted of 231 participants. The sample consisted of 54.1% female (n = 125) and 44.2% male (n = 102). Two participants identified as non-binary or self-preferred identification, and two participants did not respond to the gender item. Most participants, 80.5%, identified as White (n = 186), 8.2% identified as African American (n = 19), 6.1% identified as Asian American, 2.2% identified as Hispanic (n = 5), and 3% preferred to self-identify (n = 7).

#### Measures

**Face-to-face incivility.** Face-to-face incivility was measured using the same general scale developed by Cortina, Magley, Williams, and Langhout (2001). The Workplace Incivility Scale (WIS; 2001) was modified by adding the phrase "in person"

at the end of each item and by changing the range from five years to one year. A sample item from the modified scale was "During the PAST YEAR, have you been in a situation where any of your superiors or coworkers put you down or was condescending to you in person?" (Cortina et al., 2001, p. 70). This seven item measure contained a five point scale with 0 indicating *never*, and 4 indicating *many times*. In their original study, Cortina et al. (2001) found that their WIS had a coefficient alpha of .89. The alpha for the modified face-to-face incivility scale in this study was .96. This scale is included as Appendix A.

**Cyber incivility.** Cyber incivility was assessed using the same general format of the WIS (2001). Giumetti et al. (2012) used a modified version of the WIS (2001) to measure supervisor cyber incivility by adding the word "online" to the end of each question. A sample item from Giumetti et al.'s (2012) modified WIS scale was, "how often has your supervisor put you down or been condescending to you online?" (p. 150). Giumetti et al.'s (2012) eight item measure had a 6-point scale with 1 indicating *never*, and 6 indicating *several times per day*. The coefficient alpha for Giumetti et al.'s (2012) samples were .88 and .83. To maintain consistency with the modified WIS (2001) scale for face-to-face incivility, the cyber incivility scale in this study had the same seven items with "online" at the end of each item and was measured on the same 5-point scale as the one used by Cortina et al. (2001) with 0 indicating *never*, and 4 indicating *many times*. The alpha for the modified cyber incivility scale in this study was .94. This scale is included as Appendix B.

**Burnout.** A 14-item measure was used to assess burnout, known as the Shirom-Melamed Burnout Measure (Shirom, 2005). A sample item from this measure was, "I have no energy for going to work in the morning" (Shirom, 2005). The response format was a 7-point scale with 1 meaning *Never or almost never* and 7 meaning *Always or almost always*. Giumetti et al. (2012) used this measure and reported coefficient alpha to be .94. The alpha for the Shirom-Melamed Burnout Measure found in this study was .96. This measure is included in Appendix C.

**Job satisfaction.** A one-item measure was used to assess overall job satisfaction. This item was, "Overall, how satisfied are you with your job?" The measure used a 5point scale, with 1 indicating *Not at all satisfied* and 5 meaning *Extremely satisfied*. Having a one-item measure of job satisfaction instead of a multiple item facet measure allows participants to weigh each facet themselves, and account for facets that are not measured by current scales (Scarpello & Campbell, 1983). This is included in Appendix D.

**Turnover intentions.** A one-item measure was used assess turnover intentions. The item was, "How likely is it that you will quit your job for non-retirement reasons within the next year?" This was measured with a Likert-type scale with 5 points, with 1 meaning *Not at all likely* and 5 indicating *Extremely likely*. This is included in Appendix E.

**Absenteeism.** A two-item measure was used to measure absenteeism. These items were modeled after Dalton and Mesch's (1991) absenteeism measure, "How many days were you off the job in the last year because of *your* health only (colds, flu, injuries, etc.), not including days you were off the job because of someone else's health (e.g., child or parent)?" and "Excluding vacation time, excused time, and holiday time, how many total days were you off last year?" Participants were then able to provide a number indicating

the number of days they were absent due to health issues and another number for days of avoidable absence. This measure is included in Appendix F.

**Neuroticism.** Neuroticism was measured with the Factor IV (Emotional Stability) scale of the Big-Five Factor Markers provided by the International Personality Item Pool (Goldberg et al., 2006; IPIP). This scale had 10 items with a 5 point scale, with 1 meaning *Very Inaccurate* and 5 indicating *Very Accurate*. The coefficient alpha for this scale had been found to be .86 (International Personality Item Pool). This study found an alpha of .95 for this scale. This scale is included in Appendix G.

**Demographics.** Demographic information was collected from participants. Participants were asked to provide their age, gender, and race/ethnicity. Given that positional power in an organization may be linked to incivility (Cortina et al., 2001), participants indicated the number of years they have been working at their current job, provided an average number of hours per week they work at the job, and indicated their supervisory responsibility. The demographics questions are included in Appendix H.

## Procedure

IRB approval was obtained from the Xavier University IRB. The approval form is included in Appendix I. IRB approval was obtained for the second administration as well, and is included in Appendix J. Job satisfaction was measured first, followed by turnover intentions, absenteeism, burnout, and neuroticism, and then incivility. The incivility measures were administered after job satisfaction, turnover intentions, absenteeism, burnout, and neuroticism because of the possibility that reactions to incivility items could have affected responses to the other measures (Cortina et al., 2001). The sample was recruited through MTurk's interface which is included in Appendix K. The interface was modified for the second administration asking participants self-select out if they had already completed the survey; this is included in Appendix L. The participants were given a brief description of the study. As indicated above, initially, participants were compensated \$.40 for their time; in a second administration, participants were compensated \$0.60. From this interface, participants were directed to a Qualtrics web page, which is where the survey was hosted.

On the first page, participants were presented with the informed consent page. This page contained information concerning the purpose of the study, benefits, potential risks, participant withdrawal rights, and a statement of the implicit agreement of participating in the survey. A copy of the informed consent is included in Appendix M. The informed consent was modified for the second administration to inform participants to participate only if that had not participated before. This informed consent form is included it Appendix N.

Once the participants provided their informed consent, participants completed the job satisfaction, turnover intentions, absenteeism, burnout, and incivility measures. As previously stated, the face-to-face and cyber incivility measures were counterbalanced such that at least 64 participants completed the face-to-face incivility measure first, followed by the cyber incivility measure, and at least 64 other participants first completed the cyber incivility measure and then the face-to-face incivility measure. There was a quality check item in the burnout and neuroticism measures. An example of the quality check item was, "The correct response for this is Quite Frequently."

Participants were required to complete all aforementioned measures and correctly answer both quality check items to receive compensation. After completing all of the aforementioned measures, participants were asked to complete their demographic information; this section was not necessary for compensation. When collecting demographic information, participants were also asked to provide their MTurk ID in case the completion code did not generate properly.

After the demographics section, participants were directed to a page with a code to receive their compensation for the survey. Participants were then directed to a debriefing page detailing the purpose of the study and information to contact the principle investigator. A copy of the debriefing form is included in Appendix O.

#### Chapter IV

## Results

Multiple ANOVAs were conducted to assess mean differences based on gender, race, job tenure, and supervisory responsibility. Contrary to previous research (Cortina & Magley, 2003; Lim & Teo, 2009), no mean differences were found among any of those demographic variables.

Pearson Product-Moment correlations were conducted to test hypotheses 1a, 1b, 2a, 2b, 3a, 3b, 4a, and 4b. Table 1 shows the correlations of the variables and the descriptive statistics. Cronbach's alpha is presented along the diagonal for the multi-item scales.

Hypothesis 1a and 1b predicted that face-to-face incivility would be negatively correlated with job satisfaction and that cyber incivility would be negatively correlated with job satisfaction, respectively. Both of these hypotheses were supported (r(229) = -.36, p < .001 and r(229) = -.19, p < .01, respectively). A Fisher's r-to-z transformation was conducted to test hypothesis 1c, which posited that the correlation between cyber incivility and job satisfaction would be significantly greater than the correlation between face-to-face incivility and job satisfaction. Instead, the correlation between cyber incivility and job satisfaction (r = -.19) was actually significantly less than the correlation between the significant difference was in the opposite direction of the hypotheses.

## Table 1

Variable	М	SD	1	2	3	4	5	6
Age	38.78	10.76						
1. Job Satisfaction	3.35	1.01						
2. Turnover	2.06	1.23	61**					
Intentions								
3. Burnout	3.34	1.36	63**	.49**	(.96)			
4. Neuroticism	2.44	.99	37**	.32**	.67**	(.95)		
5. Face-to-Face	1.79	.98	36**	.30**	.49**	.35**	(.96)	
Incivility								
6. Cyber Incivility	1.43	.76	19*	.13	.23**	.18*	.67**	(.94)

Descriptive Statistics, Correlations, and Alpha Coefficients

*Note:* \*p < .01, two-tailed \*\*p < .001, two-tailed. All correlations are significant at the .05 level unless otherwise noted. Coefficient alphas are presented along the diagonal in parentheses.

Hypothesis 2a predicted that face-to-face incivility would be positively correlated with burnout, and it was supported (r(229) = .49, p < .001). Hypothesis 2b stated that cyber incivility would be positively correlated with burnout and was also supported (r(229) = .23; p < .001).

Hypothesis 2c, which predicted that the correlation between cyber incivility and burnout would be significantly greater than the correlation between face-to-face incivility and burnout, was tested with a Fisher's *r*-to-*z* transformation. Hypothesis 2c was not supported, as the correlation between cyber incivility and burnout (r = .23) was actually significantly lower than the correlation between face-to-face incivility and burnout (r = .49), z = -4.60, p < .05.

Hypotheses 3a and 3b stated that turnover intentions would be positively correlated with face-to-face incivility and cyber incivility, respectively. These hypotheses were supported in that face-to-face incivility significantly correlated with turnover intentions (r(229) = .30, p < .001) as well as cyber incivility with turnover intentions (r(229) = .13, p = .045). Hypothesis 3c, which suggested that the correlation between cyber incivility and turnover intentions (r = .13) would be significantly greater than the correlation between face-to-face incivility and turnover intentions (r = .30), was not supported by the Fisher's r-to-z transformation. The results were statistically significant, but in the opposite hypothesized direction, z = -2.62, p < .05, indicating that the correlation between face-to-face incivility and turnover intentions was significantly higher than the correlation between cyber incivility and turnover intentions.

Hypothesis 4a posited that face-to-face incivility would be positively correlated with neuroticism and hypothesis 4b predicted that cyber incivility would be positively

correlated with neuroticism. Both of these hypotheses were supported (r(229) = .35, p < .001 and r(229) = .18, p = .007 respectively). A Fisher's *r*-to-*z* transformation was conducted to test hypothesis 4c, which predicted that the correlation between cyber incivility and neuroticism would be significantly greater than the correlation between face-to-face incivility and neuroticism. Hypothesis 4c was not supported; the correlation between cyber incivility and neuroticism (r = .18) was actually significantly less than the correlation between face-to-face incivility and neuroticism (r = .18) was actually significantly less than the correlation between face-to-face incivility and neuroticism (r = .35), z = -2.87, p < .05. These results indicate that the correlation between face-to-face incivility and neuroticism was significantly higher than the correlation between cyber incivility and neuroticism.
### **Chapter V**

#### Discussion

This study investigated the relationship between face-to-face and cyber incivility using online surveys assessing participants' perceptions of experiencing both types of incivility. Consistent with previous research, face-to-face incivility negatively correlated with job satisfaction, and positively correlated with burnout, turnover intentions, and neuroticism (D'ambra & Andrews, 2014; Laschinger et al., 2009; Milam et al., 2009). All of these correlational findings supported the hypotheses involving face-to-face incivility.

Hypotheses 1b, 2b, 3b, and 4b were created to replicate the scarce research on cyber incivility (e.g., Giumetti et al., 2013; Lim & Teo, 2009), while also applying the findings from face-to-face incivility to an online context. Similar to face-to-face incivility, cyber incivility, which was defined as uncivil acts committed over information and communication technologies (ICT), was negatively correlated with job satisfaction and positively correlated with burnout, turnover intentions, and neuroticism, supporting hypotheses 1b, 2b, 3b, and 4b, respectively. Hence, it appears that many of the relationships identified between face-to-face incivility also extend to cyber incivility.

In addition to exploring relationships with cyber incivility, another goal of this study was to compare perceptions of face-to-face incivility and perceptions of cyber incivility in terms of their outcomes. Byron (2008) stated that ICTs such as email may lack some of the nonverbal cues that are normally present in face-to-face communication. The lack of nonverbal cues may result in ambiguity in messages sent over ICTs, leading to a potentially higher chance of interpreting them as uncivil. Despite the increased ambiguity of text-based ICTs, Kruger et al. (2005) found that people overestimate their ability to convey and interpret emails. With an inflated belief for conveying and interpreting messages in which there were little nonverbal cues, it was reasoned that cyber incivility would have more of an impact on organizational outcomes such as job satisfaction, burnout, and turnover intentions than face-to-face incivility.

Hence, hypotheses 1c, 2c, 3c, and 4c all stated that cyber incivility would have significantly stronger correlations with the criterion variables (job satisfaction, burnout, turnover intentions, and neuroticism respectively) than face-to-face incivility. Contrary to hypothesis 1c, face-to-face incivility had a stronger correlation with job satisfaction than cyber incivility. Likewise, hypothesis 2c was not supported as face-to-face incivility actually had a significantly stronger correlation with burnout than cyber incivility. Hypothesis 3c was also not supported as the correlation between face-to-face incivility and turnover was greater in magnitude than the correlation between cyber incivility and turnover. Lastly, hypothesis 4c was not supported; face-to-face incivility had a stronger correlation with neuroticism than cyber incivility. Hence, these findings indicate that face-to-face incivility actually had significantly stronger correlations with each criterion variable than with cyber incivility.

Although previous research (e.g., Byron, 2008; Kruger et al., 2005) seems to indicate that cyber incivility would be more impactful on organizational outcomes than face-to-face incivility, the results of this study did not corroborate these findings. It is possible that the ambiguity in incivility does not have the same impact in ICT messages as it does face-to-face communications. The lack of nonverbal cues should increase the ambiguity of ICT messages (Byron, 2008), thus leading to more cyber incivility but this study found that cyber incivility had a weaker correlation with the outcome variables compared to face-to-face incivility. Therefore, the ambiguity in cyber incivility may not be as intense as it is in face-to-face incivility.

Ambiguity may be less intense in ICT contexts because users can delay their responses, giving them time to "cool off" and reevaluate the ambiguous message. In faceto-face settings, people are not usually able to walk away from an ongoing conversation and must respond to ambiguous comments within seconds. Having less time to evaluate potentially uncivil statements or actions in face-to-face situations, one may make an attribution error about the potential instigator. The fundamental attribution error (Ross, Amabile, & Steinmetz, 1977) states that people often incorrectly underestimate the role of situational factors and overestimate personal factors that affect the behavior of others. It is possible that the fundamental attribution error is committed more often in face-toface situations because of the immediate response required gives less time for thought about situational factors influencing a potential instigator, leading to increased perceptions of face-to-face incivility. On the flip side, it may be possible that in ICT situations, the delay in response may act as a buffer to ambiguity by allowing individuals time to think about situational factors that may have influenced an ambiguous message, preventing perceptions of cyber incivility.

There may also be decreased ambiguity in ICT communications with the use of emojis, small icons meant to convey emotion through text-based communications, often portrayed using smiley faces. Zareen, Karim, and Khan (2016) found that 59.5% of participants felt that using emojis in text messages were a strong or very strong method for expressing emotion. Zareen et al. (2016) also found that 54% of participants rated emoji usage to be strong or very strong influencers on interpreting messages. Emojis seem to be a tool for decreasing ambiguity in ICT messages, but Zareen et al. (2016) also found that not receiving expected emojis from a sender could negatively influence the receiver's relationship with the sender. Indeed, emojis may increase or decrease ambiguity depending on their use or lack thereof.

The online disinhibition effect, which states that people will be more likely to engage in uncivil behaviors when they are online (Suler, 2004), may not have applied to this study. Factors in the online disinhibition effect include minimization of authority, where there is no implicit authority in online interactions, and dissociative anonymity, which allows a person to remain relatively anonymous, protecting them from any backlash from their incivility. Clearly, in the workplace, these factors are not relevant, as employees do understand the line of authority and recognize their interactions are not anonymous. Consequently, the online disinhibition effect may not be relevant to workplace interactions and thus may not be helpful in forming predictions about cyber incivility in the workplace.

Further, the hypotheses regarding face-to-face incivility were also encouraged by Kruger et al. (2005), who found that people overestimate both their ability to convey and interpret emotions and sarcasm over email despite the lack of nonverbal cues in such a medium. Hence, Kruger et al.'s (2005) research was expected to support the hypotheses that cyber incivility would have stronger correlations with the outcome variables than face-to-face incivility. Yet, the results of this study found the opposite; face-to-face

incivility had stronger relationships with the criterion variables than cyber incivility. Upon closer inspection, there are several possible explanations for these contradictory results.

First, there is some research indicating that cyber incivility may be less common than face-to-face incivility because potential instigators may be more careful when using ICTs (Sheer, 2012). Sheer (2012) found that using email to communicate negative feedback allowed supervisors and subordinates to "ease into" difficult discussions on performance, saving a subordinate from potential embarrassment and reducing the chance that a supervisor would delay giving such feedback. It is possible that being more careful in choosing words when giving negative feedback via email may lead to more deliberate, less ambiguous language in the messages. Therefore, communicating via ICTs may allow difficult discussions such as giving negative feedback to actively result in lowering perceived incivility compared to face-to-face situations.

Second, the amount of thought people put into their messages may also be related to the interpretation of incivility. Lightfoot (2006) found that 61.8% of students reported being more thoughtful when emailing instructors than dealing with them face-to-face. When emailing another individual student, 34.6% of students reported being more thoughtful when emailing each other. These results indicate that a considerable amount of students are more deliberate in the content of their communications when emailing others compared to face-to-face interactions. This deliberateness may be the product of the time that can be put in to emails compared to the immediate reactions required in face-to-face settings. It is also possible that the impact of poorly communicating in person is underestimated compared to email. In terms of incivility, putting more thought into an email may make the message less ambiguous, which would therefore reduce the chances of such communication being interpreted as uncivil. If so, it is possible that professionals may also be more deliberate over email than face-to-face interactions which could explain why cyber incivility had weaker correlations with job satisfaction, burnout, turnover intentions, and neuroticism than face-to-face incivility.

Third, there may be a threshold difference between face-to-face and cyber incivility. It may take fewer uncivil interactions in person for the victim to perceive incivility compared to ICT interactions. Beattie and Griffin (2014) found a 73.6% negative response rate to incivility in their study. All else being equal, face-to-face incivility may be perceived more often than cyber incivility, leading to a lower threshold for face-to-face interactions to result in perceived incivility compared to ICT interactions. Such a result helps explain the findings in this study that face-to-face incivility had stronger correlations with many of the outcome variables than ICT interactions.

In addition to testing the formal hypotheses, several supplemental analyses were also conducted. Referring to Table 1, face-to-face civility and cyber incivility were significantly positively correlated (r(229) = .67, p < .001). In addition, a paired samples *t*-test was conducted to determine if the means of face-to-face and cyber incivility were significantly different. It was found that perceptions of face-to-face incivility (M = 1.79, SD = .98) were significantly higher than cyber incivility (M = 1.41, SD = .75), t(231) = 7.47, p < .001. These results are consistent with Privitera and Campbell's (2009) findings that face-to-face bullying was greater than cyber bullying.

Absenteeism and its relationship with incivility was also examined as an exploratory hypothesis. Contrary to previous research findings involving job withdrawal

and face-to-face incivility (Cortina et al. 2001; Lim & Cortina, 2005), both absenteeism due to personal illness and total absenteeism were not significantly correlated with either face-to-face or cyber incivility. Yet, absenteeism due to personal illness was significantly correlated with job satisfaction (r(229) = -.18 p = .008), burnout (r(229) = .14, p = .037), and neuroticism (r(229) = .18, p = .005), but not turnover intentions. Total absenteeism was not significantly correlated with any outcome variable.

#### **Limitations and Future Research Directions**

A potential limitation of this study was not asking participants specifically about their ICT usage. There are several types of ICT, such as instant messaging, email, and video calls. Although this study focused on text-based ICT, there may be a continuum of response and deliberateness across different forms of ICT. Emails have the potential for the most delayed and deliberate response, followed by instant messaging where a response is expected in a shorter time frame, followed by video calls, where a response is expected immediately, similar to face-to-face communication. The differences found between face-to-face and cyber incivility may have been due in part to the potential for a deliberate response in text-based ICT communication. Future research should investigate each type of ICT as separate variables and compare them with each other type.

Another possible limitation is that incivility is based on perception. Even if an instigator is unaware of it, they may still be engaging in uncivil behavior. This leaves room for unwitting, inconsiderate instigators to potentially commit disproportionately more uncivil acts than others. Despite this possibility, incivility does harm because it is perceived; the damage to the company comes after the initial act in forms such as

retaliation (Andersson & Pearson, 1999; Beattie & Griffin, 2014), leaving the company (Lim & Teo, 2009), or lowering their work effort (Porath & Pearson 2013).

Finally, this was a correlational study, so no causal relationships should be inferred. Future research could investigate ICT communications using a controlled experiment. The deliberateness of text-based ICT responses could be manipulated to mimic face-to-face communications by requiring immediate responses from participants and by requiring other participants to complete an unrelated task in between receiving and responding to a message. Regardless, this study has found correlational links between incivility perceptions and several job-related variables that are consistent with previous research (Giumetti et al., 2012; Laschinger et al., 2013) as well as establishing a link between face-to-face and cyber incivility.

Future research should focus on how technology will influence social interactions. Such studies should compare traditional in-person interactions to computer mediated interactions similar to this study to determine how face-to-face and cyber communications comparatively affect workplace outcomes. There may also be several potential moderators such as personality, communication styles, the amount of time it takes to respond to a message. Future research should also compare workplaces that have ICT usage with those that do not to determine if there are differences in experienced incivility. It is entirely possible that cyber incivility, seemingly less harmful than face-toface incivility, could still spark an incivility spiral that leads to face-to-face incivility, thereby increasing face-to-face incivility. Finally, future research may want to pursue replicating the findings obtained in this study. If these findings are replicated, it may be that previous assertions that cyber incivility is worse than face-to-face incivility are unfounded. Regardless, incivility, both face-to-face and cyber, are connected to negative work outcomes and can cost a company millions of dollars (Porath & Pearson, 2013). **Conclusion** 

This study replicated findings of previous research (e.g. Cortina et al., 2001; Giumetti et al., 2012) in that face-to-face and cyber incivility were correlated with job satisfaction, burnout, turnover intentions, and neuroticism. However, no previous study has compared the relationships face-to-face and cyber incivility had with these constructs. This study's results indicate that face-to-face incivility had significantly stronger correlations with job satisfaction, burnout, turnover intentions, and neuroticism than cyber incivility. Both face-to-face and cyber incivility can cost a company money. Porath and Pearson (2013) stated that, "Even in [Cisco's] exemplary workplace, it was estimated that incivility cost \$12 million a year." Organizations should still focus on interventions to reduce face-to-face incivility, but also cyber incivility, as it may become more prevalent and costly as the use of ICT becomes more common in the workplace.

### **Chapter VI**

#### **Summary**

Before You Send That: Comparing the Outcomes of Face-to-Face and Cyber Incivility

Technology is increasingly used in organizations to communicate among supervisors, coworkers, and subordinates. Lim and Teo (2009) found that email was the second most used form of communication between workers and supervisors overall, and email was the most used form of communication for 30% of their sample. With the increased use of these technologies to correspond, problems can arise from malicious messages or the misinterpretations of benign messages. This set of unpleasant behaviors though ICTs is referred to as "cyber incivility" (Giumetti et al., 2013).

#### Incivility

Andersson and Pearson (1999) developed a commonly used definition of incivility: "low-intensity, deviant behavior with ambiguous intent to harm the target in violation of norms for respect in social interactions" (p. 457). Chui and Dietz (2014) found that observer perceptions of incivility were influenced by the target's reaction. Regardless of ambiguity, one must keep in mind that incivility violates norms of respect and is unacceptable. Those who are targeted by incivility may feel more negatively about their job, and may experience feelings of burnout (Babenko-Mould & Laschinger, 2014; Laschinger, et al., 2014).

Burnout is comprised of emotional exhaustion, cynicism, and inefficacy (Lundgren-Nilsson, et al., 2012). Elmblad and colleagues (2014) investigated the rates of

incivility from a sample of registered nurses in Michigan and found that incivility predicted burnout, and noted that incivility may lower the quality of healthcare while increasing its cost.

Reio and Ghosh (2009) measured incivility from the perspective of the instigators. They sampled 402 workers from several industries and found that those who engaged in incivility had lower job satisfaction and poorer physical health. Interestingly, despite its lack of social desirability, 54% of participants admitted to engaging in uncivil behavior. This willingness to admit to engage in incivility is often a response to perceived incivility, which is commonly referred to as the incivility spiral.

Along with defining incivility, Andersson and Pearson (1999) described how incivility can lead to subsequent incivility in what they dubbed the "incivility spiral." They proposed that when someone perceives themselves to be the target of uncivil behavior, they will reciprocate with incivility of their own. Beattie and Griffin (2014) found support for the incivility spiral. Participants completed diary surveys twice a week after their work shifts documenting uncivil incidents for four consecutive weeks. The authors noted that the most common responses consisted of ignoring or avoiding the instigator, but 73.6% of participants responded negatively to the instigator after one incident (Beattie & Griffin, 2014).

#### **Cyber Incivility**

Andersson and Pearson's (1999) definition of incivility applies beyond physical contexts. Incivility can be committed in other formats such as information and communication technological (ICT) formats such as, instant messaging, emails, and text messages. Deviant behaviors that violate organizational norms over these mediums are

39

"cyber incivility" (Giumetti et al., 2013). Cyber incivility differs from face-to-face incivility in that it lacks some of the nonverbal cues that face-to-face interactions have (Byron, 2008).

One difference between face-to-face communication and ICT communication is that the latter often contains more ambiguity (Byron, 2008). Kruger, et al. (2005) found that participants overestimated their ability to both convey and interpret emotions such as sarcasm in emails. Kruger et al. (2005) also found that participants overestimated others' ability to convey and interpret emails they sent.

Suler (2004) described multiple factors that contribute to intentionally uncivil behaviors online that combine to what Suler (2004) described as the "online disinhibition effect," meaning that one is less inclined to refrain from engaging in uncivil behaviors when dealing with others online.

Giumetti et al. (2012) sampled from university staff and business school alumni to test the effects of supervisor cyber incivility. They found that supervisor cyber incivility was positively correlated with burnout, absenteeism, and turnover intentions, the same type of outcomes often associated with face-to-face incivility (Elmblad et al., 2014; Laschinger et al., 2009).

There is evidence to suggest that the incivility spiral may also exist in ICT scenarios. Francis et al. (2015) conducted an experiment with undergraduates who completed in-basket tasks. Participants were more likely to send uncivil responses if they received an uncivil email. This study shows that the incivility spiral can potentially occur in the context of ICTs, but more research is necessary.

Although the evidence thus far suggests that cyber incivility may also be costly to organizations in terms of job satisfaction (Lim & Teo, 2009), burnout (Giumetti et al., 2012), turnover (Lim & Teo, 2009), absenteeism (Giumetti et al., 2012), and lower performance (Giumetti et al., 2013), what is not known is the difference in the incidences of face-to-face incivility and cyber incivility. It is also unknown if the magnitude of the relationships with face-to-face incivility is the same as it is in ICT. Hence, this study will investigate the magnitude of these relationships and the rates of incivility in both contexts.

#### Hypotheses

Face-to-face incivility has been linked to lower job satisfaction. Laschinger et al. (2009) examined incivility rates among nurses at various hospitals and found that higher rates of incivility were associated with rates of lower job satisfaction. Cyber incivility has also been associated with lower job satisfaction. Lim and Teo (2009) assessed cyber incivility for 192 employees of finance and banking in Singapore and found that those who were targeted by their supervisors had lower levels of job satisfaction and organizational commitment. Hence, the following are hypothesized:

*Hypothesis 1a: Face-to-face incivility will be negatively correlated with job satisfaction.* 

Hypothesis 1b: Cyber incivility will be negatively correlated with job satisfaction. Hypothesis 1c: The correlation between cyber incivility and job satisfaction will be significantly greater than the correlation between face-to-face incivility and job satisfaction. Face-to-face incivility has also been linked to burnout in several studies. Indeed, across many samples of nurses, incivility has repeatedly predicted burnout (D'ambra & Andrews, 2014; Laschinger et al., 2009; Laschinger et al., 2014). Giumetti et al. (2012) found that supervisor cyber incivility was positively correlated with burnout from a sample of university staff and business school alumni. Based on these findings, the following are posited:

Hypothesis 2a: Face-to-face incivility will be positively correlated with burnout.
Hypothesis 2b: Cyber incivility will be positively correlated with burnout.
Hypothesis 2c: The correlation between cyber incivility and burnout will be significantly greater than the correlation between face-to-face incivility and burnout.

Laschinger et al. (2009) found that in their sample of nurses, feelings of incivility were positively correlated with turnover intentions. In a sample of financial workers in Singapore, Lim and Teo (2009) found that those who were victims of cyber incivility were more likely to leave the organization. Based on this research, and the research of Byron (2008) and Kruger et al. (2005), the following hypotheses are proposed.

*Hypothesis 3a: Face-to-face incivility will be positively correlated with turnover intentions.* 

Hypothesis 3b: Cyber incivility will be positively correlated turnover intentions. Hypothesis 3c: The correlation between cyber incivility and turnover intentions will be significantly greater than the correlation between face-to-face incivility and turnover intentions. Milam et al. (2009) found that coworker and self-reports of neuroticism positively correlated with perceptions of incivility in face-to-face situations. Giumetti et al. (2012) found that self-reported neuroticism positively correlated perceptions of supervisor cyber incivility. Therefore, Hypothesis 4 states:

*Hypothesis 4a: Face-to-face incivility will be positively correlated with neuroticism.* 

Hypothesis 4b: Cyber incivility will be positively correlated with neuroticism. Hypothesis 4c: The correlation between cyber incivility and neuroticism will be significantly greater than the correlation between face-to-face incivility and neuroticism.

#### Methods

#### **Participants**

Data was collected from workers on Amazon's Mechanical Turk (MTurk). Respondents were 25 years or older and resided in the United States. Respondents also worked at least 35 hours a week to ensure they had frequent workplace exposure. Respondents who successfully completed the survey were initially compensated \$0.40. There were two quality checks, one in the burnout section and one in the neuroticism section of the survey. If participants did not successfully pass both quality checks, they did not receive payment and their data were not utilized in the analyses. Of the 354 total responses collected, 30 responses were eliminated because participants had already taken the survey, 20 responses were deleted because they were incomplete, and 60 responses were rejected because participants failed quality checks. After these omissions, the sample was 244 participants. Nine participants were rejected due to their absenteeism rates being outliers. Four participants were also excluded because 90% of their answers were the same.

The final sample consisted of 231 participants. The sample consisted of 54.1% female (n = 125) and 44.2% male (n = 102). Two participants identified as non-binary or self-preferred identification, and two participants did not respond to the gender item. Most participants, 80.5%, identified as White (n = 186), 8.2% identified as African American (n = 19), 6.1% identified as Asian American, 2.2% identified as Hispanic (n = 5), and 3% preferred to self-identify (n = 7).

#### Measures

**Face-to-face incivility.** Face-to-face incivility was measured using the same general scale developed by Cortina, Magley, Williams, and Langhout (2001). The Workplace Incivility Scale (WIS; 2001) was modified by adding the phrase "in person" at the end of each item and by changing the range from five years to one year. This seven item measure contained a five point scale with 0 indicating *never*, and 4 indicating *many times*. In their original study, Cortina et al. (2001) found that their WIS had a coefficient alpha of .89. The alpha for the modified face-to-face incivility scale in this study was .96.

**Cyber incivility.** Cyber incivility was assessed using the same general format of the WIS (2001). To maintain consistency with the modified WIS (2001) scale for face-to-face incivility, the cyber incivility scale in this study had the same seven items with "online" at the end of each item and was measured on the same 5-point scale as the one used by Cortina et al. (2001) with 0 indicating *never*, and 4 indicating *many times*. The alpha for the modified cyber incivility scale in this study was .94.

**Burnout.** A 14-item measure was used to assess burnout, known as the Shirom-Melamed Burnout Measure (Shirom, 2005). The response format was a 7-point scale with 1 meaning *Never or almost never* and 7 meaning *Always or almost always*. The alpha for the Shirom-Melamed Burnout Measure found in this study was .96.

**Job satisfaction.** A one-item measure was used to assess overall job satisfaction. This item was, "Overall, how satisfied are you with your job?" The measure used a 5point scale, with 1 indicating *Not at all satisfied* and 5 meaning *Extremely satisfied*.

**Turnover intentions.** A one-item measure was used assess turnover intentions. The item was, "How likely is it that you will quit your job for non-retirement reasons within the next year?" This was measured with a Likert-type scale with 5 points, with 1 meaning *Not at all likely* and 5 indicating *Extremely likely*.

**Absenteeism.** A two-item measure was used to measure absenteeism. These items were modeled after Dalton and Mesch's (1991) absenteeism measure, "How many days were you off the job in the last year because of *your* health only (colds, flu, injuries, etc.), not including days you were off the job because of someone else's health (e.g., child or parent)?" and "Excluding vacation time, excused time, and holiday time, how many total days were you off last year?"

**Neuroticism.** Neuroticism was measured with the Factor IV (Emotional Stability) scale of the Big-Five Factor Markers provided by the International Personality Item Pool (Goldberg et al., 2006; IPIP). This scale had 10 items with a 5 point scale, with 1 meaning *Very Inaccurate* and 5 indicating *Very Accurate*. This study found an alpha of .95 for this scale.

**Demographics.** Demographic information was collected from participants. Participants were asked to provide their age, gender, and race/ethnicity. Participants indicated the number of years they have been working at their current job, provided an average number of hours per week they work at the job, and indicated their supervisory responsibility.

### Procedure

The sample was recruited through MTurk's interface. From this interface, participants were directed to a Qualtrics web page, which is where the survey was hosted. On the first page, participants were presented with the informed consent page. Once the participants provided their informed consent, participants completed the job satisfaction, turnover intentions, absenteeism, burnout, and incivility measures. After completing all of the aforementioned measures, participants were asked to complete their demographic information; this section was not necessary for compensation. When collecting demographic information, participants were also asked to provide their MTurk ID in case the completion code did not generate properly. Participants were then directed to a debriefing page detailing the purpose of the study and information to contact the principle investigator.

#### Results

Hypothesis 1a and 1b predicted that face-to-face incivility would be negatively correlated with job satisfaction and that cyber incivility would be negatively correlated with job satisfaction, respectively. Both of these hypotheses were supported (r(229) = -.36, p < .001 and r(229) = -.19, p < .01, respectively). Hypothesis 1c posited that the correlation between cyber incivility and job satisfaction would be significantly greater

than the correlation between face-to-face incivility and job satisfaction. Instead, the correlation between cyber incivility and job satisfaction (r = -.19) was actually significantly less than the correlation between face-to-face incivility and job satisfaction (r = -.36), z = -2.73, p < .05.

Hypothesis 2a predicted that face-to-face incivility would be positively correlated with burnout, and it was supported (r(229) = .49, p < .001). Hypothesis 2b stated that cyber incivility would be positively correlated with burnout and was also supported (r(229) = .23; p < .001). Hypothesis 2c was not supported, as the correlation between cyber incivility and burnout (r = .23) was actually significantly lower than the correlation between face-to-face incivility and burnout (r = .49), z = -4.60, p < .05.

Hypotheses 3a and 3b were supported in that face-to-face incivility significantly correlated with turnover intentions (r(229) = .30, p < .001) as well as cyber incivility with turnover intentions (r(229) = .13, p = .045). Hypothesis 3c was not supported. The results were statistically significant, but in the opposite hypothesized direction, z = -2.62, p < .05, indicating that the correlation between face-to-face incivility and turnover intentions was significantly higher than the correlation between cyber incivility and turnover intentions.

Hypothesis 4a and hypothesis 4b were both supported (r(229) = .35, p < .001 and r(229) = .18, p = .007 respectively). Hypothesis 4c was not supported; the correlation between cyber incivility and neuroticism (r = .18) was actually significantly less than the correlation between face-to-face incivility and neuroticism (r = .35), z = -2.87, p < .05.

#### Discussion

Consistent with previous research, face-to-face incivility negatively correlated with job satisfaction, and positively correlated with burnout, turnover intentions, and neuroticism (D'ambra & Andrews, 2014; Laschinger et al., 2009; Milam et al., 2009). All of these correlational findings supported the hypotheses involving face-to-face incivility.

Similar to face-to-face incivility, cyber incivility, which was defined as uncivil acts committed over information and communication technologies (ICT), was negatively correlated with job satisfaction and positively correlated with burnout, turnover intentions, and neuroticism. Hence, it appears that many of the relationships identified between face-to-face incivility also extend to cyber incivility.

This study investigated the relationship between face-to-face and cyber incivility using online surveys assessing participants' perceptions of experiencing both types of incivility. This study's findings indicate that face-to-face incivility actually had significantly stronger correlations with each criterion variable than with cyber incivility. Although previous research (e.g. Byron, 2008; Kruger et al., 2005) seems to indicate that cyber incivility would be more impactful on organizational outcomes than face-to-face incivility, the results of this study did not corroborate these findings.

#### **Limitations and Future Research Directions**

A potential limitation of this study, was not asking participants specifically about their ICT usage. There are several types of ICT such as instant messaging email, and video calls; this study focused on text-based ICT. The differences found between face-toface and cyber incivility may have been due in part to the delayed/deliberate response nature of ICT. Future research should investigate each type of ICT as separate variables and compare them with each other type. Future research should focus on how technology will influence social interactions. Such studies should compare traditional in-person interactions to computer mediated interactions similar to this study to determine how face-to-face and cyber communications comparatively affect workplace outcomes. Future research should also compare workplaces that have ICT usage with those that do not to determine if there are differences in experienced incivility. Finally, future research may want to pursue replicating the findings obtained in this study. If these findings are replicated, it may be that previous assertions that cyber incivility is worse than face-to-face incivility are unfounded.

#### Conclusion

This study replicated findings of previous research (e.g. Cortina et al., 2001; Giumetti et al., 2012) in that face-to-face and cyber incivility were correlated with job satisfaction, burnout, turnover intentions, and neuroticism. However, no previous study has compared the relationships face-to-face and cyber incivility had with these constructs. This study's results indicate that face-to-face incivility had significantly stronger correlations with job satisfaction, burnout, turnover intentions, and neuroticism than cyber incivility. Both face-to-face and cyber incivility can cost a company money. Porath and Pearson (2013) stated that an "exemplary workplace, it was estimated that incivility cost \$12 million a year." Organizations should still focus on interventions to reduce faceto-face incivility, but also cyber incivility, as it may become more prevalent and costly as the use of ICT becomes more common in the workplace.

#### References

- Andersson, L. M. & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24(3), 452-471. doi: 10.2307/259136
- Babenko-Mould, Y. & Laschinger, H. K. S. (2014). Effects of incivility in clinical practice settings on nursing student burnout. *International Journal of Nursing Education Scholarship*, 11(1), 145-154. doi 10.1515/ijnes-2014-0023
- Barger, P., Behrend, T. S., Sharek, D. J., & Sinar, E. F. (2011). I-O and the crowd: Frequently asked questions about using Mechanical Turk for research. *TIP: The Industrial-Organizational Psychologist*, 49(2), 11-17. Retrieved from http://www.siop.org/tip/oct11/03barger.aspx
- Beattie, L. & Griffin, B. (2014). Accounting for within-person differences in how people respond to daily incivility at work. *Journal of Occupational and Organizational Psychology*, 87, 625-644. doi:10.1111/joop.12067
- Bies, R. J., Tripp, T. M., & Kramer, R. M. (1997). At the breaking point: Cognitive and social dynamics of revenge in organizations. In R. A. Giacalone, J. Greenberg, R. A. Giacalone, J. Greenberg (Eds.), *Antisocial behavior in organizations* (pp. 18-36). Thousand Oaks, CA, US: Sage Publications, Inc.
- Blau, G. & Andersson, L. (2005). Testing a measure of instigated incivility. *Journal of Occupational and Organizational Psychology*, 78, 595-614. doi: 10.1348/096317905X26822

- Buhrmester, M., Kwang, T., & Gosling, S., D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6 (1), 3–5 doi: 10.1177/1745691610393980
- Byron, K. (2008). Carrying too heavy a load? The communication and miscommunication of emotion by email. *Academy of Management Review*, 33(2), 309-327. doi: 10.2307/20159399
- Chui, C. W. S. & Dietz, J. (2014). Observing workplace incivility towards women: The roles of target reactions, actor motives, and actor-target relationships. *Sex Roles*, 71, 95-108. doi 10.1007/s11199-014-0367-7
- Cortina, L. M. & Magley, V. J. (2003). Raising voice, risking retaliation: Events following interpersonal mistreatment in the workplace. *Journal of Occupational Health Psychology*, 8(4), 247-265. doi: 10.1037/1076-8998.8.4.247
- 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. doi: 10.1037//1076-8998.6.1.64
- Dalton, D. R., & Mesch, D. J. (1991). On the extent and reduction of avoidable absenteeism: An assessment of absence policy provisions. *Journal of Applied Psychology*, *76* (6), 810-817. doi: 10.1037/0021-9010.76.6.810
- D'ambra, A. M. & Andrews, D. R. (2014). Incivility, retention and new graduate nurses:
  An integrated review of the literature. *Journal of Nursing Management*, 22, 735-742. doi: 10.1111/jonm.12060
- Elmblad, R., Kodjebacheva, G., & Lebeck, L. (2014). Workplace incivility affecting CRNAs: A study of prevalence, severity, and consequences with proposed

interventions. *AANA Journal*, 8 (6), 347-445. Retrieved from www.aana.com/aanajournalonline

Francis, L., Holmvall, C. M., & O'brien, L. E. (2015). The influence of workload and civility of treatment on the perpetration of email incivility. *Computers in Human Behavior*, 46, 191-201. doi:10.1016/j.chb.2014.12.044

Giumetti, G. W., Hatfield, A. L., Scisco, J. L., Schroeder, A. N., Muth, E. R., & Kowalski, R. M. (2013). What a rude e-mail! Examining the differential effects of incivility versus support on mood, energy, engagement, and performance in an online context. *Journal of Occupational Health Psychology*, *18*(3), 297-309. doi: 10.1089/cyber.2011.0336

Giumetti, G. W., McKibben, E. S., Hatfield, A. L., Schroeder, A. N., & Kowalski, R. M.
(2012). Cyber incivility @ work: The new age of interpersonal deviance. *Cyberpsychology, Behavior, and Social Networking*, 15(3), 148-154. doi: 10.1037/a0032851

- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R.,
  & Gough, H. C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40(1), 84-96. doi: 10.1016/J.JRP.2005.08.007
- International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences (http://ipip.ori.org/). Internet Web Site.

- Jourdain, G., & Chênevert, D. (2015). The moderating influence of perceived organizational values on the burnout-absenteeism relationship. *Journal of Business & Psychology, 30,* 177-191. doi: 10.1007/s10869-014-9346-9
- Kruger, J., Epley, N., Parker, J., & Ng, Z. W. (2005). Egocentrism over e-mail: Can we communicate as well as we think? *Journal of Personality and Social Psychology*, 89(6), 925-936. doi: 10.1037/0022-3514.89.6.925
- Laschinger, H. K. S., Cummings, G. G., Wong, C. A., & Grau, A. L. (2014). Resonant leadership and workplace empowerment: The value of positive organizational cultures in reducing workplace incivility. *Nursing Economic*\$, 32(1), 5-44. doi: 10.1111/j.1365-2834.2009.00999.x.
- Laschinger, H. K. S., 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. doi: 10.1111/j.1365-2834.2009.00999.x
- Lee, R. L. & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 8(2), 123-133. doi: 10.1037//0021-9010.81.2.123
- Lightfoot, J. M. (2006). A comparative analysis of e-mail and face-to-face communication in an educational environment. *Internet and Higher Education 9*, 217–227. doi: 10.1016/j.iheduc.2006.06.002
- Lim, S. & Cortina L. M. (2005). Interpersonal mistreatment in the workplace: The interface and impact of general incivility and sexual harassment. *Journal of Applied Psychology*, 90(3), 483–496. doi: 10.1037/0021-9010.90.3.483

- Lim, V. K. G., & Teo, T. S. H. (2009). Mind your e-manners: Impact of cyber incivility on employees' work attitude and behavior. *Information & Management*, 46, 419-425. doi:10.1016/j.im.2009.06.006
- Lundgren-Nilsson, A., Jonsdotti, I. H., Pallant, J., & Ahlborg, G. Jr. (2012). Internal construct validity of the Shirom-Melamed Burnout Questionnaire (SMBQ). *BMC Public Health*, 12(1), 1-8. doi: 10.1186/1471-2458-12-1
- Marchiondo, K., Marchiondo, L. A., & Lasiter, S. (2010). Faculty incivility: Effects on program satisfaction of BSN students. *Journal of Nursing Education*, 49(11), 608-614. doi:10.3928/01484834-20100524-05
- Milam, A. C., Spitzmueller, C., & Penney, L. M. (2009). Investigating individual differences among targets of workplace incivility. *Journal of Occupational Health Psychology*, 14(1), 58-69. doi: 10.1037/a0012683
- Morrow, P. C., McElroy, J. C., & Scheibe, K. P. (2011). Work unit incivility, job satisfaction, and total quality management among transportation employees.
   *Transportation Research Part E, 47,* 1210-1220. doi:10.1016/j.tre.2011.03.004
- Porath, C., & Pearson, C. (2013). The price of incivility: Lack of respect hurts morale and the bottom line. *Harvard Business Review 91*(1) 114-121. Retrieved from https://hbr.org/.
- Privitera, C. & Campbell, M. A. (2009). Cyberbullying: The face of workplace bullying?*Cyberpsychology & Behavior, 12* (4), 395-400. doi: 10.1089/cpb.2009.0025
- Reio, T. G. & Ghosh, R. Jr. (2009). Antecedents and outcomes of workplace incivility: Implications for human resource development research and practice. *Human Resource Development Quarterly*, 20(3), 237-264. doi: 10.1002/hrdq.20020

- Ross, L. D., Amabile, T. M., & Steinmetz, J. L. (1977). Social roles, social control, and biases in social-perception processes. *Journal of Personality and Social Psychology*, 35(7), 485-494. doi: 10.1037/0022-3514.35.7.485.
- Scarpello, V., & Campbell, J. P. (1983). Job satisfaction: Are all the parts there? *Personnel Psychology, 36*, 577-600. doi: 10.1111/j.1744-6570.1983.tb02236.x
- Settanni, M., & Marengo, D. (2015). Sharing feelings online: Studying emotional wellbeing via automated text analysis of Facebook posts. *Frontiers in Psychology*, 6, 1-7. doi: 10.3389/fpsyg.2015.01045
- Sheer, V. C., (2012). Does e-mail facilitate negative performance feedback giving?: Supervisor and subordinate responses compared via the concept of social accountability. *Communication Studies*, 63 (2), 220-242. doi:

10.1080/10510974.2011.633150

- Shirom, A. (2005). The Shirom-Melamed Burnout Measure (SMBM)–Version 2. Accessed 10/6/2016 from http://www.shirom.org/arie/index.html
- Suler, J. (2004). The online disinhibition effect. *Cyberpsychology & Behavior*, 7(3), 321-326. doi:10.1089/1094931041291295
- Thomas, K.W. & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. Academy of Management Review, 15(4), 666-81. doi: 10.2307/258687
- Wright, M., & Hill, L. H. (2015). Academic incivility among health sciences faculty. *Adult Learning*, 26(1), 14-20. doi: 10.1177/1045159514558410

Zareen, N., Karim, N., & Khan, U. A. (2016). Psycho emotional impact of social media emojis. *ISRA Medical Journal*, 8(4), 257-262. Retrieved from http://www.imj.com.pk/.

## Appendix A

Modified Workplace Incivility Scale 2001 (face-to-face)

The Workplace Incivility Scale (WIS; 2001) is protected by copyright so it is not

reproduced in this document. This measure is available through the following reference:

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. doi: 10.1037//1076-8998.6.1.64

## Appendix B

Modified Workplace Incivility Scale 2001 (cyber)

The Workplace Incivility Scale (WIS; 2001) is protected by copyright so it is not

reproduced in this document. This measure is available through the following reference:

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. doi: 10.1037//1076-8998.6.1.64

# Appendix C

## Shirom-Melamed Burnout Measure

The Shirom-Melamed Burnout Measure is protected by copyright so it is not reproduced

in this document. This measure is available at: http://www.shirom.org/arie/index.html

# Appendix D

### **Overall Job Satisfaction**

Overall, how satisfied are you with your job?

Scale: 1 – Not at all satisfied, 2 – Not very satisfied, 3 – Somewhat satisfied, 4 – Very satisfied 5 – Extremely satisfied

# Appendix E

### **Turnover Intentions**

How likely is it that you will quit your job for non-retirement reasons within the next

year?

Scale: 1 – Not at all likely, 2 – Not very likely, 3 – Somewhat likely, 4 – Very likely 5 – Extremely likely

## Appendix F

Absenteeism

How many days were you off the job in the last year because of *your* health only (colds, flu, injuries, etc.), not including days you were off the job because of someone else's health (e.g., child or parent)?"

Excluding vacation time, excused time, and holiday time, how many total days were you off last year?

### Appendix G

### Neuroticism

Factor IV (Emotional Stability) scale of the Big-Five Factor Markers provided by the

International Personality Item Pool (IPIP).

How accurate are the following statements?

I am relaxed most of the time. I seldom feel blue.

I get stressed out easily. I worry about things. I am easily disturbed. I get upset easily. I change my mood a lot. I have frequent mood swings. I get irritated easily. I often feel blue.

Scale: 1 – Very Inaccurate, 2 – Moderately Inaccurate, 3 – Neither Inaccurate nor Accurate, 4 – Moderately Accurate, 5 – Very Accurate

### Appendix H

#### Demographics

What is your age?

Please indicate your gender (male, female, non-binary, preferred self-identification: \_\_\_\_\_, prefer not to answer)

Please identify your race / ethnicity (White, African American, Hispanic, Asian American, Pacific Islander, Alaskan, preferred self-identification: \_\_\_\_\_, prefer not to answer)

How many years have you been working at your current job?

About how many hours per week do you work at your job?

What is your level of supervisory responsibility? (None, 1st Line Supervisor, Middle Level Manager, Top Level Executive)

Please provide your MTurk ID.

Your worker ID is only being requested so that you can still be paid if the completion code is not generated properly by the survey website. Your ID will be deleted from the data file prior to any analyses being run, in order to better protect your identity.
### Appendix I

#### IRB Letter of Approval

February 6, 2017

Rylan Heischman

Re: Protocol #16-060, Before you Send That: Comparing the Outcomes of Fact-to-Face and Cyber Incivility

Dear Mr. Heischman:

The IRB has reviewed the materials regarding your study, referenced above, and has determined that it meets the criteria for the Exempt from Review category under Federal Regulation 45CFR46. Your protocol is approved as exempt research, and therefore requires no further oversight by the IRB. We appreciate your thorough treatment of the issues raised and your timely response.

If you wish to modify your study, including the addition of data collection sites, it will be necessary to obtain IRB approval prior to implementing the modification. If any adverse events occur, please notify the IRB immediately.

Please contact our office if you have any questions. We wish you success with your project!

Sincerely,

Morell E. Mullins, Jr., Ph.D. Chair, Institutional Review Board Xavier University

MEM/sb

### Appendix J

#### IRB Letter of Modification Approval

March 6, 2017

Rylan Heischman

Re: Protocol #16-060, Before you Send That: Comparing the Outcomes of Face-to-Face and Cyber Incivility

Dear Mr. Heischman:

The IRB has reviewed the request to modify your study, referenced above. We understand that you wish to increase the compensation by .20 cents for future participants and provide an additional .20 cents to participants who have already completed the survey. We are able to continue to approve your study based on the information you provided. Therefore, your above-referenced study, as modified, continues to be approved in the Exempt category under Federal Guidelines 45CFR46.

Please note that if you wish to further modify your study, it will be necessary to obtain IRB approval prior to implementing the modification. If any adverse events occur, please notify the IRB immediately.

We truly appreciate your efforts and attention to compliance within the spirit of human subject's protection. We wish you great success with your research.

Sincerely,

Morell E. Mullins, Jr., Ph.D. Chair, Institutional Review Board Xavier University

MEM/sb

## Appendix K

## MTurk Interface

# Please note that you will have to enter a survey completion code provided at the end of the survey in order to be compensated, if eligible.

1. Please enter your unique survey completion code located on the final page of the survey. **You must enter your completion code HERE:** 

[Box for number was included here]

Also, please SAVE your unique identifier because you will be asked to enter it once AT THE END OF THE STUDY to ensure you receive payment if the completion code is not generated properly by the survey website.

2. Please click the following link in order to access the survey. After you complete the survey, click the "Submit" button below.

[Survey link was included here]

[SUBMIT]

## Appendix L

MTurk Interface (second administration)

## Please note that you will have to enter a survey completion code provided at the end of the survey in order to be compensated, if eligible.

This survey has been posted through MTurk before. If you have already taken this survey through MTurk, HIT ID:

3U18MJKL1UMZXI841WUDPXXASRENCS, please do not complete this HIT. If you submit the HIT, and you have already completed this survey, your HIT will be rejected, and you will not be compensated. If you aren't certain whether you have taken part, you can contact the researcher at heischmanr@xavier.edu and provide me with your worker ID number, and I will be happy to verify whether or not you have taken part.

1. Please enter your unique survey completion code located on the final page of the survey.

## You must enter your completion code HERE:

[Box for number was included here]

## Also, please SAVE your unique identifier because you will be asked to enter it once AT THE END OF THE STUDY to ensure you receive payment if the completion code is not generated properly by the survey website.

2. Please click the following link in order to access the survey. After you complete the survey, click the "Submit" button below.

[Survey link was included here]

[SUBMIT]

### Appendix M

#### Informed Consent

You are being given the opportunity to volunteer to participate in a project conducted by Rylan Heischman through Xavier University.

The purpose of this study is to investigate participants' feelings on their work and how they communicate with others. To be eligible to participate in this study, participants must be required to communicate with their coworkers and supervisors in-person and online as a part of their job. This study will consist of 4 surveys: 1 about how you feel about your work, 2 about how you communicate at your work, and 1 demographic survey. Overall, this study should take about 10 minutes to complete.

Discomfort/Risks: There are no known risks to completing this study.

Benefits: participants who complete the study will be compensated with \$0.40. Please note that some items in this survey are included to check the quality of responses. If you do not pass the quality check items or complete all of the required items, please be aware that you will not receive any compensation for this HIT and your HIT will be rejected.

Data will be collected anonymously and therefore your answers cannot be linked to you.

If you decide to participate in the project, please move on to the next page.

You are free to withdraw from this study at any time, but if you withdraw before completing the study, you will not receive any compensation.

At the end of the study the survey website will generate a unique completion code. You must enter this completion code on the MTurk website before submitting the HIT in order to be compensated.

If you have any questions at any time during the study, you may contact Rylan Heischman at heischmanr@xavier.edu. You may also contact the Thesis chair, Dr. Mark Nagy at nagyms@xavier.edu. Questions about your rights as a research subject should be directed to Xavier University's Institutional Review Board at (513) 745-2870, or at the email address irb@xavier.edu. By proceeding, you acknowledge that you have been given information about this research study and its risks and benefits, and freely give your consent to participate in this research project.

#### Appendix N

#### Informed Consent (second administration)

You are being given the opportunity to volunteer to participate in a project conducted by Rylan Heischman through Xavier University.

The purpose of this study is to investigate participants' feelings on their work and how they communicate with others. To be eligible to participate in this study, participants must be required to communicate with their coworkers and supervisors in-person and online as a part of their job. This study will consist of 4 surveys: 1 about how you feel about your work, 2 about how you communicate at your work, and 1 demographic survey. Overall, this study should take about 10 minutes to complete.

Discomfort/Risks: There are no known risks to completing this study.

Benefits: participants who complete the study will be compensated with \$0.60. Please note that some items in this survey are included to check the quality of responses. If you do not pass the quality check items or complete all of the required items, please be aware that you will not receive any compensation for this HIT and your HIT will be rejected.

This survey has been posted through MTurk before. If you have already taken this survey through MTurk, HIT ID: 3U18MJKL1UMZXI841WUDPXXASRENCS, please do not complete this HIT. If you submit the HIT, and you have already completed this survey, your HIT will be rejected, and you will not be compensated. If you aren't certain whether you have taken part, you can contact the researcher at heischmanr@xavier.edu and provide me with your worker ID number, and I will be happy to verify whether or not you have taken part.

Data will be collected anonymously and therefore your answers cannot be linked to you.

If you decide to participate in the project, please move on to the next page.

You are free to withdraw from this study at any time, but if you withdraw before completing the study, you will not receive any compensation.

At the end of the study the survey website will generate a unique completion code. You must enter this completion code on the MTurk website before submitting the HIT in order to be compensated.

If you have any questions at any time during the study, you may contact Rylan Heischman at heischmanr@xavier.edu. You may also contact the Thesis chair, Dr. Mark Nagy at nagyms@xavier.edu. Questions about your rights as a research subject should be directed to Xavier University's Institutional Review Board at (513) 745-2870, or at the email address irb@xavier.edu.

By proceeding, you acknowledge that you have been given information about this research study and its risks and benefits, and freely give your consent to participate in this research project.

## Appendix O

## Debrief Form

Thank you for being a part of this study. The research question for this study concerned the difference between online and face-to-face interactions on feelings and behavior at one's work. This study is investigating incivility's effect on work attitudes.

Specifically, this study assessed perceptions of incivility one is experiencing faceto-face and in online interactions, and how satisfied respondents feel about their work, feelings of burnout respondents feel, how often respondents are absent from work, and if respondents want to leave their jobs. This study also investigated personality traits that may be related to how respondents feel about their work.

If you have any questions concerning the study, feel free to contact Rylan Heischman at heischmanr@xavier.edu.

Thank you again for participating.