When Incivility Becomes Bullying: Assessing Cyberbullying in a Virtual Work Environment

by

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Abstract

Myriad constructs (e.g., harassment, incivility, bullying, abusive supervision, deviance) are subsumed under the larger phenomenon that is workplace mistreatment. To date, no researchers have empirically investigated the underlying assumptions by which these constructs supposedly differ. This lack of investigation has resulted in a fragmented body of research on workplace mistreatment. Several researchers (e.g., Aquino & Thau, 2009; Herschovis, 2011) have called for a need to synthesize relevant literature in this area. The current research represents an attempt to empirically support the need to synthesize literature in this area by examining two workplace mistreatment constructs that are on the same spectrum—incivility and bullying. Several researchers (e.g., Einarsen, Hoel, Zapf, & Cooper, 2011; Monks et al., 2009) have looked at the identifying characteristics that define the construct of workplace bullying in a traditional sense. However, these researchers have not necessarily accounted for the way the workplace is changing. Specifically, there has been limited research on the phenomenon of bullying within a network of people whose jobs exist outside traditional workplace boundaries such as physical space, time, or other limits imposed by traditional job descriptions (Broadfoot, 2011). The current research found that individuals experiencing incivility often reported greater perceptions of bullying than individuals who explicitly experienced bullying.
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Chapter 1: Introduction

The past few decades have yielded a proliferation of research on workplace bullying. Workplace bullying spans a range of terms, including bullying, mobbing, workplace abuse, psychological abuse, and workplace psychological harassment (Crawshaw, 2009). Although each of these terms engages slightly differing definitions of this concept, there is some consensus among researchers regarding what constitutes bullying (e.g., Einarsen, Hoel, Zapf, & Cooper, 2003). Workplace bullying involves an evolving process wherein an individual ends up the target of systematic, negative social acts by one or more perpetrators (Brodsky, 1976). That is, workplace bullying entails repeated behavior that is perceived as unfair, humiliating, threatening, persistent, and oppressive (Djurkovic, McCormack, & Casimir, 2008). The power differential between victim and perpetrator further complicates perceptions of bullying behavior by creating a dynamic where victims perceive that they do not have the opportunity to retaliate (Einarsen et al., 2003; Zapf & Einarsen, 2001). Victims may also perceive themselves as lacking any recourse, protection, or escape from the bullying behavior (Einarsen, 2000).

Bullying has impacts at both the individual level and the organizational level. Anywhere from 35% to 50% of U.S. employees have experienced bullying in the course of their careers (Lutgen-Sandvik, Tracy, & Alberts, 2007). Research suggests that bullying costs organizations billions of dollars through absenteeism, turnover, and legal actions (Namie & Namie, 2000; Tepper, 2000). Research on the impact of bullying in the workplace also suggests that bullying results in lower levels of job satisfaction (Einarsen & Raknes, 1997), greater expulsion from the labor market (Leyman, 1996), lower commitment, and higher perceived levels of injustice and
unfairness (Tepper, 2000). Some researchers (e.g., Vartia, 2001) even suggest that the impact of bullying spreads to the individuals who witness such behavior. Vartia (2001) found that workers who witnessed bullying reported higher levels of anxiety than those who had not experienced or witnessed bullying. Similarly, Hoel, Einarsen, and Cooper (2003) reported that one in five individuals who witnessed bullying considered leaving their organizations because of having witnessed such abusive behavior. These researchers also found that bullying was associated with higher turnover and intention to leave.

The many conceptualizations of workplace bullying suggest that three major themes truly define this phenomenon—negative acts, persistency, and imbalance of power (Einarsen, Hoel, Zapf, & Cooper, 2011; Monks et al., 2009). Despite the many conceptualization and outcomes to workplace bullying, existing research has not necessarily accounted for the rapid growth and utilization of modern, Internet-based technologies such as voice chat, instant messages, cloud computing, and connections to various data-processing systems from remote locations. That is, there is a lack of empirical research addressing workplace bullying in the context of virtual workplaces. This study seeks to address this issue, but first, it defines two critical components—the virtual workplace and cyberbullying.

**The Virtual Workplace Defined**

In the broadest terms, a virtual workplace consists of a network of people whose jobs exist outside traditional workplace boundaries such as physical space, time, or other limits imposed by traditional job descriptions (Broadfoot, 2001). The rapid development of electronic information and communication media has resulted in a faster and more efficient distribution of work. As well, the growth and accessibility of the Internet has resulted in many organizations supporting, to some degree, a virtual workplace. (Hertel, Geister, & Konradt, 2005). Therefore,
recent definitions suggest that a virtual workplace consists of geographically-distributed, electronically dependent teams who conduct their core work tasks using various technologies such as shared databases, company intranet, instant messaging, and e-mail (Gibson & Gibbs, 2006; Hinds & Kiesler, 2002). The use of these various technologies creates the opportunity for a new type of workplace bullying—cyberbullying.

**Cyberbullying Defined**

Cyberbullying is “an aggressive, intentional act carried out by a group or individual, using electronic forms of contact repeatedly and over time against a victim who cannot easily defend him or herself” (Smith et al., 2008). Similar to traditional conceptualizations of workplace bullying, cyberbullying has three major themes—aggressive acts, persistency (i.e., repetition), and power imbalance (Langos, 2012). However, the use of technology results in slightly different conceptualizations of the themes that cyberbullying shares with traditional bullying. Cyberbullying relies on modern technology to denigrate victims; primarily, this type of bullying occurs via computers that have access to e-mail and the Internet, and by mobile phones that utilize Short Message Service (SMS), which is colloquially referred to as text messaging (Privitera & Campbell, 2009).

**Mistreatment Issues: Overlapping Constructs**

Bullying behavior is generally subsumed under the larger construct of workplace mistreatment/aggression (Herschovis, 2011). This large conceptualization of workplace mistreatment includes several overlapping constructs such as abusive supervision, bullying, incivility, social undermining, and interpersonal conflict. Although several researchers (e.g., Fox & Spector, 2005) conceptually differentiated these constructs in the literature, several researchers (e.g., Aquino & Thau, 2009; Fox & Spector, 2005; Herschovis, 2011; Raver & Barling, 2008)
suggested that the amount of construct overlap has resulted in fragmentation and a need to synthesize relevant literature. One objective of the current research is to provide empirical support for this need to synthesize literature by examining the overlap between incivility and bullying. The current research focuses on bullying and incivility because these two types of workplace mistreatment have very clear theoretical differences; as well, bullying and incivility represent high- and low-intensity aggressive behaviors respectively (Herchovis, 2011).

The current work explores the relationship between cyberbullying and incivility by first discussing three major themes of traditional workplace bullying. This research also concurrently explores the relationship between traditional workplace bullying and cyberbullying in order to provide the theoretical framework that guides this study. Next, this research discusses the rationale for specific hypotheses related to testing the lack of empirical differentiation between cyberbullying and incivility. Lastly, this research details the specific method that was used to test the overarching hypothesis of this study—that the constructs of incivility and bullying do not empirically differ in a virtual context and should subsequently be synthesized.

**Chapter 2: Workplace Bullying: Exploring the Four Major Themes**

**The Experience of Negative Acts**

**The Traditional Workplace.** In the simplest of terms, bullying involves the experience of negative behaviors (Rayner & Keashly, 2005). In other words, bullying covers a range of repeated, unwelcomed abusive acts. Inherent in this discussion of negative acts is the role of perception. Many researchers (e.g., Hoel & Beale, 2006) suggest that the perception of bullying by the target should not constitute a defining property of this construct. The nature of certain behaviors (e.g., differential treatment) makes it difficult to describe them; this difficulty subsequently impacts a target’s ability to effectively discern and even articulate what has
occurred (Rayner & Keashly, 2005). Argevold (2007) agreed with this perspective and suggested that identification of bullying behaviors should stand independent of the perspective of the target. In other words, researchers in the area should emphasize a more objective perspective of workplace bullying (Einarsen et al., 2003). A purely subjective perspective may be to the detriment of the target, as differing definitions may result in the underreporting of actual bullying behavior in the workplace (Saunders, Huynh, & Goodman-Delahunty, 2007). Thus, a deeper understanding of the experience of negative acts requires examining how researchers have typically classified behaviors associated with workplace bullying, as well as the specific behaviors associated with these classification. Investigating typical classifications creates a framework for understanding the negative behaviors that translate to the virtual workplace and those behaviors that do not.

Buss (1961) developed a general framework that included dichotomizations of 3 types of aggression: verbal-physical, active-passive, and direct-indirect. Of these types of aggression, much of the research on workplace bullying has focused on direct and indirect aggression. Direct aggressive behavior involves delivery of harmful behavior from a perpetrator to a target, and indirect aggressive behavior involves delivery of harmful behavior through the actions of other people (Baron & Neumann, 1996; Buss, 1961). Baron and Neumann (1996) differentiated between direct and indirect aggressive behaviors and found that acts of direct aggression were rated as occurring significantly more frequently than acts of indirect aggression. Their conceptualization of behaviors as direct and indirect has been a critical component of the workplace bullying literature, as evidenced by its repeated use. For example, Bartlett and Bartlett (2011) reviewed the literature on workplace bullying and found that bullying behaviors spanned three broad categories: personal, work-related, and physical/threatening. This first category of
personal bullying behaviors utilized the dichotomous categorization of indirect and direct bullying behaviors. Consistent with Buss’s (1961) framework, indirect aggression involved actions that hurt the target without direct interpersonal interaction and included the following behaviors: isolation, ignoring, excluding, spreading gossip, false accusations, undermining an employee, and not returning communications (Bartlett & Bartlett, 2011). Similarly, Gardner and Johnson (2001) suggested that indirect personal behaviors include not returning communications such as phone calls, memos, and emails.

Conversely, direct behaviors were those behaviors involving an interaction between a perpetrator and a target (Bartlett & Bartlett, 2011; Buss, 1961). These behaviors included the following types of abusive actions: verbal attacks, harassment, belittling remarks, yelling, or interrupting others (Bartlett & Bartlett, 2011). Direct bullying also included behaviors that focused on humiliating the target such as persistent criticism, intentionally demeaning and mocking individuals, and negative eye contact. Severe direct bullying behaviors included manipulation, intimidation, and threats (Bartlett & Bartlett, 2011).

Rodríguez-Carballeira and colleagues (2010) suggested a similar taxonomy of psychological bullying in the workplace. They divided behaviors along the direct-indirect dichotomization. Indirect behaviors focused on work context and consisted of isolation, control and manipulation of information, and control of working conditions. Isolation can be further conceptualized as physical and social isolation and involves restricting the target’s interaction on these levels. Perpetrators may also select and manipulate the information received by the coworker by lying or interfering with the information a target receives. Lastly, perpetrators may indirectly control working conditions by intervening in the work environment. Behaviors in this last category might include interfering with access to resources needed to complete a work task.
or assigning the target to potentially risky tasks. These same researchers also looked at the direct behaviors involved in psychological bullying in the workplace. Direct behaviors were those behaviors involving emotion, cognition, and action (Rodríguez-Carballeira et al., 2010).

Emotional abuse involves offensive action and expressions that directly attack the target. Similar to the taxonomy proposed by Bartlett and Bartlett (2011), abusive emotional behaviors ranged from disrespect to intimidation and threats (Rodríguez-Carballeira et al., 2010). Direct behaviors involving cognition are designed to discredit and denigrate the target’s professional reputation and standing. That is, these behaviors involve belittling the target’s knowledge or experience. Lastly, direct behaviors may also take the form of action, wherein the perpetrator intentionally undervalues the importance of the target or relieves the target of any work responsibilities (Rodríguez-Carballeira et al., 2010).

There are several types of behavior that fall within the direct-indirect categorization of experienced negative behaviors. Rayner and Keashly (2005) suggested it is important to understand these individual behaviors for purposes of identification. They suggested that instances of bullying rarely amount to a single, unwarranted experience of abuse. Rather, bullying in the workplace typically takes the form of much smaller incidents that collectively demonstrate a pattern of abusive behavior (Rayner and Keashly, 2005).

The Virtual Workplace. Conceptual overlap exists between traditional conceptualizations of workplace bullying and cyberbullying. One such significant area of overlap involves differentiating between direct and indirect cyberbullying. Similar to the traditional workplace bullying, direct cyberbullying involves delivery of harmful behavior from a perpetrator to a target. However, this delivery occurs via electronic communication in a context that is essentially private. For example, a bully may send a victim a derogatory e-mail or a
vicious text message. Indirect cyberbullying then involves delivery of harmful behavior through a medium that is readily accessible to the public. For example, a bully may make remarks or posts on social media websites or create a special blog about the perceived shortcomings of the victim (Langos, 2012). Perhaps the greatest distinction between direct-indirect aggression in traditional versus virtual workplaces involves the audience. Although direct cyberbullying mimics traditional workplace bullying in terms of involving a finite group, indirect cyberbullying has the potential to reach a boundless audience. Once information crosses into public forums, the bully no longer has control over how this information spreads (Langos, 2012). A single instance of indirect cyberbullying may potentially result in a ceaseless experience of denigration and humiliation (Dooley, Pyżalski, & Cross, 2009). The next section further explores the persistent experience of bullying.

The Persistent Experience of Bullying

The Traditional Workplace. The definition of workplace bullying engages two critical components that function concurrently—persistency and frequency (Einarsen et al., 2011). Persistency in this context involves exposure to negative acts for a minimum of six months. Related to this minimum duration requirement is exposure to negative behaviors at least one to two times per week (i.e., frequency; Einarsen et al., 2011). The components of persistency and frequency are critical because they emphasize the relationships of the individuals involved rather than potentially minimizing aggressive acts as isolated incidents (Rayner & Keashly, 2005). Therefore, truly capturing the impact of the persistent experience of bullying requires further exploration of the interpersonal interactions between the target and the actor.

In the context of workplace bullying, relational persistency may be conceptualized as a type of conflict escalation. The underlying mechanism to this escalation is conflict, which arises
when there is the perception that something about which an individual cares is, or may potentially be, negatively affected (Thomas, 1992). Conflict escalation moves through several phases and only increases in levels of dysfunction. The first stage consists of critical incidents, which are simply triggering situations, or conflicts. Conflicts slowly transform to bullying with increased aggressive behavior and the intervention of organizational personnel management (Zapf, 1999; Zapf & Gross, 2001). In these situations, management tends to exacerbate issues by holding “personal characteristics of the victims responsible rather than environmental factors” (Zapf & Gross, 2001, p. 500). Zapf and Gross (2001) investigated this notion using a series of quantitative and qualitative studies and found that most bullying cases conformed to this idea of escalation.

Related to conflict escalation is the notion of hostile workplace relationships (Aquino & Lamertz, 2004; Keashly & Harvey, 2006). Aquino and Lamertz (2004) emphasize the interaction between context, target, and perpetrator. They suggest that individuals who perceive themselves to be targets in a social encounter will later retaliate or enact the same behavior. Engaging in this retaliatory behavior moves the individual from the role of target to that of perpetrator (Aquino and Lamertz, 2004). In this manner, the persistent experience of bullying is more enduring because of an ever-changing dysfunctional network that perpetuates bullying behavior. Although Aquino and Lamertz’s (2004) perspective does potentially contribute to understanding the persistence of bullying, it does have some practical issues. Namely, subscribing to this view makes it very difficult to determine the origins of workplace bullying and makes it difficult to determine the targets and perpetrators. This difficulty can have particular implications when attempting to develop and incorporate interventions (Branch, Ramsay, & Barker, 2012).
Although research engages the relational aspect of persistency, there are few studies that empirically investigate the temporal quality of persistency. Several researchers reported that the minimum duration of bullying is 6 months (Zapf & Gross, 2001). However, other research reported mean bullying durations between 15 and 46 months (Einarsen & Skogstad, 1996; Leymann, 1996; Zapf, 1999). Despite these varied reported mean durations of bullying, no research in the specific area of workplace bullying empirically specifies an amount of time for bullying behavior to constitute persistence. One reason that might account for this lack of research into time pertains to legal reasons. Assigning a time value to the persistence of bullying invites bullies to continue their actions until the required persistency is almost met (Rayner and Keashly, 2005). In this manner, the bully would potentially be able to avoid consequences by always ceasing behavior before meeting the required persistency.

**The Virtual Workplace.** Persistency and frequency are also two important issues in the context of cyberbullying. Whereas the traditional workplace bullying operationalizes persistency based upon minimum exposure to aggressive behavior for six months, cyberbullying focuses on repetition of aggressive behaviors (Patchin & Hinduja, 2006). Repetition allows for the distinction between isolated aggressive incidents (e.g., teasing) and systematic behavior that causes psychological harm (Langos, 2012; Nocentini et al., 2010). However, certain difficulties arise when attempting to operationalize repetition in the context of cyberbullying; these difficulties are perhaps best understood in the aforementioned context of direct and indirect cyberbullying.

Direct cyberbullying captures the repetitive behavior most akin to traditional workplace bullying. That is, direct cyberbullying relies upon multiple instances of aggressive behavior that are electronically communicated between a perpetrator and a victim. However, indirect
cyberbullying takes a form that is less straightforward in terms of repetition. Indirect cyberbullying relies upon public forums as arenas to denigrate victims. Repetition takes a different form in such arenas. A single incident of indirect cyberbullying has the potential for an infinite number of viewers (Dooley, Pyżalski, & Cross, 2009; Langos, 2012). Although a perpetrator may engage in a single act, that act can have lasting consequences. Once information is shared on public forums, there are potentially no limits to the number of viewers or the number of times this information is distributed (Langos, 2012). This potential for information to remain indefinitely accessible to the public effectively eliminates the need to establish minimum requirements that constitute persistency of cyberbullying (Fauman, 2008).

The Imbalance of Power

The Traditional Workplace and The Virtual Workplace. The third major defining aspect of workplace bullying is the imbalance of power between the target and the perpetrator. The imbalance of power is an important idea in the bullying literature because it offers some explanation why a conflict between two individuals escalates. Einarsen et al. (2003) suggested that any negative behavior arising between two individuals with balanced power (i.e., access to similar organizational resources) is more indicative of a conflict than actual bullying. That is, the conflict never escalated to bullying. Initial research in bullying supported this perspective, as researchers engaged bullying based upon the formal organizational structure, wherein the manager was the bully. Such research maintained that higher hierarchical status conferred a type of formal power that left low-status individuals vulnerable to aggressive behavior (Aquino, 2000; Hutchison, Vickers, Jackson, & Wilkes, 2006).

Lamertz and Aquino (2004) took the perspective that various types of power dynamics exist within organizations. They suggested that there are managers who lack the ability to draw
upon their formal power. Therefore, workplace bullying is not simply about the power dynamic between an authority figure and a subordinate; rather, workplace-bullying perpetrators may be any individuals who possess informal sources of power (e.g., knowledge, experience; Einarsen, Hoel, & Notelaers, 2009; Einarsen, Hoel, Zapf, & Cooper, 2003). Branch, Ramsay, and Barker (2012) similarly suggested informal sources of power (e.g., expertise, social networks; French and Raven, 1959) can be used to gain power to bully at work. As well, they suggested that a narrow view of power can result in loss of information regarding the complex role that power plays in the workplace—all individuals in the workplace have access to some form of power that can be used inappropriately (Branch, Ramsay, & Barker, 2012). Given every individual’s potential access to some form of power, workplace bullying can subsequently occur in the following manner: from supervisor to subordinate, from subordinate to supervisor, peer to peer, and external customers to employees (Fox & Stallworth, 2005).

Within the virtual context, cyberbullying reflects a power imbalance, wherein a victim perceives a lack of recourse or escape. The source of this power differential may take many forms given the seemingly infinite possibilities for denigration in a virtual context (Langos, 2012). Whereas individuals experiencing traditional bullying may be able to escape at the end of the day, those individuals experiencing cyberbullying have the potential for such aggressive behavior to penetrate their home lives (Langos, 2012; Slonje & Smith, 2008). Victims of traditional bullying face the very real threat of organizations that may perceive such aggressive behavior as a means of facilitating successful performance (Salin, 2003); such behavior may generalize to cyberbullying.
Linking Bullying and Incivility

The basic definition of bullying consists of the experience of negative behaviors, the persistent experience of bullying, and the imbalance of power. Bullying behaviors range from withholding information to belittling or even threatening the target (Bartlett & Bartlett, 2011). However, as noted earlier in this paper, the construct of bullying overlaps considerably with the construct of incivility. Whereas bullying involves repeated high-intensity aggression over time (Einarsen, 2000; Herchovis, 2011), incivility involves low-intensity aggressive acts (e.g., rude behaviors) that are characterized by ambiguous intent (Herchovis, 2011). The ambiguity of incivility stands in contrast to the unambiguous nature of bullying. In the broader domain of workplace mistreatment, Herchovis (2011) suggested that many of the differentiating attributes are “assumptions of the definition and conceptualization” (Herchovis, 2011, p. 505). The lack of empirical evidence that supports these construct differences is important, as there may be no perceptual differentiation from a victim’s perspective. Based on this information, the current research sought to identify perceived empirical differences between bullying and incivility in a virtual work context. To the author’s knowledge, no research has concurrently examined the constructs of bullying and incivility in a virtual context. The next section formally specifies the hypotheses and the rationale for them.

Chapter 3: Hypotheses Development

The current study examined perceptions of incivility and bullying in a virtual context. The overall objective of this study centers on the following question: Are incivility and bullying truly empirically distinct constructs in a virtual work environment? This study utilized e-mail/instant messaging as the communication form within the online work environment. The use of e-mail reflects the increased use of technology that currently characterizes many jobs.
E-mail also functions as a medium that contributes to the unnecessary escalation of conflicts, as well as the misinterpretation of intent (Giumetti et al., 2013; Morgan, 2013). Herchovis (2011) suggested that bullying differs from incivility and other forms of mistreatment based on the following attributes: persistency, frequency, and power imbalance. Several researchers (e.g., Einarsen et al., 2011) suggested that these concepts are critical to define bullying behavior in the workplace; however, research on workplace bullying has not truly engaged these concepts empirically (Herchovis, 2011). Persistency and frequency qualify bullying in a manner that places necessary limits on what constitutes bullying. Such limits may impose constraints that do not consider the lasting effects of single incidents of bullying. As well, such restrictions on persistency and frequency suggest that behaviors occurring more are worse than single incidents (Herchovis, 2011). Tatum (1989) suggested that a single act might result in repetitive, stressful feelings. Thus, individuals still experience the psychological feelings related to bullying. Given this information, the current study maintained that perceptions of bullying for at least one of the types of aggression depend on the frequency and audience of negative behavior. Within this framework, the current study operationalized frequency by the number of uncivil/bullying e-mails received, and it operationalized audience by presence or absence (i.e., public vs. private) of multiple recipients of the aggressive message. Therefore, this study made the following hypotheses:

H1a) Experiencing a single public act of aggression (i.e., incivility or bullying) will result in significantly higher perceptions of bullying than experiencing a single private act of aggression.
H1b) Experiencing a single private act of incivility will result in significantly lower perceptions of bullying than experiencing a single private act of bullying.

H1c) Experiencing a single public act of aggression will result in significantly higher perceptions of bullying than experiencing multiple private acts of aggression.

H1d) Experiencing multiple acts of aggression will result in significantly higher perceptions of bullying, compared to experiencing single acts of aggression.

The current study also sought to understand the implications of incivility and bullying in terms of performance and employee engagement. Conservation of resources theory (COR; Hobfoll, 1989) suggests that stress occurs when there are high levels of demands, such as interpersonal conflict. Incivility and bullying—especially at high frequency—may diminish cognitive and emotional resources of employees and subsequently be linked to decreased work effort and output (Sakurai & Jex, 2012). Interpersonal mistreatment has been related to decreased concentration, which can negatively impact work productivity (Caza & Cortina, 2007; Giumetti et al., 2013). Therefore, if incivility and bullying are different constructs within a virtual work environment, it logically follows that there should be differential effects in work performance, such that individuals experiencing bullying will experience decreased work performance compared to individuals experiencing incivility. Therefore, we propose the following hypothesis:

H2) Experiencing bullying will be associated with lower task performance compared to experiencing incivility.
Another important aspect of COR theory involves the role of resources in work engagement. Gorgievski and Hobfall (2008) proposed that a surplus of resources at work (e.g., social support) should increase work engagement. Conversely, other researchers (e.g., Hobfall & Shirom, 2001) suggested that significant demands on resources (e.g., incivility) should decrease work engagement. Several studies (e.g., Reio & Sanders-Reio, 2011) found support for the negative relationship between incivility and engagement. Other researchers also observed this negative relationship when implementing an incivility intervention—reducing incivility was associated with increased work engagement (Osatuke, Moore, Ward, Dyrenforth, & Belton, 2009). Similarly, Halbesleben (2010) offered meta-analytic evidence suggesting that resources (e.g., social support) positively predict engagement, and demands negatively predict engagement. The aggregation of these results provides initial support of a causal link between incivility and engagement. However, the survey methodology these researchers largely employed restricts the causal inferences that can be made between these constructs. The current study sought to strengthen the literature in this area by examining the impact of incivility and bullying on engagement in an experimental setting. Given that bullying represents a higher-intensity form of aggression than incivility, this study made the following hypothesis:

H3) Experiencing bullying will be associated with lower task engagement compared to experiencing incivility.

Chapter 4: The Current Study

Although several studies have teased apart various forms of workplace mistreatment, these studies have relied on arguably arbitrary assumptions to define and operationalize these various forms of mistreatment. Therefore, the current study sought to experimentally manipulate incivility and bullying in an online context. To the authors’ knowledge, only one such study (i.e.,
Giumetti et al., 2013) has attempted to manipulate any aspect of workplace mistreatment within an online context. The current study used a 2 X 2 X 2, between-subjects design to examine the differential impact of incivility and bullying on task performance, perceptions of bullying, and work engagement. The study sample consisted of university undergraduates who completed a simulated work task. This current research challenges major assumptions of these constructs within the domain of workplace mistreatment, with the ultimate goal of synthesizing research in this very fragmented research area.

Chapter 5: Method

Participants

Participants were 174 undergraduate psychology students (56.9% female, 83.5% White, $M_{age} = 20.02$ years, $SD = 3.35$) at a large Southeastern university. Data were collected online via the Qualtrics survey-hosting site, and participants received one hour of course credit for completing the study. Due to the state laws regarding consent, and the online format of the study, participants were required to be at least 18 years of age to participate. Participants were randomly distributed into uncivil, bullying, or neutral conditions that received varying frequencies of communication regarding their task performance. This communication occurred either privately (i.e., just to the “worker”) or publicly (i.e., to the worker and an unspecified number of other viewers).

Procedure

The university internal review board approved this study. Participant recruitment occurred via the University’s SONA system. This system allows students enrolled in classes offering extra credit for research to self-select into studies of their choice. On the SONA system, clicked on a link to the study titled, “Multitasking in Online Contexts.” The SONA study
description, which is available to all persons who are in the system, detailed that this study involved processing online performance feedback while completing a task. Additionally, the study informed participants that there is a possible one point of extra credit that can be earned and that the study takes one hour. Once participants agreed to participate in this study in SONA, the system routed them to a screen containing the survey link. Upon clicking this link, participants consented to participate in this study. After consenting, participants read directions online pertaining to their completion of several work-related math tasks. Participants were presented with a problem and an open-ended answer field. As they were completing the fifteen math tasks, participants randomly received five messages. Based on their experimental condition, participants either received one aggressive (i.e., incivility or bullying) message and four neutral messages, or they received five aggressive messages. Participants then completed several measures and provided demographic information. The next sections provide additional information about each phase of the study.

**Study Phases**

**Uncivil and Bullying Statements’ Development.** The first aspect of this research involved finding multiple statements that reflected incivility and bullying in an online context. The uncivil statements were based on the Workplace Incivility Scale (WIS; Cortina, Magley, Williams, & Langhout, 2001) and existing research (e.g., Giumetti et al., 2013). A statement of incivility is as follows: “Send me your responses to these questions ASAP! I’m tired of waiting for you to do your job.” Researchers used the Negative Acts Questionnaire-Revised (Einarsen, Hoel, & Notelaers, 2009) to develop the statements of bullying. A statement of bullying is as follows: “Maybe you should just quit if you can’t handle the workload here. I really don’t have
time to do my job and the job of an obvious genius like you.” These statements did not exceed 30 words.

Researchers conducted a pilot study on the uncivil and bullying statements to determine the extent to which each statement was correctly perceived as invoking its coordinating construct. Researchers administered these developed statements to a pilot sample of ten undergraduate students. The pilot participants were asked to rate 25 items on a 7-point Likert-type scale based on how uncivil, neutral, or bullying they thought each item was (1 = very uncivil or rude to 4 = neutral to 7 = very bullying). They were also given definitions for incivility and bullying (“any statement that is rude, insulting, discourteous, impolite, or unmannerly” and “unfair, humiliating, threatening, and oppressive,” respectively). Researchers computed the average rating for each item. Five items with average scores below 2 were retained as uncivil items, and five items with scores above 6 were retained as bullying items. Additionally, researchers retained five neutral items with an average score of 4. The neutral messages were an important component to make sure that all participants received the same number of messages, despite any manipulations to the number of uncivil/bullying messages received. This general process for item development and evaluation has been successful in prior research (e.g., Giumetti et al., 2013). The final set of statements can be found in Appendix A.

Math Tasks. Based on previous research (e.g., Baumesteir, Twenge, & Nuss, 2002; Giumetti et al., 2013; John et al., 2009), Graduate Record Examination (GRE) questions may function as simulated work tasks. The current study told participants that they were part of an online work environment that evaluated performance on several, simple math tasks. As part of their “job,” participants answered several math questions based on the type of questions that might appear in the quantitative section of the GRE. The study also informed participants that
they could use a calculator if they had one available. Regarding the specific math questions, each question was pilot tested with 10 undergraduate students to determine difficulty, timing, and wording of the tasks. Researchers provided these participants with 15 tasks and a calculator; the results of this online pilot test revealed that it took participants between 1-2 minutes to provide an answer. Based on the feedback from the pilot study, researchers changed the wording of some math tasks. The resulting 15 tasks are in Appendix B. Researchers calculated scores on the math tasks as the total percentage of correct responses.

Task Completion. Participants attempted to answer 15 math questions while receiving either one or multiple uncivil or bullying messages from an unspecified individual who was providing feedback about participants’ performance. The current study coded the aggressive messages into the individual questions that participants answered. This coding allowed both math tasks and feedback messages to be randomized for a participant’s experimental condition. Research (e.g., Radicati, 2012) suggests that individuals receive an estimated 68 legitimate e-mails per day. Therefore, using five e-mails represents an average number of e-mails per half-hour that one might receive on any given eight-hour workday. Therefore, this study relied on a 2X2X2, between-subjects design in which researchers manipulated type of aggression (i.e., incivility or bullying), frequency of aggressive behavior (i.e., 1 or 5 e-mails), and the experience of negative, aggressive behavior (i.e., direct/private or indirect/public).

Measures. After completing the tasks and receiving the number of e-mails corresponding to their randomly assigned groups, participants completed several measures. Participants completed a demographics questionnaire where they reported age, current class year, sex, and race. Additionally, participants completed measures of both job satisfaction and work engagement. In order to minimize possible response bias, participants completed these measures
prior to completing the WIS and NAQ-R. Prior studies reported values of Cronbach's $\alpha$ that are equal to or near .89 for the WIS (Cortina, Magley, Williams, & Langhout, 2001); in the current study, the reliability of this measure was consistent with these findings, Cronbach's $\alpha = .90$. Prior research suggested Cronbach's $\alpha$ values for the NAQ-R that range between .88 and .90 (Einarsen, Hoel, & Notelaers, 2009). The current study found high reliability with this measure, $\alpha = .96$.

The current study measured participants’ job satisfaction using the Job Satisfaction Survey (JSS; Spector, 1997). A sample item is, “I feel a sense of pride in doing my job.” The internal consistency of the JSS has historical Cronbach's $\alpha$ values that typically are equal to or exceed the critical value of .70 (Nunnaly & Bernstein, 1984). Prior studies have shown values of Cronbach's $\alpha$ that range between .60 and .82 (Spector, 1997). In the current study, the reliability of the JSS was also high, Cronbach's $\alpha = .88$. The current study also measured participants’ workplace engagement using the Utrecht Work Engagement Scale (Schaufeli, Bakker, & Salanova, 2006). A sample item is, “At my job, I am very resilient, mentally.” The internal consistency of the three scales of the UWES has historical Cronbach's $\alpha$ values that are equal to or exceed the critical value of .70 (Nunnaly & Bernstein, 1984). Usually values of Cronbach's $\alpha$ for these scales range between .80 and .90 (Salanova, Grau, Llorens & Schaufeli, 2001). The reliability of the UWES was high in the current study, Cronbach's $\alpha = .95$.

Chapter 6: Results

The current study’s purpose was to investigate the differential impact of incivility and bullying on individuals completing an online work task. There are several dependent variables of interest, including the following: incivility perceptions, bullying perceptions, work engagement, and task performance. Descriptive statistics for these variables and their correlations are presented in Table 1 (See Appendix C). Various tests were performed to assess the efficacy of
the experimental manipulation; additional tests examined the effects of the independent variables on the aforementioned dependent variables of interest. The following sections discuss the results of these tests.

**Manipulation Check.** A series of independent samples $t$ tests confirmed that the uncivil and bullying statements were perceived as intended. There was a significant difference between mean perceptions of incivility among individuals in the uncivil and bullying conditions, respectively. All individuals with complete responses across all uncivil conditions ($N = 92$) reported perceptions of incivility, $M = 3.16$ ($SD = 0.99$). By comparison, individuals across all bullying conditions ($N = 82$), reported slightly lower perceptions of incivility, $M = 2.54$ ($SD = 0.96$). To test that individuals in the uncivil and bullying conditions were associated with statistically significant different mean perceptions of incivility, researchers used an independent samples $t$-test. Distributions were sufficiently normal for the purpose of conducting a $t$-test for the manipulation check. As well, the assumption of homogeneity of variance was tested and satisfied via Levene’s $F$ test, $F = 0.21$, $p = 0.65$. The independent samples $t$-test was associated with statistically significant effect, $t(172) = 4.23$, $p < .001$, $d = 0.65$. Therefore, individuals in the uncivil conditions were associated with significantly higher perceptions of incivility than individuals in bullying conditions.

This process was repeated to test whether the bullying condition was perceived as intended. Again, all individuals with complete responses across all uncivil conditions ($N = 92$) reported perceptions of bullying, $M = 3.48$ ($SD = 0.82$). By comparison, individuals across all bullying conditions ($N = 82$), actually reported slightly lower perceptions of bullying, $M = 3.06$ ($SD = 0.77$). Following the same statistical procedure as previously outlined, distributions were sufficiently normal for the purpose of conducting a $t$-test for the manipulation check.
Additionally, the assumption of homogeneity of variance was tested and satisfied via Levene’s $F$ test, $F = .17, p = .68$. The independent samples $t$-test was associated with a statistically significant effect, $t(172) = 3.43, p < .001$ and $d = 0.52$. However, as noted above, individuals in the uncivil conditions were actually associated with significantly higher perceptions of bullying than individuals in the bullying conditions. Thus, subsequent analyses sought to help explain this occurrence; the results of these analyses appear in the next section.

**Hypothesis Testing**

Hypotheses 1a – 1d examine perceptions of bullying, based on group type; hypotheses 2 and 3 look group differences in task performance and work engagement, respectively. Because there are multiple dependent measures being compared for differences across the incivility and bullying conditions, researchers conducted a multivariate analysis of variance (MANOVA) omnibus test to control the experiment-wise Type 1 error rate. Results of this analysis appear in Table 2 (See Appendix D). Researchers conducted preliminary assumption tests to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. After testing these assumptions, researchers included only two of the dependent variables: incivility perceptions, and bullying perceptions. The independent variables were type of aggression (i.e., incivility or bullying), audience (i.e., private or public), and frequency (i.e., 1 or 5 aggressive e-mails). Results from this MANOVA with these variables did not reveal a significant omnibus test, $F(2, 165) = .591, p = .55$. Therefore, there was insufficient evidence to conclude a significant interaction effect among our independent variables on the combined dependent variables. As well, there were no significant interaction effects among lower-order interaction terms in our model. Thus, the results suggested that any significant results were within the main effects of our independent variables. Hypotheses 1a – 1c
postulated outcomes based upon the combined effects of type of aggression, audience, and frequency. Given the lack of significant interaction terms, any results pertaining to these hypotheses can only show partial support, at best. It is in this context that researchers examined the outcomes of these specific hypotheses.

Hypothesis 1a suggested that experiencing a single public act of aggression would result in significantly higher perceptions of bullying than experiencing a single private act of aggression. Hypothesis 1c suggested that there was a significant difference between experiencing a single public act of aggression and multiple private acts of aggression. A MANOVA revealed an insignificant multivariate main effect for audience (i.e., public or private), Wilks’ $\lambda = 0.984$, $F(2, 169) = 1.33$, $p = 0.27$, partial eta-squared = 0.016. Power to detect the effect was 0.29. For the sake of completeness, researchers examined the univariate main effects for audience on bullying perceptions and found no significant main effect, $F(1, 170) = 2.59$, $p = 0.11$, partial eta-squared = 0.015, power = 0.36. Researchers concluded that there was insufficient evidence to determine that experiencing a public act of aggression would result in significantly higher perceptions of bullying than experiencing a private act of aggression. As well, there was insufficient evidence to determine significantly different perceptions of bullying between acts of aggression that occurred singularly and privately. Therefore, neither Hypothesis 1a nor 1c was supported.

Hypothesis 1b suggested that experiencing a single, private act of incivility would result in significantly lower perceptions of bullying from experiencing a single, private act of bullying. A MANOVA revealed a significant multivariate main effect for type of aggression (i.e., incivility or bullying), Wilks’ $\lambda = 0.878$, $F(2, 169) = 11.79$, $p < .001$, partial eta-squared = 0.12. Power to detect the effect was .99. Given the significance of this overall test, the univariate main
effects were examined. Researchers obtained significant univariate main effects for type of aggression, $F(1, 170) = 14.19, p < .001$, partial eta-squared = 0.08, power = 0.96. Results suggested that individuals in the uncivil condition reported higher perceptions of bullying ($M = 3.50, S.E. = 0.08$) than individuals in the bullying condition ($M = 3.06, S.E. = 0.09$), and this difference was statistically significant, $p < 0.001$. Therefore, hypothesis 1b was partially supported in terms of predicting significant differences in perceptions of bullying across type of aggression. There was sufficient evidence suggesting significant differences in perceptions of bullying, but these differences were not in the hypothesized direction.

Hypothesis 1d suggested that individuals experiencing multiple acts of aggression would report significantly higher perceptions of bullying, compared to individuals experiencing single acts of aggression. A MANOVA revealed a significant multivariate main effect for frequency (i.e., 1 e-mail or 5 e-mails), Wilks’ $\lambda = 0.904$, $F(2, 169) = 8.97, p < .001$, partial eta-squared = 0.096. Power to detect the effect was .97. Given the significance of this overall test, researchers examined the univariate main effects and obtained significant univariate main effects for frequency, $F(1, 170) = 12.71, p < .001$, partial eta-squared = 0.07, power = 0.94. Results suggested that individuals receiving one e-mail that was aggressive reported higher perceptions of bullying ($M = 3.49, S.E. = 0.09$) than individuals who received five e-mails that were aggressive ($M = 3.07, S.E. = 0.08$), and this difference was statistically significant, $p < 0.001$. Therefore, hypothesis 1d was not supported. Although there was sufficient evidence suggesting significant differences in perceptions of bullying across frequency of aggressive communication, these differences were not in the hypothesized direction.

Hypotheses 2 and 3 look at different outcomes than the previous hypotheses. Inclusion of these outcomes violated the assumptions for the previous MANOVA; therefore, we ran two
separate ANOVAS. Hypothesis 2 suggested that experiencing bullying would be associated with lower task performance compared to experiencing incivility. A univariate ANOVA revealed no significant interactions or main effects of any independent variables on task performance (See Table 3, Appendix E). Thus, the test for the effect for type of aggression (i.e., incivility or bullying) on task performance was insignificant, $F(1, 170) = 1.06$, $p = .304$, partial eta-squared $= 0.006$. Power to detect the effect was .18. Results suggested that individuals in the uncivil condition had a lower percentage of correct responses on the math tasks ($M = 46.54$, $S.E. = 2.50$) than individuals in the bullying condition ($M = 50.28$, $S.E. = 2.63$). Therefore, hypothesis 2 was not supported. Hypothesis 3 suggested that experiencing bullying would be associated with lower task engagement compared to experiencing incivility. A univariate ANOVA revealed a significant three-way interaction among the independent variables, $F(1, 166) = 3.885$, $p = .05$, partial eta-squared $= .023$. Power to detect the effect was .50. This analysis revealed no other reliable main effects or interactions (See Table 4, Appendix F). Therefore, we can conclude that the relationship between task engagement and bullying perceptions depends on audience and frequency. That is, within the uncivil condition, individuals receiving one public email reported significantly lower task engagement than those individuals receiving one private email (See Figure 1). Within the bullying condition, individuals receiving one private email reported significantly lower task engagement than those individuals receiving one public email (See Figure 2). Therefore, Hypothesis 3 was supported.

**Chapter 7: Discussion**

The current study examined the differential impact of incivility versus bullying on individuals in a simulated online work environment. A desire to understand if incivility and bullying were separate constructs within an online work environment guided this research. To
that end, this study utilized e-mail/instant messaging as the communication form within the online work environment. E-mail is one form of communication that contributes to the unnecessary escalation of conflicts, as well as the misinterpretation of intent (Giumetti et al., 2013; Morgan, 2013). Herchovis (2011) suggested that bullying differs from incivility and other forms of mistreatment based on persistency and frequency. Several researchers (e.g., Einarsen et al., 2011) suggested that these concepts are critical to define bullying behavior in the workplace.

Some of the hypotheses postulated in this research were not supported. However, this lack of support may nevertheless provide incremental evidence challenging the “call to reconcile constructs within workplace aggression research” (Herschovis, 2011, p. 499).

What we do know from this research is that there was only one significant interaction at any level among the independent variables in this study. That is, type of aggression, audience, and frequency only interacted to have a combined effect on work engagement. This finding is most interesting, as individuals experiencing incivility and receiving one public email reported significantly lower task engagement than those individuals in the same condition receiving one private email. As well, individuals experiencing bullying and receiving one private email reported significantly lower task engagement than individuals in the same condition receiving one public email. From a logical standpoint, there are two main ideas we would like to extract. First, one public, uncivil message resulted in significantly lower task engagement. Second, one private, bullying email also resulted in significantly lower task engagement. Our initial hypotheses expected that, as a lesser degree of workplace aggression, experiencing incivility would result in lower perceptions of bullying that experiencing bullying. However, our findings suggested that individuals experiencing a single instance of incivility reported higher perceptions of bullying. In the context of work engagement, it is quite possible that a single instance of
aggression—incivility or bullying—escalates when juxtaposed with otherwise neutral behavior. The audience of this aggression may potentially compound this effect. Practically speaking, this finding may suggest a need for consistency in communication style in the workplace. It may not be the content of the message, so much as the consistency in style with which it is delivered.

Of these independent variables, only type of aggression and frequency had main effects on perceptions of bullying. Given the nature of this study and the data analysis methods used, it is perhaps best to discuss these most salient outcomes of this research. Individuals who received uncivil messages and those who received bullying messages reported significantly different perceptions of bullying. Additionally, although it was not part of the hypothesis testing, these individuals also reported significantly different perceptions of incivility. What is perhaps most interesting here is that individuals across the uncivil conditions reported significantly higher perceptions of incivility and bullying than those individuals who were in the bullying conditions. This finding suggests we consider other factors that may be influencing our dependent variables. One such factor involves power differentials.

This research purposefully excluded the use of any power differentials. Participants may have assumed that the person providing performance feedback was a supervisor; however, this message was not explicitly communicated at any point in the study. The notion of a power differential potentially comes into play for several reasons. First, within the bullying literature, the imbalance of power is oft cited as a reason why a conflict between two individuals escalates. Participants in the pilot test of this study clearly indicated that the examples used in this study were bullying. In the absence of explicitly creating a power dynamic, participants may have created one based on their perceptions of the aggression. Anonymous, anecdotal feedback from some participants in this study was that they stopped attending to the negative messages in the
bullying condition. This anecdotal feedback is useful because it may be grounds to consider perceptions of escalation of conflict in future research. It may not be the messages themselves, but the perception that these messages represent an escalation of conflict.

Frequency of aggressive communication was the second area where we saw a significant main effect on perceptions of bullying. Individuals who received one e-mail reported significantly higher perceptions of bullying than individuals who received five e-mails. Earlier, we mentioned that frequency qualifies bullying in a manner that places necessary limits on what constitutes bullying, and we said, “such limits may impose constraints that do not consider the lasting effects of single incidents of bullying.” Tattum (1989) suggested that a single aggressive act might result in repetitive, stressful feelings. Thus, individuals still experience the psychological feelings related to bullying. It stands to reason that the main effect of frequency on bullying perceptions supports this idea, since individuals who received one e-mail reported greater perceptions of bullying than those who received five e-mails. Future research should further explore the role of singular instances of aggression on perceptions of incivility or bullying across time.

We did not find any significant differences in task performance across type of workplace aggression. However, we did find a significant interactive effect of our independent variables on work engagement. These results also showed that individuals in the uncivil conditions reported higher work engagement than individuals in the bullying conditions. Therefore, we can conclude that type of aggression does impact work engagement when considered in tandem with the frequency of such aggression and the audience and whether victims experience public or private aggression. These findings generally support previous research, which has shown that incivility may lead to reductions in engagement (e.g., Reio & Sanders-Reio, 2011).
Chapter 8: Theoretical and Practical Implications

The current research explored whether incivility and bullying were separate constructs in an online work environment. According to this research, they are. This finding is but one way that this research adds to the literature on workplace aggression. This research challenges existing assumptions regarding the criteria that constitute incivility and bullying. We mentioned earlier that a significant, main finding was the distinction between incivility and bullying in an online context. However, future research needs to consider factors that contribute to this distinction. Also, some researchers are calling to reconcile constructs in this area. The results of this study suggests that reconciliation is perhaps not the singular approach to take, but rather, we should be reconciling and redefining. How we have traditionally defined the aggregate constructs that constitute workplace aggression is no longer suitable. The findings of this research suggest that singular instances of incivility or bullying may significantly impact perceptions of bullying. Such findings have very clear implications—aggressive behavior, even in a single, isolated instance, may be sufficient enough to drastically increase perceptions of incivility and/or bullying. Such a finding has particular implications for employers with overly litigious employees.

Chapter 9: Limitations and Future Directions

No experiment is perfect; however, the current experiment used several elements of experimental control to help rule out other explanatory variables and provide stronger evidence for causal mechanisms. The current study used an objective measure of one outcome—task performance. Although self-reports are an important part of understanding perceptions of workplace aggression, they may suffer from unreliability and common method variance issues (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). However, the results of the current study
indicated no significant differences in task performance when experiencing either incivility or bullying. This lack of significant differences in task performance may indicate a need to consider the nature of psychological realism. What is the extent to which we can generalize these findings beyond this study’s setting? Truly understanding these constructs outside a laboratory setting poses some difficulties. We may be able to overcome these difficulties by engaging in “real-world” studies that utilize content analysis. Additionally, Giumetti et al. (2013) found that decreased task performance may be due to a reduction in energy resources. Future research should further explore the conditions under which we see such reductions in energy resources.

This study was also limited by the complexity of its design. Three major themes truly define this phenomenon—negative acts, persistency, and imbalance of power (Einarsen, Hoel, Zapf, & Cooper, 2011; Monks et al., 2009). This study only explored two of these factors—negative acts and persistency; the third factor this study examined involved public versus private bullying. Future research should continue challenging the core assumptions that comprise these constructs. For example, the current study focused on temporal persistency in terms of the frequency of aggressive communication. Future studies may want to look at the differential effects in perceptions of bullying across time.

Another consideration involves further developing perceptions of aggression across different dimensions. This study focused on exploring incivility and bullying because these two types of aggression are on the same spectrum. However, this study found no significant interactions or main effects of the independent variables on task performance. One possible explanation involves the perception of the type of bullying. When Bartlett and Bartlett (2011) reviewed the literature on workplace bullying, they found that bullying behaviors spanned three broad categories: personal, work-related, and physical/threatening. Regarding the current study,
it is possible, that participants perceived the bullying to be work-related. Future research should explore differences in perceptions of bullying among Bartlett and Bartlett’s (2011) categorizations. Inherent in this research is determining any significant differences between personal- and work-related bullying in an online work environment.

The current study explored the differences between incivility and bullying in an online context, and resulted in mixed findings, at best. We may be able to identify flaws in study design or areas where methodology could be improved. Such findings are consistent with what we would expect of any scrupulous examination of research design or methodology. However, perhaps what the results of the current study most largely indicate is a need to reassess the frameworks that guide our understanding of incivility and bullying, especially in the context of online work environments. The very nature of how we complete work is changing. Such a drastic change in the way we do work deserves an equally drastic change in the way we define and consider the problems that arise at work. This study represents the beginning of empirical research that seeks to initiate that change.
References


Appendix A

Uncivil, Bullying, and Neutral Statements

Uncivil

Seriously, these tasks aren’t that difficult. Send your responses to this next set of questions.

Let’s try to get this painful experience of working together over as quickly as we can.

Try these next tasks, genius.

This is the easiest task I have ever seen—you’d better get it right.

Send me your responses to these questions asap! I’m tired of waiting.

Bullying

I think just about anyone else would’ve been a better coworker. I seriously don’t know what your problem is. How did someone so stupid even pass the entrance interview.

You’re going to get all of these tasks wrong anyway. I wish you would stop wasting everyone’s time and just quit.

I feel bad for your friends who have to deal with your stupidity all of the time, but here are some more problems that you will probably get wrong.

How did you even get qualified to do this work? Clearly, you lied somewhere on your job application to get this position.

Work on these now. I’m not sure how I got stuck with you. I think just about anyone else would’ve been better.

Neutral

Do these tasks next.

Work on this problem next.

Continue working on these problems.

Here’s the next problem.

Try these next tasks.
Appendix B

GRE-Type Math Tasks

1. If \(2x + 35 = 9x\), then what is the value of \(\frac{3}{5}x\)?

2. The advertised rate for roaming charges is 0.002 cents per second. What is that in dollars per hour?

3. In the year 2000, Paul was twice as old as his brother David. In the year 2008, Paul was only four years older than his brother. In what year was David born?

4. When the positive integer \(n\) is divided by 9, the quotient is 8 and the remainder is 7. What is the value of \(n\)?

5. If \(\frac{3}{8}\) of \(x\) equals 6, what is \(\frac{3}{4}\) of \(x\)?

6. Two-thirds of the people in Lee County are eligible to vote. Only \(\frac{4}{5}\) of the eligible people register to vote. Only \(\frac{3}{4}\) of the registered voters actually vote on Election Day. What fraction of the country’s population did not vote?

7. Wetumpka Institute of Technology has only three majors—engineering, education, and math (and each student has precisely one major). Half of the students are education majors. One-third of the students are math majors. Three-quarters of the engineering majors are female. If there are 120 male engineering majors, how many students attend the college?

8. Solve for \(x\) if \(16.44 \times 0.47223 \times x = 4,722.3 \times 1.644\).

9. Solve for \(x\) if \(6.15 \times 723 \div x = 615 \times 0.0723\).

10. Find the value of \(\frac{x-y}{x^2-y^2}\) if \(x = 0.01\) and \(y = 0.99\).

11. Find the value of \(\frac{b^2-a^2}{b+a}\) if \(a = 43\) and \(b = 57\).
12. Sarah’s salary was $50,000. She now earns $75,000. The percentage increase in her salary was \( n \) percent. What is the value of \( n \)?

13. Austin’s old salary was $60,000. His new salary is 150% of his old salary. What is his new salary?

14. Mary needs an average of at least 85 in her statistics class to keep her scholarship. She received 82, 84, 90, and 88 on her first four tests. She expects to do poorly on test five but do well on test six—the final test. What is the lowest grade she could get on test five and still possibly keep her scholarship, assuming 100 is the maximum possible score on any test?

15. Chris is 12\(^{th}\) in line and Britney is 27\(^{th}\) in line for concert tickets. After Chris purchases his tickets, he informs Britney there are 114 tickets left for sale. If each person buys the maximum of 8 tickets, how many tickets will Britney get?
Appendix C

Table 1.

*Descriptive Statistics and Correlations (N = 174)*

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<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>Task Performance</th>
<th>Work Engagement</th>
<th>Incivility Perceptions</th>
<th>Bullying Perceptions</th>
<th>Job Satisfaction</th>
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<td>Task Performance</td>
<td>48.12</td>
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<td>.067</td>
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<td>Work Engagement</td>
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<td>.347**</td>
<td>.573**</td>
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<td>Bullying Perceptions</td>
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<td>.512**</td>
<td>.489**</td>
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** Correlation significant at $p < .001$
### Appendix D

#### Table 2.

**MANOVA: FULL FACTORIAL**

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<td>Frequency (F)</td>
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<td>4.872</td>
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<td>T * A</td>
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Table 3.

**MANOVA: MAIN EFFECTS (Hypotheses 1a – 1d)**

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### Appendix F

#### Table 4.

*ANOVA: Task Performance*

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Appendix G

Table 5.

ANOVA: Work Engagement

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Figure 1. Estimated Mean Work Engagement – Uncivil Condition
**Figure 2.** Estimated Mean Work Engagement – Bullying Condition