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Hello Traitor: An Examination of Individual Differences in Perceptions of Technology-Related Workplace Incivility

by

David J. Howard

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Industrial-Organizational Psychology
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DEDICATION

This dissertation is dedicated to my husband, William Curry. Thank you for all the love and support throughout my entire academic career—a career that ended up taking a decade. Thank you especially because I had originally told you I would be going back to school for only a year and a half. I would also like to thank my parents, Timothy and Anita Howard, and Loretta Tisdale, for their love, support, and patience throughout this process. I would like to thank Roger Harville for always believing I could do this work, and who first mentioned I-O psychology to me. It is wonderful to know you never stopped believing that it could happen. Lastly, I would like to thank Gail Spector. Not only were you the best academic mom a doctoral student could ever have, you helped my husband support me throughout this endeavor, and for that I am forever grateful.

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ABSTRACT

Workplace incivility is unfortunately common among employees in today's workplace. The increase in usage of email, texting, smartphones, and social media for interpersonal workplace communication has led to an increase of these mediums being used in an uncivil manner. While there has been a growth of general workplace incivility research conducted in the past two decades, the extant literature lacks sufficient primary studies that examine technology-related workplace incivility. This research project aims to add to the burgeoning literature in the technology-related incivility content domain. First, it examined the prevalence of email incivility reported by workers and found a much lower prevalence (28.32%) than previously published research in this domain. The researcher conducted a thematic analysis on de-identified rude emails submitted by university faculty; this analysis became the foundation for developing a taxonomy of email incivility. Data from a subsequent survey led to validating and refining this email incivility taxonomy. The final taxonomy is comprised of eight email incivility characteristics: accusations, aggression, contextual factors (e.g., prior history of incivility), inappropriate recipients, inappropriate requests, structural elements, tone, and typographical emphasis. Through a series of four email incivility pilot studies and an experimental study focusing on voicemail incivility, the researcher measured several individual differences to test statistical relationships with ratings of incivility across ambiguous stimuli. Gender differences were consistent across the studies, in that more women than men rated ambiguous stimuli as uncivil. Among the other individual differences measured, only hostile attribution bias

consistently predicted ratings of incivility, while agreeableness had varying results, whether measured at the factor or facet-level. The most frequently cited emotional responses to receiving uncivil emails at work were being upset, angry, annoyed, frustrated, and feeling belittled.

INTRODUCTION

Traitor,

U traitor [name removed] and u [name removed] are not far behind . . .

I hope I never ever see either one of you again and I will try my darndest to make sure that never happens.

Have so much fun [sic] publishing your glorious nature paper.

—Anonymous Participant

Workplace incivility is unfortunately common in today's organizations, with researchers estimating that as many as 98% of employees report experiencing incivility at work, and nearly 50% of workers experiencing incivility on a weekly basis (Porath & Pearson, 2013). The above email was received by a professor from one of her colleagues at an American university, and for many reasons, it could be considered a severe example of cyber incivility. Cyber incivility refers to behaviors and comments transmitted through email, text, voice, or other information and communication technology (ICT) that the recipient interprets as rude, disrespectful, or harmful (Giumetti et al., 2012; Park et al., 2018).

While the content of the example email above is an extreme case of rudeness, there are more ambiguous aspects of communicating through ICT that can cause an individual to perceive exchanged communication to be uncivil, and there are notable differences between face-to-face

and ICT communication that could exacerbate negative reactions to messages transmitted through ICT. This research project examines what is perceived by individuals as rude or uncivil when communicating through ICT, what possible antecedents exist in how one perceives cyber incivility differently from others, and the emotional responses of an individual who receives communication they perceive to be uncivil.

Clark and Brennan (1991) note the trademarks of face-to-face conversation include co-presence (i.e., being in the same place and having the same surroundings as others); visibility (i.e., each person sees the other); audibility (i.e., the ability to hear intonation and timing of speech); co-temporality (i.e., each person hears the other at the exact moment the sound is produced); simultaneity (i.e., all parties have the ability to communicate at the same time); and sequentiality (i.e., conversation occurs in sequence without gaps). Friedman and Currall (2003) add that while email communication lacks these six trademarks, it contains unique aspects that face-to-face conversations lack. Namely, there is a written transcript of the conversation that can be reviewed by the recipient (i.e., reviewability), and the writer could revise what they wish to communicate before sending the email (i.e., revisability). In the context of this research, incivility acts as a stressor, and the ability to reread emails and ruminate about them might not be an advantage to email communication. Furthermore, there are possible downsides to revisability, as one could meticulously craft an email that is purposefully harmful to the recipient while lacking what others may perceive as obvious intent.

In addition to intentionally malicious communication, emails may be especially prone to misunderstandings. Without the visual and auditory cues that help convey meaning and intent in face-to-face communication, a well-intended remark may be mistaken for a malicious comment. Miscommunication can further be amplified by ambiguous social workplace norms, as people

within and across organizations hold different ideas about the proper length, formality, and tone of emails (Park et al., 2018).

While general research on workplace incivility has exploded since the turn of the millennium (Schilpzand et al., 2016), there has been a relatively sparse number of studies on cyber- or technology-related incivility conducted over the past two decades. This fact is alarming given the proportion of today's communication between employees that occurs through email, text, social media, and phone and voicemail. Even less attention has been directed toward understanding the characteristics of uncivil emails, and the individual differences that may contribute to ICT communication being perceived as uncivil by the recipient. This research seeks to contribute to further understanding technology-related incivility by beginning with an overview of general workplace incivility, followed by a comprehensive review of cyber incivility primary studies. Following this survey, the researcher conducted two main studies and four pilot ones, to examine and discuss the nature (i.e., the "what" and "why") of perceived technology-related incivility.

Workplace Mistreatment and Workplace Incivility

Workplace mistreatment, harassment, and violence generally refer to non-physical and physical mistreatment of others in the workplace and can be considered a stressor for the individuals who are targets of this behavior. Workplace mistreatment includes such topics as abusive supervision, bullying, incivility, social undermining, and interpersonal conflict (Hershcovis, 2011). Because of its role as a stressor, minimizing workplace mistreatment is vital to an organization and its employees' success. Meta-analytic results of workplace harassment, defined as "interpersonal behavior aimed at intentionally harming another employee in the workplace" (Bowling & Beehr, 2006, p. 998) show that there are several negative outcomes

associated with workplace mistreatment; including both physical symptoms (e.g., headache, nausea) and psychological well-being outcomes, such as anxiety, depression, and burnout (Bowling & Beehr, 2006). While some argue that this research domain may suffer from a bit of construct proliferation (Hershcovis, 2011), there are distinct conceptual differences in each of the mistreatment constructs; with the magnitude, frequency, and direction distinct depending on the respective area. For example, workplace bullying typically refers to repeated, prolonged intentional acts against an employee, whereas social undermining does not specifically refer to a repeated behavior, nor share the same level of intensity as bullying. Notably, abusive supervision is the sole mistreatment area that is not typically studied from the target perspective, and instead focuses on the actor's (i.e., supervisor's) behavior.

Workplace incivility is a unique mistreatment construct, in that it does not fall within Bowling and Beehr's (2006) definition of workplace harassment because it generally does not fit with the "intentional harm" aspect, but instead consists of actions that are of ambiguous intent. Pearson et al. (2005) define workplace incivility as "low-intensity deviant (rude, discourteous) behavior with ambiguous intent to harm the target in violation of workplace norms for mutual respect" (p. 179). Since uncivil behavior lacks overt intent, the perceptions and interpretations by the target generally determine whether an action is considered rude. Furthermore, incivility consists of behaviors that are less severe than bullying and physical violence, and the source (or actor) of the behavior can be those in more powerful positions than the target (e.g., supervisor), equal status as a coworker, or lower status (e.g., student to faculty). These distinctions are important in separating workplace incivility as a construct from other workplace aggression behaviors (Schilpzand et al., 2016).

Similar to Bowling and Beehr's (2006) workplace harassment findings, there are several potential negative outcomes associated with workplace incivility, and many that overlap with more generalized workplace mistreatment. Schilpzand et al.'s (2016) narrative review of workplace incivility comprehensively details these negative outcomes into four domains: affective, attitudinal, cognitive, and behavioral. Affective outcomes with multiple studies replicating effects include workplace incivility predicting depression (Lim & Lee, 2011; Miner-Rubino & Reed, 2010), emotional exhaustion / burnout (Kern & Grandey, 2009; Sliter et al., 2010), negative emotions (Kim & Shapiro, 2008; Sakurai & Jex, 2012), increased stress (Lim & Cortina, 2005; Miner-Rubino & Reed., 2010), increased work-family conflict (Ferguson, 2012; Lim & Lee, 2011), and a decrease in overall well-being (Ferguson, 2012; Lim & Lee, 2011). Attitudinal outcomes include reduced job satisfaction (Cortina, et al., 2001; Wilson & Holmvall, 2013) and lower organizational commitment (Lim & Teo, 2009). Cognitive outcomes include a reduction in memory recall (Porath & Erez, 2007) and fairness perceptions (Lim & Lee, 2011). Behavioral outcomes include targets enacting counterproductive work behavior (CWB; Kim & Shapiro, 2008; Penney & Spector, 2005), fewer organizational citizenship behaviors (OCB; Porath & Erez, 2007), and lower task performance (Porath & Erez, 2007; Chen et al., 2013).

While for the most part these outcomes are measured at the individual level, they lead to organizational outcomes as well, with Cortina (2008) noting that it is the organization that "absorbs the costs" of dissatisfied and disgruntled employees, job accidents, substance abuse, sick leave, and turnover resulting from workplace incivility. Pearson and Porath (2009) estimate workplace incivility costs organizations an average of $14,000 per employee each year.

Individual Differences Associated with Workplace Incivility

There are a bevy of antecedents that predict workplace incivility, and because the nature of incivility is ambiguous on at least one end of the actor-target relationship, a primary focus of this dissertation research is to examine the individual differences associated with perceptions of incivility. Of individual differences acting as predictors of perceived incivility, gender is perhaps the antecedent with the most mixed findings. Pearson and Porath (2009) state that men are twice as likely to be perpetrators of incivility, though men and women are equally likely to be targets of incivility. The extant workplace incivility literature also includes primary studies finding women experiencing workplace incivility more than men (e.g., Cortina et al., 2001; Cortina et al., 2013), that the larger the proportion of men in a workgroup, the more uncivil behaviors were experienced (Cortina et al., 2013), incivility being positively correlated with gendered harassment (Lim & Cortina, 2005), and women rating ambiguous video stimuli from the Clarence Thomas – Anita Hill proceedings as more uncivil than men (Montgomery et al., 2004).

Further muddying the waters is Lim & Lee's (2011) finding that men report more incivility than women in an Asian population. However, recent meta-analytic results support the *lack* of gender differences in perceived incivility, with both McCord et al. (2018) and Chris (2019) finding small gender effects, $\delta = 0.06$ and $\rho = 0.04$ respectively. In each meta-analysis, the 80% credibility interval included zero when measuring the relationship between gender and experienced incivility. Long story, short: when it comes to gender and incivility, it's complicated.

Cortina et al. (2013) posit that there are gender differences in perceptions of workplace incivility, and that these differences may be accounted for by the theory of selective incivility. Selective incivility refers to incivility that "can constitute a particularly insidious, behavioral

manifestation of modern / contemporary / covert sexism and racism" (Cortina, 2008, p. 55). Selective incivility theory operates under the assumption that some behaviors that researchers consider general incivility (i.e., rude behavior of ambiguous intent) are actually not general at all. Rather, the ambiguity in uncivil behavior allows perpetrators the ability to behave in a covert sexist / racist manner that runs counter to the current day workplace norms that are intolerant of overt sexist / racist behaviors. Cortina et al. (2013) explain that individuals who commit behaviors that can be perceived as uncivil could have plausible deniability and attribute them to other factors, such as carelessness or personality.

While Cortina's (2008) selective incivility theory proposes personality variables may be associated with *actors* of uncivil acts, research supports personality differences are related to the *targets* experiencing workplace incivility as well. Milam et al. (2009) found both self-reported and coworker-reported measures of both agreeableness and neuroticism significantly predicted experienced incivility. Agreeableness is a personality dimension that is largely composed of how one behaves in interpersonal situations, and is comprised of six facets: altruism, compliance, modesty, straightforwardness, tender-mindedness, and trust (Costa et al., 1991). Those who are disagreeable tend to be uncooperative, rude, skeptical, and mistrustful (McCrae & Costa, 1987), and it follows that those who are more disagreeable will perceive ambiguous situations as being uncivil more than those who are trusting and sympathetic. Individuals low in neuroticism are considered calm, even-tempered, and emotionally stable, while those high in neuroticism are anxious and worrying. The six facets of neuroticism include anxiety, depression, hostility, impulsiveness, self-consciousness, and vulnerability. In the context of email communication, those who are high in neuroticism may be more prone to appraise ambiguous or neutral stimuli as uncivil or hostile. Milam et al. (2009) furthered the direct effect of agreeableness and

neuroticism on perceived workplace incivility by positing that those who are highly neurotic and disagreeable make themselves easier targets for incivility by displaying characteristics of provocative behavior more often than those who are agreeable and emotionally stable.

Another individual difference that could account for variation in perceived workplace incivility is one's attribution style. Attribution style is the tendency to make sense of events by attributing causal explanations to them. One attribution style that is gaining attention among researchers in the organizational sciences is hostile attribution bias (Martinko et al., 2011). Hostile attribution bias is the tendency for individuals to interpret the ambiguous behavior of others as deriving from hostile intentions, and there is a heightened opportunity for hostile attribution bias to manifest itself when situations lack social context cues (Milich & Dodge, 1984). Wu et al. (2014) found a direct correlation between workplace incivility and hostile attribution bias in their study of Chinese manufacturing employees and found hostile attribution bias (and negative reciprocity beliefs) to strengthen the relationship between incivility and interpersonal deviance. Zhou et al. (2015) also found hostile attribution bias to be a significant moderator between daily workplace incivility and one's negative affect at the end of the workday.

Negative affectivity (NA) is the "pervasive individual differences in negative emotionality and self-concept" (Watson & Clark, 1984, p. 465). When considering NA as a construct, NA is very similar to neuroticism, such that neuroticism closely resembles an individual's average NA level across time (Miller et al., 2009). Because of the relationship between negative emotions and workplace incivility (e.g., Kim & Shapiro, 2008; Porath & Pearson, 2012; Sakurai & Jex, 2012), measuring one's trait-like tendency to experience negative emotions can help researchers glean insight into the process of the perceptions of workplace

incivility. Milam et al. (2009) speculated "an individual high in NA may perceive an innocuous comment or action by a coworker as threatening and in turn, respond in an uncivil manner. Others may see this response as contentious or confrontational, making the high-NA individual a provocative target" (p. 60). Penney and Spector (2005) found a bivariate correlation between self-reported negative affectivity and incivility. Furthermore, Giumetti et al. (2013) found undergraduate participants who were in an experimental condition receiving uncivil emails from their "supervisor" reported higher levels of state-like NA than those in a control condition.

Cyber Incivility

It would not be hyperbole to say that the ascent of email communication as a preferred method for coworkers to interact with each other has been one of the most transformative ways in which organizations now operate in the 21st century. Along with the groundbreaking positive effects of being able to communicate globally by just clicking the "send" button, there are negative consequences as well. Chief among these negative effects is the proliferation of cyber incivility, as the prevalence of incivility through email and other ICT devices is shockingly high. Lim and Teo (2009) reported 91% of their participants receiving an uncivil email from their supervisors, and Park et al. (2018) found over a third of their respondents received at least one email per day that they perceived to be rude. While Schilzpand et al. (2016) noted the escalation in the number of general workplace incivility articles in the past two decades, the extant cyber incivility research has not been commensurate with its relative occurrence.

Two of the earliest publications focusing on email incivility as a separate construct, and perhaps a more harmful one than face-to-face incivility, were theoretical papers. In addition to the identification of reviewability and revisability as trademark differences in email communication, Friedman and Currall (2003) noted that communicating through email is largely

an asocial behavior, with the sender typically constructing emails in isolation from the recipient. Thus, not only are the social cues present in face-to-face communication missing, but there also could be a diminishing of the "humanness" of the recipient, which could lead to the sender communicating in a vastly different manner. Friedman and Currall (2003) developed a theoretical model consisting of four precursors to conflict escalation via email: diminished feedback, minimal social cues, length of email, and excess attention (i.e., ruminating about an email). Byron (2008) added that the structure and perceptions of emotion in email communication contribute to a *neutrality effect* and a *negativity effect*. The neutrality effect states that an email recipient is more likely to interpret communication that the sender intended to reflect positive emotion as neutral, and the negativity effect reflects recipients inaccurately perceiving neutral emotion as negative emotion. Both theoretical papers highlight the difficulty in communicating through email and the potentially negative consequences of possible misperceptions on the part of the recipient.

Like workplace incivility, intention to harm on the actor's part is not a requirement for cyber incivility. What one person thinks is a perfectly acceptable means of communication is not necessarily what the person on the receiving end deems appropriate. Social norms are not always as salient in email communication, and some behaviors that email recipients find rude, others may have no issue with at all. Lim and Teo's (2009) is one of the first published primary studies found that examined cyber incivility. The authors used focus groups to ascertain which email behaviors individuals perceived as uncivil and examined how email incivility was associated with negative workplace outcomes. The authors found that email incivility behaviors could be separated into two categories: active and passive behaviors. Active uncivil email behaviors include writing emails that were perceived by the recipient as being hurtful, condescending,

derogatory, or writing negative things that would never occur in a face-to-face conversation. Passive uncivil email behaviors include using email for time-sensitive issues (e.g., giving short notice to schedule a meeting), using email for discussions that require face-to-face communication, not replying to email in general, and not acknowledging an email that specifically requested a response.

Lim and Teo (2009) also found interesting gender effects. They found male supervisors were more likely than women to commit active uncivil email behaviors, whereas female supervisors were more likely than men to commit passive behaviors. They speculated this gender difference occurred because men are more likely to be assertive and openly display displeasure in their email communication, while women are less likely to be confrontational. Furthermore, Lim et al. (2008) found that male supervisors were more likely to be uncivil to male employees than female employees, and that while the results were not significant, the same pattern emerged with female supervisors being more uncivil through email to female employees. While passive behaviors might not seem to be as malevolent as active behaviors, not getting a response to an email that asks for one could lead to an employee ruminating about an email sitting in their sent folder that requires a response. The use of email as the means of communication in a situation that requires face-to-face interaction can lead to a stressful situation for the recipient because they are unable to ask for clarification in real-time (Park et al., 2018).

Though the gender of the sender was one of the few individual differences studied in the extant cyber incivility literature, most of the published research in this domain examines the negative outcomes associated with email incivility. Multiple studies employ Conservation of Resources theory as the framework for email incivility acting as a stressor to employees (e.g., Giumetti et al., 2012; Giumetti et al., 2013; Park et al., 2018). Conservation of Resources theory

states resources are "those objects, personal characteristics, conditions, or energies that are valued by the individual" (Hobfoll, 1989, p. 516), and that individuals only have a limited number of resources available. Receiving an uncivil email might require individuals to expend resources dealing with the stressor, and the resource depletion could manifest itself as strain (Park et al., 2018). Giumetti et al. (2012) found receiving uncivil emails from supervisors predicted absenteeism, burnout, and turnover intentions. The relationship between cyber incivility was moderated by neuroticism, such that those high in neuroticism experienced more strain. Notably, there were gender differences in perceived email incivility in the first sample collected for this study (d = 0.30). While not directly discussed, it appears from the correlation matrix that females perceived incivility more than males. However, the authors decided to use gender as a control variable in their analysis of their second sample instead of examining the main effect of gender or a variable of interest. Other negative outcomes associated with cyber incivility include an increase in negative affect (Giumetti et al., 2103), lower organizational commitment and job satisfaction (Lim & Teo, 2009), counterproductive work behavior (Wu et al., 2013; Scisco et al., 2019), work-family conflict (Park & Haun, 2018) and physical symptoms including increased heart rate (Park et al., 2018; Scisco et al., 2019).

While there is a burgeoning literature focusing on the negative outcomes related to cyber incivility, there is scant focus on the individual differences or predictors in perceptions of email incivility. One exception is Francis et al. (2015), who found that environmental factors such as high workload and a response to an uncivil stimulus prompted cyber incivility as a response in an experimental condition. Even less attention has been paid to exactly "*what*" constitutes email incivility. To date, Lim and Teo (2009) created a scale informed by a focus group to measure the frequency of the active and passive email behaviors mentioned in the prior section. Others have

adapted the Workplace Incivility Scale (Cortina et al., 2001), by far the most used scale in workplace incivility research, by adding the word "online" to the scale items (e.g., Giumetti et al. 2012). McCarthy (2016) took a novel qualitative approach by asking 15 employed individuals about their experiences with email incivility. In measuring cyber incivility, none of these approaches use actual examples of email incivility or examined individual differences as potential predictors of perceptions of cyber incivility. The following study sought to contribute further understanding of cyber incivility by analyzing email content to increase the understanding of *what* employees perceive as uncivil and the subsequent pilot studies examined possible individual differences associated with perceptions of email incivility.

CHAPTER ONE:

STUDY ONE

The goal of the first study examining email incivility was to determine what aspects of email communication recipients perceived to be uncivil. While one primary study had questioned focus groups to determine what email communication behaviors (e.g., not responding to an email; Lim & Teo, 2009) could be perceived as uncivil, the impetus for this study was a difference in perceptions of incivility among a research group to a publicly sent email in an academic setting. Thus, the first step in the overall research behind this dissertation was to take an inductive approach and obtain emails that were perceived as uncivil by faculty among three universities in the Florida state university system and then analyze those emails for aspects that could be perceived as rude.

Method and Participants

Faculty members at three large Florida public universities were solicited by email to participate in a study on workplace cyber incivility through Qualtrics that asked them to "copy and paste an email that you received at work that you perceived to be rude or uncivil". Because of the sensitive nature of asking the participants to provide deidentified emails, limited demographic information was collected in an extra effort to preserve anonymity of the respondents. Additionally, University of South Florida psychology professors and instructors were removed from the sample frame so that the research team could minimize identification of any of the participants through the content of their respective emails. Seventy-five faculty

members across the three universities responded, with one faculty member submitting three emails for a total of 77 emails for the analysis. The participants were 65.33% (N = 49) female, 33.33% (N = 25) male, with one participant (1.33%, N = 1) choosing to not indicate their gender. The only other demographic variable collected from these participants was their job tenure, with the mean tenure as an instructor or professor being 9.97 years (SD = 7.62), ranging from 1 year to 38 years.

In addition to copying a de-identifiable version of the email perceived as uncivil into the Qualtrics survey, the participants were also asked, "What aspects of the email did you find rude or uncivil?" which provided more qualitative data to support the email content itself. The respondents were then asked the gender of the sender of the email, their rating on a scale of 1 (not rude) to 10 (extremely rude) of how rude they found the email, their behavioral response to the email, whether the email was sent to just the recipient or multiple recipients, and whether they perceived the sender to be of an equal (i.e., peer), higher (e.g., chair, dean), or lower (e.g., student) status.

Results

Three researchers analyzed the de-identified emails Using the six-step thematic analysis approach detailed in Braun and Clarke (2006), I analyzed and coded the de-identified emails with the assistance of two additional incivility researchers. Each coder first became familiar with the data by independently reading all 77 emails and their content multiple times without reading the explanation given as to what aspects the recipient found uncivil. During this stage, the coders noted initial ideas for themes present in the email content. After the initial stage of focusing solely on the email content without context, the participants' responses to "what aspects" they found rude were then considered. The coders then independently generated initial codes of

interesting features of the data, tracking data relevant to each code. I led the two other coders, and we compiled our codes and I searched for themes. After reviewing and reaching consensus as a group, I generated clear definitions and names for the nine themes described below.

Accusations

One of the most commonly occurring themes was the use of accusations. Accusations are defined as explicit or implied allegations of wrongdoing and/or poor character. A department chair received the following email from one of the professors in their department:

> Why are all my courses Regional studies courses? This is prejudice to me. I really hope that I can teach the other course either as Wealth [sic] and Power or International political culture. The first is a required class and the second one was quite popular before. I do not hope to be confined as a regional expert.

In this case, the department chair felt they were being accused of discrimination and that they were being unreasonably criticized because they schedule classes with faculty insight and according to student demand. While this email may be an extreme case of accusations in email; in general, accusations that are perceived as unfair or unmerited appeared especially upsetting to recipients.

Aggression

Aggressive emails are those that contain threats, profanity, or harassment. One professor received an email that read,

> [I]t has now been over 48 hours since I expressed my concern to you [...] I am optimistic you will resolve this situation to my satisfaction in order to avoid an escalation of my concerns to both college and university administration [...].

While most of the emails analyzed were not extremely aggressive, relatively minor forms of aggression such as the threat of escalation can be quite upsetting to recipients. Passive aggression also emerged as a theme, and the coders decided to not separate passive aggression from the other aggressive emails. Passive aggression in email looks quite different than other aggression and often presented itself as dismissive or disingenuous language. For example, a faculty member received an email from recalling, "The memory of last year's faculty meeting where my Certificate Proposal was a target of vehement Clannish attacks [...] remains vivid in my eyes. Wishing you a productive meeting and Happy Summer to all. [smiley face emoji]"

The recipient noted the "passive aggressive nature" of the email, likely because the well wishes would seem disingenuous and spiteful. The passive aggressive nature is also highlighted by ending the email with an emoji. While emojis can be helpful conveying emotion in email (hence the name), in this case it is being used to further antagonize the recipients.

Contextual Factors

Contextual factors included power imbalance, gender differences between the recipient and sender, and a prior history of incivility between the sender and recipient. For example, one professor provided an email that the researchers did not perceive as particularly uncivil when read in isolation. The email was from a graduate program coordinator to a professor and reads:

> Dr. [me]: I am deeply troubled by your Email.
>
> [Ph.D. applicant] has a BS in Math. from U.C. Berkeley, an MS in Biology from Stony Brook, and an MS in CS from Rutgers, many publications, and letters of support from top people. The fellowship application form stipulates the criteria to award the Fellowships:
>
> - All new students entering research doctoral degrees as full-time students are eligible for nomination.

- Requires a highly competitive GRE or GMAT score for the program.
- Requires evidence of experience in the discipline; awards, recognition, or honors; or professional contributions and achievements.

> There is nothing about the needs of the student or of the faculty nominating the student. I believe that the awards committee will only look at the items mentioned above and decide who deserve these highly prestigious fellowships. This is the reason why we also forwarded the nomination of an applicant with a perfect GRE Quant score 170! Any advise for Prof. [other prof] who nominated the applicant?

Upon inspection of what aspects of the email the recipient found uncivil, they responded "the problem with the email is that the same graduate coordinator has stymied my ability to recruit Ph.D. students multiple times in the past." Because of the sender's position of authority and prior history with the recipient, what could be perceived by others as a formal, detailed, civil email was perceived as just the opposite by the recipient.

High-Horse Tone

Participants in the study also provided emails containing condescending, arrogant, and/or entitled remarks. An associate professor of medicine received an email from a student's parent requesting time off for his daughter. In one section of the email, the parent wrote,

> I am an XXXX surgeon in practice for 30 years . . . My wife is a XXXX [medical professional], my oldest son is an XXXX [medical professional], my daughter-in-law is a XXXX [medical professional]. Moreover, my father-in-law was for many years dean of student affairs in the XXXX country.

While the recipient noted many uncivil aspects of the email, the "most offensive is the sense of entitlement" and arrogance.

Inappropriate Recipients

Emails are sometimes considered uncivil when they are sent to inappropriate recipients. Inappropriate recipients include individuals outside of the conversation and/or individuals unable to address the content of the email. Emails sent to multiple people that the recipient believes should just been sent to themselves are also included in this grouping. Using the "reply-to-all" option when inappropriate falls under this category. As an example, a professor reached out to another professor recommending a doctoral student for a course instructor position. The responding professor expressed his concerns that the student was not well-qualified, and he "cc'd my dept chair AND the faculty member he was recommending [for the position...]." The recipient was extremely upset that others were brought into the exchange.

Inappropriate Requests

Inappropriate requests include unnecessary or unreasonable requests, as well as volunteering requests framed as obligations. To illustrate, a professor received an email from their department chair in which the said, "I ask you to think carefully about all [the department has done for you] when the department needs senior faculty to . . . fulfill their responsibilities by putting their names up for election to the Exec Council." In essence, the department chair was "volun-telling" the professor to increase their service to the university by serving on the executive council.

Structural Elements

Structural elements are characteristics impacting how the email is constructed by the sender. Examples of structural elements that were perceived as uncivil or rude by the participants included using an incorrect salutation (e.g., the use of Mr. or Mrs. instead of Dr.), lack of

salutation or valediction, excessive brevity or length of the email, and the sender's grammar. An instructor received an email from a student that read in its entirety, "[instructor's name], I gave you access to the google doc for assignment 4, why did I receive a 0. [student's name]." The recipient noted that the lack of a proper salutation and the student's poor grammar were uncivil.

Typographical Emphasis

Typographical emphasis involves the stressing of words or phrases in an email. Examples include italics, bold, caps lock, underline, exclamation marks, and quotation marks. In the earliest days of email communication and online behavior, correct usage of typographical emphasis was the key to proper online etiquette. People receiving emails containing typographical emphasis might not think that the email is rude or uncivil, especially if the emphasis is used lightly. But typographical emphasis may exacerbate existing incivility. For example, a professor received an email from another faculty member stating, "YOU have no RIGHT to assign a GRADE in my absence." The recipient indicated that the use of caps lock was uncivil, presumably because it emphasized the accusatory nature of the email.

Unaccountability

Unaccountability is depicted in emails when individuals deny responsibility for mistakes or make defensive remarks. After expressing concern about missing lab materials, an assistant professor received an email from a graduate teaching assistant that said: "My students never touch glassware from the [...] lab bins [...]." Like other cases of unaccountability, the professor perceived the remark as unnecessarily defensive and uncivil.

In summary, the nine themes extracted from the thematic analysis were: accusations, aggression, contextual factors, high-horse tone, inappropriate recipients, inappropriate requests,

structural elements, typographical emphasis, and unaccountability. In addition to the email incivility themes, there were some interesting results from this first study. Nearly two-thirds of the participants were female and when examining the gender of the sender to the gender of the recipient, there was an even split in the gender of the sender for the emails sent to females (25 emails each), but only nine emails where the recipient of the email was male and the sender of the email was female; and 15 emails where the recipient of the email was male and the sender of the email was male. There was a fairly even mix of perceived status-level of the email sender, with 24 (31.17%) being perceived as a higher status than the recipient, 20 (25.97%) as equal status, and 32 (41.56%) from a lower-status individual. The behavioral responses to the uncivil email were less evenly split; with 46 (59.74%) responding with what the participant felt was a civil email, 21 (27.27%) choosing to not respond at all, 6 (7.8%) responding to either the sender's supervisor or the sender and the supervisor, 1 (1.3%) responding in-person, and 1 (1.3%) admitting they responded with an equally uncivil email.

Pilot Study One

Armed with a better understanding of what individuals perceive as uncivil, the research team proceeded to examine why there are differences in the level of incivility individuals perceive in email communication.

Method and Participants

The first step was creating stimuli (i.e., sample emails) to be used in an experimental setting to examine these differences and to test how individual differences that were related to general workplace incivility would be associated with email incivility stimuli. Twelve sample

emails were constructed based on the content and taxonomy in the first study to test as stimuli with an undergraduate sample. An example email read,

> No one is an island in this department, and you yourself have benefited from the help of others. For example, were it not for the advocacy of one of your colleagues, your name would have been placed on the "deadwood" employee list. I ask you to think carefully about all this at the moment when the department needs someone to step up to the plate to put their names up for election to this volunteer committee.

An initial sample was used to test whether the stimuli could be interpreted as ambiguously uncivil. A total of 206 employed participants were recruited from the University of South Florida psychology department SONA pool for this part of the pilot study. The sample was 80.58% female (n = 165), 19.42% male (n = 40), with one person who chose not to answer. Fifty-five percent (n = 113) of the individuals used email for their current job. In addition to the 12 email vignettes, demographic information was collected, as was Likert-type responses to the following individual difference/personality variables: agreeableness, neuroticism, self-esteem, trait-like negative affectivity, trait anger, hostile attribution bias, and narcissism. Most of these variables were chosen because of their link to workplace incivility detailed above; however, it should be noted that this work is considered exploratory and variables such as narcissism were chosen after a group of four researchers discussed what variables we thought may impact perceptions of email incivility. Thus, there were not any hypotheses created for this pilot study, as the main purpose was creating the stimuli.

Measures

For each of the individual difference variable items, the participant was asked to use the following as their frame of reference: "Please use the rating scale below to describe how

accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future." Participants rated themselves on each item from strongly disagree to strongly agree.

Agreeableness was measured using the freely available NEO-PI-R 10-item Likert-type scale (Goldberg, 1999) obtained from the International Personality Item Pool (IPIP) website (http://ipip.ori.org). A sample item is "Believe that others have good intentions." The internal consistency reliability of the scale in this sample was $\alpha = 0.85$.

Hostile attribution bias was measured using the Bal and O'Brien (2010) 7-item scale. A sample item is "When coworkers leave me out of social events, it is to hurt my feelings." The internal consistency reliability of the scale in this sample was $\alpha = 0.85$.

Narcissism was measured using 10 items that were adapted to a Likert-type scale format from items selected from the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979). A sample item from the NPI is "I have a natural talent for influencing people." The internal consistency reliability of the scale in this sample was $\alpha = 0.83$.

Neuroticism was measured using the IPIP NEO-PI-R 10-item Likert-type scale (Goldberg, 1999). A sample item is "Have frequent mood swings." The internal consistency reliability of the scale in this sample was $\alpha = 0.87$.

Self-Esteem was measured using the 10-item freely available IPIP self-esteem scale (Goldberg, 1999) that is based on the Rosenberg (1965) General Self-Esteem Scale. A sample item is "Just know that I will be a success." The internal consistency reliability of the scale in this sample was $\alpha = 0.88$.

Trait Anger was measured using the 10-item IPIP NEO facet scale (Goldberg, 1999). A sample item is "Get irritated easily." The internal consistency reliability of the scale in this sample was $\alpha = 0.88$.

Negative Affectivity was measured using 10 items from the Positive Affect and Negative Affect Scale (PANAS). Unlike the other measures, the responses for the PANAS items used the following context: "Please use the rating scale below to describe the extent to which you experience the mood state during the past month" and used the following range of responses: very slightly or not at all, a little, moderately, quite a bit, very much. The internal consistency reliability of the scale in this sample was $\alpha = 0.75$.

Results

The primary finding from this study was that it is very difficult to write emails that are ambiguously uncivil, as the means for each email (see Table 1) were heavily skewed (less than 3 or greater than 7 on a scale of 1 to 10). Two of the emails had means that were somewhat close to the middle of the scale range and displayed variability (email #1 – M = 6.67, SD = 2.29; email #11 – M = 6.72, SD = 2.46).

Table 1. Descriptive Statistics of Sample Emails in Pilot Study One**.**

	N	Min	Max	Mean	SD
Email 1	206	1	10	6.67	2.29
Email 2	206	3	10	9.51	1.31
Email 3	206	1	10	8.63	1.94
Email 4	206	2	10	8.94	1.60
Email 5	206	3	10	8.83	1.58
Email 6	206	1	10	7.03	2.42
Email 7	206	1	10	1.80	1.66
Email 8	205	1	10	2.70	2.08
Email 9	206	1	10	7.49	2.94
Email 10	206	1	10	8.72	1.77
Email 11	206	1	10	6.72	2.46
Email 12	205	2	10	7.72	2.08

Bivariate correlations of these two emails with the individual difference variables were calculated and none of the personality variables had significant correlations with either of the email ratings (see Table 2). However, for both e-mails, women reported them as more uncivil.

Table 2. Correlation Matrix for Pilot Study One Variables**.**

		Email 1	Email 11	Age	Gender	HAB Total	Self Esteem Total	Agree Total	Neuro Total	Trait Anger Total	Narcissism
Email 1	Pearson Correlation	1	.181**	0.126	.181**	0.080	0.103	0.011	-0.038	0.056	0.063
	Sig. (2-tailed)		0.009	0.073	0.009	0.257	0.149	0.876	0.592	0.426	0.369
	N	205	205	204	205	205	199	198	198	202	205
Email 11	Pearson Correlation	.181	1	0.098	.153	0.096	0.038	-0.036	0.025	0.015	0.016
	Sig. (2-tailed)	0.009		0.162	0.029	0.173	0.592	0.619	0.725	0.830	0.816
	N	205	205	204	205	205	199	198	198	202	205
Age	Pearson Correlation	0.126	0.098	1	-0.003	-0.050	.186**	0.045	-.278**	-.185**	-0.061
	Sig. (2-tailed)	0.073	0.162		0.971	0.481	0.009	0.527	0.000	0.009	0.386
	N	204	204	204	204	204	198	197	197	201	204
Gender	Pearson Correlation	.181**	.153*	-0.003	1	-0.035	-0.088	0.136	.169*	0.104	-0.113
	Sig. (2-tailed)	0.009	0.029	0.971		0.621	0.219	0.057	0.017	0.140	0.108
	N	205	205	204	205	205	199	198	198	202	205
HABT Total	Pearson Correlation	0.080	0.096	-0.050	-0.035	1	-.305**	-.486**	.254**	.225**	.221**
	Sig. (2-tailed)	0.257	0.173	0.481	0.621		0.000	0.000	0.000	0.001	0.001
	N	205	205	204	205	205	199	198	198	202	205
Self Esteem Total	Pearson Correlation	0.103	0.038	.186**	-0.088	-.305**	1	.418**	-.760**	-.487**	.292**
	Sig. (2-tailed)	0.149	0.592	0.009	0.219	0.000		0.000	0.000	0.000	0.000
	N	199	199	198	199	199	199	193	193	196	196
Agree Total	Pearson Correlation	0.011	-0.036	0.045	0.136	-.486**	.418**	1	-.349**	-.502**	-0.087
	Sig. (2-tailed)	0.876	0.619	0.527	0.057	0.000	0.000		0.000	0.000	0.225
	N	198	198	197	198	198	193	198	193	196	198
Neuro Total	Pearson Correlation	-0.038	0.025	-.278**	.169*	.254**	-.760**	-.349**	1	.713**	-.158*
	Sig. (2-tailed)	0.592	0.725	0.000	0.017	0.000	0.000	0.000		0.000	0.026
	N	198	198	197	198	198	193	193	198	196	198
Trait Anger Total	Pearson Correlation	0.056	0.-15	-.185**	0.104	.225**	-.487**	-.502**	.713**	1	-0.010
	Sig. (2-tailed)	0.426	0.830	0.009	0.140	0.001	0.000	0.000	0.000		0.885
	N	202	202	201	202	202	196	196	196	202	202
Narcissism	Pearson Correlation	0.063	0.016	-0.061	-0.113	.221**	.292**	-0.087	-.158*	-0.010	1
	Sig. (2-tailed)	0.369	0.816	0.386	0.108	0.001	0.000	0.225	0.026	0.885	
	N	205	205	204	205	205	199	198	198	202	205

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

While there were no other significant bivariate correlations, one curious finding did stick out. Email #1 was the only email of the twelve that had an obvious male sender (John) and

female recipient (Samantha). One other email had an obvious female sender - male recipient, but all the other emails had no names or gender indicators in the email. When comparing the means of the gender of the participant with the ratings on email #1, females rated the email as more uncivil ($M = 6.90$, $SD = 2.19$) than males ($M = 5.88$, $SD = 2.39$); which was a statistically significant difference: $t(203) = 2.62$, $p < 0.01$, $d = 0.46$. Examination of the gender differences on email #11 showed a similar effect size and pattern: women rated the email as more uncivil ($M = 6.92$, $SD = 2.28$) than men ($M = 5.98$, $SD = 3.00$), though the data for this email failed Levene's test of equality of variances and when using a Welch t-test there was not a statistically significant difference; $t(203) = 1.87$, $p = 0.07$, $d = 0.36$.

In addition to determining what individuals perceived as uncivil in email communication and possible individual differences in perceptions of email incivility, a primary focus of this dissertation was to assess the prevalence of email incivility in the workplace. Thus, the respondents of this survey were asked if they had ever received an uncivil email at work, and if so, how frequently they received rude emails. Of the 204 respondents who answered the question, 31 (15.2%) stated that they had received an uncivil email at work. When answering the frequency with which they received uncivil emails, one (3.2%) stated they received them at least once a day, six (19.4%) received them a few times a week, one (3.2%) stated weekly, one (3.2% answered monthly, and 22 (71.0%) said less than once a month.

Pilot Study Two

Since the email vignettes used in pilot study one were so polarizing regarding their ratings, new email vignettes were created. This time, four additional email stimuli were specifically written to be ambiguous and included with the previous 12 vignettes, for a total of 16 email vignettes tested in pilot study two. The same demographic information was collected in

this study. However, because of the lack of a significant relationship with the email ratings in pilot study one, the personality variables that were collected in pilot study one were omitted this time, except for hostile attribution bias and narcissism. Participants were again recruited from the USF psychology department SONA pool. However, those who participated in study two were excluded from participating in this study. There was a total of 144 participants, with 82.6% female (n = 119) and 16.7% male (n = 24), and one person electing to not specify their gender.

Results

This time, we were fairly successful in creating stimuli with means near the middle of the range of 1–10 and having variation in the responses of the email vignettes as well (see Table 3). Emails 2, 8, 9, and 15 were the newly created ambiguous email stimuli.

One rather innocuous email (email 7) had a mean of 1.56 (SD = 1.51) but was moderately correlated with gender ($r = 0.17$, $p < 0.05$), and self-ratings of hostile attribution bias ($r = 0.40$, $p < 0.01$). The email read, “Just want to remind you about our meeting tomorrow at 1 PM. Don’t forget! ☺” This email served as a template for the following pilot studies. Another email that focused on meetings read, “I’m sorry that you forgot about our meeting. I made the decision without you.” This email (email 8) had a mean of 6.67 (SD = 2.43), and in combination with the email above the stimuli for the subsequent studies were created.

Table 3. Descriptive Statistics of Sample Emails in Pilot Study Two**.**

	N	Min	Max	Mean	SD
Email 1	144	1	10	6.81	2.17
Email 2	143	1	10	6.75	2.31
Email 3	144	1	10	2.06	1.91
Email 4	143	5	10	9.70	0.87
Email 5	144	1	10	8.78	1.77
Email 6	144	4	10	8.92	1.49
Email 7	144	1	10	1.56	1.51
Email 8	144	1	10	6.67	2.43
Email 9	144	1	10	7.21	2.22
Email 10	144	4	10	9.43	1.18
Email 11	144	1	10	7.12	2.43
Email 12	144	1	10	2.91	2.19
Email 13	144	1	10	8.00	2.54
Email 14	144	2	10	8.97	1.54
Email 15	144	1	10	6.10	2.69
Email 16	143	2	10	7.62	2.23

Pilot Study Three

Based on the results in pilot study one and two and having nearly two-thirds of the participants in study one as female, gender became a larger focus in the overall examination of technology-related incivility. The next step was to conduct a study that added upon the previous studies by adding the gender of the sender and recipient to the email stimuli and to examine if there were differences based on the gender, including that of the participant. I first piloted a study through USF's psychology department SONA system, but because it was during a slower part of the semester, I was only able to obtain 77 participants. While the number of participants was not large enough to have sufficient statistical power, a similar trend emerged of females perceiving email stimuli as more uncivil than males. I then conducted a survey of employed individuals who used email at work through Amazon's Mechanical Turk (MTurk).

Method

The study design changed from the previous attempts by presenting individuals with two email exchanges that took place between employees and asking the participant to rate the rudeness of both the sender and the recipient. One scenario presented the participant with an email conversation between two individuals who were setting up a meeting to hire an applicant from three people who interviewed for a job. After settling upon a time and date later in the week, one person sent the following email,

> I know it's Thursday. But I went ahead and made the decision without you. I offered the position to XXXXXXXXX. I have a million things to do and got tired of having to wait until it was convenient for you to meet.

In the other email exchange that was rated by participants, an individual was replying to a holiday party invitation sent by their regional manager and "replied to all". This email was responded to all by another party and stated,

> Once again, PLEASE, **do not reply** "to all" if only the sender needs to have your reply. If everyone replied "to all" as you have done, then I would have to delete > 30 messages—and since many go to duplicate in my inbox, I would have to delete > 60 messages!

The presentation order of the email exchanges was randomized, and the participants were randomly assigned to rate the exchanges with female or male senders and recipients for each of the scenarios, and if the sender and recipient was male or female sender/recipient for the first email exchange, the genders were reversed in the second scenario. For example, if a participant was presented with the interview exchange first and had a male being rude to the female, then they would next be presented with the reply-to-all holiday party scenario with the female being

rude to the male. Two important things to highlight are that these were not solely cross-gender email exchanges and that the conditions included female-to-female and male-to-male exchanges, and second, there was a manipulation check presented as the following Qualtrics block that asked the participants to recall the previous email exchange. Along with the demographic information and the gender sender/recipient manipulation, the participants' hostile attribution bias, agreeableness, self-esteem, and trait anger as individual differences were measured, with previous workplace incivility research showing that these differences may be related to ratings of email incivility. While there were not significant effects found in the previous studies of this dissertation research, these individual difference variables were added back into the study since the research had not yet been conducted on an MTurk sample. In addition to the individual differences being added back to the survey instrument, the participants were asked if they had ever received an uncivil email at work, and if so, how frequently did this occur.

Participants

A total of 320 participants were recruited, including 159 males, 160 females, and one person who identified as non-binary. Since gender differences were a primary focus and the non-binary participant did not specify their gender identity, the participant was dropped from the analysis. One participant did not fully complete the survey, thus there were a total of 318 participants for the data analysis, with the participants in roughly equal condition groups with the smallest group composed of 38 participants and 41 in the largest group. The average age of the participants was 38.38 years (SD = 10.36). There were 246 (77%) white / Caucasian participants, 23 (7%) black / African American / Afro-Caribbean, 21 (7%) Asian or Pacific-Islander, 19 (6%) Hispanic or Latino-American, 3 (1%) Native-American, and 6 (2%) who chose "other" as their ethnicity. Of the 318 participants, 119 (37.42%) stated they had received an uncivil email at

work. When answering the frequency with which they received uncivil emails, one (.84%) stated they received them at least once a day, seven (5.88%) received them a few times a week, five (4.20%) stated weekly, 13 (10.92%) answered monthly, and 93 (78.15%) said less than once a month.

Results

A factorial analysis of variance (ANOVA; 2x2x2) was conducted with the gender of the participant (male/female), the gender of the email sender (male/female), and the gender of the email recipient (male/female), as the independent variables, and the ratings of the sender's incivility was examined both separately and with a combined total as the dependent variable. Means and standard deviations for each condition are in Table 4 for the Interview scenario and Table 6 for the Reply-to-All scenario. Regarding gender, the *only* significant predictor of the sender's incivility ratings was a main effect of the gender of the participant in the scenarios (ANOVA results for the Interview scenario are in Table 5 and for the Reply-to-All scenario are in Table 7). There were no significant gender effects related to the gender of the sender or recipient in the email stimuli.

Table 4. Descriptive Statistics for the Interview Scenario in Pilot Study 3**.**

Participant Gender	Gender Sender	Gender Recipient	Mean	SD	N
Female	Female	Female	8.20	2.05	41
		Male	7.58	2.13	38
	Male	Female	8.32	1.94	41
		Male	8.23	2.05	39
Male	Female	Female	7.58	1.78	40
		Male	7.70	1.90	40
	Male	Female	7.73	1.95	40
		Male	7.28	2.11	39

Table 5. Factorial ANOVA Results for the Interview Scenario in Pilot Study 3**.**

Tests of Between-Subjects Effects						
Dependent Variable:	**Sender's Incivility**					
Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	η_p^2
Corrected Model	39.28[a]	7	5.61	1.417	0.12	
Intercept	19462.16	1	19462.16	4914.88	0.00	
Gender Participant	**20.66**	**1**	**20.66**	**5.22**	**0.02**	**0.017**
Gender Sender	1.27	1	1.27	0.32	0.57	0.001
Gender Recipient	5.17	1	5.17	1.31	0.25	0.004
Gender Participant * Gender Sender	5.39	1	5.39	1.36	0.24	0.004
Gender Participant * Gender Recip	0.73	1	0.73	0.19	0.67	0.000
Gender Sender * Gender Recip	0.01	1	0.01	0.002	0.97	0.000
Gender Participant * Gender Sender * Gender Recip	5.99	1	5.99	1.51	0.22	0.005
Error	1227.55	310	3.96			
Total	20764.00	318				
Corrected Total	1266.83	317				

Table 6. Descriptive Statistics for the Reply-to-All Scenario in Pilot Study 3.

Participant Gender	Sender Gender	Recipient Gender	Mean	SD	N
Female	Female	Female	6.76	2.28	41
		Male	6.55	2.60	38
	Male	Female	7.20	2.24	41
		Male	6.87	2.54	39
Male	Female	Female	5.50	2.55	40
		Male	5.98	2.47	40
	Male	Female	5.73	2.88	40
		Male	6.18	2.64	39

Table 7. Factorial ANOVA results for the Reply-to-All Scenario in Pilot Study 3.

Dependent Variable:	**Incivility Sender**					
Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**η_p^2**
Corrected Model	99.502[a]	7	14.215	2.223	0.032	
Intercept	12792.258	1	12792.258	2000.356	0.000	
Gender Participant	**79.300**	**1**	**79.300**	**12.400**	**0.000**	**0.038**
Gender Sender	7.005	1	7.005	1.095	0.296	0.004
Gender Recipient	0.805	1	0.805	0.126	0.723	0.000
Gender Participant * Gender Sender	0.537	1	0.537	0.084	0.772	0.000
Gender Participant * Gender Recipient	10.531	1	10.531	1.647	0.200	0.005
Gender Sender * Gender Recipient	0.098	1	0.098	0.015	0.902	0.000
Gender Participant * Gender Sender * Gender Recipient	0.049	1	0.049	0.008	0.930	0.000
Error	1982.447	310	6.395			
Total	14888.000	318				
Corrected Total	2081.950	317				

While this research was exploratory in nature, these findings could be considered curious, as one might have hypothesized that men and women would identify more strongly with their gender and would rate the opposite gender sending their gender (e.g., a female participant with a male being rude to a female) as more uncivil than the other conditions (e.g., a male participant with a male being rude to a female). This was not the only surprising finding, as prior research would suggest that agreeableness would have a negative correlation with ratings of incivility and yet there was a significant positive correlation of agreeableness with ratings of the sender's

incivility (see Table 8), though the relationship had a fairly small effect size in the ratings of one of the email exchanges ($r = 0.11$, $p = 0.04$ for the interview scenario; $r = 0.20$, $p < 0.01$ for the reply-to-all scenario). Strangely, there was a positive relationship between hostile attribution bias and ratings of incivility of the interview email scenario ($r = 0.14$, $p = 0.01$), but a negative relationship between the variables for the holiday party "reply-to-all" scenario ($r = -0.13$, $p = 0.02$). Additionally, there was not a significant relationship between incivility ratings and self-esteem or trait anger.

Table 8. Correlation Matrix for Pilot Study 3 Variables**.**

		Reply-to-All	Interview	Gender	HAB	Self Esteem	Agreeable	Anger
Reply-to-All	Pearson Correlation	1	.167**	.129*	-.127*	0.094	.202**	-0.097
	Sig. (2-tailed)		0.003	0.021	0.024	0.093	0.000	0.084
	N	318	318	318	318	318	318	318
Interview	Pearson Correlation	.167**	1	.197**	.142*	0.022	.114*	-0.051
	Sig. (2-tailed)	0.003		0.000	0.011	0.697	0.042	0.364
	N	318	318	318	318	318	318	318
Gender	Pearson Correlation	.129*	.197**	1	0.001	-0.093	0.097	0.101
	Sig. (2-tailed)	0.021	0.000		0.988	0.099	0.086	0.073
	N	318	318	318	318	318	318	318
HAB	Pearson Correlation	-.127*	.142*	0.001	1	-.293**	-.387**	.357**
	Sig. (2-tailed)	0.024	0.011	0.988		0.000	0.000	0.000
	N	318	318	318	318	318	318	318
Self Esteem	Pearson Correlation	0.094	0.022	-0.093	-.293**	1	.487**	-.549**
	Sig. (2-tailed)	0.093	0.697	0.099	0.000		0.000	0.000
	N	318	318	318	318	318	318	318
Agreeable	Pearson Correlation	.202**	.114*	0.097	-.387**	.487**	1	-.681**
	Sig. (2-tailed)	0.000	0.042	0.086	0.000	0.000		0.000
	N	318	318	318	318	318	318	318
Anger	Pearson Correlation	-0.097	-0.051	0.101	.357**	-.549**	-.681**	1
	Sig. (2-tailed)	0.084	0.364	0.073	0.000	0.000	0.000	
	N	318	318	318	318	318	318	318

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

Pilot Study Four

The final pilot study was similar in design and survey construction to pilot study three except for two key components. First, the same gender sender/recipient conditions (e.g., female sender to female recipient) were eliminated since there was only the main effect of gender participant found in the last study. Second, a further exploration of what could be contributing to the gender differences was implemented by adding traditionally male or female-dominated occupations to the email exchanges through context and graphics. The male-dominated occupation chosen was engineering, and the female-dominated occupation chosen was nursing. Graphical logos and job titles were added to the signatures of the sender and recipient for each condition (e.g., a family clinic logo below the signature "Melissa Smith, Registered Nurse").

A total of 161 participants recruited from MTurk took part in this study for a payment of $2.50. There were 82 (51%) males and 79 (49%) females. There were 136 (85%) White / Caucasian participants, 8 (5%) Hispanic or Latino-American, 7 (4%) Black / African American / Afro-Caribbean, 7 (4%) Asian or Pacific-Islander, 1 (0.6%) Native-American, and 2 (1%) who chose "other" as their ethnicity. Exclusion criteria was implemented that those who participated in pilot study 3 were not allowed to participate in this study. The participants were again randomized into the same conditions (e.g., male sender/female recipient), but they were also randomized on whether they had a nurse or engineer occupation and Interview or Reply-to-All scenario first. The second scenario has the opposite occupation and scenario to the first.

Job type (i.e., nurse or engineer) had no impact on the results. However, once again there was a main effect of participant gender on the ratings of the email sender's incivility with women rating the emails as ruder than men: $r = 0.20$, $p = 0.01$ (female Mean = 15.1, SD = 3.47 vs. male Mean = 13.66, SD = 3.56). These means are the combined scores for the two ratings on the

sender's incivility. Since the scores for each email was on a 1-10 scale, the possible range was 2-20. I should note that the analysis was conducted on this sample using a mixed-effects linear model as was done in pilot study three, and that the t-test results are showing a simplified version of what the mean differences look like with the conditions combined. When examining the bivariate correlations between the combined sender incivility scores (scenario one + scenario two) and the other individual difference variables, hostile attribution bias had a small significant relationship (r = 0.16, p = 0.048), but none of the other exploratory variables (besides age and gender) had significant correlations with sender incivility (see Table 9).

Table 9. Correlation Matrix for Study 4 Variables.

Variable		Gender	Age	Incivility	HAB	Self Esteem	Agree	Anger
1. Gender	Pearson's r	—						
	p-value	—						
2. Age	Pearson's r	0.097	—					
	p-value	0.222	—					
3. Incivility	Pearson's r	0.202 *	-0.170 *	—				
	p-value	0.010	0.031	—				
4. HAB	Pearson's r	-0.047	0.013	0.157 *	—			
	p-value	0.557	0.867	0.048	—			
5. Self-Esteem	Pearson's r	0.011	0.122	0.028	-0.317 ***	—		
	p-value	0.887	0.123	0.726	< .001	—		
6. Agreeable	Pearson's r	0.070	0.009	-0.040	-0.438 ***	0.455 ***	—	
	p-value	0.378	0.914	0.612	< .001	< .001	—	
7. Anger	Pearson's r	0.143	-0.024	0.073	0.372 ***	-0.569 ***	-0.655 ***	—
	p-value	0.071	0.768	0.359	< .001	< .001	< .001	—

*Note: * p < .05, ** p < .01, *** p < .001*

CHAPTER TWO:

STUDY TWO

Study Two consists of an experimental study that is an extension and replication of the pilot studies conducted with the MTurk participants. There are many different media for employees to communicate with each other in today's workplace besides face-to-face communication. These media include email, text messaging, social media, phone and voicemail, and Internet chat software. I further examined the relationship between gender, hostile attribution bias, and agreeableness (i.e., the three individual difference variables with at least some significant relationships in the pilot studies) with ratings of perceived incivility by attempting to replicate the email incivility findings with a different medium that is not face-to-face. Specifically, I examined whether the findings from pilot studies two, three and four replicate in a recorded voicemail exchange setting.

While meta-analytic results measuring the relationship between gender and *experienced* workplace incivility suggest there is not a significant difference between genders in how frequently they personally encounter general workplace incivility, Montgomery et al.'s (2004) findings that men and women rate ambiguous stimuli differently (i.e., videos of the Clarence Thomas – Anita Hill proceedings) and the results of pilot studies two, three, and four included in this proposal support the notion that given an ambiguous stimuli, males and females perceive incivility differently. Thus, I hypothesize that the ratings of the ambiguous voicemail stimuli will differ between genders.

Hypothesis 1: Women Will Perceive (Rate) Ambiguously Rude Voicemail Messages as More Uncivil Than Men

The voicemail exchange stimuli were created using the voice manipulation software Amazon Polly. Amazon Polly gives users the ability to create spoken word from text passages, and the ability to have computerized versions of male and female voices speaking the text. This allows the ability to have the same thing spoken with the same inflections but having different gendered voices. The audio clips are based on the same premises as the email incivility stimuli. Voicemail messages were chosen because they are a common method of work communication, and they will reintroduce one of the six Clark and Brennan (1991) factors (i.e., audibility) that is missing from email communication, but present in face-to-face communication. Furthermore, recipients of voicemail messages can ruminate over uncivil messages by playing them on demand. However, revisability is lacking in voicemail recordings, but is present in email. The voicemail stimuli could potentially include more social cues than the email stimuli because of the presence of audibility. However, the potential to have more social cues may be offset by the voicemail stimuli being computerized voices of text-to-speech software being used. In line with the results of Wu et al. (2013) and Zhou et al. (2015) finding hostile attribution bias was related to general workplace incivility, and the results of pilot studies two and four supporting a positive relationship between hostile attribution bias and cyber incivility, I hypothesize that individuals who score higher in self-ratings of hostile attribution bias will rate the voicemail exchanges as more uncivil.

Hypothesis 2: There Will Be a Significant Positive Relationship Between Hostile Attribution Bias and Incivility Ratings of the Voicemail Stimuli

As mentioned in the workplace incivility literature review, Milam et al. (2009) found self-reports of agreeableness had a significant negative relationship with experienced workplace incivility. However, the findings of pilot study three found a positive relationship between self-reported agreeableness and ratings of email incivility, and pilot study four found no significant relationship between agreeableness and email incivility ratings. One explanation for these differing results could be the measurement of agreeableness as a construct in the pilot studies. Workplace incivility consists of interpersonal actions of ambiguous intent, and perhaps the ambiguity of uncivil behavior influences individuals to prioritize one facet of agreeableness (i.e., straightforwardness) over another (i.e., compliance). In the pilot studies, agreeableness was measured with the 10-item NEO Domain IPIP scale (Goldberg, 1999). This scale measures agreeableness as an overall factor as one of the Big Five personality dimensions. An alternative way to measure agreeableness is at the facet-level. One conceptualization of agreeableness is Costa et al.'s (1991) six-facet approach. In this approach, agreeableness is comprised of trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness. To gain a better understanding of why there were mixed and/or unexpected results (i.e., the positive relationship in pilot study 3) when examining the relationship between agreeableness and ratings of incivility, I measured agreeableness at the facet-level.

Straightforwardness refers to the level of frankness with which one communicates with others. In study one, there were multiple participants who found brevity in email communication to be rude. Thus, straightforwardness may be a facet of agreeableness that does not relate with incivility in the same manner as the other facets. Costa et al. (1991) also equate low levels of

straightforwardness with self-monitoring, and this could manifest in interpersonal communication through deception or manipulation. Using Costa et al.'s (1991) taxonomy, one could reason those individuals who are high and individuals who are low in agreeableness might be apt to rate stimuli intended to uncivil as not rude, and thus I do not have a hypothesis related to the bivariate relationship between straightforwardness and ratings of incivility.

Trust can be defined as the tendency for an individual to attribute the intent of others to benevolent reasons (Costa et al., 1991). While there is nothing in this definition of trust that refers to ambiguous situations, this definition is nearly the opposite of hostile attribution. Thus, I hypothesize that there will be a significant negative relationship between trust and ratings of incivility.

Hypothesis 3A: There Will be a Negative Relationship Between Self-Ratings of Trust and Voicemail Incivility Ratings

Individuals high in altruism show concern for others and are courteous. Selfless is another way to describe altruistic individuals. When rating uncivil stimuli, those who show concern for others may be keenly aware social norms regarding interpersonal communication and be particularly sensitive to perpetrators of incivility.

Hypothesis 3B: There Will Be a Positive Relationship Between Self-Ratings of Altruism and Voicemail Incivility Ratings

Compliance in individuals is marked by their avoidance of conflict and deferring to others when interpersonal communication involves disagreement (Costa et al., 1991). Goldberg's (1999) IPIP scales map cooperation in compliance's stead, and those who avoid conflict and are

cooperative in the workplace may be more likely to be perceptive of aspects of communication that may come across to others as rude.

Hypothesis 3C: There Will Be a Positive Relationship Between Self-Ratings of Compliance and Voicemail Incivility Ratings

Modesty is one facet of agreeableness that is less reflective of interpersonal communication and is more reflective one's self-concept. Those who are modest do not feel they are better than others and have humility. Conversely, Costa et al. (1991) note that the clinical operationalization of narcissism includes those who are extremely low in modesty. In pilot study one, I thought those high in narcissism would not perceive email stimuli as uncivil as those who were modest. While I was unable to find support for the hypothesis, the way I measured narcissism likely contributed to the non-significant findings. When narcissism is measured with the complete version of Raskin and Hall's (1981) Narcissistic Personality Inventory there are seven factors. Because this research was largely exploratory, I measured and analyzed only the two narcissism factors I felt would most strongly correlate with perceptions of incivility (i.e., leadership/authority and entitlement). Unfortunately, not only did I have non-significant results with the factors and ratings of incivility, I was also unable to find a positive correlation between the narcissism factors of authority and entitlement in pilot study one. However, based on the Costa et al. (1991) and Goldberg (1999) conceptualization of modesty, I hypothesize that those high in modesty will more strongly rate stimuli as uncivil than those who are immodest.

Hypothesis 3D: There Will Be a Positive Relationship Between Self-Ratings of Modesty and Voicemail Incivility Ratings

Tender-mindedness is defined by an individual's tendency to be sympathetic when making judgment of others and forming their attitudes (Costa et al., 1991). Those considered tender-minded and sympathetic might be most strongly perceptive of when ambiguous stimuli could be interpreted as uncivil by the recipient.

Hypothesis 3E: There Will Be a Positive Relationship Between Self-Ratings of Tender-Mindedness and Voicemail Incivility Ratings

In summary, the five hypotheses associated with the facets of agreeableness and ratings of incivility differ in the following ways from measuring agreeableness at the factor-level. First, trust may be prioritized as a facet when responding to ambiguous stimuli and my hypothesis states that there will be a negative relationship between trust and the ratings of incivility. Second, straightforwardness may relate negatively or positively with ratings of incivility, and thus there is no hypothesis regarding this facet. The other facets of agreeableness are hypothesized to positively relate with ratings of incivility in a similar manner with each other.

CHAPTER THREE:

PROCEDURES

Voicemail exchange stimuli were created using the voice manipulation software Amazon Polly. The created stimuli were based on the previously used voicemail stimuli, except for one voicemail that was intentionally made to be extremely rude. The extremely rude voicemail was included as an exploration to examine whether relationships between the variables of interest would remain in a stimulus that theoretically would not have as much variability in responses. The voicemail stimuli exchanges were tested and I modified them (e.g., volume adjusted) based on feedback obtained by four incivility researchers. I then recruited employed individuals from MTurk to participate in this research and administered the stimuli and survey through Qualtrics. The participants were paid $2.50 (USD) to participate in the study, as the study took approximately 10 minutes to complete. I attempted to recruit an even number of female and male participants to have them randomly assigned to a condition of (1) male being rude to a female through voicemail condition, or (2) female being rude to a male for the first voicemail, and then reversed for the second voicemail exchange, and then randomly assigned for the third voicemail stimuli. The gender of the participant and the gender of the rude voicemail voice sender created 4 condition groups: 2 (male or female participant) x 2 (male or female uncivil sender). One rule of thumb for analysis of variance is to have 20 participants per condition cell. The decision to have double the rule of thumb was based on having consistency with pilot study three, which had approximately 40 participants in each condition.

While the intent was to recruit exactly 160 total participants with an even number (80) of each gender, because of the nature of having to target gender after removal of individuals who failed the attention check, the final analysis was conducted with 84 male participants (51.22%) and 80 female participants (48.78%), for a total of 164 participants. The data collection had 22 participants who were removed from the analysis because they either failed the attention check (n =14) or had the same exact geolocation as another participant who just took the survey (n = 8). The participants' age ranged from 22 years old to 69 years old, with a mean age of 38.92 years (SD = 9.66). There were 133 (81.10%) White / Caucasian participants, 18 (10.98%) Hispanic or Latino-American, 7 (4.27%) Black / African American / Afro-Caribbean, 5 (3.05%) Asian or Pacific-Islander, and 1 (0.61%) who chose "other" as their ethnicity. The participants' hours worked per week was measured and if they chose 10 hours of fewer per week then they were directed to the end of the survey as working 10 or more hours was an MTurk exclusion criteria. 124 (75.61%) reported working 40–49 hours per week, 19 (11.59%) worked 30–39 hours, 13 (7.93%) worked 50 hours or more, 5 (3.05%) worked 20-29 hours, and 3 (1.83%) worked 10-19 hours per week. All participants reported using a phone for their employment and having received a voicemail at work.

Measures

As mentioned above, the voicemail stimuli were created with the Amazon Polly software and each voicemail was rated on a 1 (not rude at all) to 10 (extremely rude) scale. A total of three stimuli were administered to the participants and the exchanges are as follows.

Scenario 1

Matt: Hi Sally, sorry I missed you. Why don't we get together on Friday to discuss the person to hire.

Sally: Hi Matt, that sounds fine. We can meet at 3 pm on Friday if you'd like.

Matt: Hi Sally, I just wanted to let you know I went ahead and made the decision without you. I didn't want to wait until Friday.

Scenario 2

Cathy: Shaun, I need to talk to you. I'm not happy about how you messed up the ACME account. This is costing the company a lot of money. I don't want to hear excuses. I can't trust you to handle any of these accounts. You are being transferred out of sales. Be happy you still have a job.

Scenario 3

Frank: I'm calling because you keep "replying to all" on all your emails. Stop doing that.

Hostile Attribution Bias

Hostile attribution bias was again measured with the 7-item short version of Bal and O'Brien's (2010) Hostile Attribution Style instrument (Appendix B). The internal consistency reliability of the instrument in this sample was $\alpha = 0.81$.

Agreeableness

The agreeableness facets were measured using the publicly available Likert-type scales available at the International Personality Item Pool (IPIP) website, http://ipip.ori.org (Appendix C). While trust, altruism, and modesty are constructs that directly map on to Costa et al.'s (1991)

taxonomy; tender-mindedness maps on to sympathy in the IPIP scales, compliance maps on to cooperation, and straightforwardness maps on to morality (see https://ipip.ori.org/newNEO_FacetsTable.htm). The internal consistency reliability reported on the IPIP website of the six facets ranges from 0.73 for cooperation to 0.83 for trust. An example item for trust is "Believe that others have good intentions". An example item for morality is "Pretend to be concerned for others". An example item for altruism is "Love to help others". An example item for cooperation is "Can't stand confrontations". An example item for modesty is "Seldom toot my own horn". An example item for sympathy is "Feel sympathy for those who are worse off than myself". In this sample, the internal consistency reliability was higher than reported on the IPIP website, with the Cronbach's alpha for each facet as follows: Trust = 0.97, Morality = 0.87, Altruism = 0.90, Cooperation = 0.86, Modesty = 0.90, Sympathy = 0.87.

Results

When constructing and refining the voicemail stimuli, there was a focus for two of the stimuli to attempt to create stimuli that were ambiguously rude and thus would lead to have the average rating of the stimuli to be near the middle of the 1–10 range. This goal was largely achieved with the mean rating of incivility for the first scenario across all 164 participants being a 6.43 (M = 6.43, SD = 2.32) and the third scenario having a mean rating of 6.25 (M = 6.25, SD = 2.11). Scenario two was also rated as extremely uncivil by the participants (M = 8.85, SD = 1.55) as intended. The descriptive statistics for the remaining variables of interest are in Table 10.

Table 10. Descriptive Statistics for Study Two Variables.

Variable	N	Mean (SD)	Min	Max
Scenario 1 Incivility Rating	164	6.43 (2.32)	1	10
Scenario 2 Incivility Rating	164	8.85 (1.55)	2	10
Scenario 3 Incivility Rating	164	6.25 (2.11)	1	10
Hostile Attribution Bias	164	18.16 (7.22)	7	37
Trust	164	49.46 (14.51)	12	70
Altruism	164	58.84 (7.97)	32	70
Morality	164	57.71 (8.90)	28	70
Cooperation	164	55.14 (10.05)	24	70
Modesty	164	49.86 (11.42)	19	70
Sympathy	164	55.07 (9.74)	23	70

Hypothesis one focused on whether there are gender differences in perceptions of the voicemail stimuli and based on the previous pilot studies with email stimuli, I hypothesized that females would rate the stimuli as more uncivil than males. I conducted a 2 x 2 analysis of variance (ANOVA) on each of the voicemail scenarios to garner support for this hypothesis. For scenario one, which is the interview scenario where the sender of the first email decides to make the selection without their coworker after asking for their input, the results showed there was not a significant effect for the gender of the participant: $F(1,160) = 0.75$, $p = 0.39$, with no statistical difference between males ($M = 6.29$, $SD = 2.25$) and females ($M = 6.59$, $SD = 2.40$). There was also no significant effect for the gender of the sender of the voicemail: $F(1,160) = 0.58$, $p = 0.45$, with no statistical difference between a male sender ($M = 6.56$, $SD = 2.45$) or a female sender ($M = 6.31$, $SD = 2.19$). Furthermore, there was no statistically significant interaction in predicting the incivility rating for scenario one: $F(1,160) = 0.50$, $p = 0.48$. Means can be seen in Table 11 and ANOVA results in Table 12.

Table 11. Descriptive Statistics—Stimulus 1 Rating**.**

	Stimulus 1 Condition	Mean	SD	N
Female	Female Send	6.33	2.31	42
	Male Send	6.87	2.50	38
Male	Female Send	6.28	2.09	40
	Male Send		2.41	

Table 12. ANOVA—Stimulus 1 Rating**.**

Cases	Sum of Squares	df	Mean Square	F	p	η_p^2
Gender	4.07	1	4.07	0.75	0.39	0.005
Stimulus 1 Condition	3.15	1	3.15	0.58	0.45	0.004
Gender ✻ Stimulus 1 Condition	2.71		2.71	0.50	0.48	0.003
Residuals	868.81	160	5.43			

Note. Type III Sum of Squares.

Scenario two was intentionally created to be extremely rude. This was the scenario where the recipient was told they were lucky to still have a job. Again, I conducted a 2 x 2 ANOVA and the results were similar to the pilot studies and showed there was a significant effect for the gender of the participant: $F(1,160) = 8.75$, $p < 0.01$, with males rating the sender less uncivil ($M = 8.50$, $SD = 1.78$) than females ($M = 9.21$, $SD = 1.16$). There was not a significant effect for the gender of the sender of the voicemail: $F(1,160) = 1.54$, $p = 0.22$, with no statistical difference between a male sender ($M = 9.01$, $SD = 1.38$) or a female sender ($M = 8.68$, $SD = 1.68$). Furthermore, there was no statistically significant interaction in predicting the incivility rating for scenario two: $F(1,160) = 0.14$, $p = 0.71$. Means can be seen in Table 13 and ANOVA results in Table 14.

Table 13. Descriptive Statistics—Stimulus 2 Rating.

Gender	Stimulus 2 Condition	Mean	SD	N
Female	Female Send	9.11	1.31	38
	Male Send	9.31	1.00	42
Male	Female Send	8.32	1.89	44
	Male Send	8.70	1.65	40

Table 14. ANOVA—Stimulus 2 Rating.

Cases	Sum of Squares	df	Mean Square	F	p	η_p^2
Gender	19.93	1	19.93	8.75	0.004	0.052
Stimulus 2 Condition	3.51	1	3.51	1.54	0.22	0.010
Gender ✻ Stimulus 2 Condition	0.32	1	0.32	0.14	0.71	0.000
Residuals	364.52	160	2.28			

Note: Type III Sum of Squares.

Scenario three was the scenario where the recipient was told to stop sending reply-to-all emails. A 2 x 2 ANOVA was conducted, and the results were similar to the second scenario and the pilot studies. There was a significant effect for the gender of the participant: $F(1,160) = 36.23$, $p < 0.01$, with males rating the sender less uncivil ($M = 5.36$, $SD = 2.12$) than females ($M = 7.19$, $SD = 1.67$). There was not a significant effect for the gender of the sender of the voicemail: $F(1,160) = 0.05$, $p = 0.83$, with no statistical difference between a male sender ($M = 6.31$, $SD = 2.14$) or a female sender ($M = 6.18$, $SD = 2.10$). Furthermore, there was no statistically significant interaction in predicting the incivility rating for scenario two: $F(1,160) = 1.21$, $p = 0.27$. Means can be seen in Table 15; ANOVA results in Table 16.

Table 15. Descriptive Statistics—Stimulus 3 Rating.

Gender	Stimulus 3 Condition	Mean	SD	N
Female	Female Send	7.03	1.63	33
	Male Send	7.30	1.71	47
Male	Female Send	5.55	2.19	44
	Male Send	5.15	2.03	40

Table 16. ANOVA—Stimulus 3 Rating**.**

Cases	Sum of Squares	df	Mean Square	F	p	η_p^2
Gender	132.89	1	132.89	36.23	< .001	0.185
Stimulus 3 Condition	0.17	1	0.17	0.05	0.83	0.000
Gender ✻ Stimulus 3 Condition	4.43	1	4.43	1.21	0.27	0.007
Residuals	586.81	160	3.67			

Note: Type III Sum of Squares.

Overall, hypothesis one was partially supported. In two of the three scenarios, the participants' gender was a significant predictor of incivility ratings. Notably, the one scenario that did not see a significant main effect was the first scenario, and the ratings for that scenario were the only one in this study that occurred before the attention check was given. Though all the participants who were part of the analysis passed the attention check, perhaps the check made the participants pay closer attention in scenarios two and three – where I found significant differences in the gender of the participant in incivility ratings.

Hypothesis two stated that hostile attribution bias would be positively related to ratings of incivility, such that those higher in hostile attribution bias would rate the stimuli as ruder. Hypothesis two was not supported as there were no significant correlations between self-reported hostile attribution bias and any of the incivility ratings of the three scenarios (see Table 17).

Table 17. Correlations of Hostile Attribution Bias with Stimuli Ratings**.**

Variable		Hostile AB	Stimulus 1		Stimulus 2	
1. Hostile AB	Pearson's r	—				
	p-value	—				
2. Stimulus 1	Pearson's r	0.11	—			
	p-value	0.14	—			
3. Stimulus 2	Pearson's r	0.04	0.31	**	—	
	p-value	0.64	< .001		—	
4. Stimulus 3	Pearson's r	0.12	0.24	**	0.47	**
	p-value	0.12	0.002		< .001	

*Note: * = $p < 0.05$, ** = $p < 0.01$.*

Hypotheses 3A–3E were related to the facets of agreeableness and whether there were significant correlations between the individual agreeableness facets and the ratings of incivility. Hypothesis 3A was that there would be a negative relationship between trust and incivility ratings and this hypothesis was not supported as there was not a significant bivariate relationship between trust and any of the three stimuli. The correlations with the three stimuli were as follows: scenario one (r = -0.15, p = 0.06), scenario two (r = 0.02, p = 0.83) and scenario three (r = 0.00, p = 0.99)

For hypotheses 3B–3E, a positive relationship between the agreeableness facets of altruism, compliance, modesty, and tender-mindedness with incivility ratings was hypothesized. All four of these hypotheses were not supported as there were no significant bivariate correlations between any of the agreeableness facets and the ratings of incivility of scenario two and three, and the significant relationships between morality (r = -0.16, p = 0.047) and compliance/cooperation (r = -0.19, p = 0.02) with the incivility ratings of scenario one was in the opposite direction than hypothesized. Additionally, I had no hypothesis regarding straightforwardness/modesty and there was a significant negative relationship between this facet

and the scenario one incivility ratings (r = -0.21, p = 0.01). Though these results do not support my hypotheses, they do support the notion that measuring agreeableness at the facet-level was perhaps not the reason for the inconclusive results regarding the findings in the previous pilot studies.

Table 18. Correlation Matrix of Stimuli and Agreeableness Facets**.**

Variable		Stimulus 1		Stimulus 2		Stimulus 3	Trust		Altruism		Morality		Cooperation		Modesty		Sympathy
1. Stimulus 1 Rating	Pearson's r	—															
	p-value	—															
2. Stimulus 2 Rating	Pearson's r	0.311	***	—													
	p-value	< .001		—													
3. Stimulus 3 Rating	Pearson's r	0.237	**	0.470	***	—											
	p-value	0.002		< .001		—											
4. Trust	Pearson's r	-0.146		0.017		0.001	—										
	p-value	0.062		0.834		0.989	—										
5. Altruism	Pearson's r	-0.094		0.113		-0.006	0.518	***	—								
	p-value	0.231		0.149		0.935	< .001		—								
6. Morality	Pearson's r	-0.155	*	0.067		-0.033	0.376	***	0.670	***	—						
	p-value	0.047		0.392		0.672	< .001		< .001		—						
7. Cooperation	Pearson's r	-0.190	*	-0.037		-0.038	0.524	***	0.648	***	0.637	***	—				
	p-value	0.015		0.635		0.629	< .001		< .001		< .001		—				
8. Modesty	Pearson's r	-0.207	**	-0.052		-0.013	0.113		0.153	*	0.378	***	0.392	***	—		
	p-value	0.008		0.509		0.871	0.151		0.050		< .001		< .001		—		
9. Sympathy	Pearson's r	-0.151		0.129		-0.005	0.443	***	0.639	***	0.503	***	0.578	***	0.43	***	—
	p-value	0.053		0.100		0.949	< .001		< .001		< .001		< .001		< .001		—

*Note: * p < .05, ** p < .01, *** p < .001.*

Consistent with the results above, when entering in gender, hostile attribution bias, and the six facets of agreeableness in a regression model as predictors of the incivility ratings, none of the independent variables are significant predictors in the ratings of scenario one, and only gender was a significant predictor in scenarios two and three. Regression results for the three stimuli are in Tables 19-21, respectively.

Table 19. Stimulus One Rating Regressed on Gender and Personality.

Model Summary—Stimulus 1 Rating				
Model	**R**	**R^2**	**Adjusted R^2**	**RMSE**
H_0	0.00	0.00	0.00	2.32
H_1	0.30	0.09	0.04	2.28

ANOVA						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**p**
H_1	Regression	76.24	8	9.53	1.84	0.07
	Residual	802.03	155	5.17		
	Total	878.26	163			

Coefficients						
Model		**Unstandardized**	**Standard Error**	**Standardized**	**t**	**p**
H_0	(Intercept)	6.433	0.181		35.491	< .001
H_1	(Intercept)	10.100	1.914		5.277	< .001
	Gender	0.765	0.403	0.165	1.901	0.059
	Hostile AB	-0.007	0.030	-0.022	-0.236	0.814
	Trust	-0.015	0.017	-0.094	-0.902	0.368
	Altruism	0.032	0.039	0.111	0.832	0.407
	Morality	-0.025	0.031	-0.095	-0.803	0.423
	Cooperation	-0.022	0.028	-0.094	-0.780	0.436
	Modesty	-0.033	0.020	-0.163	-1.674	0.096
	Sympathy	-0.014	0.027	-0.061	-0.527	0.599

Note: The intercept model is omitted, as no meaningful information can be shown.

Table 20. Stimulus Two Rating Regressed on Gender and Personality.

Model Summary—Stimulus 2 Rating				
Model	**R**	**R^2**	**Adjusted R^2**	**RMSE**
H_0	0.000	0.000	0.000	1.545
H_1	0.328	0.108	0.061	1.497

ANOVA						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**p**
H_1	Regression	41.848	8	5.231	2.334	0.021
	Residual	347.341	155	2.241		
	Total	389.189	163			

Coefficients						
Model		**Unstandardized**	**Standard Error**	**Standardized**	**t**	**p**
H_0	(Intercept)	8.848	0.121		73.326	< .001
H_1	(Intercept)	8.163	1.259		6.482	< .001
	Gender	0.750	0.265	0.243	2.829	0.005
	Hostile AB	1.013e -4	0.020	4.737e -4	0.005	0.996
	Trust	-0.001	0.011	-0.012	-0.115	0.909
	Altruism	0.026	0.026	0.132	0.998	0.320
	Morality	0.005	0.020	0.031	0.268	0.789
	Cooperation	-0.035	0.018	-0.227	-1.912	0.058
	Modesty	-0.017	0.013	-0.124	-1.291	0.199
	Sympathy	0.024	0.018	0.151	1.331	0.185

Note: The intercept model is omitted, as no meaningful information can be shown.

Table 21. Stimulus One Rating Regressed on Gender and Personality.

Model Summary—Stimulus 3 Rating						
Model	**R**	**R^2**	**Adjusted R^2**	**RMSE**		
H_0	0.000	0.000	0.000	2.114		
H_1	0.482	0.232	0.192	1.900		
ANOVA						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**p**
H_1	Regression	169.074	8	21.134	5.853	< .001
	Residual	559.676	155	3.611		
	Total	728.750	163			
Coefficients						
Model		**Unstandardized**	**Standard Error**	**Standardized**	**t**	**p**
H_0	(Intercept)	6.250	0.165		37.854	< .001
H_1	(Intercept)	7.736	1.599		4.839	< .001
	Gender	2.179	0.336	0.517	6.480	< .001
	Hostile AB	-0.002	0.025	-0.007	-0.085	0.932
	Trust	0.009	0.014	0.059	0.618	0.537
	Altruism	0.031	0.033	0.118	0.966	0.336
	Morality	-0.039	0.026	-0.162	-1.491	0.138
	Cooperation	-0.016	0.023	-0.076	-0.685	0.494
	Modesty	-0.007	0.016	-0.039	-0.435	0.664
	Sympathy	-0.024	0.023	-0.111	-1.050	0.295

Note: The intercept model is omitted, as no meaningful information can be shown.

CHAPTER FOUR:

ADDITIONAL ANALYSES

One area of interest to me throughout the pilot work and studies was the prevalence of workers perceiving that they received uncivil emails at work. The estimates covered in the literature review seemed high. Lim and Teo (2009) found 91% of workers received a rude email from their supervisor, and Park et al. (2018) found 36% of employees received at least one rude email each day. Across the pilot studies in this work, 194 individuals (28.32%) of the 687 participants who responded to the question "Have you received a rude email at work?" stated yes. The percentage (28.32%) of respondents who stated that they received a rude email at work is less than previously reported in the literature. One reason for this disparity is because of the employed students sample reporting such a low prevalence (15.2%).

The 194 individuals who responded that they received an uncivil email at work were also asked what aspects of the email they found rude. I coded the answers into the existing taxonomy and the coding was duplicated by four other incivility researchers (see results in Table 22). One exception was that tone (in general) was added to the taxonomy (in addition to high-horse tone) – leaving 10 categories in the taxonomy: accusations, aggression, contextual factors, high-horse tone, inappropriate recipients, inappropriate requests, structural elements, tone, typographical emphasis, and unaccountability.

Fifteen of the 194 responses were removed from the analysis because the respondent did not choose to answer the question in a way that it described an aspect of the email. For example,

one wrote “The way the email was written”. This left 179 responses for qualitative coding. Because the responses could be coded into multiple categories the total is greater than 179. The frequency for the categories mentioned as uncivil by the participant are listed in the table below.

Table 22. Frequency of Taxonomy Classification.

Classification	N
Accusations	65
High-horse tone	53
Tone	34
Aggression	30
Structural elements	16
Inappropriate recipients	15
Inappropriate requests	9
Typographical emphasis	9
Unaccountability	8
Contextual factors	6

An examination of the frequencies of what aspects of emails the MTurk participants found as uncivil in their communication versus the taxonomy created from the deidentified emails reveals some interesting findings. Using the original taxonomy in study one, accusations were the more often cited reason (N = 65) that the participants found an email to be uncivil. However, tone dominates what the MTurk participants remembered as uncivil from the rude email they received at work. With 34 responses classified as *tone*, and 53 classified as *high-horse tone*, perceived tone is an important characteristic of email communication. This aspect of the research is focused on the “validation” of the originally created taxonomy, and though they were separate classifications in the taxonomy coding post-study one, these results speak to changing the taxonomy classification to simply *tone*, instead of *high-horse tone* or keeping them as separate classifications. Simplifying to *tone* will allow future research and applied practice to

concentrate on the various aspects of tone in email communication instead of focusing solely on, but still including tone that may translate as condescending to the recipient.

Another refinement to the taxonomy based on the results from the analyses of the pilot studies' data is to remove *unaccountability* from the taxonomy. There were relatively few instances of unaccountability in the faculty emails from study one, and only 8 instances of participants mentioning it in the MTurk pilot studies. While occurrences of unaccountability exist in email communication, the low prevalence across the samples in this dissertation supports its removal from the taxonomy and the research team who coded the responses decided that unaccountability could be incorporated into accusations, as they were frequently associated with each other. In the Mturk data, there were also few instances *typographical emphasis* (n = 9). However, this classification will remain in the taxonomy because the deidentified emails from the faculty in study one contains a plethora of typographical emphasis. It is also possible the framing of the question for the MTurk participants led to them stating *tone* because they were remembering an email that had typographical emphasis (e.g., caps lock in text) and attributed it to tone in the remembrance of the communication. Thus, the final taxonomy of email incivility includes the following eight classifications: accusations, aggression, contextual factors, inappropriate recipients, inappropriate requests, structural elements, tone, and typographical emphasis.

Emotional Responses

Gaining an understanding of the negative outcomes associated with perceived email incivility was also of interest in this research. From the 194 participants who stated they received a rude email, 166 stated an emotional response to receiving the email in the survey. I coded this qualitative data, and the coding was duplicated and confirmed by the same four incivility

researchers who verified the taxonomy validation. A total of 45 emotions were listed by the participants resultant from receiving an uncivil email. The participants ranged from listing as few as one emotion to as many as six emotions driven by receiving the email. The data was then analyzed through NVivo 12 software with the synonym wizard to develop a list of the most frequent emotions associated with rude emails. The results are presented in both a "word cloud" (see Figure 1) and in Table 22 with the 10 most frequently cited emotions listed. Anger and annoyance (irritation) were the two most common emotions stated by the participants. Some emotions are close on the emotional circumplex, but they are all negatively valanced emotions that are consistent with the negative emotional outcomes associated with workplace incivility.

Figure 1. Word Cloud of Emotional Responses to Uncivil E-mails.

Table 23. Most Frequently Mentioned Emotional Responses to Uncivil E-mails.

Emotion	N
Angry	43
Annoyed	42
Upset	20
Frustrated	19
Belittled	15
Disrespected	9
Bad	8
Embarrassed	8
Offended	6
Surprised	5

In summary, study two was able to further replicate from the email stimuli studies the main effect of gender on incivility ratings of email with a computerized voicemail stimulus in two of the three scenarios, with both scenarios occurring after the attention check. Agreeableness still had mixed results in study two, with three of the six facets of agreeableness having significant correlations with the incivility ratings of scenario one. However, the lack of significant correlations for three of the six agreeableness facets with any of the voicemail stimuli incivility ratings and three facets only correlating with the first stimulus presented before the attention check would not support agreeableness as a significant predictor of incivility ratings when rating experimental stimuli. These results give further explanation of the varying agreeableness – incivility rating relationships in the pilot studies because perhaps agreeableness does not predict incivility ratings regardless of whether it is measured at a facet-level or not. Notably, hostile attribution bias was not significantly correlated with the voicemail stimuli, and this was at odds with the findings in the pilot studies. The study two sample did have a low mean self-rating for hostile attribution bias (2.59 on a 1 (low) – 7 (high) scale). The additional analysis showed that the samples in the pilot studies for this research had a lower prevalence than

previously published studies in the cyber incivility literature and helped further refine the taxonomy of email incivility into the final version of eight characteristics.

CHAPTER FIVE:

DISCUSSION

Technology-related communication (e.g., email, Zoom/Teams, text) is now the preferred method of communication for many in the workplace today, and this has only increased in the time since this research started because the COVID-19 pandemic forced so many employees to work remotely. There are unique challenges present in online communication that drive many employees to perceive incivility regardless of the sender's intent. Some of these themes cropped up in previous cyber incivility research. For example, Friedman and Currall (2003) noted that excessive length of an email could be regarded as rude by a recipient. However, the thematic analysis and subsequent creation of the email incivility taxonomy offers a more holistic insight into the many factors that people perceive as uncivil when using email as their communication method.

This research potentially has substantial practical impact as the taxonomy can be used as the basis for training employees to better their email communication skills. This research, and specifically the classification, can serve as the foundation for courses designed to ameliorate the occurrence of email incivility - perhaps as part of a university communication course; while organizations and practitioners can use this taxonomy to develop research-based interventions and training for mitigating email incivility in the workplace. Prior to being able to best change behavior there is a need-to-know what behavior to change. Because of the ambiguity of incivility (by definition), this taxonomy fulfills a need to understand "what" email communication

behavior may need to change, so the resultant negative emotions associated with someone receiving an uncivil email are also remedied.

From a personal perspective, the impetus for part of this research was born from seeing a publicly sent email and hearing the varying levels of perceived incivility among coworkers. This variance in perceptions was fascinating, and from an academic perspective, I most wanted to know what predicted this variance in perceptions. While the thought of gender being involved in perceptions of incivility was there from the very beginning, it would be disingenuous to say these results were in any way the expectation going into this research project, The original research idea was that females would rate rude emails sent from males to females as ruder than from females, and the same with males rating emails sent from females to males as ruder than from males. It was at first puzzling, but interesting, that there was only a main effect of the participant gender being predictive of ratings of incivility on the email stimuli. This led to an immediate question "can we replicate these findings?"

A strength of this collection of studies is that when confronted with a curious finding, it was replicated multiple times in the same medium (email), even with adding in other potential variables into the stimuli (i.e., job type). The finding was then extended into another medium – computerized voicemail exchanges – and replicated again in the two voicemail stimuli presented after the attention check. This replication supports the notion that gender of the participant is related to ratings of ambiguously uncivil stimuli, such that females rate ambiguously uncivil email as ruder. In the case of scenario two in study two, females even rated the unambiguously rude voicemail stimulus as ruder. Academically speaking, this is valuable to know. However, you can't change someone's gender; and thus, the practicality of this knowledge is not immediately apparent and, in fact, is a difficult situation to address. My advice is not to use a

heightened awareness when sending emails to women, it is to use a heightened awareness of potentially uncivil aspects of your communication when sending emails to everyone. It just so happens that women may have an elevated awareness to characteristics of emails that individuals can interpret as uncivil.

Except for hostile attribution bias, the other exploratory predictor variables (e.g., narcissism) largely were not significantly related to ratings of incivility. While it is important for those who send email communication to be aware that their emails can be interpreted differently by the recipients, it may be that it is the content or context that is more important in perceptions of incivility than individual differences. Said another way, it is possible one of the reasons that there were so few individual differences that had significant effects with ratings of incivility is because except for women and those with hostile attribution bias, uncivil e-mails might represent situations that are seen similarly strong by most people. Practically speaking, this directs attention to things that can be changed—the behaviors and characteristics in the taxonomy, and away from my focus on the individual differences that may predict perceptions of incivility. In short, if we can minimize the frequency with which people send emails that are accusatory, condescending, or in other ways uncivil, individual differences will not matter because everyone will be communicating in a civil manner.

Limitations

The usage of copies of de-identified emails and the replicating nature of this research could be considered strengths; however, there are some notable limitations in these studies. One limitation is that the de-identified emails in study one all came from university faculty, and thus the taxonomy was not based on email communication from a broad sampling of jobs across many different domains. This limitation was partially addressed by asking the MTurk workers

who responded that they received a rude email at work which aspects of the email they found rude. Ostensibly, MTurk workers would be an ideal sample for a broad sampling of occupations, and the participants' responses to the question asking them their job description indicates there was a broad sampling of jobs in those sample. That said, unlike the university faculty, the MTurk workers were not asked to provide a de-identified copy of the email or email exchange.

Another limitation of this research concerns the sampling for each of the studies that followed study one. All four of the pilot studies and study two used either a student sample from the University of South Florida psychology SONA system or Amazon's Mechanical Turk to solicit participants. The data collection from these studies could be considered convenience sampling. While sampling through SONA and MTurk is particularly useful for research conducted by undergraduate and graduate students who lack "real world" organizational access, the SONA participant sample is largely comprised of female students who have at least a rudimentary understanding of psychology and psychological research. Likewise, MTurk workers typically have vast experience in taking surveys and even those denoted as MTurk "masters" were used in this research when available – they still could have a higher proficiency of surveys, and the possibility exists that the MTurk workers have taken some of the measures (besides the newly created email and voicemail stimuli) several times.

Based on my previous experience related to utilizing MTurk workers as a sample, study two had some alarming statistics related to the data collection. First, the number of participants who failed the attention check (N = 14) was higher than my previous data collections at 7.52%. In isolation, this percentage may not seem too extraordinary – however, the combination of the failed attention checks and the differences in the results between voicemail scenario one compared to scenarios two and three (i.e., no main gender effect predicting incivility ratings and

three of the agreeableness facets having significant relationships with the incivility rating) is of some concern. Even more troublesome, in my opinion, was that eight "participants" appeared to be coming from the same geolocation in immediate temporal sequence (one immediately proceeded by the next). The ability to do this is not supposed to happen with MTurk. My best guess of what occurred is that someone had created multiple MTurk accounts and was using them in quick succession to collect the $2.50 multiple times. This experience has tarnished my prior positive experiences with MTurk data collection, to the point that I would seriously consider only using MTurk workers for early preliminary work in scale construction or a similar project. Put bluntly, I have concern regarding the integrity of the data and the inferences that can be drawn from them, even though I did my best to clean the data of any abnormalities.

Lastly, except study one, all the studies used experimental stimuli that could lack the fidelity of "the real thing". The lack of fidelity was most prominent in study two. To add audibility while minimizing any differences that female and male actors might have, computerized Amazon Polly voices were used for this research. Even though I took as much care as possible to make them realistic, the voices were very clearly computerized. It is quite possible there would be different results using actors who attempt to create the same tone and inflection for both genders. Also adding to the lack of fidelity was using voicemail stimuli instead of a more frequently used medium for today's workplace. While phones (and personal smartphones) are still widely used in the workplace, there has been an enormous rise in the prevalence of workplace-related texting and meetings through software such as Microsoft Teams and Zoom. In hindsight, the use of computerized voicemails as stimuli might not have been an optimal choice.

Future Research

To address the potential limitation of using computerized voice stimuli, the first recommendation I have regarding a major area of future research would be a continuation of this research but instead use actors and actresses—or actual employees in an organization—to create ambiguously uncivil exchanges in a Microsoft Teams or Zoom meeting. Ideally, I would conduct research in an organization using the software that is used for their team meetings, and that would present a situation that could possibly arise. For example, discussion of a cybersecurity breach in a meeting among information technology leadership where one of the leaders makes statements that could be perceived as uncivil among other employees. Since this research started, the COVID-19 pandemic descended unto the world – and continues at the time of this dissertation's writing. There could not be an event that has had a more monumental impact on workplace technology and rapid change. In prior years, someone who had experience in conducting a meeting though Zoom might be considered technologically savvy. In today's workplace environment, Zoom/Teams meetings are commonplace, and this all occurred in an 18-month timespan. Using stimuli using actors or employees in this medium would not only increase the fidelity of the stimuli, but it would also more accurately represent today's workplace.

The second area of research would focus on the practical application of the taxonomy that was created in study one and then further refined and validated in the subsequent studies. The classification system provides guidance to those who seek to lower the frequency that rude emails are exchanged in the workplace. The planning process is already underway to utilize this taxonomy as the foundation to create a training class for the Tampa General Hospital (TGH) – University of South Florida People Development Institute (PDI). PDI is a collaboration between

the hospital and university to provide training for free to all Tampa General Hospital team members (i.e., employees). The email communication course is being developed and based on the taxonomy created from this research and is set to be offered to all 9,000+ TGH team members starting in Spring 2022. From a research perspective, there is the ability to examine human resource complaints occurring because of mistreatment through email communication at TGH prior to and following the debut of the email communication course offering. Further, it would be possible to track the frequency of email-related complaints within units to see if it subsides over time as the percentage of team members take the course.

CONCLUSIONS

Unfortunately, workplace mistreatment in general, and specifically technology-related incivility, occur all too often in today's workplace. Though the prevalence of email incivility was lower than previous academic literature found, nearly 30% of workers reporting that they received uncivil emails at work is still a shockingly high percentage. The taxonomy developed through a thematic analysis involving multiple coders, and validated through survey responses, provides a practical classification system of behaviors and characteristics for those who seek to reduce the percentage of workers receiving uncivil emails in the future. This research also found, and replicated multiple times, that there is a gender effect in rating of incivility in both email and voicemail stimuli and found hostile attribution bias to be a predictor of email incivility ratings. These results provide some insights about individual differences in perceptions of incivility, and we can use the taxonomy to teach and train employees how to best minimize sending potentially uncivil emails at work.

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APPENDIX A:

DEMOGRAPHIC QUESTIONS

1. What is your age in years?
2. What is your gender?
3. What is your ethnicity?
4. What is your current job title? (Please be as specific as possible)
5. When did you start working with your current employer? (drop down list for month and year)
6. Do you use the phone as part of your job?
7. Do you receive work-related voicemails?

APPENDIX B:

HOSTILE ATTRIBUTION BIAS

1. When coworkers leave me out of social events, it is to hurt my feelings.
2. If coworkers do not appreciate me enough, it is because they are self-centered.
3. If coworkers work slowly on a task I assigned them, it is because they don't like me.
4. If people are laughing at work, I think they are laughing at me.
5. If coworkers ignore me, it is because they are being rude.
6. Coworkers deliberately make my job more difficult.
7. When my things are missing, they have probably been stolen.

APPENDIX C:

FACETS OF AGREEABLENESS

Trust ($\alpha = 0.82$)

1. Trust others.
2. Believe that others have good intentions.
3. Trust what people say.
4. Believe that people are basically moral.
5. Believe in human goodness.
6. Think that all will be well.
7. Distrust people.
8. Suspect hidden motives in others.
9. Am wary of others.
10. Believe that people are essentially evil.

Morality ($\alpha = 0.75$)

1. Would never cheat on my taxes.
2. Stick to the rules.
3. Use flattery to get ahead.
4. Use others for my own ends.

5. Know how to get around the rules.
6. Cheat to get ahead.
7. Put people under pressure.
8. Pretend to be concerned for others.
9. Take advantage of others.
10. Obstruct others' plans.

Altruism ($\alpha = 0.77$)

1. Make people feel welcome.
2. Anticipate the needs of others.
3. Love to help others.
4. Am concerned about others.
5. Have a good word for everyone.
6. Look down on others.
7. Am indifferent to the feelings of others.
8. Make people feel uncomfortable.
9. Turn my back on others.
10. Take no time for others.

Cooperation ($\alpha = 0.73$)

1. Am easy to satisfy.
2. Can't stand confrontations.
3. Hate to seem pushy.

4. Have a sharp tongue.
5. Contradict others.
6. Love a good fight.
7. Yell at people.
8. Insult people.
9. Get back at others.
10. Hold a grudge.

Modesty ($\alpha = 0.77$)

1. Dislike being the center of attention.
2. Dislike talking about myself.
3. Consider myself an average person.
4. Seldom toot my own horn.
5. Believe that I am better than others.
6. Think highly of myself.
7. Have a high opinion of myself.
8. Know the answers to many questions.
9. Boast about my virtues.
10. Make myself the center of attention.

Sympathy ($\alpha = 0.75$)

1. Sympathize with the homeless.
2. Feel sympathy for those who are worse off than myself.
3. Value cooperation over competition.
4. Suffer from others' sorrows.
5. Am not interested in other people's problems.
6. Tend to dislike soft-hearted people.
7. Believe in an eye for an eye.
8. Try not to think about the needy.
9. Believe people should fend for themselves.
10. Can't stand weak people.

APPENDIX D:

VOICEMAIL QUESTIONS

1. Have you ever received a voicemail at work that you considered rude?
2. How did receiving the voicemail make you feel?