

NEGATIVE EXCHANGE SPIRALS: A PROCESS MODEL
OF INCIVILITY AMONG COWORKERS

by

JENNIFER GRACE MANEGOLD

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Dedication

To my husband, KJ, who has shown me unconditional love and support throughout this process. Thank you for believing in me - I love you!

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Abstract

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Jennifer Grace Manegold, PhD

The University of Texas at Arlington, 2014

Supervising Professor: James J. Lavelle

Increasing instances of incivility (e.g. rudeness or disrespect) in the workplace have led to the growing popularity of incivility research within the mistreatment literature. It is believed that incivility may encourage reciprocated behaviors that escalate in intensity. However, the underlying processes by which these ‘incivility spirals’ occur are not yet well understood. Therefore, based on social exchange theory and theories of emotion and organizational justice, I propose and test a multilevel model that examines the effects of daily experienced incivility on daily negative behaviors (e.g. instigated incivility and counterproductive behaviors) via a desire for revenge and state anger. In addition, I discuss and test potential moderators of negative exchange (e.g. narcissism, moral identity, hostile attribution bias, and perceptions of overall fairness) that may accelerate or attenuate the negative exchange process. I also treat time as a moderator to assess whether negative behaviors escalate over time in my sample. I collected surveys once daily for a period of two weeks from part-time workers. Using 741 daily observations from 150 participants, the results of multilevel path analyses indicated support for a positive indirect effect from experienced incivility to both instigated incivility and

counterproductive work behaviors via a desire for revenge. In addition, cross-level moderated mediation results demonstrated that perceptions of overall coworker group fairness strengthened the relationship from experienced incivility to a desire for revenge, which then positively related to both instigated incivility and counterproductive work behaviors. Overall, these findings contribute to the larger workplace mistreatment literature, including research on both negative workplace behaviors and organizational justice. Specifically, while a large stream of literature explicates the processes underlying positive social exchange, studying process models of negative exchange allows for a better understanding of when and why negative behaviors may occur in the workplace.

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Chapter 1

Introduction

Incivility is one of the most commonly studied variables in the workplace mistreatment literature (Hershcovis, 2011), and with good reason. Examples of incivility include being rude, discourteous, and disrespectful to others. The *Civility in America* survey, a nation-wide annual survey, reports that in 2013 Americans encountered incivility an average of 2.4 times a day (in and out of the workplace), with 43% of respondents anticipating experiencing incivility within the next 24 hours. Further, 81% of participants considered incivility to be a leading cause in increased violence.

Not surprisingly, incivility researchers have found similar trends regarding incivility within the workplace. According to Porath and Pearson (2013), 98% of workers report experiencing uncivil behavior, with half of these workers experiencing uncivil behavior at least once a week. Experiencing incivility has been tied to numerous negative outcomes in the workplace, including lower job satisfaction and commitment, and higher levels of psychological distress, absenteeism, and turnover (e.g. Cortina, Magley, Williams, & Langhout, 2001; Sliter, Sliter, & Jex, 2012).

Participants of the *Civility in America* survey identified several reasons for the increase in uncivil behavior in American society. For example, 70% thought that internet usage encourages incivility, and out of the individuals who expected uncivil behavior to worsen in the future, 34% blamed social media sites like Twitter for the problem. In addition to social media sites, survey respondents reported that politicians and the media were also seen as prominent reasons for the perceived increase in uncivil behavior.

Researchers have also posited many reasons for increasing incidents of incivility in the workplace. Cortina et al. (2001) believe that power differentials can be one reason for incivility, with employees who hold lower positions of power being more likely to be victims of incivility. Porath and Pearson (2005) argue that the fast-paced reality of global business can cause workers to feel that they simply do not have time to be nice. Also, greater diversity in workforces brings many cultures together, which can lead to misunderstandings (Muir, 2000). Muir (2000) also points to the increased use of temporary workers who may not share commitment to the organization and do not care to impress their coworkers, and to budget cuts and layoffs, which can damage employee morale and lead employees treat each other uncivilly.

As the previous paragraphs elaborate, there are many plausible reasons why incivility is occurring now more than in generations past. Of particular interest to the current research is the question of how employees respond to uncivil treatment once it has occurred. Andersson and Pearson (1999) theorized that incivility may trigger negative exchange spirals, where the experience of incivility may lead to an escalation in the reciprocated response, such as retaliation through counterproductive work behaviors (CWB) targeting the transgressor. Examples of interpersonal CWB include gossiping, embarrassing, or swearing at one's colleague at work. To date, research regarding this spiraling effect has been mixed, and few study designs have tested and captured this popular theory of negative workplace behavior.

In this dissertation, I argue that both social exchange and negative emotions play a role in the occurrence of negative exchange spirals. When people benefit from a relationship, they often feel bound by norms to reciprocate in a positive manner (Gouldner, 1960). However, this norm of reciprocity can also be applied when employees feel they are being treated unfairly (Cropanzano & Mitchell, 2005). In the case where people experience unfair treatment, they may

‘repay’ the transgressor through CWB (e.g. Jones, 2009). There are several ways to interpret a desire to reciprocate. According to theories on emotion, emotions such as anger will play an important role in this process. By feeding the underlying motive, emotions help shape the victim’s reactions to an offense (Crossley, 2009: 21). One such motive to perceptions of mistreatment or disrespect can be a desire for revenge, which has also been linked to CWB (Jones, 2009).

In addition, the organizational justice literature offers insight into the process by which negative exchange spirals may occur. According to the multiple needs perspective (Cropanzano, Byrne, Bobocel, & Rupp, 2001), three general models drive justice through their relation to universal human needs that, when violated, lead to a need to restore justice. First, the instrumental model involves a need for control. Second, the relational model encompasses the need for belonging and the need for positive self-regard. Third, the virtue, or deontic model, involves a need for a greater meaning in life. In this research, the multiple needs perspective offers a framework for investigating moderating mechanisms that may attenuate or accelerate negative exchange spirals. Further, justice theories on the role that perceptions of overall fairness may play in this process offer additional insight into possible moderating interactions.

Therefore, the purpose of this research is to investigate the spiraling effects of incivility on the daily lives of coworkers by developing a process model of incivility. Based on social exchange theory (e.g. Blau, 1964) and theories of emotion, such as the frustration-aggression model (Fox & Spector, 1999) and affective events theory (Weiss & Cropanzano, 1996), I investigate the mediating potential of a desire for revenge and state anger on the relationship from experienced incivility to reciprocated negative workplace behaviors (specifically, instigated incivility and CWB). In addition, based on theories from organizational

justice, I derive potential moderators of negative exchange (specifically, narcissism, moral identity, hostile attribution bias, and overall justice perceptions), which may help to accelerate or attenuate negative exchange spirals among coworkers.

This research seeks to add several meaningful contributions to theory in the extant literature. First, by offering a detailed investigation of the relationship between daily incivility and other forms of negative workplace behavior, this research will add to the literature and theory surrounding the negative processes of social exchange. While the idea of negative exchange spirals has become popular in recent years, research investigating the details (such as timing) by which negative exchange occurs is sparse (e.g. Meier & Spector, 2013). Since incivility is considered a minor form of negative behavior, it makes sense that any reciprocation following incivility may occur swiftly. Researchers in the mistreatment literature (including justice, incivility, and CWB) have called for more research that captures daily fluctuations in relationships (e.g. Colquitt, Scott, Rodell, Long, Zapata, Conlon, & Wesson, 2013; Meier & Spector, 2013). Therefore, in this dissertation I consider the daily impact of incivility on negative workplace outcomes.

Second, Meier and Spector (2013) recently called for more research that examines underlying mechanisms related to the relationship between incivility and CWB. Following this call, I investigate the potential for a reciprocal relationship between social exchange and negative affect to act as a mediating mechanism from incivility to CWB (i.e. Colquitt et al., 2013). I suggest that this underlying process drives the larger idea of negative exchange spirals, making this work applicable to the broader workplace mistreatment literature, including research on negative workplace behaviors and organizational justice.

Third, in this dissertation theories of organizational justice are uniquely applied to the incivility/CWB literature as a framework for moderation, or boundary conditions, within negative exchange spirals (Manegold & Lavelle, 2013). Using justice research as a theoretical backdrop allows new and interesting connections between related fields of study. For example, moral identity has not been studied in conjunction with incivility, although it has become a popular topic in the broader darkside and justice literature (e.g. Skarlicki & Rupp, 2010; O'Reilly & Aquino, 2011; Gino, Schweitzer, Mead, & Ariely, 2011; Vitell, Keith, & Mathur, 2011).

This study is presented in the next five chapters. Chapter 2 includes a literature review on incivility and counterproductive work behavior in the workplace, including a discussion of the theoretical and empirical distinctiveness of these constructs, as well as the mixed research findings regarding the relationship between the two constructs. Chapter 3 integrates social exchange theory with theories of emotion to develop mediated hypotheses regarding negative exchange spirals among coworkers. In addition, the organizational justice literature provides a framework for investigating moderating variables that may either intensify or weaken the hypothesized relationships. The procedure for data collection, sample characteristics, and research methods are included in Chapter 4. Chapter 5 reports the results of the multilevel hypotheses tests (days nested within individuals) for both mediation and moderated mediation. Finally, Chapter 6 includes a summary of the findings, contributions and implications, limitations, and directions for future research.

Chapter 2

Literature Review

I begin this chapter with a brief overview of the mistreatment literature, paying specific attention to negative workplace behaviors. Then, I discuss theoretical perspectives on interpersonal mistreatment, including theories derived from organizational justice. Next, I review the incivility literature and the counterproductive behaviors literature, carefully delineating the differences between these two constructs. Finally, I discuss the relationship between incivility and CWB, including both theoretical and empirical evidence, and outline areas for future research.

Cortina and Magley (2003: 247) define interpersonal mistreatment as a “specific, antisocial variety of organizational deviance, involving a situation in which at least one organizational member takes counternormative negative actions - or terminates normative positive actions - against another member.” Interpersonal mistreatment may range from uncivil behavior to blatant harassment or violence (Cortina & Magley, 2003). The interpersonal mistreatment literature is quite large and varied, consisting of several related streams of research, such as “darkside” phenomena (e.g. Griffin & O’Leary-Kelly, 2004; Robison & Bennett, 1995), as well as research on injustice in the workplace (Cortina et al., 2001; Skarlicki, van Jaarsveld, & Walker, 2008; Fox, Spector, and Miles, 2001).

Overview of Negative Workplace Behaviors

Negative workplace behavior (NWB) is terminology used to describe various related constructs within the larger literature concerned with the “darkside” of behavior in the workplace (e.g., Neuman, & Keashly, 2010, p. 57; O’Leary-Kelly & Griffin, 2004; Skarlicki & Folger, 1997, p. 432). Representative behaviors include but are not limited to incivility, bullying,

sabotage, and counterproductive work behavior (e.g., Andersson & Pearson, 1999; Crino, 1994; Rayner & Keashly, 2005; Spector & Fox, 2005). As this field of literature has grown in popularity, researchers have expressed concern regarding construct proliferation and overlap (e.g. Hershcovis, 2011). Subsequently, several scholars have outlined the similarities and differences among related darkside constructs (e.g. Andersson & Pearson, 1999; Jex, Geimer, Clark, Guidroz, & Yugo, 2010; Kidwell & Martin, 2005; Spector & Fox, 2005). By studying different frameworks and charts relating to the classification of negative workplace behavior, I have developed a reference chart that includes some of the more commonly studied behaviors. *Table 1* includes the definition for each construct, and then several classifying categories.

The first category considers whether or not the construct of interest is defined as violating organizational norms. Robinson and Bennett (1995: 556) explain that organizational norms (e.g. rules, policies, procedures) can be either formal or informal, but the key is that they are defined based on the standards of a particular social group, rather than a system of absolute morals or standards. Of note, the constructs that are defined as counternormative (such as incivility and counterproductive work behavior) fit the description of interpersonal mistreatment suggested by Cortina and Magley (2003).

The second category references intent to harm. In other words, did the perpetrator choose to commit the act consciously knowing that it would cause harm? Further, did the target and/or witnesses perceive the behavior to be intentionally harmful? Most negative workplace behaviors are considered intentionally harmful, but there are a few cases where the behavior is described as ambiguous in nature. For example, one of the defining features of incivility is the ambiguous nature of intent to harm. It is not always clear to the perpetrator, target, or witnesses that an

Table 1: Comparing and contrasting popular negative workplace behaviors

Popular Types of Negative Workplace Behaviors	Definition	Violation of Norms?	Intent to Harm?	Repetitive in Nature?	Typical Targets
Workplace deviance	"voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of the organization or its members, or both" (Robinson & Bennett, 1995, pg. 556)	Yes	Yes	No	organization, supervisor/subordinate, coworker, customer
Workplace aggression	"any form of behavior directed by one or more persons in a workplace toward the goal of harming one or more others in that workplace (or the entire organization) in ways the intended targets are motivated to avoid. (Neumann & Baron, 2005, p. 18)	Yes	Yes	No	organization, supervisor/subordinate, coworker, customer
Counterproductive work behavior	"Counterproductive work behavior at the most general level refers to any intentional behavior on the part of an organization member viewed by the organization as contrary to its legitimate interests." (Sackett, 2002, p. 5)	Yes	Yes	No	organization, supervisor/subordinate, coworker, customer
Antisocial Behavior	"actions directed towards other employees or the organization that have the potential for producing physical, economic, psychological, or emotional harm" (Aquino & Douglas, 2003: 195; Robinson & O'Leary-Kelly, 1998)	No	Ambiguous	No	organization, supervisor/subordinate, coworker
Sabotage	Behavior that can "Damage or disrupt the organization's operations by creating delays in production, damaging property, the destruction of relationships, or the harming of employees or customers" (Crino, 1994, p. 312).	No	Yes	No	organization, supervisor/subordinate, coworker, customer
Employee Vice (Betrayal)	"an act that betrays the trust of other individuals or the organizational community" (Edwards & Greenberg, 2010, p. 16; Moberg, 1997) "character lapses that will lead to betrayal even when relevant situational factors are absent" (Moberg, 1997, p. 48)	Yes	Ambiguous	No	organization, supervisor/subordinate, coworker, customer
Dysfunctional behavior	"occurs when employees commit acts that have negative consequences for an individual within an organization, a group of individuals, and/or the organization itself" (Kidwell & Martin, 2005, pg. 5; Griffin, O'Leary-Kelly, & Collins, 1998)	No	Ambiguous	No	organization, supervisor/subordinate, coworker, customer
Organizational Misbehavior	"Any intentional action by member/s of organization/s which defies and violates (a) shared organizational norms and expectations, and/or (b) core societal values, mores and standards of proper conduct" Verdi & Weiner (1996, p. 151)	Yes	Ambiguous	No	organization, supervisor/subordinate, coworker, customer
Insidious Workplace Behavior	"a form of intentionally harmful workplace behavior that is legal, subtle, and low level (rather than severe), repeated over time, and directed at individuals or organizations." (Edwards & Greenberg, 2010, p. 4)	No	Yes	Yes	organization, supervisor/subordinate, coworker
Noncompliant Behavior - Ignorance about rules	"Employees that accidentally break organizational rules or procedures because they do not know that the rules exist" (Warren, 2005: 132)	Yes	No	No	organization
Noncompliant Behavior - Ignorance about rule application	"employees know the rules, but do not know whether the rules apply to them" (Warren, 2005: 132)	Yes	No	No	organization
Noncompliant Behavior - Opportunistic noncompliance	"employees understand that they are breaking the rules but do so for opportunistic reasons" (Warren, 2005: 132)	Yes	Yes	No	organization
Noncompliant Behavior - Principled noncompliance	"employees exhibit noncompliance but are motivated by ethical principles or moral beliefs [...] they exhibit noncompliance as a form of protest" (Warren, 2005: 132)	Yes	Ambiguous	No	organization
Abusive supervision	"subordinates' perceptions of the extent to which their supervisors engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" (Tepper, 2000, p. 178)	Yes	Yes	Yes	subordinate
Petty tyranny	"The tendency to lord one's power over others." (Ashforth, 1997, p. 126)	No	Yes	Yes	subordinate
Emotional Abuse	"Repeated hostile verbal and nonverbal, often nonphysical behaviors directed at a person(s) such that the targets' sense of him/herself as a competent worker and person is negatively affected." (Keashly, 2001, pg. 234)	Yes	Yes	Yes	subordinate, coworker, customer
Incivility	"Low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others" (Andersson & Pearson, 1999, p. 457)	Yes	Ambiguous	No	subordinate, coworker, customer
Social Undermining	"Behavior intended to hinder, over time, the ability to establish and maintain positive interpersonal relationships, work-related success, and favorable reputation" (Duffy et al., 2002, p. 332)	No	Yes	Yes	subordinate, coworker, customer
Bullying	"persistent negative interpersonal behavior experienced by people at work" (Rayner & Keashly, 2005, p. 271)	Yes	Yes	Yes	subordinate, coworker, customer
Mobbing	"hostile and unethical communication, which is directed in a systematic way by one or a few individuals mainly towards one individual who, due to mobbing, is pushed into a hopeless and defenseless position, being held there by continuing mobbing activities" (Leymann, 1996, p. 168)	No	No, but there is a perception of intent	Yes	coworker

Note: This table was adapted from similar tables and organizing frameworks by Bies & Tripp (2005), Edwards & Greenberg, (2010), Jex et al. (2010), Kidwell & Martin (2005), Spector (2011), and Spector & Fox (2005).

uncivil act, such as rudeness, was intentionally undertaken to cause harm (Andersson & Pearson, 1999; Cortina & Magley, 2003).

The third category considers whether or not a behavior is necessarily repetitive in nature. The repetitive nature of some forms of NWB requires that the relationship between the perpetrator and target be ongoing, while other forms of NWB may occur in relation to a single situation in time (e.g., Jex et al., 2010). Finally, the last category includes the typical targets of the behavior. Some behaviors specifically focus on the supervisor/subordinate relationship (Ashforth, 1997; Tepper, 2000). Other behaviors are only interpersonal in nature, and do not target the organization (e.g. incivility), and for some behaviors (e.g. CWB) it is quite common to consider whether the behavior is interpersonally or organizationally directed (e.g. Jones, 2009). In this dissertation, particular interest will be paid to incivility and CWB, and later sections discuss the literature on these constructs in detail, as well as the theoretical and empirical evidence supporting the construct distinctiveness between them.

Theoretical Perspectives on Interpersonal Mistreatment at Work

Several theories have been used to explain why employees may engage in workplace mistreatment. In this section, I discuss stress-related theories of aggression and several theories from the organizational justice literature. To begin, frustration-aggression theory proposes that aggression is a consequence of frustration (Dollard, Doob, Miller, Mowrer, & Sears, 1939). The Dollard et al. model argues that when situations occur differently than expected (e.g. we do not reach an expected goal, or a normal pattern of behaviors is interrupted), frustration will occur. Then, frustration may lead to a negative response, such as a negative workplace behavior (Jex & Beehr, 1991).

Spector and colleagues (e.g. Chen & Spector, 1992; Fox & Spector, 1999; Spector, 1998; Spector & Fox, 2002) extended the frustration-aggression model to the study of aggression in the workplace by developing an emotion-centered model of job stress. According to this view, events that threaten well-being are considered job stressors. These stressors induce negative emotions, such as frustration, anger, or anxiety (Spector, 1998). The stress process produces the outcome of strain, which can be psychological, physical, or behavioral in nature (Fox et al., 2001). In the literature, behaviors such as incivility are considered stressors, and aggressive behaviors, such as CWB, are considered a type of behavioral strain (Fox et al., 2001). In other words, when employees feel that their well-being is threatened (stressors), they experience negative emotions that can lead to negative workplace outcomes (strain) (Spector & Fox, 2002).

According to another stress-related model, Cognitive Resource Theory (CRT), employees allocate cognitive resources to behaviors through self-regulatory processes (e.g. Muraven, Tice, & Baumeister, 1998). When individuals are exposed to high levels of stress, they may lose their capacity for self-regulation (e.g. Baumeister & Vohs, 2003; Baumeister & Heatherton, 1996). When this happens, employees will have fewer cognitive resources to devote to control efforts, such as refraining from counterproductive behaviors (Tucker, Sinclair, Mohr, Thomas, Salvi, & Adler, 2009). So, according to CRT, stressors such as incivility (e.g. Spector, 1998) or injustice (e.g. Fox et al., 2001) can lead the victim to become the aggressor by overriding self-regulatory processes that hinder harmful behaviors and actions, such as CWB.

Organizational justice is another literature stream of interest within the workplace mistreatment literature. Organizational justice studies the perceptions and reactions of individuals to fairness in an organization (Greenberg, 1987). People perceive transactions as fair or unfair, and react to their fairness perceptions. Research shows that perceptions of fairness

have a powerful impact on desired employee attitudes and behaviors, such as organizational citizenship behaviors, affective commitment, and trust (e.g., Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001). In addition, studies demonstrate that perceptions of unfairness are related to negative workplace attitudes and behaviors, such as employee withdrawal, turnover, and counterproductive work behaviors (e.g. Colquitt et al., 2001; Cropanzano et. al., 2001).

Organizational justice research is classified into four different types of justice: procedural, distributive, interpersonal, and informational (Greenberg, 1993; Colquitt, 2001). Distributive justice refers to perceptions of fairness regarding outcomes received for the effort applied to a task or job (Greenberg, 2001). Procedural justice refers to perceptions of fairness regarding the decision making procedures or policies being implemented by the organization (Greenberg 2001; Thibaut & Walker, 1975). Interpersonal justice refers to whether or not people feel they have been treated with respect and dignity by decision makers (Colquitt et al., 2001). Finally, informational justice refers to the fairness of explanations given by decision makers regarding the policies implemented (Colquitt et al., 2001).

The link between justice violations and negative workplace behaviors has been well established in the literature through several meta-analyses (e.g. Berry, Ones, & Sackett, 2007; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Dalal, 2005; Hershcovis et al., 2007). As reported in a meta-analysis by Dalal (2005: 1249), the average corrected correlation (weighted by sample size) between organizational justice and CWB falls between -0.25 and -0.36. Justice constructs will not be directly measured in this dissertation. However, several theories from the justice literature will be applied to the model developed herein.

For example, several justice researchers (e.g. Bies & Tripp, 1996; Jones, 2009; Manegold & Lavelle, 2013; Tripp, Bies, & Aquino, 2007) suggest that injustice (which has been conceptualized as a type of stressor, see Fox et al., 2001) triggers attributions of blame and a desire for revenge. Recent empirical research has shown that a desire for revenge can then lead to counterproductive work behaviors targeting the responsible party (e.g. Jones, 2009). Further, Folger and Skarlicki (1998) suggest that situational conditions (such as perceived injustice) may be a necessary but not sufficient condition preceding negative workplace behaviors, rather individual characteristics also play a role in the motivation to react to situations of injustice. In later sections, this dissertation will integrate the affect-centered models (e.g. stressor-strain) and organizational justice perspectives in order to better understand processes of negative exchange in the workplace.

Incivility at Work

Incivility pertains to behaviors that show a lack of respect or regard for others, such as being rude or discourteous (Andersson & Pearson, 1999). The popularity of incivility research is not surprising, given how common and damaging uncivil behavior can be in the workplace. After surveying thousands of workers over the last 14 years, Porath and Pearson (2013: 115) report that almost all (98%) of their participants have experienced workplace incivility and the frequency of uncivil behavior is rising. In 1998, a quarter of their participants reported experiencing uncivil behavior at least once a week; but by 2011, half were reporting weekly incidences of incivility (Porath & Pearson, 2013).

The trends reported in Porath and Pearson (2013) are of concern to researchers and practitioners alike, because incivility in the workplace relates to numerous negative consequences. A few examples include lower levels of job performance and organizational

commitment, an increase in turnover intentions, an impact on well-being, and a greater likelihood to commit negative workplace behaviors, such as counterproductive work behavior (e.g. Cortina et al., 2001; Porath & Pearson, 2013; Penney & Spector, 2005; Sliter et al, 2012). In this research, the idea that incivility can escalate into more severe behaviors is of central interest (cf. Andersson & Pearson, 1999).

Definition and Unique Characteristics of Incivility

Andersson and Pearson (1999: 457) define incivility as “low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect.” They explain that uncivil behaviors show a lack of regard for others, such as treating someone rudely or without respect. Hershcovis (2011) points to two distinguishing characteristics of incivility contained within this definition: low-intensity and ambiguous intent to harm.

First, the definitions of most of the other workplace mistreatment constructs do not specifically mention intensity (insidious workplace behavior is an exception, see *Table 1*). However, Andersson and Pearson (1999) were careful to highlight the importance of this characteristic in relation to uncivil behavior. In arguing the case for research on incivility, they explained that even minor types of mistreatment can detrimentally impact employee attitudes and behaviors. Pearson, Andersson, and Wegner (2001: 1401) describe low-intensity as being, “of lower magnitude of force, lower negative charge.” For example, physical assault (which can be associated with workplace violence or aggression) would not be considered a low-intensity behavior. Further, Cortina and Magley (2009) equate low-intensity behavior with the target’s appraisal of a situation. They explain that incivility usually triggers negative appraisals that are mild in nature, such as feeling frustrated or annoyed, and these low-intensity appraisals can then

be contrasted with more intense appraisals, such as finding a behavior to be threatening (Cortina & Magley, 2009: 284).

Second, incivility is explicitly defined as having an ambiguous intent to harm. In other words, it is not clear to the instigator, target, or witnesses that the instigator meant to cause harm (Cortina & Magley, 2003; Pearson et al., 2001). On the one hand, uncivil behavior exhibited by an individual may intentionally reflect a desire to harm the target, but on the other hand, that same behavior exhibited by someone else may unintentionally cause harm to the target (Wu, Zhang, Chui, Kwan, & He, 2013; Andersson & Pearson, 1999). Even if a target of incivility is certain that an uncivil act was intended to cause harm, it is possible that the instigator and witnesses may not make such an attribution (Pearson et al. 2001). To complicate the situation further, the offending coworker may intend to harm the target, but the target may or may not perceive the behavior as uncivil in nature (Wu et al, 2013). Pearson et al. (2001: 1400) suggested that, “one may behave uncivilly as a reflection of desire to harm the organization, to harm the target, or to benefit oneself, or one may behave uncivilly without intent.” Pearson et al. (2001) also pointed out that even if intent is indeed present, there are several ways that an instigator may conceal this objective from the target or witnesses, such as claiming ignorance of the harmful effect (e.g. I only meant to say...); accusing the target of misinterpreting the situation (e.g. I was just busy, I wasn’t ignoring you); or blaming the target for being too sensitive (e.g. Don’t overreact, all I said was...).

Incivility has conceptual similarities to some of the other workplace mistreatment constructs. For example, it overlaps a great deal with interactional justice (Penney & Spector, 2005). Original conceptualizations of interactional injustice describe it as the perceived fairness of interpersonal treatment that is received during the enactment of workplace procedures (Bies &

Moag, 1986). Penney and Spector (2005) explain that out of the five criteria (i.e. respect, propriety, timeliness, specificity, and truthfulness) for interactional fairness identified by Bies and Moag (1986), two overlap with current incivility conceptualizations: (1) respect, such as treating one another with courtesy and avoiding rude behaviors, and (2) avoiding improper questions.

Further, incivility overlaps a great deal with interpersonal justice, a sub-type of interactional justice that encompasses both respect and propriety. Colquitt et al (2001: 427) explain that interpersonal justice “reflects the degree to which people are treated with politeness, dignity, and respect by authorities and third parties involved in executing procedures or determining outcomes” (Colquitt et al. 2001: 427). A key difference between justice constructs and incivility is that interactional and interpersonal justice are defined in the context of formal organizational processes. Specifically, they reflect the treatment received by decision makers in the delivery of organizational procedures (e.g. Colquitt et al., 2001). Incivility is broader in that it can include treatment outside of these situations (Penney & Spector, 2005: 778-779). As an example, an individual may fail to invite his or her coworker to a lunch gathering of other coworkers. This is a clear example of incivility, in that it aligns with the Cortina et al. (2001) Workplace Incivility Scale item, “Ignored or excluded you from professional camaraderie.” However, this situation does not clearly reflect a violation of interactional or interpersonal injustice. In this dissertation, the conceptual overlap between incivility and injustice is considered advantageous. Over the last several decades, justice scholars have developed theories that may be transferable to research on process models of incivility.

Experienced versus Instigated Incivility

Blau and Andersson (2005) recognized that the theorized spiraling nature of incivility was not being tested in the literature because the only validated measure (Cortina et al., 2001) of workplace incivility captured experienced incivility, or incivility that has been received. To date, almost all incivility research uses the scale developed by Cortina et al. (2001), and sample items include, “paid little attention to your statement or showed little interest in your opinion,” and “made demeaning or derogatory remarks about you.”

However the theorized back and forth, or tit-for-tat, nature of incivility at work suggests that capturing instigated incivility is also of interest (Blau & Andersson, 2005). Instigated incivility includes taking uncivil actions toward others. Therefore, Blau and Andersson (2005) adapted the scale items from Cortina et al.’s (2001) Workplace Incivility Scale to create the instigated incivility scale. For experienced incivility, participants are asked: How often has someone at work (e.g. supervisor, coworker, other employee) done the following to you during the past year? For instigated incivility, participants are asked: How often have *you exhibited* the following behaviors in the past year to someone at work? (italics added for emphasis)

Overall, Blau and Andersson (2005) were able to validate the two separate versions of incivility scales, as well as show that they differ from Bennett and Robinson’s (2000) Interpersonal Deviance Scale (this scale is discussed in more detail in a subsequent section). Also of note, in the study by Blau and Andersson (2005), interpersonal deviance is an enacted behavior, in that respondents were prompted with the phrase, “How often have you engaged in each of these behaviors in the last year.” To confirm the uniqueness of their new measure, Blau and Andersson (2005) conducted an exploratory factor analysis using varimax rotation, which extracted the three factors. Then confirmatory factor analysis was conducted using structural

equation modeling, and the three factor solution showed the best fit over a one and two factor solution, with a significant decrease in chi-squared values going from one to three factors, and adequate fit indices for a three factor solution (CFI = 0.939, AGFI = 0.906, RMSEA = 0.072).

Blau and Andersson (2005) concluded that there is empirical support for the distinction between experienced incivility, instigated incivility, and interpersonal deviance. This finding is critical to my research, since I measure both experienced and instigated incivility, as well as interpersonal CWB, over time. In doing so, I attempt to capture an escalating pattern of negative behavior that is consistent with the idea of incivility spirals. Following the findings of Blau and Andersson (2005), I will consider both instigated incivility and CWB to be indicators of the escalation of negative exchange, and experienced incivility to be a precursor. This leads to the next section, which discusses counterproductive work behavior.

Counterproductive Work Behavior

Counterproductive work behavior (CWB) has been defined as consciously *intentional* behaviors by organizational members that are not aligned with the organization's legitimate interests (Jones, 2009; Sackett, 2002; Gruys & Sackett, 2003). By defining CWB in this way, the focus is on the behavior itself, rather than its consequences, such as the actual harm experienced as a result of the behavior (Gruys & Sackett, 2003: 30). The label 'counterproductive work behaviors' is often used as an umbrella term for any behavior that may cause harm to the organization or its members, and can include theft, destruction of property, misuse of information, time, or resources, unsafe behavior on the job, poor attendance, intentionally poor quality of work, drug or alcohol abuse, or inappropriate verbal or physical actions (Gruys & Sackett, 2003). This list is not exhaustive, but does help to demonstrate the wide variety of constructs that can fall under the heading of CWB (Sackett, 2002).

Theoretical and Empirical Distinctions between Incivility and CWB

The potential overlap among constructs in the darkside literature has raised concerns of construct proliferation and related validity (e.g. Hershcovis, 2011). Consequently, one approach to these concerns has been to delineate the similarities and differences among related darkside constructs (e.g. Andersson & Pearson, 1999; Jex et al., 2010; Kidwell & Martin, 2005; Spector & Fox, 2005). While a detailed discussion relating to the categorizing or organizing of all of the constructs within the larger literature is outside the scope of this dissertation (for a snapshot, see *Table 1*), it is important to specifically outline the unique distinctiveness of the CWB and incivility constructs, as they are the focus of my research. There are both theoretical and empirical reasons to support the distinctiveness of these two constructs.

Intent. First, the two constructs differ in relation to intent. A key characteristic of incivility is the *ambiguous intent* to harm (Andersson & Pearson, 1999), meaning that it may not be clear to the instigator, target, or witnesses that the instigator actually meant to cause harm (Cortina & Magley, 2003; Pearson et al., 2001). In contrast, Gruys and Sackett (2003) say that while accidental actions can be harmful, they are not the focus of CWB research. Specifically, the CWB domain encompasses volitional behavior that harms or is intended to harm organizational interests (Jones, 2009; Spector & Fox, 2005: 151). To be clear, while intent is ambiguous in relation to uncivil behaviors, CWB is an intentional negative workplace behavior.

Target. A second difference between incivility and CWB is the target of the behavior. Counterproductive work behavior research differentiates between both organizational and interpersonal forms of CWB (e.g. Jones, 2009; Bennett & Robinson, 2000; Gruys & Sackett, 2003). In contrast, incivility research considers rude behaviors that are directed at individuals, and is thus interpersonal in nature. Targets of incivility typically include coworkers,

supervisors/subordinates, or customers, but not the organization. The most popular scale that measures both organizational and interpersonal CWB is the deviance scale developed by Bennett and Robinson (2000), and I discuss this scale in more detail in a following section. In my research, I consider CWB to be a response to uncivil treatment.

Intensity. A third difference between the two constructs is the intensity of the behavior. Incivility is defined as being a low-intensity behavior, such as being rude or discourteous and displaying a lack of respect and disregard toward others (Andersson & Pearson, 1999). In contrast, the severity of CWB varies. For example, minor forms of CWB may include gossiping about coworkers, placing blame on coworkers, being competitive in a way that is not beneficial, or showing favoritism (Robinson & Bennett, 1995: 565). Serious forms of CWB include sexual harassment, verbal abuse, stealing and physical endangerment (Robinson & Bennett, 1995: 565). Bennett and Robinson's (2000) measure incorporates both minor and severe forms of CWB. However, the literature concerning incivility spirals conceptualizes CWB as a more severe behavior than incivility (e.g. Andersson & Pearson, 1999, Meier & Spector, 2013).

Process Model Perspectives. Finally, several of the process models of mistreatment that were discussed earlier categorize incivility and CWB as occurring in different stages of the model. For example, in the context of the emotion-centered models of aggression (e.g. Spector, 1998), incivility has been conceptualized as a work stressor that triggers emotions like anger and frustration, leading to negative workplace behaviors, such as CWB (Penney & Spector, 2005). Further, in the context of justice models, mistreatment by a coworker (such as experiencing incivility) triggers attributions of blame that motivate a desire for revenge, which leads to coping responses such as reciprocated incivility or CWB (Tripp, Bies, & Aquino, 2007).

Empirical differentiation. In addition to the theoretical rationale that considers incivility and CWB to be unique constructs, empirical findings also support this argument. For example, Penney and Spector (2005) found a correlation of 0.47 between self-reported incivility and self-reported CWB. Specifically, they found a correlation of 0.44 between incivility and organizational CWB, and 0.39 between incivility and interpersonal CWB. While the constructs were significantly correlated, they related at only a moderate magnitude (Cohen, 1988). There is no hard and fast rule relating to an “acceptable” correlated magnitude among constructs, but recent research has suggested that theoretically related constructs with correlations in the 0.70 range should generally be combined, while correlations in the 0.50 range should generally be kept separate (Colquitt & Shaw, 2005). Penney and Spector (2005) measured incivility with 43 items that were compiled from existing measures (specifically, Cortina et al., 2001, Leymann, 1990, and Neuman & Keashley, 2002). CWB was assessed using the Counterproductive Work Behavior Checklist, or CWB-C (Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006). The 45 item scale can be scored as overall CWB, or as CWB directed toward the organization versus individuals. As an aside, there is also a 32 item version that includes five subscales relating to different types of CWB: abuse (harmful behavior targeting others), production deviance (doing the job wrong on purpose), sabotage (destruction of the physical environment), theft, and withdrawal (avoiding work thorough absenteeism or tardiness). Researchers can reference Spector et al. (2006) for additional information on the CWB-C.

Recently, Meier and Spector (2013) found a similar magnitude in the correlation between incivility and CWB using different measures. They measured experienced incivility using an adapted 7-item scale from Cortina et al. (2001), with the adaptations proposed by Blau and Andersson (2005). Example items include: “Put you down or was condescending to you in some

way” and “Made demeaning, rude or derogatory remarks about you” (Cortina et al., 2001). CWB was assessed using both subscales from Bennett and Robinson’s (2000) deviance scale. Of note, although Bennett and Robinson’s (2000) scale refers to deviance, it is commonly used to measure CWB directed toward the organization (CWB-O) and toward individuals (CWB-I). They measured experienced incivility and CWB at two month intervals over five iterations. The correlations for experienced incivility and CWB-I were: 0.43, 0.51, 0.47, 0.42, 0.53. For experienced incivility and CWB-O the correlations were: 0.27, 0.37, 0.39, 0.33, 0.25.

To further support the empirical distinctiveness of incivility and CWB, Meier and Spector (2013) conducted a CFA analysis using SEM analytic techniques. They tested three nested models (1 factor, 2 factors, and 4 factors). For the one factor model, they included all parcels into a single factor for each measurement period, resulting in a total of five factors (one for each measurement occasion) that were correlated with one another. In the two-factor model, the stressor parcels were placed in one factor, and the CWB parcels were placed in another factor, resulting in 10 factors (two per measurement occasion) that were correlated with one another. Finally, for the four-factor model, the parcels were placed into their corresponding factors, resulting in 20 factors (4 per measurement occasion) that were correlated with each other. From this, Meier and Spector (2013) found that the only model showing good fit was the four-factor model, where the factors represented experienced incivility, CWB-I, CWB-O and organizational constraints (e.g. situations that prevent individuals from translating ability or effort in performance – see Spector & Jex, 1998) as unique constructs (CFI = .97, TLI = .96, RMSEA = 0.025, with 90% CI = .023, .028). In SEM analysis, good fit is indicated by values greater than or equal to .95 for the CFI and TLI indices, and less than or equal to .06 for RMSEA

(Hu & Bentler, 1999). Therefore, both theoretical and empirical evidence supports the idea that incivility and CWB are unique constructs.

Types of CWB: Active/Passive; Direct/Indirect; Physical/Verbal

Much of the CWB research today is based on early models of aggression. One popular model is the Buss (1961) typology, which categorizes workplace aggression into three main dichotomies: active-passive, direct-indirect, and verbal-physical. Active aggression produces harm through the performance of a behavior, while passive aggression produces harm by the withholding of an action or behavior (Buss, 1961; Baron & Neuman, 1996). Further, direct aggression occurs when harm is delivered directly to a victim, while indirect aggression occurs when harm is delivered through other people or objects that are valued by the victim, such as damaging the victim's property (Buss, 1961; Baron & Neuman, 1996).

Verbal aggression occurs through words, rather than deeds. Physical aggression occurs when blatant actions intended to harm the victim (e.g. physical violence) are evident (Buss, 1961; Baron & Neuman, 1996). While physical violence in the workplace is not unheard of, it is much rarer than verbal instances of aggression. Therefore, the wording present in many of the scale items that capture darkside constructs at work refers to verbal assaults on the victim. For example: "Made demeaning, rude or derogatory remarks about you" (Workplace Incivility Scale, Cortina et al., 2001) and "Cursed at someone at work" (Deviance Scale, Bennett & Robinson, 2000).

Severity and Target of CWB

A large portion of the research conceptualizes CWB as a behavior that is either organizationally- or interpersonally-directed (e.g. Dalal, 2005). While most of the research in this area has studied CWB targeting either the organization or the supervisor, recent advances have

included additional foci of interest, such as customers (e.g. Skarlicki et al., 2008). Some researchers argue that the main reason authors have focused on this conceptualization of CWB is because the most popular scale used for assessing the construct was developed by Bennett and Robinson (2000) to capture both interpersonal deviance and organizational deviance (Berry et al. 2007).

The scale developed by Bennett and Robinson (2000) is based on a typology established in their prior work. Robinson and Bennett (1995, 1997) created a typology of workplace deviance, suggesting that the target of deviant behavior can be either the organization or a specific person or group of people in the organization. In addition, they argued that deviance can run along a continuum of severity, from minor to very serious (Robinson & Bennett, 1997). This continuum occurs for both organizational deviance and for interpersonal deviance. They labeled behaviors according to one of four combinations: production deviance (organizational and minor), property deviance (organizational and severe), political deviance (interpersonal and minor), and personal aggression (interpersonal and severe). Production deviance includes actions such as leaving early from work, taking breaks that are too long, and wasting company resources. Property deviance includes equipment sabotage, lying about hours worked, and stealing from the organization. Examples of political deviance include showing favoritism, gossiping, and placing unnecessary blame on coworkers. Personal aggression refers to actions like sexual harassment, verbal abuse, and stealing from coworkers (see Robinson and Bennett, 1995: 565 for the full typology).

Bennett and Robinson's (2000) measure includes both interpersonal and organizational subscales, and also captures offenses ranging from minor to severe. Sample items for the interpersonal scale include, "Made fun of someone at work," "Made an ethnic, religious, or racial

remark at work,” and “Publicly embarrassed someone at work.” Sample items for the organizational scale include, “Dragged out work in order to get overtime,” “Come in late to work without permission,” and “Taken property from work without permission.” The items for the full scale are located on page 360 in Bennett and Robinson (2000). Of note, although this measure refers to deviance, the items align well with the examples of CWB I provided earlier. This measure is currently the most popular measure used to capture CWB in the workplace.

Empirical Research on the Relationship between Incivility and CWB

Andersson and Pearson (1999) theorize that incivility in relationships can be expected to escalate, or spiral, into more aggressive behaviors. They explain that uncivil behavior can activate a back and forth (or tit-for-tat) repetitive process that continues until either one of the parties’ exits the situation, or the conflict escalates in severity, such as culminating in physical violence (Andersson & Pearson, 1999). The work of Andersson and Pearson (1999) is considered a seminal article in incivility research, and is also the first article to specifically reference the idea of incivility spirals. According to Google Scholar, that article has been cited over 1,000 times, and more than 100 of those articles include the term “incivility spiral”. Nevertheless, there has been little empirical research investigating the relationship between incivility and counterproductive work behaviors. This is surprising given the popularity of the idea of incivility spirals and the escalation of violence in the mistreatment literature. In this section, I review the few empirical studies that have established a positive relationship from incivility to CWB, as well as research supporting the reverse – that is, a positive relationship from CWB to incivility.

Consequences of Stress

As discussed earlier, experienced incivility is often classified as a type of work stressor. Surprisingly, while researchers generally accept the idea that work stressors lead to other negative behaviors, such as CWB, there are only a handful of direct tests that empirically investigate this notion (Meier & Spector, 2013). Specifically, Meier and Spector (2013) found only three previous studies that controlled for baseline CWB. First, Greenberg's (1990) classic, quasiexperimental study on theft in manufacturing plants found experienced inequity and insufficient explanations led to higher theft rates in relation to control groups. Specifically, inequity was measured by a pay reduction of 15%, while the pay level in the control groups was not altered. Both inequity and insufficient explanations as to why the pay reduction occurred equate to stressors in this study, while theft rates represent CWB. Greenberg found that relieving these stressors through fair pay and thorough explanations reduced the theft rate.

In another example, Detert, Treviño, Burris, and Andiappan (2007) conducted a longitudinal study of 265 restaurants to better understand managerial influence on CWB. They found that both excessive managerial oversight and abusive supervision (stressors) led to unit-level food loss, which was considered an objective measure of counterproductivity in their study. Finally, Tucker et al. (2009) conducted a longitudinal, six-wave study by collecting archival data from 1,701 soldiers. Based on Cognitive Resource Theory (e.g. Tucker et al., 2009; stressors can override the self-regulatory processes that hinder harmful behaviors and actions) they argued that control is an important resource that helps employees cope with work demands and maintain performance levels. Overall, their results showed that a lack of job control (stressor) led to undisciplined behavior (CWB) in soldiers. Meier and Spector (2013) call for more research that

replicates the findings in these studies using additional work stressors (such as incivility), and a broader conceptualization of CWB.

Incivility Predicts CWB

Besides the studies discussed above, which look at a variety of workplace stressors and different conceptualizations of CWB, some studies have specifically investigated the effect of incivility on CWB. Penney and Spector (2005) based their study on the emotion-centered model of aggression discussed earlier (Spector, 1998), arguing that incivility is a type of workplace stressor. In their study, 299 employed students were surveyed, with 47% of the students working at least 30 hours a week, and all working at least 2 months at their current job prior to taking the survey. In addition, each student gave a questionnaire to one of their coworkers. The coworker response rate was 52%, resulting in 155 complete pairs, with both self- and peer-reported data. Overall, they found that incivility (e.g. ‘ignored or excluded you from professional camaraderie’), organizational constraints (i.e. situations that make it more difficult to complete job tasks, such as faulty equipment or incomplete information), and interpersonal conflict (e.g. ‘How often do you get in arguments with others at work?’) were positively related to CWB (e.g. ‘stole something from a person at work’). Further, there was some evidence to suggest that trait negative affectivity is a moderator of the relationship from job stressors to CWB, so that the relationship was stronger for those individuals who were high (rather than low) in negative affectivity. The relationship from self-reported incivility to CWB was moderated by trait negative affectivity, but this was not replicated with the peer data. Of note, the correlations between self- and peer-rated stressors and job satisfaction were similar in magnitude.

Some limitations to the Penney and Spector (2005) study include the study design and the method for selecting coworker participants. First, they collected data from both an employee and

a coworker at a single point in time, so the design of the study did not allow for casual inference regarding the directionality of the relationships. Second, since the student participants were asked to give a survey to one of their coworkers, the researchers had no control over who received the peer surveys. The student participants could have chosen peers with whom they have a good rapport, thus limiting the incidences of incivility and CWB reported. This may have contributed to their finding that the self-report data was generally replicated by the peer report data.

Recently, Sakurai and Jex (2012) investigated relationships between coworker incivility and both work effort and CWB. They proposed that workers who experienced high levels of incivility from coworkers would report lower levels of work effort and increased levels of CWB. In line with the emotion-centered model of job stress (e.g. Spector & Fox, 2002), they expected negative emotions (e.g. sadness, anger, frustration, etc.) to mediate the relationship between both incivility and work effort and incivility and CWB. Their sample consisted of 209 full-time university employees who completed a two-wave, self-report survey (either online or pencil and paper) over a two month time span.

Overall, Sakurai and Jex (2012) found support for the mediated hypotheses. Of specific interest to my research, the relationship from coworker incivility to the employee's CWB was statistically significant. Further, the results from a bootstrap procedure showed that the indirect effect of coworker incivility (through negative emotions) on CWB was statistically significant. Finally, the authors also found that supervisor social support moderated the relationship from negative emotions to work effort, so that the relationship was weaker for employees who reported high levels of support (compared to employees who reported low levels of support).

However, supervisor social support did not moderate the relationship from negative emotions to CWB.

Sakurai and Jex (2012) used the Workplace Incivility Scale by Cortina et al. (2001) to measure coworker incivility, and respondents were asked to indicate the frequency with which their coworkers engaged in each incivility in the past month. Bennett and Robinson's (2000) full Workplace Deviance scale was used to capture both interpersonal and organizational CWB, however the dimensions were not split when reporting the outcomes of the analysis. Negative emotions were measured using the Job-related Affective Wellbeing Scale (JAWS) by Van Katwyk, Fox, Spector, and Kelloway, 2000 (e.g. "My job made me feel annoyed" and "My job made me feel frustrated").

A limitation of the study by Sakurai and Jex (2012) is the possibility of common method bias from self-report data. However, in an attempt to minimize this, the authors did control for baseline criterion scores and trait negative affectivity, while also stressing the anonymity of responses. An additional limitation is that combining the interpersonal and organizational dimensions of CWB assumes that the antecedents of CWB-O and CWB-I do not differ. This is problematic in that it may lead to results where the population effect is understated or overstated (Hershcovis et al., 2007).

In another recent study, Taylor and Kluemper (2012) examined a process model of job stressors to workplace aggression based on traditional models of frustration-aggression (e.g. Dollard et al., 1939). Their sample consisted of 404 supervisor-subordinate pairs, and they proposed that role stressors, such as role ambiguity (e.g. "I know what my responsibilities are," reverse-scored), role conflict (e.g. "I receive incompatible requests from two or more people"), and role overload (e.g. "It often seems like I have too much work for one person to do") lead to

enacted workplace aggression. They also suggested that experienced incivility partially mediated these relationships, arguing that individuals who experience high levels of role stress will perceive greater levels of incivility from others at work (superiors and coworkers), and thus are more likely to engage in acts of both interpersonal and organizational aggression. Further, personality factors (neuroticism, agreeableness, and conscientiousness) were expected to moderate the mediated relationship. Experienced incivility was measured with the 7-item Cortina et al. (2001) scale in relation to both supervisors and coworkers, and enacted workplace aggression was measured using supervisor ratings of the Stewart, Bing, Davison, Woehr, and McIntyre (2009) measure of workplace deviance. Sample items include “Made fun of someone at work” (interpersonal) and “Took property from work without permission” (organizational). The interpersonal and organizational items were then combined, so that higher scores overall indicated higher levels of aggression.

Taylor and Kluemper’s (2012) results supported moderated mediation, with indirect effects for role ambiguity and role conflict on enacted aggression via experienced incivility, and moderation by individual personality differences. Of specific interest, Taylor and Kluemper (2012) found support for incivility as a mediating mechanism between the role stressors and enacted aggression, which supports the idea of a tit-for-tat escalation of negative exchange that increases in intensity as well as the frustration-aggression model of behavior. In relation to the personality moderators, high levels of neuroticism were found to be both a first- and second-stage moderator, while low levels of agreeableness and conscientiousness were second-stage moderators. One limitation of this study is that causal inference in relation to directionality was not possible. Taylor and Kluemper (2012) acknowledge the possibility of ‘feedback loops’ among the constructs studied in their research, and the reiterate the call made by Glomb (2002:

33) for more studies that include longitudinal data to help disentangle the relation between job stressors, such as incivility, and CWB.

CWB Predicts Incivility

As discussed above, Tucker et al. (2009) demonstrated that work stressors can lead to CWB (e.g. Penney & Spector, 2005; Tucker et. al, 2009; Taylor and Kluemper, 2012). For example, Tucker et al. (2009) found that a lack of job control predicted indiscipline (their measure of CWB) in soldiers. However, since they conducted a time-lagged study, they were also the first to examine the reversed effects – that CWB can also lead to work stressors. Accordingly, they found that prior incidents of indiscipline were associated with less control. This suggests a reciprocal effect between some workplace stressors and CWB.

Building on this idea, Meier and Spector (2013) empirically tested the theory that there is a reciprocal relationship between incivility and CWB. Like Penney and Spector (2005), they rationalized that incivility represents a type of work stressor that can activate negative responses, such as CWB (e.g. Spector & Fox, 2005). On the other hand, they also argued that there are theoretical reasons to assume that instances of CWB may increase certain work stressors, such as experienced incivility. For example, the violation of organizational norms, which is included in the definition of CWB, can trigger a desire for retaliation by others in the workplace (Aquino, Tripp, & Bies, 2001). Similarly, Andersson and Pearson (1999) noted that negative workplace behaviors can trigger an uncivil response from the target of the behavior. This is because the presence of negative behaviors at work can erode norms of mutual respect, trust, and support, thus elevating work stressors (e.g. Pearson et al., 2001).

To test this reciprocal effect empirically, Meier and Spector (2013) collected longitudinal data that included five assessments at two-month intervals over an eight month time period.

Their sample consisted of 663 employees collected through a snowball technique (i.e. 663 at time 1; 382 at time 5 because of attrition), where 96% of the sample lived in Switzerland and 70% worked full-time. Using SEM to assess the cross-lagged model over the two-month time lags, they found that both CWB-O and CWB-I predicted experienced incivility in the workplace (in general, as a specific target was not identified). However, the reverse effect, where incivility predicts CWB, was not present. They suggest that experiencing uncivil behavior may not be stressful enough to trigger behaviors like CWB, and conclude that experienced incivility appears to be a consequence of CWB, but not an antecedent of CWB (Meier & Spector, 2013).

Meier and Spector (2013) also point to several limitations in their study that will need to be resolved with future research. First, their participants reported low levels of both incivility and CWB, restricting the variance. They suggest that it is possible that the effect of incivility on CWB may emerge only once a specific threshold is reached, and say that more research is needed on samples with more prevalence of a hostile work environment, such as social services. Second, Meier and Spector (2013) explain that little is known about the importance of time-lags to these relationships. Since incivility is a low intensity behavior, they suggest that its potential effects may be short-lived. They point out that “future studies may therefore want to focus on even shorter time lags (e.g., 1 day) to test the incivility spiral in more detail” (Meier & Spector, 2013: 536). Since their study design captured measures every two months, it is possible that the effect of incivility on CWB was not detected in their study, but that smaller windows of time might reveal this piece of the incivility spiral. Also, the study by Meier and Spector (2013) did not test the underlying processes that link incivility and CWB, and future research is needed to establish both mediators and moderators in the process. Specifically, they suggest that a desire for revenge and negative affect may play a mediating role.

Summary of Future Research Directions

In sum, this literature review revealed several areas that are ripe for future research. The needs identified in this section will be incorporated into my dissertation. First, more coworker studies are needed in darkside research. Much of the research to date divides CWB among organizational and interpersonal dimensions, but does not specify a breakdown in the interpersonal dimension between the possible targets, such as coworkers, customers, or supervisors (e.g. Lavelle et al., forthcoming; Manegold & Lavelle, 2013; Spector, 2011). Additionally, much of the research that has focused on specific interpersonal relationships has focused on supervisor-subordinate dynamics, not coworker relationships. For example, Hershcovis et al. (2007: 235) used meta-analytic techniques to look at target specific relationships in relation to negative workplace behavior constructs, but were unable to analyze coworker-targeted aggression in relation to mistreatment variables, such as injustice, because there simply was not enough existing research that differentiates the target by supervisor versus coworker.

In addition, incivility spirals are proposed to begin with a tit-for-tat response that eventually escalates in intensity (Andersson & Pearson, 1999). Research that uses more fine-grained measures (for example, daily assessments and target-specific measures) may be able to empirically capture this idea in more detail. In fact, researchers in the mistreatment literature (including justice, incivility, and CWB) have called for more research that captures daily fluctuations or changes in these types of relationships (e.g. Colquitt et al. 2013).

Finally, there is a need for a better understanding of the relationship between incivility and CWB (e.g. Meier & Spector, 2013). When does experienced incivility predict negative behaviors, such as instigated incivility and CWB targeting the offending party? The

identification of underlying mediating mechanisms and moderating constructs may help to answer this question (testing models with small windows of time, such as daily, may also be useful in this respect). In this dissertation, I develop and test a process model containing these constructs, paying particular attention to specific targets, possible mediators (such as a desire for revenge and state anger), and possible moderators that may either strengthen or weaken the escalating negative behaviors. In addition, this dissertation integrates similar research streams within the mistreatment literature by using justice theories and frameworks to shed light on the processes behind negative workplace behavior relationships. The next section of this dissertation will begin addressing these research gaps through a discussion of the theory and hypothesis development.

Chapter 3

Theory and Hypothesis Development

Based on the literature review, this section extends theory and develops hypotheses. First I discuss the mediating potential of social exchange (conceptualized as a desire for revenge) and emotions (conceptualized as state anger). Then I discuss why these mediators are likely to have a reciprocal relationship within a negative exchange context, and how this phenomena could extend previous theory on displaced aggression (e.g. Dollard et al., 1939; Mohiyeddini & Semple, 2013), as well as targeted behaviors (e.g. Lavelle et al., 2007; Lavelle et al., forthcoming). I also consider the role of time in relation to the escalation of negative exchange. After that I use theories from justice research (namely, the multiple needs perspective, the event/entity perspective, and the theory of contrast effects) to derive moderators expected to intensify or attenuate the relationship between experienced incivility from coworkers and negative workplace outcomes (instigated incivility and CWB). For example, I discuss personality factors that may cause individuals to respond with more negativity than is warranted (e.g. narcissism, hostile attribution bias, and moral identity symbolization). I also consider a personality construct that may attenuate, or prevent, the escalation of negative exchange (e.g. moral identity internalization). Finally, I discuss how perceptions of overall fairness (from a specific coworker and from the coworker group as a whole) may differentially impact the proposed relationships. *Figure 1* provides a roadmap of the relationships to be discussed in this chapter.

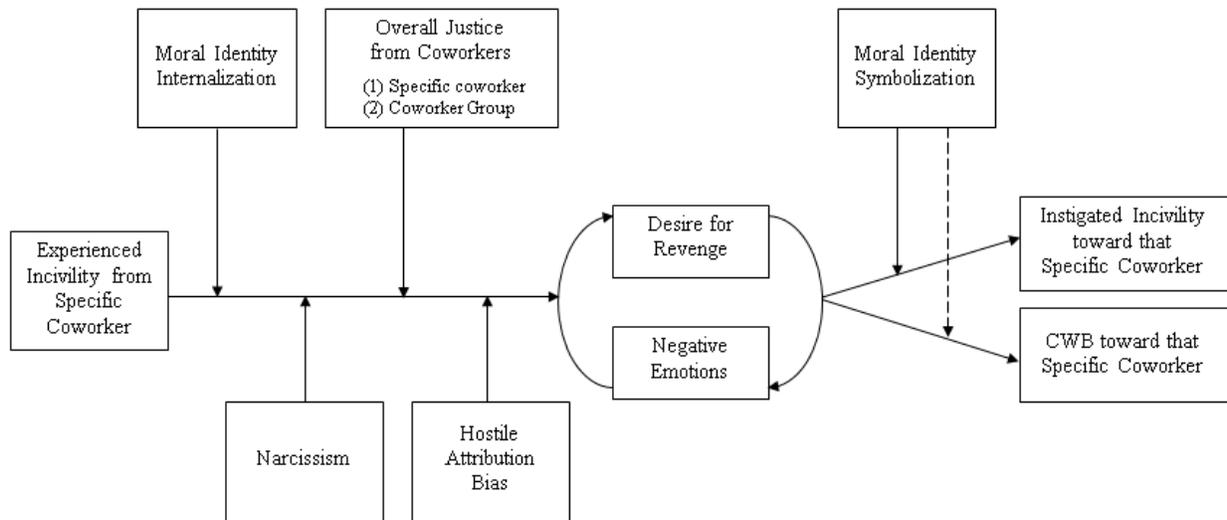


Figure 1: A process model of negative exchange measuring daily incivility and CWB

Social Exchange Theory

Social exchange has been defined as “actions contingent on the rewarding reactions of others, which over time provide for mutually and rewarding transactions and relationships” (Cropanzano & Mitchell, 2005). Social exchange relationships tend to involve socio-emotional resources, such as commitment, support, or trust (e.g. Konovsky & Pugh, 1994; Lavelle et al., 2007). Therefore, these relationships tend to develop over a period of time (Rupp & Cropanzano, 2002). This can be contrasted with economic exchange, which is characterized as more short-term, with quid pro quo exchanges (Blau, 1964; Konovsky & Pugh, 1994). Contemporary social exchange theory (see Cropanzano & Rupp, 2008) conceptualizes social exchange as a type of interpersonal relationship based on normative rules that are established within unique exchange relationships (Colquitt et al., 2013; Emerson, 1976; Gouldner, 1960). For example, the norm of reciprocity has been commonly studied in relation to social exchange in organizational behavior research (Cropanzano & Mitchell, 2005). Reciprocity is generally recognized as a universal norm (Gouldner, 1960), and involves “repaying the actions of others with corresponding actions

of our own” (Cropanzano et al., 2001: 184). For example, when employees feel they have been treated fairly by their supervisor, social exchange mechanisms are activated (such as mutual feelings of trust, support, and commitment). This leads the employee to feel obligated to reciprocate in a positive manner, such as through citizenship behaviors directed toward their supervisor (e.g. Lavelle et al., 2007).

The norm of reciprocity can also be applied to perceptions of interpersonal mistreatment in the workplace. In describing the norm of reciprocity, Gouldner (1960) explained that the expectation is for individuals to help (rather than harm) those who have helped them. This begs the question – how do social exchange processes explain negative reciprocation in relationships? One suggestion is that when an individual experiences unfair treatment, it is possible that he or she will ‘repay’ the offending party for mistreatment through negative workplace behaviors, such as CWB (e.g. Jones, 2009).

Only a handful of studies have applied social exchange arguments to negative relationship outcomes (Colquitt et al., 2013: 202). For example, one of the earliest studies to apply social exchange theory in relation to negative workplace behaviors was work by Greenberg and Scott (1996). They suggested that social exchange was a complimentary theory to the traditional focus of theft as a purely criminal activity. While they acknowledged that some serious crimes are beyond managerial control, they suggested that understanding the negative implications of social exchange could help managers identify and control the occurrence of more minor forms of pilferage in the workplace.

Further, in a recent meta-analysis, Colquitt et al. (2013) considered CWB as an outcome of reciprocated behaviors based on social exchange theory. After analyzing 493 independent samples, they found direct effects between procedural, distributive, and informational justice and

CWB, but these were not mediated by social exchange quality. Of note, they measured social exchange quality using common indicators of positive exchange: trust, organizational commitment, perceptions of support, and perceptions of the quality of leader-member exchange. Colquitt et al. (2013: 215) suggest that this compliments the view that OCB and CWB are not opposites on the same continuum; rather it is possible that a different type of mediator underlies the formation of CWB. Overall, the underlying processes used to describe negative social exchange have not been studied as thoroughly as the processes that define positive social exchange, leaving ample potential for future research in this area. In other words, it is possible that measures of negative social exchange will differ from the measures used for positive exchange (e.g. support, trust, commitment, etc.). In later sections, I will address this gap by considering revenge desires to be a valid proxy for negative social exchange processes.

Negative Exchange Spirals

Some theorists have pointed to the spiraling effects of social exchange. For example, in a review of the literature on social exchange, Cropanzano and Mitchell (2005: 889) discuss the causal ambiguity related to social exchange, in that the “*output* from a past transaction can be the *resource* exchanged in a future transaction” (italics original). To clarify this statement, they use the analogy of climbing a ladder, where the previous rung becomes the support rung for the next step up. The incivility spirals described by Andersson and Pearson (1999) seem to fit this idea of reciprocated negative exchange. According to Andersson and Pearson’s (1999) theory, incivility in relationships can be expected to escalate, or spiral, into more aggressive behaviors. They explain that uncivil behavior in an organization can start with something as simple as a thoughtless act that is interpreted as mistreatment. At this point, one could argue that a negative exchange process is activated, leading the victim to reciprocate toward the offending party

(perhaps with a rude remark). In this way, the original victim of the negative behavior becomes the instigator. Then, the original actor may view the reciprocated response from the original victim as unfair, and thus the negative exchange process repeats again and again until either one of the parties exits the situation, or the conflict escalates to the point of violence (Andersson & Pearson, 1999).

Evidence from other areas of the mistreatment literature seems to support this escalating or spiraling effect. For example, Groth and Grandey (2012) reviewed the literature on employee well-being and customer satisfaction and suggested that a negative exchange spiral similar to the process described by Andersson and Pearson (1999) occurs when negative service encounters create negative spillover in relation to the experience of customers and other employees. Further, Glomb and Liao (2003) found empirical evidence to support the escalation of aggression. They based their hypotheses on social exchange and the idea of 'reciprocal aggression', which says that individuals who engage in acts of aggression towards others are likely to become the target of aggressive acts from those same others (e.g. Bandura, 1973). Glomb and Liao's (2003) data supported the hypothesis that being the target of aggressive behaviors predicted employees' subsequent aggressive behavior. They mention that this finding is consistent with findings from the justice literature, in that employees who have been treated unfairly may reciprocate in order to restore justice (e.g. Aquino, Tripp & Bies, 2006). However, one limitation of their study was that they were unable to identify targets versus aggressors, and thus only have correlational relationships between being the target of aggression and engaging in aggressive behavior. Therefore, they did not dig into the possible mechanisms that underlie this process, such as a desire for revenge (e.g. Jones, 2009).

Masuch (1985: 16) describes negative exchange spirals as “vicious circles in organizations,” specifically defining them as deviation-amplifying loops, or action loops that have counterproductive results. According to Masuch (1985: 23), “Vicious cycles lead an absurd existence, since everyone should avoid deviation-amplifying feedbacks. Yet, once caught in a vicious cycle, human actors continue on a path of action that leads further and further away from the desired state of affairs.” Masuch (1985) explains that once caught in a negative exchange spiral, both parties involved must decide whether or not to escalate the situation. If the other side does not escalate, then choosing escalation can lead to superiority in the situation. Similar to the ideas present in the prisoner’s dilemma game, while both parties would benefit most from cooperation, escalation is often chosen instead to avoid being deceived by the opposing party. Further, Masuch (1985) explains that a critical threshold must be passed to start the negative exchange process, and then exogenous factors external to the cycle may be the only way to terminate the process.

The idea of a critical threshold is relevant to the relationship between incivility and counterproductive work behaviors. Meier and Spector (2013) suggested that perhaps incivility did not lead to counterproductive work behaviors in their study because uncivil acts were perceived as minor violations that were not stressful enough to warrant CWB, which is a more severe form of retaliation. Indeed, other scholars have echoed this sentiment. For example, Glomb (2002) conducted a qualitative study that included structured interviews and questionnaires to collect employee experiences of workplace aggression, from both the target and aggressor perspectives. While the data did suggest that aggressive behaviors follow an escalatory pattern, the severity of the act was an important predictor of the resulting negativity of the reciprocated act.

The findings by Meier and Spector (2013) and Glomb (2002) are not necessarily contrary to the argument posed in this dissertation; rather, they provide an opportunity to extend the theory that has been developed and the knowledge that has accumulated thus far. Specifically, Andersson and Pearson (1999) argued that the tit-for-tat nature of incivility spirals may suggest that incivility is reciprocated with more incivility at first. Then, as the small acts are repeated over and over (such as with daily incivility), more aggressive responses will emerge over time. Similarly, Affective Events Theory (Weiss & Cropanzano, 1996; I discuss this theory in more detail later) says that affective experiences *accumulate*, which helps to form attitudes and behaviors. This theoretical explanation seems to fit nicely with the qualitative findings of Glomb (2002), in that the severity of the preceding behavior will be predictive of the severity of reciprocated behaviors. Further, Meier and Spector (2013) point to the need for more research that considers the timing between incidents. As I have argued throughout, daily measures could reveal patterns of escalation that have been previously hidden.

Taking this into consideration, in this dissertation I will consider the relationships from experienced incivility to (a) instigated incivility and (b) coworker-directed CWB. This classification is meant to capture effects of experienced incivility on negative behaviors at varying levels of intensity to capture the escalating pattern predicted by negative exchange over time. Therefore, based on the literature review and the theory presented above, I suggest that:

Hypothesis 1: Within individuals, experienced incivility from a specific coworker will be significantly related to (a) instigated incivility directed toward that specific coworker and (b) CWB directed toward that specific coworker.

Hypothesis 2: Within individuals, (a) experienced incivility from a specific coworker will be more strongly related to instigated incivility targeting that coworker than to CWB targeting that coworker. (b) However, as experienced incivility from a specific coworker persists over time, its relationship to CWB directed toward that specific coworker will become stronger.

Revenge as a Mediator

After finding direct effects between procedural, distributive, and informational justice and CWB, but no mediation effect of social exchange quality on these relationships, Colquitt et al. (2013) called for more research that identifies the underlying mechanisms of negative exchange in relationships. In their meta-analysis, social exchange quality was measured with common indicators of positive exchange: trust, organizational commitment, perceptions of support, and perceptions of the quality of leader-member exchange. It is entirely plausible that the indicators used to capture positive exchange should be different from the indicators of a negative exchange process. Recent empirical evidence supports the idea that OCB and CWB are not opposites on a continuum (e.g. Dalal, 2005; Dalal, Lam, Weiss, Welch, & Hulin, 2009). Traditional models of (positive) social exchange often use OCB as the outcome variable, with indicators of exchange being represented by trust, support, and commitment (e.g. Lavelle et al., 2007). However, if OCB and CWB are not opposites, it is reasonable to question whether one can simply apply the same constructs as proxies to positive versus negative exchange relationships.

Within the darkside literature, one construct that is considered a mediating mechanism is the desire for revenge (e.g. Jones, 2009), and I argue that this might be a better proxy to use when capturing the process of negative exchange. Revenge is defined as the effort by an

individual to harm the party whom they blame for an offense (Stuckless & Goranson, 1992). Bies and Tripp (1996) conceptualize revenge as a response to a trust violation (or interpersonal offense), and say that a revenge episode is characterized by both attributions of blame and cognitions in response to the violation of trust. Further, Aquino et al. (2006) conceptualize revenge as a coping mechanism for dealing with an offense at work that helps the victim manage his or her offense-generated emotions and cognitions. This suggests that while emotions like anger can feed revenge, a desire for revenge is also driven by cognitive evaluations of the situation. I argue that the cognitive aspect of revenge, where harm is observed, blame is placed, and a reciprocating action is chosen (e.g. Bies and Tripp, 1996), fits the description of negative social exchange. This is especially true since the desire for revenge will be directed at the person who committed the offense (Bies & Tripp, 1996; Bies, Tripp, & Kramer, 1997; Jones, 2009). This is a clear example of negative reciprocity, which is a defining characteristic of negative exchange.

Bies and Tripp (2005) described revenge as being provoked by goal obstruction, norm violation, or status/power derogation. Milam, Spitzmueller, and Penney (2009) posited that this description of revenge fits nicely with the idea of tit-for-tat incivility exchanges, and that revenge may be a driving force behind uncivil behavior. As mentioned in the literature review, incivility is considered a type a negative workplace behavior that violates norms (Andersson & Pearson, 1999). In addition, researchers believe that individuals seek revenge to restore their rank in a relationship by simultaneously reducing the rank of the offending party (Bradfield & Aquino, 1999). Further, people will defend themselves against threats to their social and personal identities, which can lead to incivility triggering a desire for revenge (Aquino & Douglas, 2003).

In peer relationships, desires for revenge may lead to counterproductive work behaviors intended to hinder the performance of the coworker being targeted (McLean, Parks, & Kidder, 1994).

Jones (2009) points out that researchers often infer that a desire for revenge underlies the relationship between mistreatment and counterproductive work behaviors without presenting empirical evidence that this is indeed the case. A notable exception is the study conducted by Bradfield and Aquino (1999), which showed that revenge cognitions are significantly and positively related to revenge behavior. Adding to these findings, Jones (2009) found significant relationships between desires for revenge and actual counterproductive work behaviors, and that these behaviors were directed towards the perceived origination of the offense (in that paper, the supervisor or the organization). Specifically, Jones (2009) found that supervisory interpersonal and informational justice significantly predicted CWB toward the supervisor, whereas procedural justice stemming from the organization did not. Importantly, this relationship was mediated by a desire for revenge toward the supervisor. Moreover, Jones found organizational procedural justice to predict CWB toward the organization, while supervisory interpersonal and informational justice did not. Again, a desire for revenge toward the organization mediated this relationship. Jones (2009) based his model on the agent-system model of justice, which is social exchange-based, and predicts that certain types of justice will be more related to specific sources of mistreatment (Bies & Moag, 1986). These findings also offer support for the target similarity perspective (Lavelle et al., 2007). This is significant because it shows that the desire for revenge can (1) empirically work as a mediator between mistreatment and target-specific CWB, and (2) be used as a proxy for social exchange to help explain the process. Following this rationale, I propose:

Hypothesis 3: Within individuals, a desire for revenge targeting a specific coworker positively relates to (a) instigated incivility toward that coworker and (b) CWB toward that coworker.

Hypothesis 4: Within individuals, experienced incivility from a specific coworker will have a positive indirect effect on (a) instigated incivility toward that coworker and (b) CWB toward that coworker via a desire for revenge.

Negative Emotions

Earlier, I explained that according to the emotion-centered model of work behaviors, threats to employee well-being (e.g. stressors) will trigger negative emotions, which can lead to negative workplace outcomes (Spector & Fox, 2002). Importantly, a central concept of this view is that negative emotions will mediate the relationship between stress and strain (e.g. Fox and Spector, 1999). This is because emotions represent an immediate response to perceived stress (e.g. Lazarus, 1991). Also, emotions have been theorized to motivate subsequent behavior (Weiss & Cropanzano, 1996). The emotion literature differentiates between state affect (moods) and trait affect (affectivity) (Barsky & Kaplan, 2007). Most often, this is achieved by considering affect to exist along two unipolar dimensions, positive and negative affect (Watson, Wiese, Vaidya, & Tellegen, 1999). Trait affect captures the tendency to consistently experience feelings across time and different situations, and state affect, is more transient or malleable depending of day-to-day experiences (Watson, Clark, & Tellegen, 1988). Researchers consider emotion and state affect to be hierarchal, such that emotions are subsumed under affect (mood), which allows findings in one area to inform the other (e.g. Fong, 2006).

The PANAS scale is the most popular measure that is used to capture affective states and traits. It considers positive and negative affect to be separate and orthogonal dimensions, with

distinctly different correlates (Watson et al., 1988). It is designed to capture context-free affective terms by listing 20 words that tap into positive and negative feelings. The Job-related Affective Well-Being Scale (JAWS) is another measure of emotions in the workplace (see Van Katwyk et al., 2000). This measure differs from the PANAS, in that it places judgments in specific phrases (e.g. My job makes me feel angry), rather than using context-free affective terms like *angry* or *bored*.

In addition to stressor-strain theories of emotion, Affective Events Theory (AET) informs the mediating processes of emotions. AET comprehensively accounts for antecedents, consequences, and contingencies related to affective experiences in the workplace (Weiss & Cropanzano, 1996), which helps to explain what happens between a work event, such as incivility among coworkers, and subsequent attitudes and behaviors. Specific attention is paid to the role that emotion plays, as well as the contingent moderating effects that personality and disposition can impose on attitudes and behaviors. According to AET, work environment features (i.e. work roles or the design of the job) directly influence work attitudes through a cognitive route, and indirectly through an affective route. The affective route is activated when a feature of the work environment influences a work event (i.e. incivility among coworkers), which generates both positive and negative affective reactions that help to form both work attitudes and affect driven behaviors. Then, work attitudes are linked to judgment driven behaviors (i.e. turnover intentions). In addition, Weiss and Cropanzano (1996) proposed that personal dispositions, such as personality differences, will moderate the impact that work events have on affective reactions.

Of particular interest here, AET proposes both the causes and consequences for mood (i.e. state affect) and emotions at work, in that mood and/or emotions are considered to be the

mediating mechanism between the work environment and job-related attitudes and behaviors (Fisher & Ashkanasy, 2000; Weiss & Cropanzano, 1996). Fisher and Ashkanasy (2000) explain that, according to AET, features of the work environment lead to events that generate emotions (e.g. positive feedback can lead to positive emotions like pride and joy). These affective experiences can then lead to affectively-driven behaviors (e.g. citizenship behaviors). Also, affective experiences at work accumulate, so that in the aggregate they contribute to the affective component of job attitudes (e.g. job satisfaction). Specifically, Fisher and Ashkanasy (2000) clarify that measures of real-time emotion should be predictive of job attitudes, and eventually judgment-driven behaviors (e.g. quitting a job). An important takeaway in relation to the current study is that affective experiences are described as accumulating, or escalating, which helps to form attitudes and behaviors.

For example, Fox et al. (2001) investigated the mediating effect of negative emotions between both procedural and distributive justice and CWB-I and CWB-O. Based on the emotion-centered model of work behaviors (Spector, 1998), Fox et al. (2001) conceptualized injustice as a work stressor that leads to behavioral responses such as CWB through emotions. They point to parallels that exist between how the organizational justice and job stress literatures explain CWB – including the central role of emotions and affective responses (Fox et al., 2001: 294). Therefore, their model includes a unified job stress / injustice approach to CWB that centers on the role of emotions. Emotions were measured using the JAWS questionnaire by Van Katwyk et al. (2000). Overall, excluding the relationship between distributive justice and CWB-I (no significant main effect), the authors found significant mediation effects for negative emotions on all of the other justice-CWB relationships.

Similarly, Sakurai and Jex (2012) found evidence that negative emotions mediate the relationship from coworker incivility to CWB. The job stress/strain model of negative workplace emotions (Spector & Fox, 2002) was used as the underlying theory, and interestingly, social exchange theory was used to rationalize the use of supervisor social support as a moderator of the relationship. The data were collected in two waves (2 months apart), from full-time university employees. A total of 209 employees completed both surveys. Overall, Sakurai and Jex found support for a mediation model, where incivility predicted CWB through negative emotions. Also, supervisor support served as a moderator between negative emotions and work effort (e.g. the energy put into work tasks), but not between negative emotions and CWB. Incivility was measured with the Workplace Incivility Scale by Cortina et al. (2001), and adapted so that the source of the incivility was coworkers. CWB was measured with the scale developed by Bennett and Robinson (2000). Both the interpersonal and organizational subscales were used to form one overall measure of CWB. However, incivility is interpersonal in nature (the organization is not usually conceptualized as being uncivil), so in my study I only use the interpersonal items to form a measure of CWB.

Sakurai and Jex (2012) suggest that it is possible that supervisor support is not found to be very helpful in relation to dealing with uncivil coworkers, and that instead employees may have resorted to the use of CWB as a coping mechanism to incivility from coworkers. Interestingly, they suggest that CWB is not always visible to supervisors, especially in covert form, so employees may have coped with uncivil behavior through engaging in CWB that goes unnoticed by their supervisor. Overall, both job-stress models (Spector & Fox, 2002) and AET (Weiss & Cropanzano, 1996) highlight the importance of negative emotions as a mediating

mechanism. Further, recent research (e.g. Sakurai & Jex, 2012) suggests that negative emotions (as measured by affective states) underlie the relationship between incivility and CWB.

State Anger as a Mediator

The three primary negative emotional responses that have been identified by psychologists and sociologists are anger, fear, and sadness (Porath & Pearson 2012; Ekman & Friesen, 1975; Frijda, 1993; Plutchik, 1980). Porath and Pearson (2012) suggest that these core negative emotions are evoked when people experience incivility. Anger is a response to a perceived violation and is evoked when blame can be placed on an offending party (e.g. Averill, 1983; Greenspan, 1988). Fear occurs when someone feels threatened or has the uncomfortable feeling that danger is imminent (e.g. Greenspan, 1988). Sadness is experienced when negative events are perceived as uncontrollable (Frijda, Kuipers, & Terschure, 1989). Regarding the relationships that I am testing, anger has been connected to revenge desires in previous research (e.g. Bies & Tripp, 1998), and will be to the focus of this section.

Anger has been of interest to organizational scholars for many years (e.g. Stearns & Stearns, 1986), and interest in this emotion has increased dramatically over the last several decades (Gibson & Callister, 2009). In defining anger, Gibson and Callister (2009) identify several critical components of the construct. First, anger is a discrete emotion that can be considered ‘basic’, in that individuals are able to recognize it across different situations and cultural settings. Second, it is a social emotion and tends to be a response to the actions of others (Averill, 1982). Third, anger can be conceptualized as state anger and trait anger, where state anger is a temporary emotional state that can range from being irritated to enraged, and trait anger is a personal disposition that leads individuals to more readily perceive situations as anger provoking. Fourth, emotions like anger can be viewed as transactions between individuals,

meaning there is a temporal aspect to feelings of anger. Of note, this aligns well with definitions of social exchange (e.g. Cropanzano et al., 2001). Drawing from these critical components of anger, Gibson and Callister (2009: 68) define anger as, “an emotion that involves an appraisal of responsibility for wrongdoing by another person or entity and often includes the goal of correcting the perceived wrong.” Further, Gibson and Callister (2009) argue that anger has useful implications for study as a distinct phenomenon in organizational research.

In recent years, researchers have conducted research based on the deontic model (cf. Folger, 2001). According to the deonance perspective, the universal nature with which justice norms can be observed suggests that humans possess an innate understanding of how we should treat one another (Rupp & Aquino, 2009). The deontic model says that individuals will react automatically with moral outrage, or deontic rage, when witnessing unfair treatment (Rupp & Aquino, 2009). Couched within the deontic perspective, feelings of anger following mistreatment indicate that important values or beliefs have been violated (Gibson & Callister, 2009; Goldman, Slaughter, Schmit, Wiley, & Brooks, 2008). Deontic rage and revenge share several commonalities. For example, both are driven by the emotion of anger, and the motivation of both is to right a perceived wrong, which is indicative of negative social exchange.

Further, along the lines of deontic rage, Tripp and Bies (2010) discussed the idea of ‘righteous anger’ in relation to a desire for revenge. They define righteous anger as “an emotional response to correct and prevent injustice” (Tripp & Bies, 2010: 413). They argue that whether or not anger motivates a desire for revenge will be contingent on whether or not the victim attributes blame to the harm-doer. Specifically, if there are circumstances that create a reasonable doubt in the victim’s mind (for example, the offense seems out of character for the person who committed the offense), the victim may rationalize the offense and blame is not

assigned. This makes seeking revenge less likely. In other words, an important factor to consider in relation to the anger-revenge relationship is whether or not the victim believes the actions were intentional. Tripp and Bies (2010) argue that assigning blame can lead to righteous anger, and thus a desire for revenge. Following the theory outlined above, since I am looking at revenge as one key mediating mechanism for negative exchange, measuring the emotion of anger as another possible mediator may allow for a more complete picture of the underlying process.

Therefore, I hypothesize:

Hypothesis 5: Within individuals, state anger positively relates to (a) instigated incivility toward that coworker and (b) CWB toward that coworker.

Hypothesis 6: Within individuals, experienced incivility from a specific coworker will have a positive indirect effect on (a) instigated incivility toward that coworker and (b) CWB toward that coworker via state anger.

Integrating Negative Exchange and Negative Affect Spirals

Researchers most often study mistreatment based on *either* social exchange or affect. Yet, as the previous sections demonstrate, both social exchange-based and emotion-based constructs have been presented as mediating mechanisms in the broader mistreatment literature (e.g. Jones, 2009; Sakurai & Jex, 2012). In this section, I discuss recent theory in the justice literature that calls for research capturing the synergy between these two theoretical lenses by exploring the justification for a complementary relationship between social exchange-based constructs and emotion-based constructs (Colquitt et al., 2013).

First, social exchange processes can trigger emotions such as joy or pleasure, or in the case of negative exchange, anger, sadness, or fear (cf. Lawler & Thye, 1999). In fact, early fairness theorists emphasized the emotional side of exchange (Cook & Rice, 2006). Lawler and

Yoon (1996) developed Relational Cohesion Theory, which specifically argues that individuals will develop emotional responses towards ongoing exchange relationships. It says that successful exchange can lead to good feelings (e.g. satisfaction, pleasure, interest, or excitement), and that individuals are motivated to understand what caused these feelings. Through this process the exchange relationship becomes more salient (Lawler & Thye, 1999). Through a series of experiments, Lawler and Yoon (1993, 1996, 1998) found that, indeed, members of exchange relationships who express positive emotions relating to the relationship will report more commitment to the relationship. Tse, Dasborough, and Ashkanasy (2008) conducted a qualitative study to better understand the process of exchange relationship formation in teams, and they demonstrated that both positive and negative affect are related to this process. Low-quality exchange relationships were described by participants as having a lack of care, support, communication, trust, respect, or cooperation. Friendship was emphasized as an important contributor to positive exchange, which was associated with feelings of interest, happiness, comfort, satisfaction, enjoyment, and excitement, among others. Negative exchange was triggered by being uncomfortable, angry/annoyed, frustrated/hate/furious, nervous/anxious, stressed, afraid/scared, and upset/unhappy.

Alternately, positive and negative affect created by events in the relationship may change individual perceptions of the quality of social exchange within the relationship, and these changes can have long lasting effects by imprinting on the memory of the event (Ballinger & Rockman, 2010; Colquitt et al., 2013: 219). For example, it has been argued that anger and related emotions (e.g. hostility, contempt, disgust) are a strong motivator of revenge (Tripp et al. 2007). Bies and Tripp (2002) reviewed the literature on how emotions feed the motivation for revenge, and explained that the intensity of emotions experienced after mistreatment were quite

relevant. Further, individuals describe the negative emotions that follow injustice as being quite intense, such as being furious, bitter, or enraged (Bies & Tripp, 1996). Tripp et al. (2007) theorize that this intensity will help to imprint the emotions into memory, allowing the anger experienced over mistreatment to endure, and fostering a desire for revenge over time.

With evidence to support a relationship between social exchange and affect, as well as a relationship between affect and social exchange, Colquitt et al. (2013) assert that there is theoretical rationale behind the idea that there is a non-recursive relationship between the perceived quality of social exchange and state affect. There are several extensions to theory that can be derived from this possibility. In recent years, the multifoci perspective in the justice literature has gained traction. This perspective emphasizes accountability by incorporating the person responsible for mistreatment (Folger & Cropanzano, 2001; Lavelle et al., 2007, Lavelle et al., forthcoming; Rupp & Cropanzano, 2002). For example, the target similarity model (Lavelle et al., 2007) suggests that multiple sources of justice are important to employees, in that they hold multiple, unique exchange relationships with each source of justice. The target similarity model “encourages researchers to hypothesize links between key employee perceptions (e.g., justice), relationships (e.g., social exchange), and behaviors (e.g., citizenship) with more precision than ever before - by specifying foci at all stages of the psychological processes being investigated” (Lavelle et al., 2007: 841). Overall, the target similarity model suggests that when simultaneously examining multiple justice sources, fairness attributed to a specific source will most strongly predict employee behaviors directed toward that source. For example, research has shown that perceptions of supervisor unfairness are more strongly related to CWB targeting the supervisor than to CWB targeting the organization (e.g. Jones, 2009). The target similarity model also acknowledges the existence of carry-over effects from one source to another. In other words,

while target similar relationships should have the strongest effects; smaller effects may be present between dissimilar targets. However, the reason for these ‘spillover’ or carry-over effects is not well understood.

Combining emotions and affect with a social exchange perspective may help to fill in the gap. For example, say that Jack is uncivil to Jill by way of a rude comment. This may offend Jill and activate negative emotions, such as anger. These emotions may lead to a general bad mood. While she may lash out at Jack as a result of his actions toward her, it is also possible that she may lash out at other coworkers or her spouse later that day (people who did not initially offend her) and chalk it up to being in a bad mood. This example illustrates displaced aggression (e.g. Dollard et al., 1939). Displaced aggression occurs when the target of negative behavior did not cause the harm (Dollard et al., 1939). So is it possible that the carry-over effect that has been observed in targeted behavior research is related to an affect-based explanation. In other words, exchange-based attributions may explain the stronger effects within target similar relationships, and emotion-based moods (e.g. state affect) may explain the carry-over effects through displaced aggression.

Colquitt et al. (2013) assert that design boundaries have kept the research on social exchange versus the research on affect in instances of mistreatment separate (Colquitt et al., 2013: 219). Specifically, most social exchange research focuses on relationships with entities over an extended time, while most research on affect focuses on events taking place in the present situation (Colquitt et al, 2013). That said, recent research has shown the utility of daily studies that capture fluctuations in both justice perceptions (Loi, Yang, & Diefendorff, 2009) and reciprocated behaviors (Dalal et al., 2009). Loi et al. (2009) used hierarchical linear modeling to find that both daily interpersonal and informational justice were significantly related to daily job

satisfaction. Further, between-individual procedural justice moderated the relationship between daily informational justice and daily job satisfaction, while between-individual distributive justice moderated the relationship between daily interpersonal justice and daily job satisfaction. Dalal et al. (2009) demonstrated through daily accounts of organizational citizenship behavior and CWB that at the within-person level, the affective forces driving each construct were unique, leading to different nomological networks of antecedents. Their study helps to demonstrate that behavior can vary predictably, even over very short lapses of time.

Applying this to the process model presented herein, that would suggest that there should be daily fluctuations in perceptions and affect resulting from experienced incivility, as well as the desire for revenge. Therefore, by capturing data on a daily basis, such as through the use of experience sampling methods, it is possible to test the validity of the theory that social exchange and state anger serve in an integrative mediating role between mistreatment and outcomes. Of note, this notion is consistent with the idea of righteous anger and deontic rage. This leads to the following hypotheses:

Hypothesis 7: Within individuals, in response to experienced incivility from a specific coworker, a daily desire for revenge targeting that coworker will influence daily state anger, and daily state anger will influence a daily desire for revenge directed at that specific coworker.

Moderators from the Organizational Justice Literature

Wu et al. (2013) explain that the inherent ambiguity present in acts of incivility provides an opportunity to identify boundary conditions for the effects of incivility. For example, since incivility is a low intensity behavior with ambiguous intent, a target's individual characteristics, (such as personality differences) may prevent him or her from perceiving mistreatment at all,

effectively terminating the potential for an incivility spiral to occur (Wu et al., 2013). This reasoning also falls in line with Affective Events Theory (Weiss & Cropanzano, 1996), which assumes that behavior is contingent on personal characteristics and attributes.

Moderators derived from the organizational justice literature may be particularly interesting in relation to the study of incivility spirals in the workplace. As noted in Chapter 2, both incivility and injustice are considered forms of mistreatment (e.g. Cortina et al., 2001). Since there is conceptual overlap between interpersonal justice perceptions and incivility (Penney & Spector, 2005), I suggest that the psychological needs that drive justice perceptions will extend to perceptions of incivility.

The Multiple Needs Perspective

The multiple needs perspective argues that perceptions of justice matter to employees because they serve important psychological needs (Cropanzano et al., 2001). Three central models pertaining to why justice matters to employees have been proposed and I briefly explain each here. For further review of these perspectives, see Cropanzano et al. (2001) and Cropanzano, Goldman, and Folger (2003). One of the first models to be identified in the justice literature is based on economic ideas of equity in relationships. The instrumental model is tied to the need for control, because possessing control helps to maximize favorable outcomes (Cropanzano et al., 2001). A key aspect of instrumental and self-interest models is that behaviors are undertaken for the purpose of personal gain (Cropanzano et al., 2003). Next, the relational model addresses the question, “Who am I?” in relation to our membership in the groups that we find relevant (e.g., Ashforth & Mael, 1989; Lind & Tyler, 1988). Psychologically, this is significant because people seek acceptance, standing, and status in relevant groups to promote their own self-esteem (Lind & Tyler, 1988). Therefore, the relational model is related to a need

for belonging and a need for self-esteem (Cropanzano et al, 2001). The deontic model is connected to the need for a meaningful existence, and argues that people should have a mutual respect for the dignity of others, and that they want to act in a way that upholds that respect (Folger, 2001; Cropanzano et al., 2001). Deontic refers to “requirement-based (moral rule-following) reasons for action, as contrasted with resource-based or interpersonal reasons (cf. Folger, 2001)” (Cropanzano et al., 2003: 1020). According to this perspective, information regarding mistreatment is processed by categorizing the event as either morally acceptable or unacceptable (Cropanzano et al., 2003: 1022). In this sense, living a virtuous life is important because “virtue is its own reward” (Turillo, Folger, Lavelle, Umphress, & Gee, 2002, p. 839).

Instrumental Justice Moderator: Narcissism

Instrumental justice is based on the need to control situations in order to manipulate them to one’s own self-interest (Cropanzano et al., 2001), and in this research I suggest that narcissism is one construct that fits this description well. Narcissism is characterized by an inflated view of the self and a need to feel in control through the admiration of others (Kernberg, 1989). The theory of threatened egotism and aggression (Baumeister, Smart, & Boden, 1996) supports the notion that individuals high in narcissism are likely to react aggressively when their self-esteem is threatened (Penney & Spector, 2002). Chen, Ferris, Kwan, Yan, Zhou, and Hong (2013) suggest that since narcissists have an inflated need for self-enhancement, incivility is likely to be perceived as a threat to narcissists’ self-view, heightening their need to protect their ego. A few recent studies have considered narcissism as a moderator of darkside constructs. For example, using a matched sample of 115 employees and their supervisors, Harris, Lavelle, McMahan, and Hargrove (2012) empirically demonstrated that narcissism enhances the positive relationship

between organizational unfairness and counterproductive work behavior targeting the organization.

Further, Chen et al. (2013) examined whether narcissism moderates the effect of incivility on work engagement. Their sample consisted of two sets of multi-wave, multisource data from Chinese employees. They found that workplace incivility (measured using the scale by Cortina et al. 2001) is negatively related to work engagement at high levels of narcissism, but is unrelated to work engagement at low levels of narcissism. Further, they tested a moderated mediation model, where the indirect effect of incivility through work engagement on task performance was stronger when narcissism was high, meaning that for narcissists, task performance decreased as incivility increased. In contrast, the results for individuals reporting low levels of narcissism only showed a weak positive relationship for the mediated effect of incivility on task performance.

In another recent study, Meier and Semmer (2012) tested a moderated mediation model between a lack of reciprocity in the relationship with one's organization (a role of work characteristic) and instigated incivility. They included work-related anger as the mediator, and narcissism as the moderator. The results from their sample of 197 employees showed that anger partially mediated the relationship, and that the indirect effect was strong among those high in narcissism. This study helped to illuminate the process by which the moderation occurs, because narcissism moderated the relationship from reciprocity to anger, but not the relationship from anger to incivility. Therefore, their results support the idea that a narcissistic personality feeds the motivation for retaliation following mistreatment. Following this previous research, I suggest narcissism will serve as a first stage moderator, in that individuals high in narcissism will

be more likely to report feelings of anger and seek revenge through instigated incivility and counterproductive behaviors following experienced incivility from a coworker.

Hypothesis 8: Within individuals, narcissism moderates the positive relationship from daily experienced incivility from a coworker to (a) a desire for revenge targeting that coworker (b) state anger, such that the relationship is stronger for employees high on narcissism as compared to employees low on narcissism.

Hypothesis 9: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via revenge is moderated by narcissism such that the indirect effect becomes stronger for employees high on narcissism as compared to employees low on narcissism.

Hypothesis 10: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via state anger is moderated by narcissism such that the indirect effect becomes stronger for employees high on narcissism as compared to employees low on narcissism.

Deontic Justice Moderator: Moral Identity

The deontic or moral model of justice taps into an inherent need for a meaningful existence to provide a sense of purpose and personal significance (Cropanzano et al. 2001). The concept of deontic justice refers to the reactions of individuals to the violation of moral norms of behavior (Folger, 2001). Deontic justice judgments are often made subconsciously, the result of intuitive beliefs about what is right and wrong (Folger, Cropanzano, & Goldman, 2005; Van den Bos, 2007). Because of this, the motivation to act following a deontic justice violation may be

independent of the consequences (Cropanzano et al., 2003). In other words, individuals may engage in behavior following a moral violation that is not necessarily in their self-interest. For instance, Turillo et al. (2002) provided empirical support for this perspective through a series of experiments. They revealed that participants had a desire to punish perpetrators and were willing to sacrifice their own economic gain to do so, even in cases where they had no personal relationship with the victim. In recent years, the deontic perspective has piqued the interest of scholars. One construct in particular that can be derived from the deontic justice literature has implications for the current study to help us understand individual differences in response to incivility. Specifically, I suggest that the two dimensions of moral identity will differentially impact the proposed model at different points in the negative exchange process.

Moral Identity

Aquino and Reed (2002) define moral identity as the chronic accessibility of the moral self. In other words, moral identity, “connects the individual (personal identity) to others (social identity) through the evaluative implications of a set of moral associations that define the moral self” (Reed & Aquino, 2003). Moral identity consists of two separate dimensions: internalization and symbolization. The internalization dimension of moral identity reflects the importance of morals to an individual’s identity, and it is related to moral reasoning and a concern for others (Aquino & Reed, 2002). In contrast, moral identity symbolization reflects the degree to which threats to an individual’s moral identity are expressed through behavior, meaning that symbolization is related to self-presentation behaviors (Aquino & Reed, 2002). This is because symbolization relates to symbolic self-completion theory (Wicklund & Gollwitzer, 1982), which in brief argues that individuals are driven to make their own identities a social reality (Skarlicki & Rupp, 2010).

Skarlicki et al. (2008) investigated both dimensions of moral identity in relation to customer mistreatment and employee sabotage responses. They hypothesized that higher levels of internalization would weaken the positive relationship between mistreatment and sabotage, but that higher levels of symbolization would intensify the desire to retaliate to mistreatment. Skarlicki et al. (2008) found that the association between unjust treatment and sabotage was moderated by both dimensions of moral identity in the form of a 3-way interaction. The relationship between injustice and sabotage was more pronounced for employees high (vs. low) in symbolization, but this moderation effect was weakened for those employees who were high (vs. low) in internalization.

Additional studies have found similar unique effects for internalization versus symbolization. For example, DeCelles, DeRue, Margolis, and Cernic (2012) tested a moderated mediation model, where power influenced self-interested behavior through moral awareness, and moral identity internalization moderated the relationship. They proposed that individuals who were high in moral identity internalization were less likely to act in their own self-interest than those who were low in moral identity internalization when subjectively experiencing power. They tested this model through a two studies that included a two-phase survey and an experiment. In the first phase, they asked working adults (study 1) and undergraduate students (study 2) to respond to measures for power and moral identity, and in the second phase participants answered questions for organizational deviance (study 1) or engaged in self-interested behavior (study 2). In the second phase they also included a manipulation for power by asking respondents to write an essay where they recalled an incident where they had power. Then they were asked to play a version of the dictator game (study 1) or award shared points for a lottery prize (study 2). In the second study, they also measured moral awareness by asking

respondents how strongly they agreed with questions relating to the game they just played.

Across both studies, DeCelles and colleagues found that even though power is often associated with self-interested behaviors, moral identity internalization diminished this effect.

Similarly, across four experimental studies, Gino et al. (2011) investigated how moral identity internalization impacts deviant behavior when self-regulatory processes are compromised. They employed different self-regulatory depletion tasks across the four experiments, such as using a pre-validated attention task, a writing task that did not allow participants to use certain letters, and the Stroop task (1935; where participants are timed and asked to read 20 congruent names, such as RED in the color red, and then 20 incongruent names, such as BLUE printed in green). Gino and colleagues found that self-regulatory depletion reduced moral awareness, which in turn led to an increased likelihood of cheating. However, individuals who were high in moral identity internalization did not show elevated levels of cheating, even when their self-regulatory processes were depleted. In contrast, those low in moral identity internalization were more likely to ‘impulsively cheat’ when their self-regulatory processes were low.

In relation to moral identity symbolization, a few recent studies have shown that it actually increases the likelihood of retaliation following a moral wrong. Harris et al. (2012) found that individuals who perceived unfairness in a situation and were high in moral identity symbolization exhibited higher levels of counterproductive work behavior targeting the source of mistreatment. Skarlicki and Rupp (2010) investigated whether a primed rational (vs. experiential) processing frame might affect the automatic emotional response described in the deontic justice literature. They found that a rational processing frame lowered retributive responses more than the experiential processing frame. However, individuals who were high in

moral identity symbolization were not as affected by the framing exercise, in that they reported higher retribution tendencies regardless of the processing frame to which they were primed.

Taken together, the above studies provide evidence that moral identity internalization helps to diminish desires to engage in unethical behaviors, such as cheating and sabotage. On the other hand, it appears that moral identity symbolization can actually serve as a catalyst for deviant behaviors as a morally-driven reaction to injustice or mistreatment. I suggest that internalization and symbolization occur in different parts of the process model between mistreatment (i.e. experienced incivility) and negative workplace outcomes. First, internalization is expected to moderate the relationship from incivility to a desire for revenge/state anger, so that high levels of internalization will reduce that desire, effectively stopping, or at least slowing, the process of a negative exchange spiral. I expect this because moral identity internalization should reduce the desire to reciprocate the mistreatment, similar to the way it reduces a desire to cheat (Gino et al., 2009), or engage in other self-interested behaviors to the detriment of others (DeCelles et al. 2012). Next, I suggest that high levels of symbolization will intensify the relationship from a desire for revenge/state anger to counterproductive work behavior, because the desire for revenge and anger that is generated from experiencing uncivil acts helps to drive morally-charged behaviors in retaliation.

Hypothesis 11: Within individuals, moral identity internalization moderates the positive relationship from daily experienced incivility from a coworker to (a) a desire for revenge targeting that coworker (b) state anger, such that the relationship is weaker for employees high on moral identity internalization as compared to employees who are low on moral identity internalization.

Hypothesis 12: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via revenge is moderated by moral identity internalization such that the indirect effect becomes weaker for employees high on moral identity internalization as compared to employees who are low on moral identity internalization.

Hypothesis 13: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via state anger is moderated by moral identity internalization such that the indirect effect becomes weaker for employees high on moral identity internalization as compared to employees who are low on moral identity internalization.

Hypothesis 14: Within individuals, the positive indirect effect from a desire for revenge targeting a coworker to (a) instigated incivility and (b) CWB directed toward that coworker is moderated by moral identity symbolization such that the indirect effect is stronger for employees high on moral identity symbolization as compared to employees who are low on moral identity symbolization.

Hypothesis 15: Within individuals, the positive indirect effect from state anger to (a) instigated incivility and (b) CWB directed toward that coworker is moderated by moral identity symbolization such that the indirect effect is stronger for employees high on moral identity symbolization as compared to employees who are low on moral identity symbolization.

Hypothesis 16: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility and (b) daily CWB directed toward that coworker is moderated by moral identity symbolization such that the indirect effect is stronger for employees high on moral identity symbolization as compared to employees who are low on moral identity symbolization.

In addition, I propose that symbolization will be more related to CWB than to instigated incivility. As I mentioned previously, people who are high in moral identity symbolization are driven to make their own identities a social reality (Skarlicki & Rupp, 2010). Therefore, the moral or righteous reason driving the retaliation of someone who is high in moral identity symbolization may also increase the individual's desire for the perpetrator to know that what he or she did was unacceptable, and that this is the just punishment for their mistreatment. For example, Turillo et al. (2002) supported the idea that 'virtue is its own reward' through four studies, where they looked at the willingness of participants to sacrifice their own self-interest (by sacrificing a monetary amount) to punish unfair others. One area for future research that stems from the study by Turillo and colleagues is the idea that moral outrage may cause a desire to punish that transcends self-interested behaviors. I suggest that high levels of moral identity symbolization may disarm the self-preservation tactics normally employed to avoid being caught causing harm to another. This is because the individual wants others to know that a moral wrong has been avenged. It follows that since incivility is ambiguous in nature, moral identity symbolization will be more strongly related to CWB.

Hypothesis 17: Moral identity symbolization will be more strongly related to daily CWB directed toward a specific coworker, as compared to daily instigated incivility directed toward that same coworker.

Relational Justice Moderator: Hostile Attribution Bias

According to the relational model of justice, people seek acceptance, standing, and status in relevant groups to promote their own self-esteem (Lind & Tyler, 1988). Cropanzano et al, (2001) relate this to a need for belonging and a need for self-esteem. Hostile attribution bias is viewed as a personality variable recognizing that certain people will be more prone to assess situations as provocative in nature (Spector, 2011). It is defined as an extrapunitive mindset, where individuals project blame onto other people rather than themselves as a way to cope with conflict (e.g. Adams & John, 1997). This can be tied to the need for self-esteem that is central to the relational model of justice.

Since incivility is ambiguous in nature, whether or not a target is offended by uncivil behavior can vary (Wu et al., 2013). Wu et al. (2013) explained that some individuals are more likely to attribute hostile intent in ambiguous situations than others. Hostile attribution bias is associated with greater levels of anger directed toward the source perceived to be responsible for mistreatment (Weiner, 1985). Martinko, Harvey, Sikora, and Douglas (2011) empirically demonstrated a positive relationship between hostile attribution bias and employee perceptions of supervisor abuse. Similarly, Chiu and Peng (2008) demonstrated that the greater the hostile attribution bias, the stronger the relationship between psychological contract breach (a form of mistreatment) and deviance directed at both individuals and the organization. The results were similar for individually versus organizationally directed deviance in that study; however, psychological contract breach was only measured with reference to the organization.

Recently, Wu et al. (2013) found that hostile attribution bias moderates the relationship from incivility (from supervisors and coworkers combined) to interpersonal deviance (measured with the subscale by Bennett and Robinson, 2000). Specifically, both hostile attribution bias and negative reciprocity beliefs strengthened the relationship between incivility and CWB. Further, they found evidence of a three-way interaction between incivility, hostile attribution bias, and negative reciprocity (the belief that mistreatment must be reciprocated), where the relationship to CWB was strongest when individuals were high on both hostile attribution bias and negative reciprocity beliefs. Their sample consisted of 233 manufacturing employees from China, and the data was collected using a three-wave research design (over a six month time-frame).

Building on the findings of Wu et al., (2013), Chiu and Peng (2008), and Martinko et al, (2011), I suggest that hostile attribution bias will serve as a moderator in the relationship from experienced incivility to a desire for revenge and state anger. As Martinko et al. (2011) demonstrate, individuals who are high on hostile attribution bias are more likely to perceive mistreatment. Since hostile attribution bias is associated with a heightened sense of anger following perceptions of mistreatment, the relationship between coworker incivility and negative emotions, such as anger, should be strengthened. I expect a similar scenario regarding a desire for revenge, since it has been linked to feelings of anger (e.g. Bies & Tripp, 1996). Further, following the results from Chiu and Peng (2008) and Wu et al. (2013), mistreatment may activate a desire to reciprocate through negative workplace behaviors.

Hypothesis 18: Within individuals, hostile attribution bias moderates the positive relationship from daily experienced incivility from a coworker to (a) a desire for revenge targeting that coworker (b) state anger, such that the relationship is

stronger for employees high on hostile attribution bias as compared to employees low on hostile attribution bias.

Hypothesis 19: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via revenge is moderated by hostile attribution bias such that the indirect effect becomes stronger for employees high on hostile attribution bias as compared to employees low on hostile attribution bias.

Hypothesis 20: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via state anger is moderated by hostile attribution bias such that the indirect effect becomes stronger for employees high on hostile attribution bias as compared to employees low on hostile attribution bias.

Event/Entity Moderator: Overall Fairness of a Specific Coworker

Cropanzano et al. (2001) explained that justice research is primarily composed of two paradigms: event versus entity. Some studies focus on the justice derived from a specific entity, such as supervisors, coworkers, the organization, etc. For example, the multifoci perspective suggests that individuals will target the source of unfairness, and that outcomes such as CWB will be more strongly related to the source of unfairness rather than to other sources (e.g. Lavelle et al., 2007). Other studies focus on specific justice events, such as policy implementation. Overall justice is considered a holistic judgment of fairness, and can be related to event fairness (Bobocel, 2013). Ambrose and Schminke (2009) conducted two studies to show that overall

justice judgments mediate the effect of justice types (distributive, procedural, and interactional) on several outcomes, such as task performance, citizenship behavior, and deviance. They also showed that overall justice mediated the relationship from justice types to job attitudes, as measured by job satisfaction and affective commitment.

Distinguishing between event and entity fairness parallels to contemporary theories in the justice literature (Gilliland, 2008). Fairness heuristic theory (Lind, 2001) says that people will form global impressions of fairness from initial information, and then use this evaluation of fairness as a heuristic that individuals then use to guide their future actions. As new information comes available, however, people may need to carefully evaluate and reformulate their initial impressions (Lind, 2001, 2002). Lind argued that this reevaluation only becomes active when major events cause high levels of uncertainty relating to a situation or entity. Therefore, Fairness Heuristics Theory can be likened to the justice events paradigm, in that a baseline of justice is formed, and this baseline can then be revised up or down depending on new situations (Gilliland, 2008).

On the other hand, according to fairness theory (Folger & Cropanzano, 2001), people interpret whether events are fair or unfair by holding others accountable for their actions. Fairness theory suggests that individuals use *would*, *could*, and *should* counterfactuals to compare what happened to an alternative outcome to the event (Folger & Cropanzano, 2001). These counterfactuals help to form accountability judgments targeting to source of mistreatment (Folger & Cropanzano, 2001). Fairness Theory is therefore more focused on single or isolated incidents that focus on a specific individual or the entity paradigm (Gilliland, 2008).

Recently, scholars have shown an interest in the interaction between the event and entity paradigms. For example, Choi (2008) investigated baseline perceptions of supervisor- and

organization-based justice (entity) in relation to justice reactions toward a performance appraisal. The results showed that overall justice assessments moderated the relationship between justice perceptions and outcomes targeting the supervisor (i.e. trust and citizenship directed toward the supervisor) and the also the relationship between justice perceptions and outcomes targeting the organization (i.e. organizational commitment and OCB). As another example, Bobocel (2013) found that how employees cope with unfair events depends on their perceptions of overall organizational justice, as well as the degree to which they are self- versus other- focused. Overall, Bobocel (2013) concludes that perceptions of overall organizational fairness help to shape responses to unfair events by facilitating constructive responses (e.g. forgiveness) and suppressing destructive responses (e.g. revenge seeking).

In line with these findings, Gilliland (2008: 278) points to attribution theory, saying that individuals are more likely to be held accountable for, “relatively stable baselines of mistreatment than for isolated episodes of mistreatment.” Further, Gilliland (2008: 279) explains that it is important to study baseline (or overall) justice perceptions, because it is possible that a baseline of fair treatment can provide an “inoculation” against event specific mistreatment. In relation to negative exchange spirals, this suggests that perceptions of overall fairness in a specific coworker relationship may be one way to prevent an escalation of aggression. If an individual normally treats others fairly, they be given the benefit of the doubt when the treat someone in a uncivil manner. In other words, the uncivil treatment may be attributed to them having a bad day or a bad week, but their treatment is perceived as out of character. Therefore, following Choi (2008), Gilliland (2008), and Bobocel (2013), I suggest:

Hypothesis 21: Within individuals, perceived overall fairness from a specific coworker moderates the positive relationship from daily experienced incivility

from that coworker to (a) a desire for revenge targeting that coworker (b) state anger, such that the relationship is weaker when perceptions of overall fairness are high as opposed to low.

Hypothesis 22: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via a desire for revenge is moderated by perceived overall fairness from a specific coworker such that the indirect effect becomes weaker when perceptions of overall fairness are high as opposed to low.

Hypothesis 23: Within individuals, the positive indirect effect of experienced incivility from a coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via state anger is moderated by perceived overall fairness from a specific coworker such that the indirect effect becomes weaker when perceptions of overall fairness are high as opposed to low.

Contrast Effect Moderator: Overall Fairness of the Coworker Group

Above, I argued that perceptions of high levels of overall fairness from a specific coworker may serve to attenuate negative responses toward that coworker. This may not be the case when comparing the overall fairness of a group to the treatment received from a specified coworker. Drawing from decision-making research, van den Bos (2002) explains that the same justice event may be perceived as more or less fair depending on the social context in which it takes place. In situations where there is a high level of fairness perceived within the social context (such as high levels of overall fairness from the coworker group), a specific event (such as uncivil behavior from a specific coworker) may be judged more negatively.

Models of social judgment argue that the formation of an impression includes both the interpretation of an event, and the comparison of that event to a standard or baseline (Schwartz & Bless, 1992; Stapel & Koomen, 2001). The interpretation component can activate assimilation effects. Assimilation effects are similar to the situation described in the previous section, where a person or situation may be judged as normally fair, so the justice judgment in relation to a current event is adjusted toward those previous experiences of fairness (Stapel & Koomen, 2001; van den Bos, 2002). Thus, when an individual is perceived as normally fair, he or she may be given the benefit of the doubt when acting in an uncivil manner.

On the other hand, the comparison component of decision processes may activate contrast effects (Stapel & Koomen, 2001; van den Bos, 2002). Rather than simply considering whether a situation is fair or unfair, the theory of contrast effects asserts that individuals will compare a specific situation with what they have previously experienced (van den Bos, 2002). For example, in a situation where the social context is perceived as almost always unfair, uncivil treatment may be perceived as the norm. However, in situations where the social context is perceived as highly fair, that same uncivil treatment may be perceived as highly unfair (in contrast to the norm).

To my knowledge, only a few studies have empirically tested the theory of contrast effects in the organizational justice literature. First, van den Bos (2002) conducted an experiment that included both fair, slightly unfair, and very unfair outcomes following a computer simulated work task. Findings indicated that fairness judgments were more positive following slightly inaccurate procedures, as opposed to very inaccurate procedures. Further, outcomes were seen as fairer following a slightly inaccurate procedure versus a very inaccurate procedure (assimilation effects). In addition, when participants were primed for fair treatment, contrast effects were

found such that higher levels of fairness led to more negative affective ratings for the slightly inaccurate procedure versus the very inaccurate procedure. This finding was key, in that it showed initial support for contrast effects in the organizational justice literature. The author concludes that contrast effects relating to fairness perceptions may be found when individuals receive an outcome and compare it to the procedure they experienced, such that higher levels of previous fairness may lead to more negative, rather than positive, reactions in employees.

A few years later, van den Bos, Burrows, Umphress, Folger, Lavelle, Eaglestone, and Gee (2005) investigated this effect in relation to subordinates' perceptions of fairness relating to an old supervisor versus a new supervisor. They found support for both assimilation effects and contrast effects. Specifically, subordinates who had previously experienced fair treatment from an old supervisor reacted more positively to neutral messages from the old supervisor than from the new supervisor. Further, when subordinates had experienced previous unfair treatment from the old supervisor, they reacted more negatively to neutral messages from the old supervisor than from the new one (assimilation effects). In addition, they found that subordinates reacted to neutral messages from a new supervisor more positively when they had experienced unfair (rather than fair) treatment from the old supervisor (contrast effect).

Both van den Bos (2002) and van den Bos et al. (2005) conducted laboratory experiments to test the theory of assimilation and contrast effects. To my knowledge, this study will be the first to study contrast effects in a working sample. Further, this will be the first study to consider contrast effects in relation to incivility and negative exchange among coworkers.

Therefore, based on models of social judgment and the theory developed by van den Bos and colleagues (2002; 2005), I suggest that perceptions of overall coworker group fairness will serve as a first-stage moderator to the proposed relationships from experienced incivility to

negative outcomes (via the mediating functions of a desire for revenge and state anger). In situations where the social context is perceived as highly fair, uncivil treatment from a specific coworker may be perceived as highly unfair (in contrast to the norm).

Hypothesis 24: Within individuals, perceived overall fairness from the coworker group moderates the positive relationship from daily experienced incivility from a specific coworker to (a) a desire for revenge targeting that coworker (b) state anger, such that the relationship is stronger when perceptions of overall fairness are high as opposed to low.

Hypothesis 25: Within individuals, the positive indirect effect of experienced incivility from a specific coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via a desire for revenge is moderated by perceived overall fairness from the coworker group such that the indirect effect becomes stronger when perceptions of overall fairness are high as opposed to low.

Hypothesis 26: Within individuals, the positive indirect effect of experienced incivility from a specific coworker on (a) daily instigated incivility toward that coworker and (b) daily CWB toward that coworker via state anger is moderated by perceived overall fairness from the coworker group such that the indirect effect becomes stronger when perceptions of overall fairness are high as opposed to low.

Chapter 4

Data Collection and Research Methods

Analytic Strategy

As my literature review discusses, since a single incident of incivility is likely to elicit minor levels of offense, reciprocation regarding that offense may occur swiftly, if at all (Meier & Spector, 2013). Therefore, researchers have called for daily observations of incivility among coworkers (Meier & Spector, 2013). To assess daily interactions in the workplace, I used a daily diary study approach to investigate the occurrence of incivility spirals among coworkers.

Experience Sampling Methodology (ESM) is a research procedure where participants provide responses to a number of surveys delivered to them at different times throughout the day (Larson & Csikszentmihalyi, 1983; Dimotakis, Ilies, & Judge, 2013). This process takes place over a specified timeframe, which is usually a week or more in duration (Larson & Csikszentmihalyi, 1983; Dimotakis et al., 2013). ESM study designs allow researchers to capture a more comprehensive picture of the daily experiences of their respondents through an assessment of their normal daily environment (Dimotakis et al., 2013; Fisher & To, 2012). The daily diary method is similar to ESM, but requires only one response per day over several weeks (Fisher & To, 2012).

A strength of this design is that recollection or retrospective bias is not of great concern (Dimotakis et al., 2013; Fisher & To, 2012). Further, the daily diary method is ideal for studying within-person processes over time (Fisher & To, 2012). In addition, cross-level analysis is also possible using a daily diary design, and several researchers have noted that the greatest potential for ESM/daily diary designs may lie in such interactionist research (e.g. Beal, 2011; Fisher & To, 2012; Fleeson, 2007). While many of my hypotheses center on a within-person context, the

moderated mediation hypotheses (meant to assess potential characteristics that may accelerate or decelerate negative exchange) will require cross-level analysis. Of note, a potential weakness to ESM and daily diary studies is the possibility of measurement reactivity, where the repeated self-reporting of certain phenomena can change the participant's perceptions of the situation in question (Fisher & To, 2012). However, French and Sutton (2010) admit that researchers' understanding of this issue is rudimentary, so while researchers should be aware that this can occur, research is still needed to help identify when problems are more or less likely to arise.

Sample Description and Respondent Characteristics

The sample consists of employees attending college who worked at least part-time, allowing for generalization across jobs and industries (sample details are described later in this section). While this is in essence a convenience sample, prior daily studies in reputable academic journals have used working students for their sample (e.g. Conway & Briner, 2002; Loi et al., 2009; Richard & Diefendorff, 2011). Much of the analyses will be conducted within-individual, so that the convenience nature of the sample does not pose a serious threat (Conway & Briner, 2002).

Data were collected with two samples that were original to this study. The first data collection included MBA students (February-March 2014), and the second data collection included undergraduate students (March-April 2014). For both samples, participants were recruited via an initial email that invited them to participate voluntarily in the study. To be qualified for the study, all participants had to be employed at least part-time. Further, the participants had to complete both an initial survey, as well as at least 3 daily surveys on days when they interacted with a specific coworker of their choosing (see Chapter 5 for tests supporting this decision). This coworker was described as the individual with whom they are

currently experiencing the most conflict at work. Participants who completed the initial survey (from both samples) were entered into a drawing to win one of five \$25 Amazon gift cards. Further, individuals who participated in the daily portion of the study (from both samples) were entered into a drawing for one of five \$50 Amazon gift cards, and were also entered into a grand prize drawing for one iPad Air.

For the first sample, I obtained usable data (defined as completion of the initial survey plus at least three daily surveys on days the individual interacted with the specific coworker) from 51 out of 112 participating individuals. However, 23 were removed from the sample because of missing data. Specifically, I removed a participant from the sample if he or she did not answer at least two items on a measure on any of the daily responses. So, for example if a respondent skipped a measure one day, but answered it on other days, he or she was retained, but if the respondent skipped the scale every day, he or she was removed from the sample (this most often occurred with the daily anger scale). Therefore the final sample size for the first sample was 28. For the second sample, I received useable data for 142 out of 297 participating individuals. For this sample I included a quality control question (e.g. “select 1 for quality control”) in the initial survey. Twenty of the participants did not correctly answer that prompt, and were removed from the useable sample. None of the respondents from the second survey skipped a measure every day, and the final sample size for the second sample was 122 participants. Therefore, the total combined sample size for my study is 150 individuals. For the first sample, I used 155 out of a possible 392 completed daily surveys, and for the second sample I used 586 out of a possible 1,708 daily responses. Overall, this leads to a total of 741 observations across both samples, which is a response rate of 35.3% across individuals and time. It is important to note that this number reflects the removal of daily surveys on days when the

individual either (a) did not go to work, or (b) did not interact with their specific coworker. In other words, the 741 observations reflect the participant responses on the days when they interacted with their specific coworker at work.

The first sample was 50% female. The modal age category was between 26 and 35 years old (64% of the sample; 18% indicated they were between 18-25 years old, and 18% indicated they were 36+ years old). 15 individuals (54% of the sample) indicated that they worked less than 20 hours a week and 7 individuals (25% of the sample) indicated that they work 20+ hours a week (avg. hours worked = 15; SD = 10.34; 6 individuals did not respond). Regarding job tenure, 36% indicated they had been working in their current job less than one year, 11% indicated they had been working in their current jobs for at least 1 year, 18% worked in their current job for at least 2 years, 11% worked in their job for at least 3 years, and 24% worked in their current job for 4 or more years. The majority of participants (82%) indicated that they work 5 or more days a week, while 4% indicated that they work 4 days a week, and 14% indicated that they work 3 days or less a week.

The second sample was 56% female. The modal age category was between 18 and 25 years old (76% of the sample; 16% indicated they were between 26-35 years old, and 8% indicated they were 36+ years old). 51 individuals (43% of the sample) indicated that they worked less than 20 hours a week, while 67 individuals (57% of the sample) worked 20+ hours a week (avg. hours worked = 22, SD = 9.32; min. = 6; max. = 41; four individuals did not respond). In relation to job tenure, 29% indicated they had been working in their current job less than one year, 17% indicated they had been working in their current jobs for at least 1 year, 24% worked in their current job for at least 2 years, 16% worked in their job for at least 3 years, and 14% worked in their current job for 4 or more years. More than half of the participants (54%)

indicated that they work 5 or more days a week, while 22% indicated that they work 4 days a week, and 24% indicated that they work 3 days or less a week. Out of the 54 participants that indicated their occupation, the top three occupations were: management/professional (22% of responses), service industry (35% of responses), and sales (20% of responses).

Since there are some differences in the demographics of the two samples, I ran an independent t-test, or between-subjects t-test, in SPSS to compare the means of the two samples with one another. I selected the main variables of interest in my analysis (experienced incivility, revenge, state anger, instigated incivility, and instigated CWB) to determine if there are significant differences among the responses to those variables between the two samples. Levene's Test was not significant for experienced incivility, revenge, state anger, or CWB, so I interpreted the t-tests assuming equal variance. None of these t-tests were significant (p-values for variables were: experienced incivility = 0.64; Revenge = 0.36; State Anger) = 0.68; CWB = 0.51). However, Levene's Test was significant for instigated incivility, and assuming unequal variance, the t-test was also significant ($p=.018$). In examining the means for instigated incivility for each sample, I conclude that the first sample is slightly less likely to report instigated incivility (mean for sample 1=1.16 vs. mean for sample 2=1.28). Since there were slight (yet significant) differences between the samples relating to instigated incivility and the two sample sizes were unequal (28 versus 122), I ran a nonparametric t-test (Mann-Whitney) to confirm this result. The nonparametric t-test was not significant (Mann Whitney U = 1525, Z= -.888, $p = >0.05$). Therefore, the overall results of the t-tests indicate that the two samples are similar in relation to my main variables of interest, and the two samples were combined for the remaining analyses.

Procedure for Data Collection

The initial survey included demographic information, moderators, and control variables. These constructs were only assessed once, since they should remain stable over time (e.g. narcissism, moral identity, control for trait anger, etc.). Then, I emailed a survey to each participant once daily for two weeks, resulting in 14 possible observations for each individual. Previous research argues that two weeks is a stable and generalizable window of time into the everyday lives of individuals (Wheeler & Reis, 1991; Ilies, Dimotakis, & De Pater, 2010). I included weekends since my sample works primarily part-time in areas such as the service and retail industries. The daily surveys included measures for experienced incivility from the participant's specific coworker (the person with whom they were currently experiencing the most conflict), daily revenge desires toward that coworker, daily state anger, instigated incivility toward that coworker, and CWB directed towards that specific coworker over the previous 24 hour period. The daily survey was available from 3pm to 10am the following morning. Participants were emailed a fresh link to the daily survey each day at 3:00pm. In addition, a reminder email was sent around 9:00pm each night.

Measures

Unless otherwise specified, all scales in this section were measured using a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). *Appendix A* includes all of the items for the measures discussed below.

Dependent Variables

Instigated Incivility. Instigated incivility is particularly relevant to the current study because it will help to capture the tit-for-tat nature of incivility spirals described by Andersson and Pearson (1999). Further, according to social exchange theory, individuals will often

reciprocate a perceived wrong with a comparable action of their own (e.g. Gouldner, 1960; Cropanzano et al., 2001). Therefore, it makes sense that individuals may react to incivility with incivility of their own (Blau and Andersson, 2005).

To measure instigated incivility, or incivility that occurs as a result of reciprocation from a perceived wrong, I employed a scale tested and developed by Blau and Andersson (2005). The instigated incivility scale has been used in subsequent research on incivility (e.g. Kuster, Orth, & Meier, 2013; Leiter, Laschinger, Day, & Oore, 2011). The original lead-in phrase for the scale was worded “How often have you exhibited the following behaviours in the past year to someone at work” (Blau & Andersson, 2005: 600). This has been adapted in the current study to reflect the relationship with a coworker and a daily timeframe: How often did you exhibit the following behaviors toward your coworker today at work? The scale consists of seven items, and examples include, “Ignored or excluded your coworkers from professional camaraderie (e.g. social conversation)” and “Made demeaning, rude, or derogatory remarks about your coworkers.” Cronbach’s alpha for this measure was 0.90, which is very similar to the internal consistency reliability estimate for this scale reported in Blau and Andersson (2005) for their primary sample (0.91). Responses were measured on a 5-point Likert-type scale ranging from 1 (not at all) to 5 (all of the time).

Counterproductive work behavior targeting the specific coworker. To measure CWB, I used the interpersonal items from the workplace deviance scale developed by Bennett and Robinson (2000). Their scale captures offenses ranging from minor to severe, and is based on the typology of workplace deviance developed in Robinson and Bennett (1995). Respondents were asked, “How often did you engage in the following behavior towards your coworker today at work?” Example items include, “made fun of my coworker,” “said something hurtful to my

coworker,” and “cursed at my coworker.” To parallel the measurement of instigated incivility, responses were measured on a 5-point Likert-type scale ranging from 1 (not at all) to 5 (all of the time). Cronbach’s alpha for this measure was 0.89, which is higher than the internal consistency reliability reported for the interpersonal deviance scale (0.78) in Bennett and Robinson (2000).

Independent Variable

Experienced Incivility. To measure experienced incivility, I employed an adapted version of the scale developed by Cortina et al. (2001). The adaptations were suggested by Blau and Andersson (2005). The experienced incivility scale has been used in subsequent research on incivility (e.g. Meier & Spector, 2013; Leiter et al., 2011; Wu et al., 2013). The original lead-in phrase for the scale was worded “How often someone at work (e.g. supervisor, co-worker, other employee) has done the following to you in the past year” (Blau & Andersson, 2005: 559). This has been adapted in the current study to reflect the relationship with a coworker, as well as a daily timeframe: How often did your coworker engage in the following behavior towards you today at work? The scale consists of seven items, and examples include, “Ignored or excluded you from professional camaraderie (e.g. social conversation)” and “Made demeaning, rude, or derogatory remarks about you.” The internal consistency reliability for my sample was 0.90, which is similar to the estimate for this scale reported by Blau and Andersson ($\alpha = 0.88$).

Responses were measured on a 5-point scale ranging from 1 (not at all) to 5 (all of the time).

Mediators

Desire for Revenge. The items I used to measure a desire for revenge were derived from Jones (2004; 2009). Jones assessed revenge desires using four items, with two items assessing retaliatory intentions, and two items assessing the expected utility of revenge (i.e. the degree to which an individual believes that the benefits of revenge are worth the potential costs). The

original items were adapted to the coworker and daily context in this study. Example items include, “If I was mistreated by my coworker today, it would feel good to get back in some way,” and “If I were mistreated by my coworker today, the satisfaction of getting even would outweigh the risks of getting caught.” In Jones (2009), the coefficient alpha for a desire for revenge (against the supervisor) was 0.78. In my sample, the Cronbach’s alpha was higher, at 0.96.

Daily (State) Anger. Daily anger was assessed using items from Watson et al.’s (1988) negative affectivity scale from the PANAS. Specifically, I included: distressed, upset, hostile, and irritable. To capture *state* affective feelings, Watson et al. (1988) suggest the use of short-term instructions. Therefore, participants were asked the extent to which they had these feelings *each day* of the study. The responses were measured on a scale of 1 (very slightly or not at all) to 5 (very much). Cronbach’s alpha for this set of items was 0.86.

Moderators

Narcissism. Narcissism was assessed using a 12-item version of the Narcissistic Personality Inventory (e.g. Raskin & Terry, 1988; Gentile, Miller, Hoffman, & Campbell, working paper). This measure asks participants to choose one statement from each of 12 sets of statements, with one statement representing narcissism while the other does not. For example, “I find it easy to manipulate people” versus “I don’t like it when I find myself manipulating people,” and “I insist on the respect that is due me,” versus “I usually get the respect I deserve.” To score this measure, I coded the responses 1 for narcissism and 0 for responses that do not indicate narcissism. Then I added the scores, with higher scores representing higher levels of narcissism. In my sample, Cronbach’s alpha for this measure was 0.66, which is a little below the recommended level of 0.70 or above (e.g. Nunnally, 1978).

Moral Identity Symbolization and Internalization. Moral identity internalization and symbolization was assessed using the 10-item Moral Identity scale developed by Aquino and Reed (2002). For this measure, respondents were provided with a list of characteristics: Caring, Compassionate, Fair, Friendly, Generous, Helpful, Hardworking, Honest, and Kind. They were told that the person with these characteristics could be them, or someone else. Then, they were asked to visualize a person with these types of characteristics, and how that person might think, feel, or act. Example items for symbolization include: “The fact that I have these characteristics is communicated to others by my membership in certain organizations,” and “The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.” Example items for internalization include: “I strongly desire to have these characteristics,” and “It would make me feel good to be a person who has these characteristics.” Prior research has shown that this scale provides a valid measure of the two sub-dimensions of moral identity (e.g. Aquino & Reed, 2002; Reed & Aquino, 2003; Skarlicki et al., 2008). In my sample, Cronbach’s alpha for moral identity internalization was 0.76, and for moral identity internalization was 0.71.

Hostile Attribution Bias. A six-item scale developed by Adams and John (1997) was used to measure hostile attribution bias. Example items include, “Most people are honest chiefly through fear of being caught,” and “I think most people would lie to get ahead.” In Wu et al. (2013), the scale’s reliability was 0.72. Wu et al. (2013) showed through confirmatory factor analysis that this scale is distinct from negative reciprocity beliefs, general workplace incivility, and interpersonal deviance. In my sample, the internal consistency reliability for this measure was 0.71.

Overall Fairness of Coworker Relationships. The Perceived Overall Justice (POJ) scale was originally created by Ambrose and Schminke (2009), and later adapted by Li, Cropanzano,

and Bagger (2013). It consists of three items to assess individuals' interpersonal justice experiences. Individuals report their agreement with each statement, and higher ratings reflect greater perceptions of source specific overall fairness. The original scale refers to the organization as the source of fairness ("Overall, I'm treated fairly by my organization"), and so will be adapted to reflect the employees' relationships with their coworkers. For overall coworker group fairness, the three items were, "Overall, I'm treated fairly by my coworkers," "In general, I can count on my coworkers to be fair," and "In general, the treatment I receive from my coworkers is fair."

I also assessed participants' perceptions of overall fairness relating to the specific coworker they identified (the person with whom they were currently experiencing the most conflict at work). For this construct, the items were reworded to target the specific individual (for example "Overall, I'm treated fairly by this specific coworker"). In my sample, Cronbach's alpha for each of these measures was 0.95.

As an aside, I ran a confirmatory factor analysis on both of these fairness constructs and between-level experienced incivility. I tested a model with three factors that contained the items for each measure on their appropriate factor, an uncorrelated factor model, a perfectly correlated factor model, and a two factor model. Overall, the results indicated that the three factor model had the best fit for the data, supporting the assertion that overall fairness of a specific coworker, overall fairness of the coworker group, and experienced incivility are unique constructs. Further supporting this assertion, the correlation between the two justice constructs was 0.49, meaning that even though they are moderately related, they should generally be kept as separate constructs in the analysis (Colquitt & Shaw, 2005).

Control Variables

At the between level, I controlled for trait anger, frequency of coworker interaction, relative power in working relationships, and social desirability. Since I am measuring state anger at the within-level, I included trait affect as a baseline. In addition, if the coworkers did not interact very often over the time period, there would be less of an opportunity for mistreatment to occur between them, so frequency of interaction was included to control for this possibility. Relative power in the working relationships captures the chance that retaliatory behaviors will differ with power differentials (e.g. Tripp et al., 2007). Also, since I am measuring negative behaviors, there is a chance that people who scored high on social desirability would not be forthcoming regarding the negative behaviors that they may have committed (e.g. Podsakoff & Organ, 1986).

Trait anger. Trait anger was also assessed using the same four items from Watson et al.'s (1988) negative affectivity scale from the PANAS (distressed, upset, hostile, and irritable). To capture *trait* affective feelings, participants were asked the extent to which they generally felt this way, that is, how they feel on average. The responses were measured on a scale of 1 (very slightly or not at all) to 5 (very much). Cronbach's alpha for this set of items was 0.70.

Frequency of coworker interaction. For frequency of coworker interaction, respondents were asked, "On average, how frequently do you and this coworker interact with one another each week? (interaction via any means of communication - e.g. in person, through email, instant messenger, phone, etc.)." The responses were categorical, with (1) less than once a week, (2) 1-3 times a week, (3) 4-6 times a week, (4) 7-10 times a week, and (5) more than 10 times a week. The mean response for this question was 3.21, so on average the respondents reported interacting with their specific coworker around 4-6 times a week.

Relative power in working relationships. To measure perceptions of relative power, I used the Sense of Power scale from Anderson, John, and Keltner (2012). Respondents were prompted, “In my relationships with my coworkers...” Sample items include, “My ideas and opinions are often ignored (reverse-coded)” and “I think I have a great deal of power.” Cronbach’s alpha for this scale was 0.80.

Social desirability. For social desirability, I used a 13-item measure based on the Marlow-Crowne Social Desirability Scale (Crowne & Marlow, 1960). Sample items include, “I have never deliberately said something that hurt someone’s feelings,” and “I am always courteous, even to people who are disagreeable.” Cronbach’s alpha for the scale was 0.76.

Chapter 5

Results

Preliminary Analyses

To begin, I conducted analyses to determine if the number of days responded per participant was related to my variables of interest: experienced incivility, instigated incivility, CWB, revenge, and state anger. I included the number of surveys that each participant completed as a predictor for each of my variables. Since I was testing for multiple effects, I included a Bonferroni correction (.05/5) to guard against Type 1 errors (e.g. Ferris, Spence, Brown, & Heller, 2012). The results indicate that the number of surveys responded per participant were not significantly related to any of my variables of interest. As an aside, I also ran all of my models with the restriction that respondents must have completed four daily surveys (instead of three; $n = 107$). The overall results of my analysis did not change; the significant relationships I found stayed significant, and the non-significant results did not become significant. Therefore, the results that are reported in this section use the full sample of 150 participants.

Means, Standard Deviations, and Correlations

The means, standard deviations, and correlations for all variables are presented in *Table 2*. To calculate the between-level correlations (below the diagonal) for day-level variables, values were aggregated across days. I followed the recommendations of Bland and Altman (1995) to calculate the within-level correlations (listed above the diagonal). I used multiple regression in SPSS, making one of the variables of interest the outcome and the other variable the predictor (for example, I regressed experienced incivility on revenge). It is important to acknowledge the multilevel nature of the data (i.e. 741 observations on 150 subjects); otherwise the correlation coefficient will be misleading (Bland & Altman, 1995). Therefore, in the

regression equations, the subjects' ID number was treated as a categorical predictor using dummy variables. I used the analysis of variance table to calculate the correlations using the following formula: $\text{sum of squares for } X / (\text{sum of squares for } X + \text{residual sum of squares})$. The within-subjects correlation coefficient is then the square root of this proportion (Bland & Altman, 1995).

Multilevel Confirmatory Factor Analysis

My data contains a hierarchical structure, where days are nested within individuals. Since the items used for this study were adapted to the daily level, it was necessary to determine whether the items load properly on their unique constructs at the within level while accounting for the clustering effect. Therefore, multilevel confirmatory factor analysis (MCFA) was used to determine the construct validity for the daily measures of experienced incivility, instigated incivility, instigated CWB, revenge, and anger. MCFA analyzes the factor structure while controlling for non-independence by modeling the same factors and loadings at the within- and between-levels of analysis.

To conduct a MCFA, I followed the procedures outlined by Muthen (1994), which recommends a multi-step process. First, Muthen suggests performing a conventional confirmatory factor analysis on the sample without taking the multilevel clustering into account (referred to here as the total CFA model). This model may result in biased parameter estimates and fit statistics because it does not account for the non-independence in the data (Dyer, Hanges, & Hall, 2005).

Therefore, the next step considers whether multilevel analysis is appropriate for the data by estimating the between group variation (Muthen, 1994; Dyer et al., 2005). To do this, Muthen (1994) suggests estimating a unique type of intra-class correlation (ICC) that assumes random

Table 2: Means, standard deviations, and within- and between- correlations for all study variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Day-Level Variables																	
1 Daily Experienced Incivility	1.38	0.43	(0.90)	0.40**	0.24**	0.23**	0.25**										
2 Daily Instigated Incivility	1.26	0.38	0.73**	(0.90)	0.32**	0.15**	0.23**										
3 Daily Instigated CWB	1.09	0.19	0.47**	0.66**	(0.89)	0.18**	0.03										
4 Daily Desire for Revenge	1.42	0.68	0.17**	0.31**	0.44**	(0.96)	0.09										
5 State Negative Affect	1.68	0.65	0.32**	0.25**	0.28**	0.26**	(0.86)										
Person-Level Variables																	
6 Moral Identity Internalization	4.55	0.55	-0.36**	-0.30**	-0.22**	-0.26**	-0.08	(0.76)									
7 Moral Identity Symbolization	3.59	0.67	0.02	-0.00	-0.00	-0.07	-0.12	0.31**	(0.71)								
8 Overall Fairness of Specific CW	3.48	1.18	-0.33**	-0.16	-0.10	-0.15	-0.12	0.12	-0.02	(0.95)							
9 Overall Fairness of CW Group	4.07	0.71	-0.29**	-0.18*	-0.12	-0.10	-0.26*	0.14	-0.01	0.49**	(0.95)						
10 Narcissism	4.06	2.51	0.15	0.13	0.21**	0.16	0.09	-0.14	0.14	-0.01	0.01	(0.66)					
11 Hostile Attribution Bias	2.88	0.69	0.13	0.06	0.09	0.20*	0.10	-0.11	0.06	-0.04	-0.02	0.32**	(0.71)				
12 Control: Trait Anger	1.96	0.77	0.26*	0.13	0.08	0.23*	0.59**	-0.22*	-0.23*	-0.29**	-0.21*	0.14	0.22*	(0.70)			
13 Control: Power in Relationships	3.62	0.56	-0.11	-0.12	-0.00	-0.04	-0.10	0.19*	0.18*	0.18*	0.35**	0.22**	0.03	-0.04	(0.80)		
14 Control: Social Desirability	2.60	0.53	0.06	0.14	0.15	0.31**	0.11	-0.21*	-0.17*	-0.07	-0.08	0.09	0.20**	0.31**	-0.29**	(0.76)	
15 Control: Frequency of CW Interact.	3.21	1.41	-0.01	-0.08	-0.06	-0.09	0.15	0.01	-0.16*	-0.12	-0.11	0.06	-0.22**	0.12	0.06	-0.12	—

Notes: Correlations below the diagonal represent the person (between) level (due to missing values $n=94-150$).

In order to calculate person-level correlations for day-level variables, values were aggregated across days.

Correlations above the diagonal represent the day (within) level (due to missing values $n=509-741$).

Cronbach's alphas for day-level variables are the mean internal consistencies averaged across all measurement days.

Frequency of coworker interaction: 1 = less than once a week, 2 = 1-3 times a week, 3 = 4-6 times a week, 4 = 7-10 times a week, 5 = more than 10 times a week.

level effects. Dyer et al. (2005) explain that MCFA also assumes random level effects, making this type of ICC more appropriate than other techniques that assume fixed level effects, such as ICC(1), WABA, or η^2 . Muthen's ICC assumes random level effects by calculating a ratio of the maximum likelihood estimates of both the latent within- and between- variance components (Dyer et al., 2005). This ICC ranges from 0 to 1, and higher values indicate a greater bias if the multilevel nature of the data is not taken into account (Dyer et al., 2005). Next, the ICCs can be used to calculate a design effect ($1 + [average\ cluster\ size - 1]*ICC$), and as a rule of thumb, a design effect greater than two indicates that clustering in the data should be taken into account during estimation (Muthen, 1999).

Assuming that multilevel analysis appears justified from the previous step, Muthen (1994) recommends analyzing the factor structure of the within submodel by running a CFA on the pooled-within covariance matrix (Dyer et al, 2005). Unlike the total model from the first step, in this analysis the between-group differences have been removed, allowing for an analysis of the factor structure at the within-level only (Dyer et al., 2005). Finally, the last step is to perform the MCFA and assess the model fit (Muthen, 1994). I used Mplus version 7.11 to conduct the analyses. The results of the MCFA analysis are reported next.

Based on sample size considerations, I conducted the MCFA analyses using randomly assigned three-item parcels for experienced incivility, instigated incivility, and CWB. Mok (1995) observed that MCFA usually works well with datasets that contain 800+ observations, and my total observations are a little shy of this at 741. Parceling allows for a reduction in the number of indicators, which reduces the number of free parameters in the model and can be useful in obtaining adequate model fit with smaller sample sizes (Hall, Snell, & Singer Foust, 1999). *Table 3* includes the results from the total CFA, the pooled-within CFA, and the MCFA,

and *Table 4* includes the standardized factor loadings, the ICC values, and the calculated design effect for all CFA indicators.

Table 3: Total, pooled-within, and MCFA summary of results

Model fit for priori single- and multilevel models						
Models	Chi-Square	DF	CFI	TLI	RMSEA	SRMR
Total CFA	301.396	109	0.97	0.97	0.05	0.03
Pooled-Within CFA	317.556	109	0.95	0.94	0.05	0.04
MCFA	365.107	218	0.95	0.94	0.03	w (0.04) b (0.06)

The chi-square for the total model is 301.396 and significant ($p < 0.001$), with 109 degrees of freedom. As can be seen in *Table 3*, the standardized root mean square residual (SRMR), comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square error of approximation (RMSEA) all indicate an acceptable fit for the model. Further, all factor loadings were statistically significant ($p < 0.05$) on their respective factors. However, as discussed earlier, this model fails to account for the hierarchical nature of the data. Therefore, these results can be misleading since they are influenced by the individual-level (between) factor structure (Dyer et al., 2005).

This leads to the next step, which is to assess whether there is substantial between-group variance in the model, which would warrant the use of multilevel analysis (Muthen, 1994; Dyer et al., 2005). The ICCs were calculated for each item and are listed in *Table 4*. Mplus automatically generates the ICCs when a two-level analysis is requested. The ICCs range from 0.34 to 0.67, with an average ICC of 0.48. I also calculated the design effect for each ICC, using the formula mentioned earlier (average cluster size = 4.9), and all calculations fall above the benchmark of 2. This evidence leads me to conclude that there is sufficient between group variance in the data, and multilevel analysis is the most appropriate course of action.

Next, I assessed a single-level CFA using the pooled-within covariance matrix. The fit for the within-level CFA was not as good as the fit for the Total CFA, which again may be an

indication that there is important between-level variance in the data structure (Dyer et al., 2005). The chi-square for the within-level model is 317.556 and significant ($p < 0.001$), with 109 degrees of freedom. As shown in *Table 3*, The SRMR, CFI, TFI, and RMSEA all indicate an acceptable fit for the model. Also, all factor loadings were statistically significant ($p < 0.05$) on their respective factors.

Finally, I ran the full MCFA model, and the results show an adequate fit at the within-level, and an adequate (yet slightly worse) fit at the between level, as indicated by the SRMR of 0.06. The chi-square for the MCFA model is 365.107 and significant ($p < 0.001$), with 218 degrees of freedom. All fit indices shown in *Table 3* indicate an acceptable fit to the multilevel factor structure. Also, all standardized loadings for both the within- and between- levels were significant. Overall, the results of these analyses give me confidence that the measures in this study capture unique constructs that are best analyzed with a hierarchal structure that nests days within individuals.

Hypothesis Tests

All hypotheses were tested using Mplus 7.11. Hypotheses 1a and 1b predicted the main effects; that experienced incivility would be to significantly related to instigated incivility toward a specific coworker and also be significantly related to CWB directed toward a specific coworker. To test Hypothesis 1a and 1b, I tested a within-level only path model, clustering on the participant's ID number. I did not include specifications for the between level structure. I included experienced incivility as the predictor, and instigated incivility and CWB as

Table 4: Standardized loadings, ICCs, and size of the design effect for CFA indicators

Item	Standardized Loadings			Muthen's ICC	Size of Design Effect
	Total CFA	Pooled-Within CFA	MCFA Within		
Experienced Incivility, parceled items 1 & 4	0.85	0.82	0.82	0.92	2.50
Experienced Incivility, parceled items 2 & 7	0.75	0.66	0.65	0.87	2.75
Experienced Incivility, parceled items 3, 5, & 6	0.88	0.82	0.82	0.94	2.76
Revenge item 1	0.91	0.81	0.80	0.99	3.27
Revenge item 2	0.88	0.75	0.75	0.95	3.42
Revenge item 3	0.90	0.79	0.79	0.96	3.44
Revenge item 4	0.85	0.66	0.65	0.95	3.63
Anger item 1	0.64	0.46	0.48	0.81	2.61
Anger item 2	0.75	0.55	0.56	0.93	2.67
Anger item 3	0.64	0.42	0.42	0.85	2.79
Anger item 4	0.80	0.70	0.68	0.94	2.89
Counterproductive Behavior, parceled items 1 & 5	0.78	0.68	0.68	0.97	2.34
Counterproductive Behavior, parceled items 2 & 7	0.86	0.88	0.88	0.88	2.35
Counterproductive Behavior, parceled items 3, 4 & 6	0.88	0.82	0.82	0.93	2.74
Instigated Incivility, parceled items 1 & 4	0.75	0.62	0.61	0.93	2.74
Instigated Incivility, parceled items 2 & 7	0.78	0.66	0.64	0.91	2.80
Instigated Incivility, parceled items 3, 5, & 6	0.90	0.82	0.81	0.95	3.31

the outcome variables. The results indicated that experienced incivility was positively related to instigated incivility ($\gamma = 0.540$, $p < 0.001$), and also positively related to CWB ($\gamma = 0.289$, $p < 0.001$). These initial results provide support for Hypothesis 1a and 1b.

Hypothesis 2a predicted that experienced incivility from a coworker would be more strongly related to instigated incivility directed toward that coworker than to CWB targeting that coworker. To test this hypothesis, I ran the same model above; only this time I constrained the paths from experienced incivility to the two outcomes to be equal. Since I have nested data (clustering on ID), I conducted the Satorra-Bentler Chi-Square test (see Asparouhov & Muthen, 2013) to compare my new model with the previous model from the first hypothesis. The chi-square difference was significant ($\Delta\chi^2_{(2)} = 19.49$, $p < 0.01$). This substantiates that the original model fits the data better than the model where I constrained the paths from the predictor to the outcomes to be equal, suggesting that the path estimates are significantly different from one another. The unstandardized estimates are provided in the previous paragraph. For the relationship from experienced incivility to instigated incivility, the standardized estimate is 0.648, and for the relationship from experienced incivility to CWB, the standardized estimate is 0.493. Therefore, Hypothesis 2a is supported, and in my data experienced incivility is more strongly related to instigated incivility than to CWB.

Hypothesis 2b predicted that over time, the relationship between experienced incivility from a specific coworker and CWB targeting that coworker will become stronger. To test this hypothesis, I treated time as a within-level moderator. I group-mean centered experienced incivility and time, and created an interaction term from those two variables, and then I ran a within-level only path model (clustering on ID) with instigated incivility and CWB as the outcome variables. The results indicated that experienced incivility was positively related to

CWB ($\gamma = 0.187, p < 0.001$); however, the interaction term was not significant ($\gamma = -0.005, p > 0.10$). This model included the full 14 days of observations, so as an exploratory analysis I also ran an additional model that restricted the observations to only the first week of data collection. The interaction term was also not significant in this model ($\gamma = 0.000, p > 0.10$). Therefore, Hypothesis 2b was not supported.

Multilevel Mediation

Hypotheses 3a, 3b, 4a, 4b, 5a, 5b, 6a, and 6b predicted mediated relationships between experienced incivility and (a) instigated incivility and (b) CWB. The mediators of interest were a desire for revenge and state anger. These measures were all captured at the within-level, and I took a two-step approach to test for mediation.

First, following recommendations from Kaplan (2000), I ran path models to test the within-structure only. These models included the cluster variable and participant ID, but did not include specifications for the between level structure. I ran four models. The first two tested the relationships from experienced incivility to instigated incivility, with a desire for revenge and state anger mediating the relationships. The second two models assessed the relationships from experienced incivility to CWB, with a desire for revenge and state anger mediating these relationships.

The results for the first path model (experienced incivility \rightarrow revenge \rightarrow instigated incivility), indicated that experienced incivility was positively related to instigated incivility ($\gamma = 0.484, p < 0.001$), experienced incivility was positively related to a desire for revenge ($\gamma = 0.330, p < 0.001$), and a desire for revenge was positively related to instigated incivility ($\gamma = 0.125, p < 0.001$). I used a parametric bootstrap procedure (20,000 Monte Carlo replications) to test the confidence intervals (CI) to test the significance of the indirect effect (Preacher, Zyphur, &

Zhang, 2010). The results indicate a significant positive indirect effect of experienced incivility on instigated incivility through a desire for revenge, as the confidence interval did not include zero (95% CI: 0.0150, 0.0754).

For the second path model (experienced incivility → anger → instigated incivility), the path from experienced incivility to instigated incivility was positive and significant ($\gamma = 0.508$, $p < 0.001$), experienced incivility was positively related to state anger ($\gamma = 0.141$, $p < 0.01$), and the path from state anger to instigated incivility was also positive, but not significant ($\gamma = 0.076$, $p > 0.05$). In addition, the bootstrapped confidence intervals for the indirect effect were not significant, as the confidence interval includes zero (95% CI: -0.0015, 0.0283).

The results of the third path model (experienced incivility → revenge → CWB) indicated that experienced incivility was positively related to CWB ($\gamma = 0.192$, $p < 0.001$), experienced incivility was positively related to a desire for revenge ($\gamma = 0.325$, $p < 0.001$), and a desire for revenge was positively related to CWB ($\gamma = 0.126$, $p < 0.001$). Further, the results of the bootstrapped confidence intervals indicated a positive indirect effect of experienced incivility on CWB through a desire for revenge (95% CI: 0.0156, 0.0730).

For the fourth path model (experienced incivility → anger → CWB), the path from experienced incivility to CWB was positive ($\gamma = 0.421$, $p < 0.001$), experienced incivility was positively related to state anger ($\gamma = 0.155$, $p < 0.01$), and the path from state anger to CWB was also positive and significant ($\gamma = 0.083$, $p < 0.05$). However, the bootstrapped confidence intervals for the indirect effect were not significant, as is indicated by the presence of a zero within the interval (95% CI: -0.0004, 0.0168).

Overall, the within-level only path analyses provide initial support for hypotheses 3a, 3b, 4a, 4b, and 5b but do not provide support for 5a, 6a or 6b. However, while the within-level

models do account for the hierarchal nature of the data by clustering the daily responses with individuals, they do not account for the between level structure. This will be important moving forward, because the moderating variables I measured were at the between level. Therefore, the next step was to run multilevel mediated models.

There are several options when running multilevel mediation models in SEM. Preacher et al. (2010) outline several options for testing two-level mediation models with a nested data structure. Preacher et al. explain that traditional regression is inappropriate for nested data because the assumption of independence is violated, which can lead to downwardly biased standard errors. Further, traditional methods for measuring multilevel mediation, such as HLM, can lead to conflation, or bias, of the indirect effect – even in within-level models. The issue is that traditional multilevel modeling assumes that the within and between components are identical (only a single effect of the mediator on the outcome is specified). Preacher et al. (2010) argue that in practice, possessing data with equal parameters at both the within and between levels is rare, and that most of the time these effects will differ. This leads to conflation of the model estimates.

One solution to this problem is to use an unconfliated modeling approach (Hedeker & Gibbons, 2006; Kreft & de Leeuw, 1998; Preacher et al., 2010; Snijders & Bosker, 1999). In an unconfliated multilevel model, the within and between effects of a level 1 variable (for example, the mediation hypotheses in my study) are separated by replacing the level 1 predictors with two predictors: a group-mean centered variable at the within level, and the mean of the predictors at the between level. In other words, at the between level all of the daily responses from each individual are averaged to provide an overall average response for each respondent. Doing so means that the within and between components of the model are no longer conflated, because

they are not contained in a single estimate (Preacher et al., 2010). However, the unconfliated model also has its weaknesses. The biggest issue is that using the group mean as a proxy for the between-level latent variable may cause bias in the between level effect.

Since both traditional multi-level models, and the unconfliated modeling approach can cause bias in the between level effects, Preacher et al. (2010) recommend using a multilevel SEM approach (MSEM). This approach allows for separate estimation of the within and between level components of the model by treating the clustering effect of level 1 variables as latent. MSEM is the current gold standard for multilevel model testing, and is relatively easy to implement in Mplus. However, one drawback of this approach is that if a model is estimated using a variable with a very small between level variance, the model may not converge on a proper solution (Preacher et al., 2010, pg. 215).

I chose to run my multilevel mediation models using both the unconfliated model and the MSEM approach. Unfortunately, the MSEM models did not converge properly as indicated by a non-positive definite error at the between level. It is possible that the variance in my outcome variables is not sufficient to support a MSEM model. In my within-level only models, the between level variance is significant for the predictor and mediating variables, but not for the two dependent variables. Of note, the within level variances are significant. Also, since the between level variances are significant for the predictors, the possibility that there are first stage moderators (between the predictor and mediator) is likely. Kenny, Korchmaros, and Bolger (2003) suggest that this significant effect can indicate the need for moderators to help explain this variability. The unconfliated models ran well, so I chose to test both my multilevel mediation and moderated mediation models using the unconfliated approach. My interest lies primarily at the within-level, so the fact that unconfliated models can present biased between level effects is

not of serious concern (although this is weakness in my chosen analytic approach). The unconfated model is still superior to traditional multilevel statistical methods such as HLM, because it properly disentangles the within and between effects.

To run the unconfated model, I group-mean centered the within-level predictors, and grand-mean centered the between-level predictors. This should alleviate common method concerns, because the relations among the within-individual variables will not be confounded by individual differences such as personality (e.g. Judge, Scott, & Ilies, 2006; Loi et al., 2009). Specifically, group-mean centering the predictor variables removes the between-individual variance in estimates of within-individual relationships (Judge et al., 2006).

The values used at the between level were the overall mean response per individual for each measure. I also included the control variables (frequency of coworker interaction, trait anger, perceptions of power in coworker relationships, and social desirability bias) at the between level. The model was analyzed as two-level random, and the data was clustered on respondents' identification number. To calculate an indirect effect, I included a model constraint at the within-level: *slope of m on x * slope of y on m*.

The results of the mediation analysis are reported in *Table 5*. These results match well with the results from the within-level path models, providing confidence in the overall conclusions drawn from the testing of these hypotheses. Hypothesis 3a, 3b, 4a, and 4b were supported, as can be evidenced by the significant mediation results for daily experienced incivility on (a) instigated incivility and (b) CWB, through a daily desire for revenge. Experienced incivility was positively related to a desire for revenge ($\gamma = 0.235, p < 0.01$), a desire for revenge was positively related to instigated incivility ($\gamma = 0.103, p < 0.01$), and experienced incivility was positively related to instigated incivility ($\gamma = 0.424, p < 0.001$). The results of the

bootstrapped confidence intervals (20,000 Monte Carlo replications) indicated a positive indirect effect of experienced incivility on instigated incivility through a desire for revenge (95% CI: 0.004, 0.052). Revenge also serves as a mediator when CWB is the outcome. The results indicated that experienced incivility was positively related to a desire for revenge ($\gamma = 0.233$, $p < 0.01$), a desire for revenge was positively related to CWB ($\gamma = 0.109$, $p < 0.001$), and experienced incivility was positively related to CWB ($\gamma = 0.161$, $p < 0.001$). The results of the bootstrapped confidence intervals indicated a positive indirect effect of experienced incivility on CWB through a desire for revenge (95% CI: 0.006, 0.051). Hypothesis 5a, 5b, 6a and 6b were not supported, since state anger was not significantly related to the outcome variables, and the mediation results for experienced incivility on (a) instigated incivility and (b) CWB through daily anger were not significant.

Hypothesis 7 predicts a reciprocal relationship between revenge and state affect. To test this hypothesis I ran an unconfated mediation model that included both mediators and allowed for correlated residuals between them. In this model, the unstandardized estimate representing the relationship for revenge with state anger was 0.015 and not significant ($p > .10$). Also, while the indirect effect for revenge was still significant, the indirect effect for state anger was not. Consequently, Hypothesis 7 was not supported.

Multilevel Moderated Mediation

To test moderated mediation, I used a building-up approach by combining the unconfated mediation models with Model 2 from Preacher, Rucker, and Hayes (2007). Model 2 includes Mplus syntax for what is considered the direct effect and first stage moderation in Edwards and Lambert (2007). Model 2 is designed for single level analysis. I incorporated this syntax into the between-level syntax of my mediation models. I also included model constraints

Table 5: Results of the unconfliated mediation models

	Estimate	Standard Error	Standardized Estimate	Two-Tailed <i>p</i> -value	Bootstrapped 95% CI	
					Lower	Upper
Experienced Incivility-Revenge-Instigated Incivility						
Experienced Incivility-Revenge	0.235	0.088	0.176	0.008	—	—
Revenge-Instigated Incivility	0.103	0.033	0.165	0.002	—	—
Experienced Incivility-Instigated Incivility	0.424	0.056	0.509	0.000	—	—
Within Indirect Effect	0.024	0.011	—	0.031	0.004	0.052
Experienced Incivility-Revenge-CWB						
Experienced Incivility-Revenge	0.233	0.088	0.175	0.008	—	—
Revenge-CWB	0.109	0.028	0.248	0.000	—	—
Experienced Incivility-CWB	0.161	0.037	0.274	0.000	—	—
Within Indirect Effect	0.025	0.011	—	0.020	0.006	0.051
Experienced Incivility-Anger-Instigated Incivility						
Experienced Incivility-Anger	0.089	0.048	0.062	0.066	—	—
Anger-Instigated Incivility	0.061	0.043	0.106	0.154	—	—
Experienced Incivility-Instigated Incivility	0.442	0.056	0.530	0.000	—	—
Within Indirect Effect	0.005	0.005	—	0.295	-0.002	0.018
Experienced Incivility-Anger-CWB						
Experienced Incivility-Anger	0.090	0.048	0.062	0.062	—	—
Anger-CWB	0.044	0.027	0.108	0.096	—	—
Experienced Incivility-CWB	0.182	0.040	0.310	0.000	—	—
Within Indirect Effect	0.004	0.003	—	0.217	-0.0011	0.0121

Note: Standardized estimates were hand-calculated as: $(Estimate * SD \text{ of Predictor}) / SD \text{ Outcome}$; I doubled checked this calculation by running the models with the z-scores for each variable.

to test the moderated-mediated indirect effect at the mean, one standard deviation above the mean, and one standard deviation below the mean. For example, the indirect effect at the mean included the calculation: *(slope of the mediator on the predictor [at the within-level] + the slope of the mediator on the moderator [at the between-level] * mean of the moderator, which is zero) * the slope of the outcome variable on the mediator [at the within-level]*.

Of note, moral identity symbolization requires second-stage moderation. Preliminary tests showed that the between-level variance for the outcome variables was not significant, so second-stage moderation is unlikely to be significant. Nevertheless, I ran the models with moral identity symbolization for completeness of my analyses. For second-stage moderation the model constraint to test for the indirect affect changes slightly. The calculation for the indirect effect at the mean is as follows: *slope of the mediator on the predictor [at the within-level] * (the slope of the outcome variable on the mediator [at the within-level] + the slope of the mediator on the moderator [at the between-level] * mean of the moderator, which is zero)*.

Table 6 reports the results of the moderated mediation tests with instigated incivility as the outcome, and *Table 7* reports the results with CWB as the outcome. The mediated results did not change between the mediation models and moderated mediation models, so they are not reported again in these tables. As *Table 6* and *Table 7* show, I did not find significant effects for multilevel moderation or for multilevel moderated mediation via revenge (on either outcome variable) for narcissism, moral identity internalization, moral identity symbolization, hostile attribution bias, or perceptions of overall fairness from the specific coworker. This is evidenced by the lack of significance for the interaction term in each of these models. I did not include the relationships with state anger in the tables, since it is not a significant mediator. However, Hypotheses 8b, 11b, 14b, 18b, 21b, and 24b predicted that the moderating variables above would

moderate the relationship from experienced incivility to state anger. None of the interaction terms were significant for those models. Further, while moral identity symbolization was significantly related to instigated incivility, it was not significantly related to CWB. Thus, Hypothesis 17, which predicted that moral identity symbolization would be more strongly related to CWB than instigated incivility, was not supported.

However, Hypotheses 24a, 25a, and 26b were supported, since there is evidence of significant multilevel moderation and of significant multilevel moderated mediation for both outcome variables with overall coworker group fairness as the moderator. The rest of this section will focus on interpreting these significant findings. *Table 8* contains the overall results of the hypothesis tests.

The interaction term for overall coworker group fairness was significant in both models, indicating moderation of the path from experienced incivility to revenge for both models, with CWB as an outcome and instigated incivility as an outcome ($\gamma = 0.411$, $p < 0.001$ and $\gamma = 0.410$, $p < 0.001$, respectively). The indirect effects were also significant in both of these models, providing initial support that overall coworker group fairness moderates the mediated relationship from experienced incivility to CWB through revenge, and also for the mediated relationship from experienced incivility to instigated incivility through revenge.

Since the same moderator was significant for both outcomes, I ran one more model including both of these outcomes in order to conservatively test the potential moderation effect. The interaction term for overall coworker group fairness was still significant ($\gamma = 0.409$, $p < 0.000$), indicating moderation of the path from experienced incivility to revenge with both CWB and instigated incivility included as outcomes in the model. The indirect effects were also significant for both outcomes, providing initial support that overall coworker group fairness

moderates the mediated relationship from experienced incivility to both instigated incivility ($\gamma = 0.025, p < 0.05$) and CWB ($\gamma = 0.024, p < 0.05$) through revenge.

Table 6: Results for moderated mediation for experienced incivility-revenge-instigated incivility

Experienced Incivility-Revenge-Instigated Incivility	Estimate	Standard Error	Two-Tailed <i>p</i> -value	Bootstrap 95%	
				Lower	Upper
First-Stage Moderator, Moral Identity Internalization					
Moral Identity Internalization on Revenge	0.179	0.050	0.000	—	—
Experienced Incivility *Moral Identity Internalization on Revenge	0.220	0.138	0.110	—	—
-SD Moral Identity Internalization (-0.55)	0.012	0.012	0.350	-0.009	0.032
Mean Moral Identity Internalization (at 0)	0.024	0.011	0.031	0.006	0.042
+SD Moral Identity Internalization (0.55)	0.036	0.015	0.018	0.011	0.062
First-Stage Moderator, Narcissism					
Narcissism on Revenge	-0.007	0.014	0.640	—	—
Experienced Incivility *Narcissism on Revenge	-0.059	0.043	0.168	—	—
-SD Narcissism (-2.51)	0.039	0.018	0.032	0.009	0.069
Mean Narcissism (at 0)	0.024	0.011	0.031	0.006	0.042
+SD Narcissism (2.51)	0.009	0.015	0.544	-0.015	0.033
First-Stage Moderator, Hostile Attribution Bias					
Hostile Attribution Bias on Revenge	0.036	0.065	0.574	—	—
Experienced Incivility *Hostile Attribution Bias on Revenge	-0.035	0.183	0.847	—	—
-SD Hostile Attribution Bias (-0.69)	0.027	0.018	0.129	-0.002	0.055
Mean Hostile Attribution Bias (at 0)	0.024	0.011	0.031	0.006	0.042
+SD Hostile Attribution Bias (0.69)	0.022	0.017	0.196	-0.006	0.049
First-Stage Moderator, Overall Justice Coworker Group					
Overall Justice Coworker Group on Revenge	-0.095	0.059	0.108	—	—
Experienced Incivility *Overall Justice Coworker Group on Revenge	0.410	0.090	0.000	—	—
-SD Overall Justice Coworker Group (-0.71)	-0.006	0.011	0.614	-0.025	0.013
Mean Overall Justice Coworker Group (at 0)	0.024	0.011	0.031	0.006	0.042
+SD Overall Justice Coworker Group (0.71)	0.054	0.019	0.005	0.022	0.086
First-Stage Moderator, Overall Justice Specific Coworker					
Overall Justice Specific Coworker on Revenge	0.023	0.032	0.469	—	—
Experienced Incivility *Overall Justice Specific Coworker on Revenge	0.013	0.122	0.914	—	—
-SD Overall Justice Specific Coworker (-1.18)	0.022	0.018	0.224	-0.008	0.053
Mean Overall Justice Specific Coworker (at 0)	0.024	0.011	0.031	0.006	0.042
+SD Overall Justice Specific Coworker (1.18)	0.026	0.018	0.164	-0.005	0.056
Second-Stage Moderator, Moral Identity Symbolization					
Moral Identity Symbolization on Instigated Incivility	-0.048	0.022	0.028	—	—
Experienced Incivility *Moral Identity Symbolization on Instigated Incivility	-0.036	0.065	0.578	—	—
-SD Moral Identity Symbolization (-0.67)	0.030	0.017	0.083	0.002	0.058
Mean Moral Identity Symbolization (at 0)	0.024	0.011	0.031	0.006	0.042
+SD Moral Identity Symbolization (0.67)	0.018	0.013	0.167	-0.003	0.040

Table 7: Results for moderated mediation for experienced incivility-revenge-CWB

Experienced Incivility-Revenge-CWB	Estimate	Standard Error	Two-Tailed <i>p</i> -value	Bootstrap 95%	
				Lower	Upper
First-Stage Moderator, Moral Identity Internalization					
Moral Identity Internalization on Revenge	0.181	0.050	0.000	—	—
Experienced Incivility *Moral Identity Internalization on Revenge	0.219	0.138	0.113	—	—
-SD Moral Identity Internalization (-0.55)	0.012	0.013	0.353	-0.009	0.034
Mean Moral Identity Internalization (at 0)	0.025	0.011	0.020	0.007	0.043
+SD Moral Identity Internalization (0.55)	0.039	0.015	0.008	0.015	0.063
First-Stage Moderator, Narcissism					
Narcissism on Revenge	-0.007	0.014	0.624	—	—
Experienced Incivility *Narcissism on Revenge	-0.060	0.042	0.154	—	—
-SD Narcissism (-2.51)	0.042	0.017	0.016	0.013	0.071
Mean Narcissism (at 0)	0.025	0.011	0.020	0.007	0.043
+SD Narcissism (2.51)	0.009	0.016	0.563	-0.017	0.035
First-Stage Moderator, Hostile Attribution Bias					
Hostile Attribution Bias on Revenge	0.034	0.065	0.599	—	—
Experienced Incivility *Hostile Attribution Bias on Revenge	-0.037	0.185	0.843	—	—
-SD Hostile Attribution Bias (-0.69)	0.028	0.019	0.128	-0.002	0.059
Mean Hostile Attribution Bias (at 0)	0.025	0.011	0.020	0.007	0.043
+SD Hostile Attribution Bias (0.69)	0.023	0.017	0.181	-0.005	0.051
First-Stage Moderator, Overall Justice Coworker Group					
Overall Justice Coworker Group on Revenge	-0.093	0.059	0.116	—	—
Experienced Incivility *Overall Justice Coworker Group on Revenge	0.411	0.090	0.000	—	—
-SD Overall Justice Coworker Group (-0.71)	-0.006	0.012	0.595	-0.026	0.013
Mean Overall Justice Coworker Group (at 0)	0.025	0.011	0.020	0.007	0.043
+SD Overall Justice Coworker Group (0.71)	0.057	0.018	0.001	0.028	0.087
First-Stage Moderator, Overall Justice Specific Coworker					
Overall Justice Specific Coworker on Revenge	0.024	0.032	0.453	—	—
Experienced Incivility *Overall Justice Specific Coworker on Revenge	0.014	0.123	0.909	—	—
-SD Overall Justice Specific Coworker (-1.18)	0.024	0.019	0.213	-0.008	0.061
Mean Overall Justice Specific Coworker (at 0)	0.025	0.011	0.020	0.007	0.043
+SD Overall Justice Specific Coworker (1.18)	0.027	0.020	0.163	-0.008	0.065
Second-Stage Moderator, Moral Identity Symbolization					
Moral Identity Symbolization on CWB	-0.026	0.025	0.309	—	—
Experienced Incivility *Moral Identity Symbolization on CWB	-0.011	0.088	0.904	—	—
-SD Moral Identity Symbolization (-0.67)	0.027	0.018	0.133	-0.003	0.063
Mean Moral Identity Symbolization (at 0)	0.025	0.011	0.020	0.007	0.043
+SD Moral Identity Symbolization (0.67)	0.024	0.017	0.162	-0.004	0.052

Table 8: Results of the hypothesis tests

Main Effects & Time Effects		Moderator: Moral Identity Symbolization
1a & 1b	Supported	14a & 14b Not supported
2a	Supported	15a & 15b Not supported
2b	Not Supported	16a & 16b Not supported
Revenge as Mediator		Moral Identity Symbolization with CWB
3a & 3b	Supported	17 Not supported
4a & 4b	Supported	Moderator: Hostile Attribution Bias
State Anger as Mediator		18a & 18b Not supported
5a & 5b	Not Supported	19a & 19b Not supported
6a & 6b	Not supported	20a & 20b Not supported
Relationship between Revenge and State Anger		Moderator: Overall Fairness from Specific Coworker
7	Not supported	21a & 21b Not supported
Moderator: Narcissism		22a & 22b Not supported
8a & 8b	Not supported	23a & 23b Not supported
9a & 9b	Not supported	Moderator: Overall Fairness from Coworker Group
10a & 10b	Not supported	24a Supported
Moderator: Moral Identity Internalization		24b Not supported
11a & 11b	Not supported	25a & 25b Supported
12a & 12b	Not supported	26a & 26b Not Supported
13a & 13b	Not supported	

Next, I calculated the psuedo- R^2 value with formulas from Snijders and Bosker (1999), which represents the proportional reduction in the Level 1 and Level 2 errors do to including additional predictors in the model. The predictors accounted for 8% of the total variance in revenge, 20% of the the total variance in instigated incivlty, and 22% of the total variance in CWB. This suggests that both experienced incivility and overall group fairness are practically important predictors of revenge, insitgated incivility, and CWB in my data.

Following the procedure outlined by Aiken and West (1991), I plotted the interaction effects at higher and lower levels of overall coworker group fairness (1 SD above and below the mean). This procedure has been used in previous multilevel research (c.f. Wallace, Butts, Johnson, Stevens, & Smith, 2013). *Figure 2* shows that experienced incivlty is more strongly related to a desire for revenge when coworker group overall fairness is higher rather than lower. This provides additional support for my hypotheses.

Following methods outlined by Baur, Preacher, and Gil (2006), I investigated the significance of the conditional indirect effects of experienced incivility on (a) instigated incivility and (b) CWB through revenge at higher (+1SD) and lower (-1SD) levels of the moderating variable. These regions of significance show that the indirect effect was stronger at high levels of overall coworker group fairness (for instigated incivility: estimate = 0.055, $SE = 0.020$, $p < 0.05$; for CWB: estimate = 0.058, $SE = 0.018$, $p < 0.001$), and weaker at low levels of overall coworker group fairness (for instigated incivility: estimate = -0.007, $SE = 0.012$, $p > 0.05$; for CWB: estimate = -0.007, $SE = 0.012$, $p > 0.05$).

In sum, the results of my multilevel path models show that a desire for revenge targeting the specific coworker significantly mediates the effect of experienced incivility on both CWB and instigated incivility. Further, overall coworker group fairness acts as a first-stage moderating variable. When perceptions of coworker group fairness were high, the respondents were more likely to react to experienced incivility through both targeted instigated incivility and counterproductive behaviors targeting the specific coworker who has treated them uncivilly.

Figure 3 includes the final moderated mediation path coefficients for all significant relationships.

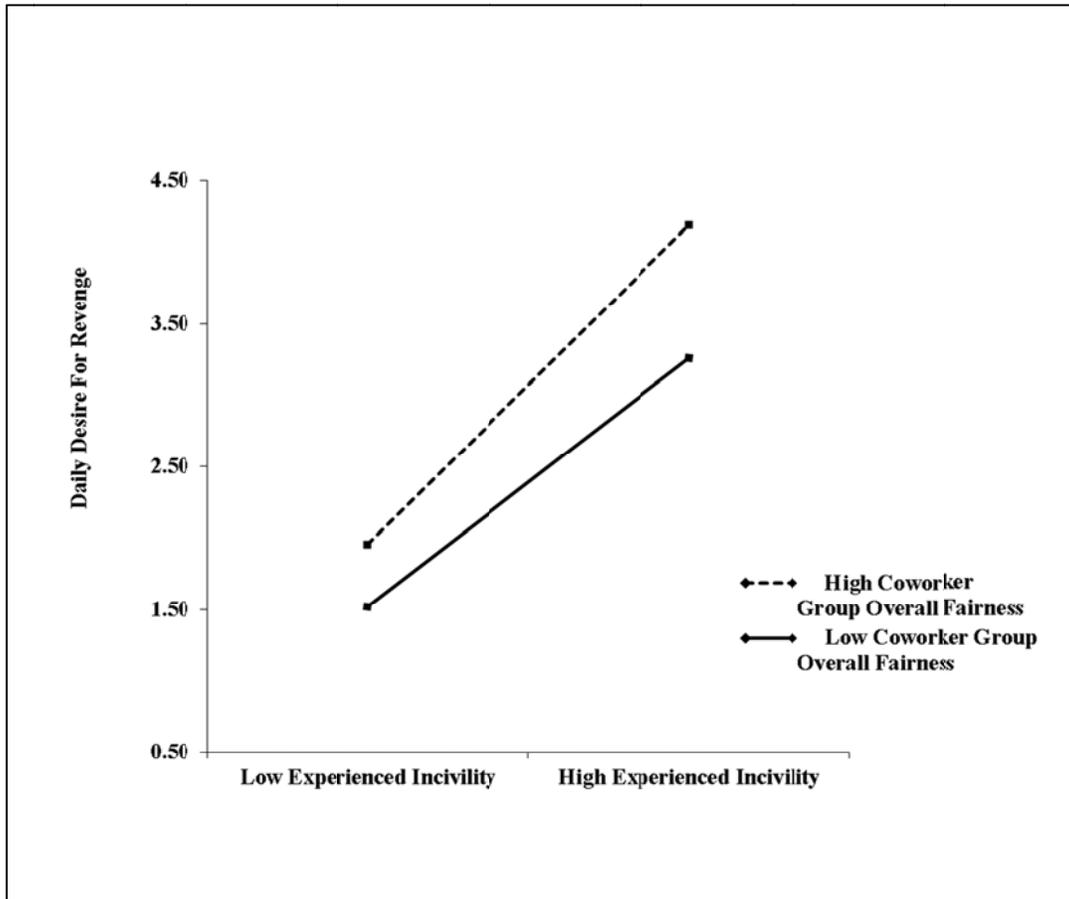


Figure 2: The moderating effect of coworker group overall fairness on the relationship from experienced incivility to a desire for revenge

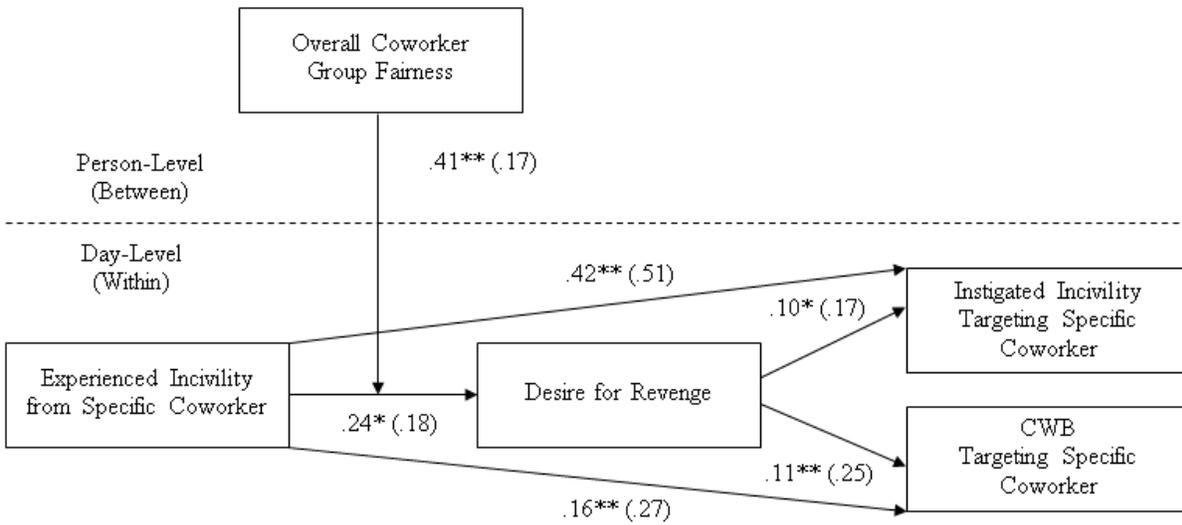


Figure 3: Final model: moderated mediation path coefficients

Note: Standardized coefficients are provided in parentheses. Following Wallace et al. (2013), the cross-level interaction coefficient for overall coworker group fairness was calculated from the estimated effect size of the pseudo- R^2 value. The control variables were included in the analysis for this model, but to present a more parsimonious model, I did not include the effects of control variables on a desire for revenge, instigated incivility, or CWB.

* $p < .01$ ** $p < .001$

Chapter 6

Discussion and Conclusion

Summary of Findings

The results of the current study indicate that experienced incivility, instigated incivility, and CWB are *unique* constructs. I conducted a multilevel CFA (clustering days within individuals) and found the model to have good fit. While this is in line with previous research that has shown incivility and CWB to be empirically unique (e.g. Blau & Andersson, 2005; Penney & Spector, 2005; Meier & Spector, 2013), this is the first study to demonstrate their distinctiveness within individuals at the daily level.

In addition, I also found through multilevel mediation that experienced incivility is predictive of both instigated incivility and CWB through a desire for revenge. Of note, as a supplemental analysis I ran a reverse model, with CWB as the independent variable and experienced incivility as the outcome. That model did not support a mediating effect through revenge. This lends more credence to the conclusions drawn in this study that negative exchange may escalate in intensity through unique mediators like revenge. My results support previous research that found incivility to be predictive of CWB (e.g. Penney & Spector, 2005; Sakurai & Jex, 2012; Taylor & Kluemper, 2012). These results are also consistent with Andersson and Pearson's (1999) theory on the spiraling effects of incivility.

In addition, using multilevel analysis, the results of this research indicate that group coworker fairness serves as a first-stage moderator on the relationship from experienced incivility to both instigated incivility and CWB via revenge. My findings indicate that when perceptions of coworker group fairness were high, the desire for revenge was strengthened, which then led to both instigated incivility and CWB. These findings are consistent with justice

theory on contrast effects, suggesting that the social context of justice judgments should be taken into account. For example, a contrast effect may occur when previous levels of fairness in the group are high and consequently, minor incidences of unfair treatment are more likely to stand out. When this happens, individuals may react more strongly to minor violations than they would in a situation where the perceptions of group fairness are low (e.g. van den Bos, 2002).

There were also several relationships that I tested that were not significant. Time did not act as a within-level moderator of the relationship between experienced incivility and the outcomes of instigated incivility and CWB. State anger did not mediate the relationships between experienced incivility and the outcomes variables. The personality characteristics of narcissism, moral identity, and hostile attribution bias did not serve as moderators. Finally, perceptions of overall fairness relating to the specific coworker did not moderate the mediated relationships. Possible methodological issues relating to these findings are discussed in the limitations section below.

Theoretical Contributions and Implications

This research uncovered several interesting findings that contribute to research on incivility and other negative workplace behaviors, the literature on social exchange, and the study of organizational justice. Overall, this research finds useful implications for the larger workplace mistreatment stream. There were three main contributions that I will discuss in this section. First, I discuss the findings of this study as they relate to the interplay between incivility and CWB. Second, I relate the implications from this research regarding the study of negative exchange, and third, I argue for the applicability of organizational justice theories to the study of incivility and other negative workplace behaviors.

The relationship between incivility and CWB

First, I addressed the question that previous researchers have posed in the literature regarding the relationship between incivility and CWB (e.g. Meier & Spector, 2013). Specifically, Meier and Spector (2013) suggested that future research should consider how timing impacts this relationship, and recommended that future research consider the daily consequences of incivility and CWB. I addressed this question by conducting a daily diary study and analyzing the data through multilevel path analytic models. First, I confirmed that experienced incivility, instigated incivility, instigated CWB, a desire for revenge, and daily state anger were unique constructs by running a multilevel CFA, which showed a good fit when the parceled items for each construct were loaded on their respective factor. Further, the results of multilevel mediation analysis indicated a significant relationship from experienced incivility to both of my outcome variables, instigated incivility and CWB. These significant relationships are in line with previous research in the area (e.g. Blau & Andersson, 2005; Penney & Spector, 2005, Meier & Spector, 2013; Sakurai & Jex, 2012), but my findings add to the previous literature by finding these relationships within individuals through multilevel analysis.

Further, much of the mistreatment literature has focused on the supervisor-subordinate relationship, and the significant relationships found in this research concerned specific coworker relationships. This adds to a growing literature stream concerning the study of target-specific attitudes and behaviors in the workplace (e.g.; Lavelle et al., 2007; Lavelle et al., forthcoming, Rupp & Cropanzano, 2002). While my findings can only partially address the question of causality (in that I did not test truly time-lagged models, which is discussed in more detail in the limitations section), I did find a significant relationship from experienced incivility to the outcome variables (instigated incivility and CWB) via a desire for revenge. I also tried the model

in reverse, where CWB predicted experienced incivility. In that model, a desire for revenge did not have a significant indirect effect. The implications suggest that there may be different mediating mechanisms underlying the incivility-CWB relationship versus the CWB-incivility relationship.

Negative exchange indicators

Through this research I proposed and tested a process model of negative exchange. In previous sections I argued that the traditional indicators for positive social exchange (e.g. trust, identification, commitment, etc.) may not translate to models of negative exchange. Rather, negative social exchange processes may require a unique set of indicators. Studying the negative exchange process in relation to incivility spirals allowed me to also address questions in the incivility literature relating to the underlying processes that drive incivility spirals (e.g. Meier & Spector, 2013).

Therefore, I proposed that both a desire for revenge and state anger would serve as indicators in negative exchange relationships. This contributes to the workplace mistreatment literature by answering the question of why experienced incivility may escalate into more severe forms of mistreatment. I found that revenge served this mediating function, but state anger did not. However, as I will elaborate in the limitations section, there may have been measurement issues relating to my conceptualization of state anger that resulted in these findings.

While the literature contains theories regarding the mediating role that revenge takes in negative workplace behavior research (e.g. Tripp & Bies, 2010), to date there has not been a lot of empirical research that treats a desire for revenge as a mediating mechanism in NWB models (for exceptions, see Bradfield & Aquino, 1999, Jones, 2009; Liu, Kwan, Wu, & Wu, 2010). Further, the last two studies cited in the previous sentence used the same revenge scale that I

used in this study, but they considered the relationships between supervisors and subordinates, not daily interactions among coworkers. By studying a daily desire for revenge within individuals, this research contributes to the organizational justice literature, the incivility literature, and most significantly, to research on social exchange processes. As I discussed in previous chapters, Colquitt et al. (2013) tested CWB as an outcome of reciprocated behaviors based on social exchange theory in their meta-analysis, and while they found direct effects between procedural, distributive, and informational justice and CWB, they did not find that positive exchange indicators mediated these relationships. Overall, the implications from this study suggest that the negative exchange process may indeed require different indicators of exchange than the traditionally used indicators in positive social exchange research.

Organizational justice theories and the study of incivility

The third major contribution of this study concerns the integration of justice theories with the incivility literature. Earlier I argued that both organizational justice and negative workplace behaviors are subsumed within the mistreatment literature. Since interpersonal justice and incivility share several communalities, I suggested that utilizing the rich literature from previous studies on organizational justice may provide new revelations in the incivility literature.

Researchers have called for the study of boundary conditions relating to incivility spirals (e.g. Wu et al., 2013). Investigating moderating variables helps to decipher when an escalation in negative exchange is more likely to occur. Therefore, I proposed and tested several moderating variables expected to either strengthen or weaken the negative exchange relationship between experienced incivility and negative workplace behaviors, via the mediation effects of social exchange and emotion.

Based on research on contrast and assimilation research in organizational justice (van den Bos, 2002), I tested overall fairness of the coworker group as a moderator, predicting that when perceptions of overall fairness are high within the social context of the workplace (e.g. the coworker group is considered fair overall), a contrast effect will be found in relation to the specific coworker relationship in question. The results supported this assertion, in that I found a multilevel interaction effect from experienced incivility to a desire for revenge, which then led to both instigated incivility and CWB targeting that specific coworker.

Interestingly, there is not a lot of literature that empirically studies the theory of a contrast effects. I only found two published articles in the justice literature that included a test of contrast effects (e.g. van den Bos, 2002; van den Bos et al. 2005), and to my knowledge, my study is the first to find such an effect in a working sample, and the first to incorporate contrast effect theory into the incivility literature. Overall, these findings lead to exciting implications for the workplace mistreatment literature, in that drawing from theories of organizational justice can be lucrative for incivility scholars.

Implications for Practice

Several aspects of this research contribute to practitioner knowledge regarding incivility among coworkers. The results of this study suggest that within coworker relationships, experienced incivility can escalate into CWB through a desire for revenge. It is important for practitioners to recognize that a rude comment amongst coworkers can lead to more severe instances of retaliation. This means that managers should be attentive to uncivil behaviors and intervene when coworker interactions become disrespectful. The ethical leadership literature (e.g. Brown, Treviño, & Harrison 2005; Mayer, Aquino, Greenbaum, & Kuenzi, 2009; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2012) mirrors this suggestion by describing moral

leaders as people who model good behavior (in this case, consciously refraining from uncivil behavior), while also rewarding the good and punishing the bad behavior of employees. Further, the organizational justice literature recommends that managers encourage a respectful culture at work so that employees will treat each other in an interpersonally fair manner.

That said, the results of this study suggest that the more an employee views the rest of his or her coworker group as fair, the more magnified uncivil behavior from a specific person becomes. This suggests that asking managers to foster a fair and just work climate may not be enough. Porath and Pearson (2013) suggest that practitioners both hire for civility (which should help to foster a fair work climate overall) and teach civility at work. One surprising finding from my post hoc survey (discussed in more detail in the limitations section) was that many of the participants did seem to better recognize the uncivil behaviors they committed towards their coworkers, as well as uncivil acts committed by others over the course of the two week survey period. Extending this idea into practice, if managers periodically ensure that employees are aware of the definition of incivility and counterproductive behaviors (including specific examples), this knowledge may help to diminish incidences of negative behavior in the workplace. This speculation would be an interesting area for future research efforts.

Methodological Contributions

This study addressed several methodological weaknesses from prior studies on negative workplace behaviors. First, I included only the interpersonal components of the Workplace Deviance scale by Bennett and Robinson (2000) for my measure of CWB. Often, research will combine the interpersonal and organizational components into one overall measure of CWB (e.g. Sakurai & Jex, 2012). In fact, Spector (2011) noted that recent darkside research appears to be trending towards a more holistic conceptualization of CWB, often neglecting to categorize the

results of research by the particular target of the behavior. However, researchers have expressed concern that doing so may bias the population effect (Hershcovis et al., 2007). In my study, since instigated incivility is inherently interpersonal in nature, measuring CWB as an interpersonal construct allowed me to better compare my two outcome variables of interest. In addition, I adapted the measures to be target-specific, allowing me to ask about specific coworker relationships. Much of the previous research has looked at supervisor-subordinate relationships, and researchers have called for more studies concentrating on coworkers (e.g. Hershcovis et al., 2007; Lavelle et al., in press).

Finally, I used newer approaches to multilevel modeling in my analysis. As I discussed at length in the methods section, choosing to use the unconfliated approach to modeling has both advantages and disadvantages. Unconfliated models use the group mean as a proxy for the between-level latent variable, which can bias the between level effect (Preacher et al., 2010). For this reason, the unconfliated model approach is weaker than using the multilevel SEM approach recommended by Preacher et al. (2010). Nonetheless, the unconfliated model approach can still be considered superior to traditional HLM modeling, which has been the most popular method of analysis for ESM studies in management to date. Traditional methods for measuring multilevel mediation (e.g. HLM) assume that the within- and between- components are identical, and only a single effect is specified for the mediator on the outcome. This leads to the conflation of the model estimates. Since the majority of my hypotheses were tested at the within-level of analysis, the weaknesses of the unconfliated model approach were not a great concern in this research. Further, the within-individual nature of my hypotheses helped to alleviate concerns regarding common method bias, in that the relations among the within-individual variables were no longer confounded by individual differences (e.g. Judge, Scott, & Ilies, 2006; Loi et al., 2009).

Limitations and Future Research Directions

In lieu of the contributions made in this dissertation, there are also several limitations that should be discussed. The limitations discussed in this section lend themselves to interesting and fruitful future research directions. First, my sample was cross-sectional in nature, and all measures were self-report. Therefore, single source bias could be a weakness of my study design. I asked respondents about their relationships with their coworkers (rather than collecting coworker data as well). Some researchers have suggested that peer ratings of CWB are more appropriate, because coworkers may have more opportunities throughout the day to observe their peers committing CWB. Using this rationalization, Penney and Spector (2005) collected both self- and peer- reported measures of incivility and CWB. They found that the correlations between self- and peer-rated stressors and job satisfaction were similar in magnitude. Further, all of the correlations between peer-rated stressors and self-rated CWB were significant. This led them to conclude that single source bias did not likely inflate the correlations in their study. Further, darkside researchers have argued that the individual who committed negative workplace behaviors is the most appropriate person to ask about these behaviors, because other individuals in the workplace may be unaware of the behaviors that are taking place (Fox & Spector, 1999).

That said, social exchange is inherently a relational process, and more research is needed to measure this process by simultaneously considering both parties involved. Of note, it has been suggested that the ideal research design involving incivility would track interacting employee dyads over time (Andersson & Pearson, 1999; Pearson et al., 2001; Blau & Andersson, 2005). In response to this criticism, Taylor and Kluemper (2012) point out that the incivility literature does not require that escalation or reciprocity necessarily occur exclusively among individuals. As my research shows, asking one individual in a relationship about his or her experiences and

perceptions relating to incivility can still lead to new insights. However, researchers have called for more dyadic research in this area because both the enactment of aggression, as well as the victim's perceptions relating to aggressive acts will likely depend on unique aspects of the perpetrator/victim relationship (Hershcovis & Barling, 2007: 268). Indeed, there is a need for more dyadic analysis in organizational behavior research in general. Krasikova and LeBreton (2012) found that out of 164 studies they identified as dyadic in nature from the time period of 2007-2010, only six used dyadic analysis techniques like the actor-partner interdependence model (APIM; 5 studies on trust, and 1 study on leader-member exchange). Using dyadic techniques such as APIM could be very useful in incivility research, allowing the researcher to capture the nuances of a tit-for-tat exchange among partners. Therefore, I echo this call for dyadic analysis as a future research direction when studying the relationship between incivility and CWB.

Another limitation of the current study was that respondents reported low levels of instigated incivility and CWB. As was discussed in the methods section, this may be the reason that the MSEM models did not converge correctly, leading me to use the unconflated models for my analysis. This is also the likely the reason I did not find a significant result for time as a moderating variable. In this respect, this supports the call for capturing dyadic data. Even though I controlled for social desirability bias, it is possible that respondents were hesitant to report retaliatory behaviors. There is also the possibility of measurement reactivity (discussed in more detail below); however other researchers have reported low variance on these variables as well. For example, Meier and Spector (2013) also reported restricted variance on incivility and CWB, and they did not collect daily measures. They suggest that more research is needed on samples with more prevalence of a hostile work environment, such as social services. In my study I chose

to survey respondents from a variety of industries to allow for more generalizability. However, future researchers may want to seriously consider choosing a less generalizable sample in a specific industry that is more likely to foster an environment conducive to negative workplace behaviors.

An additional weakness of this study is that causality is still of concern, in that my data analysis was not completely time-lagged. I measured experienced incivility, instigated incivility, and CWB each day, and did not include the initial levels of these variables as a control. Because of this, I cannot rule out the possibility that the relationship between these variables within each day was not influenced by other factors, such as mood. Other researchers have also pointed to this issue in their research (e.g. Sakurai & Jex, 2012). Obviously, causality is a concern, and is especially relative to the relationship between incivility and CWB. As I mentioned earlier in this chapter, revenge does not mediate when experienced incivility and CWB are switched in the models. This gives credence to the model presented in this study. However, future research should take these limitations into consideration. Analyzing cross-lagged models with longitudinal data over different time periods (e.g. daily) could help to unravel the nuances in the relationship between experienced incivility and CWB. Further, newer data analytic techniques, such as latent change score modeling could be a useful avenue for future research. For example, using latent change score modeling procedures, Taylor, Bedeian, Cole, and Zhang (in press) recently investigated workplace incivility change, where a change in incivility over time predicted changes in burnout and turnover intentions. Modeling the relationship between experienced incivility, instigated incivility, and CWB using methods like latent change score modeling may allow researchers to finally capture the elusive incivility spiral.

Several of the hypothesized relationships were not significant, so I feel it is important to address possible limitations relating to these findings. First, time did not serve as a within-level moderator between experienced incivility and the outcome variables of instigated incivility and CWB. This could be attributed to the respondents' reporting low levels of instigated incivility and CWB, which restricted the variance on these outcome variables. Another possibility is that the daily measure approach I used could have incited measurement reactivity, where repeated self-reporting of certain phenomena may change the participant's perceptions of the situation in question (Fisher & To, 2012). Of note, I did conduct a post hoc survey where I asked respondents directly if participating in the incivility survey (a) influenced their behavior in the workplace and (b) influenced the way they will react to uncivil behavior in the future. I received 107 responses, which were captured on a 5 point scale. The average response to each question was 3.91 and 3.94, respectively. I also included a section where respondents could answer the same questions in an open-ended format. A few samples of the responses are included in *Table 9*. The relatively high average responses and the comments provided by participants could be suggestive of measurement reactivity, and future researchers are cautioned to consider this possibility when studying daily measures of negative workplace behaviors.

Table 9: Samples of open-ended responses to post hoc survey

I was a lot more aware of my behavior in the workplace and was sure not to treat my coworkers in an uncivil manner.
Knowing that I was participating in this incivility research made me become more aware of my behavior and how I treated people. I didn't want to fit the negative characteristics of a person who coworkers do not want to work with because of negative or rude behaviors. I was also able to identify those rude and negative behaviors better as I would see them daily on the survey.
I realized that day to day I was pretty passive in the workplace and finally addressed the situation with the person I was clashing with. After we talked it out, she realized that she had been rude but unintentionally and finally resolved to change her behavior. I started enjoying my work more and we got along a little better after our talk.
I caught myself thinking of the listed emotions while at work.
I never thought to look at how I was acting towards the individual as well. I guess it takes two to create conflict.
Because I am more aware of incivility, I will be able to notice when it's happening and to stop and adjust my behavior accordingly
By participating in this survey I became much more aware of how I am treated in the work place. More importantly, I am much more aware of how I treat others in my daily interactions at the work place. I thank you for this- absolutely priceless!
I was not the one treating people wrong, but because of this survey I am able to see a lot of things differently now. The ones who do people wrong should take this survey and hopefully they would learn.
Because I knew I was participating in a survey I was more aware than usual of my behavior and those around me.
I don't necessarily feel as though it influenced my behavior, but taking the daily surveys have allowed me to become more aware of my daily interactions with co-workers/management.

Surprisingly, state anger did not act as a mediator in my data. It is possible that the findings in this data set could be attributable to my choice of measure. I used items from the PANAS (Watson et al. 1988) to assess state anger. The prompt asked how respondents were feeling today, but did not include target-specific wording. Therefore, it is possible that responses to the state affect items were contaminated by other situations in the respondents' daily life (e.g. a good mood may be attributable to something that happened early in the day at home, or a bad mood may not have been related to interactions with the specific coworker). Also, on the daily surveys I collected data for the full PANAS scale, which includes 20 items. This long scale on a daily measure could have led to respondent fatigue. Fisher and To (2012) suggest that researchers using shortened versions of scales on daily measures to alleviate this possibility, and this is certainly something for future research to take into consideration. In addition, the moderator for overall fairness from the specific coworker was not significant. Since I asked respondents to think about the coworker with whom they are currently having the most conflict, their perceptions of overall fairness relating to this person may have already been low, which may have impacted the moderating potential of this variable.

In addition to the future research directions suggested thus far, another worthwhile avenue for future research includes identifying other mediating mechanisms for negative social exchange. In this paper I argue that negative exchange indicators are likely not the same as traditionally used positive exchange indicators (e.g. trust, commitment, identification, etc.). A desire for revenge is posited to be one indicator of negative exchange, and I found significant mediation in my models using revenge as an indicator of negative exchange. Future researchers are encouraged to consider what additional constructs may be used as indicators of negative exchange. For example, in earlier sections, I discussed the similarity between deontic rage and a

revenge/anger relationship. Deontic rage may be an indicator of negative exchange that delves more deeply into the moral implications of such an exchange. As another example, recent research argues that trust and distrust may be unique constructs, rather than one construct along a continuum. Dimoka (2010) showed that trust and distrust activate different regions in the brain, and have different effects, leading the author to conclude that trust and distrust are distinct constructs that are associated with differing neurological processes. Future research could consider both deontic rage and distrust in relation to the study of incivility.

In addition, while I found a contrast effect through multilevel mediated moderation, the personality variables I tested for moderation did not work in my sample. I encourage future researchers to consider additional moderating variables that may accelerate or decelerate incivility spirals. For example, power may play into these relationships as a moderator. In my study, I treated power as a control variable. However, researchers have pointed to the importance of power differentials in reactionary models of negative workplace behavior. Tripp et al. (2007) propose a model of vigilante justice that includes power differences as a second stage moderator between a desire for revenge and coping responses (such as committing CWB toward the offending party). Further, additional personality traits may serve in a moderating capacity. Douglas and Martinko (2001) discovered that low self-control, attitude towards revenge seeking, and previous exposure to aggressive cultures may impact the likelihood of retaliatory behaviors following a perceived wrong.

Conclusion

In conclusion, the results of this research provide new insights into the underlying mechanisms by which experienced incivility relates to other negative workplace behaviors, specifically instigated incivility and counterproductive work behavior. In particular, the results

suggest that studying negative social exchange may be driven by different processes than positive social exchange. My findings show that within individuals, experienced incivility relates to instigated incivility and CWB via a desire for revenge. Further, through multilevel moderated mediation analysis, I show that overall perceptions of coworker group fairness moderated this mediated effect, such that when perceptions of coworker group fairness were high, the mediated relationships were stronger. This supports previous research on a contrast effect in the justice literature. In sum, this study proposes and tests a process model of daily incivility among coworkers, and in doing so contributes to a growing area of research concerning when and why negative workplace behaviors occur.

Appendix A
Measures and Items

Experienced Incivility: IV

Experienced Work Incivility Scale (Cortina et al., 2001; adapted by Blau & Andersson, 2005)

**Adapted to the coworker context in this study, the original wording refers to “someone” rather than “coworker”*

How often did your coworker do the following to you today at work?

1 = Not at all 2 = Occasionally 3 = Frequently 4 = Most of the time 5 = All of the time

1. Put you down or was condescending to you in some way
2. Paid little attention to a statement you made or showed little interest in their opinion
3. Made demeaning, rude or derogatory remarks about you
4. Addressed you in unprofessional terms, either privately or publicly
5. Ignored or excluded you from professional camaraderie (e.g. social conversation)
6. Doubted your judgment in a matter over which you have responsibility
7. Made unwanted attempts to draw you into a discussion of personal matters

Instigated Incivility: DV

Instigated Workplace Incivility (Blau and Andersson, 2005)

**Adapted to the coworker context in this study, the original wording refers to “someone” rather than “coworker”*

How often did you exhibit the following behaviors toward your coworker today at work?

1 = Not at all 2 = Occasionally 3 = Frequently 4 = Most of the time 5 = All of the time

1. Put down your coworker or were condescending to him/her in some way
2. Paid little attention to a statement made by your coworker or showed little interest in his/her opinion
3. Made demeaning, rude, or derogatory remarks about your coworker
4. Addressed your coworker in unprofessional terms either privately or publicly
5. Ignored or excluded your coworker from professional camaraderie (e.g. social conversation)
6. Doubted your coworker’s judgment in a matter over which he/she has responsibility
7. Made unwanted attempted to draw your coworker into a discussion of personal matters

Counterproductive Work Behaviors: DV

Interpersonal Deviance Scale (Bennett & Robinson, 2000)

How often did your coworker engage in the following behavior towards you today at work?

1 = Not at all 2 = Occasionally 3 = Frequently 4 = Most of the time 5 = All of the time

1. Made fun of you
2. Said something hurtful to you
3. Made an ethnic, religious, or racial remark towards you
4. Cursed at you
5. Played a mean prank on you
6. Acted rudely toward you
7. Publically embarrassed you

Desire for Revenge: Mediator

Desire for Revenge Scale (Jones, 2009)

Please indicate the degree to which you agree with the following statements:

1= Strongly Disagree 2= Disagree 3= Neither Agree nor Disagree 4= Agree 5= Strongly Agree

1. I intend to settle the score with my coworker today.
2. I plan on getting even with my coworker in the near future.
3. If I were mistreated by my coworker today, the satisfaction of getting even would outweigh the risks of getting caught.
4. If I were mistreated by my coworker today, it would feel good to get back in some way.

Positive and Negative Affect (PANAS): Mediator

The Positive and Negative Affect Schedule (Watson et al., 1988)

This scale consists of a number of words that describe different feelings and emotions. Read each item and then list the number from the scale below next to each word. Indicate the extent you have felt this way *in the past 24 hours*.

Note: Items in BOLD indicate the items used for State Anger.

Indicate the extent to which you felt this way at work TODAY.

1	2	3	4	5
Very Slightly or Not at All	A Little	Moderately	Quite a Bit	Extremely
_____ 1. Interested		_____ 11. Irritable		
_____ 2. Distressed		_____ 12. Alert		
_____ 3. Excited		_____ 13. Ashamed		
_____ 4. Upset		_____ 14. Inspired		
_____ 5. Strong		_____ 15. Nervous		
_____ 6. Guilty		_____ 16. Determined		
_____ 7. Scared		_____ 17. Attentive		
_____ 8. Hostile		_____ 18. Jittery		
_____ 9. Enthusiastic		_____ 19. Active		
_____ 10. Proud		_____ 20. Afraid		

Overall Justice of Coworker: Moderator

Perceived Overall Justice (POJ) scale (Ambrose & Schmike, 2009)

1= Strongly Disagree 2= Disagree 3= Neither Agree nor Disagree 4= Agree 5= Strongly Agree

1. Overall, I'm treated fairly by my coworker
2. In general, I can count on my coworker to be fair
3. In general, the treatment I receive from my coworker is fair

Narcissism (Gentile, Miller, Hoffman, & Campbell, working paper)

Note: Bold items indicate narcissistic response.

Please choose a statement that best describes you from each of the sets of statements below:

- ___ 1. A I find it easy to manipulate people.
 B I don't like it when I find myself manipulating people.
- ___ 2. A When people compliment me I get embarrassed.
 B I know that I am a good person because everybody keeps telling me so.
- ___ 3. A I like having authority over other people.
 B I don't mind following orders.
- ___ 4. A I insist upon getting the respect that is due me.
 B I usually get the respect I deserve.
- ___ 5. A I don't particularly like to show off my body.
 B I like to show off my body.
- ___ 6. A I have a strong will to power.
 B Power for its own sake doesn't interest me.
- ___ 7. A I expect a great deal from other people.
 B I like to do things for other people.
- ___ 8. A My body is nothing special.
 B I like to look at my body.
- ___ 9. A Being in authority doesn't mean much to me.
 B People always seem to recognize my authority.
- ___ 10. A I will never be satisfied until I get all that I deserve.
 B I will take my satisfactions as they come.
- ___ 11. A I try not to be a show off.
 B I will usually show off if I get the chance.
- ___ 12. A I am a born leader.
 B Leadership is a quality that takes a long time to develop.

Moral Identity: Moderator

The Self-Importance of Moral Identity Measure (Aquino & Reed, 2002)

I = Internalization; S = Symbolization; R = Reverse coded.

Listed below are some characteristics that might describe a person:

Caring, Compassionate, Fair, Friendly, Generous, Helpful, Hardworking, Honest, and Kind

The person with these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions.

1= Strongly Disagree 2= Disagree 3= Neither Agree nor Disagree 4= Agree 5= Strongly Agree

- (I) 1. It would make me feel good to be a person who has these characteristics.
- (I) 2. Being someone who has these characteristics is an important part of who I am.
- (S) 3. I often wear clothes that identify me as having these characteristics.
- (I) 4. I would be ashamed to be a person who had these characteristics. (R)
- (S) 5. The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.
- (S) 6. The kinds of books and magazines that I read identify me as having these characteristics.
- (I) 7. Having these characteristics is not really important to me. (R)
- (S) 8. The fact that I have these characteristics is communicated to others by my membership in certain organizations.
- (S) 9. I am actively involved in activities that communicate to others that I have these characteristics.
- (I) 10. I strongly desire to have these characteristics.

Hostile Attribution Bias: Moderator

Hostile Attribution Bias (Adams and John, 1997)

I slightly reworded #6 to eliminate gendered wording. It originally said "A person is better off if he doesn't trust anyone."

1= Strongly Disagree 2= Disagree 3= Neither Agree nor Disagree 4= Agree 5= Strongly Agree

- 1. I commonly wonder what hidden reason another person may have for doing something nice for me.
- 2. Most people are honest chiefly through fear of being caught.
- 3. I think most people would lie to get ahead.
- 4. I have often found people jealous of my good ideas, just because they had not thought of them first.
- 5. People pretend to care more about one another than they really do.
- 6. A person is better off not trusting anyone.

Controls

Frequency of Coworker Interaction

On average, how frequently do you and this coworker interact with one another each week? (interaction via any means of communication, such as in person, through email, instant messenger, phone, etc.)

Less than once a week; 1-3 times a week; 4-6 times a week; 7-10 times a week; More than 10 times a week

Power in Relationships (Anderson, John, and Keltner, 2012)

1= Strongly Disagree 2= Disagree 3= Neither Agree nor Disagree 4= Agree 5= Strongly Agree

In my relationships with my coworkers...

I can get people to listen to what I say

My wishes do not carry much weight.

I can get others to do what I want.

Even if I voice them, my views have little sway.

I think I have a great deal of power.

My ideas and opinions are often ignored.

Even when I try, I am not able to get my way.

If I want to, I get to make the decisions.

Social Desirability (13- item measure based Crowne & Marlow, 1960)

1= Strongly Disagree 2= Disagree 3= Neither Agree nor Disagree 4= Agree 5= Strongly Agree

It is sometimes hard for me to go on with my work if I am not encouraged.

I sometimes feel resentful if I don't get my way.

On a few occasions, I have given up doing something because I thought too little of my ability.

There have been times when I felt like rebelling against people in authority even though I know they were right.

No matter who I am talking to, I'm always a good listener.

There have been occasions when I took advantage of someone.

I'm always willing to admit it when I make a mistake.

I sometimes try to get even rather than forgive and forget/

I am always courteous, even to people who are disagreeable.

I have never been irked when people expressed ideas very different from my own.

There have been times when I was quite jealous of the good fortune of others.

I am sometimes irritated by people who ask favors of me.

I have never deliberately said something that hurt someone's feelings.

Trait Negative Affect (Watson et al., 1988 – PANAS)

Same items as State Affect (listed above), different prompt:

Indicate the extent to which you generally feel this way - that is, how you feel on average.

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Biographical Information

Jennifer Grace Manegold received her Ph.D. from the University of Texas at Arlington. She has an MBA from The University of Texas of the Permian Basin. Her primary research focus is in organizational behavior with an emphasis on organizational justice, social exchange, and the “darkside” of workplace behavior. She also has an interest in human resource management, particularly in relation to targeted recruitment and HR policies. She has published in *Human Resource Management*, and coauthored a chapter on multifoci justice in the forthcoming *Handbook of Justice in Work Organizations*. She teaches courses in organizational behavior and management process theory at the University of Texas at Arlington.