

COWORKER INCIVILITY AND INCIVILITY TARGETS' WORK EFFORT AND
COUNTERPRODUCTIVE WORK BEHAVIORS: THE MODERATING ROLE OF SUPERVISOR
SOCIAL SUPPORT

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ABSTRACT

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A two-wave study investigated the relationships among coworker incivility, counterproductive work behaviors (CWBs), and work effort. The author proposed based on affective events theory (Weiss & Cropanzano, 1996) that coworker incivility has negative influences on work effort and CWBs via the mediating effects of negative emotions. Study results based on data from full time university employees ($n = 209$) supported both of the hypothesized mediated relationships. In addition, supervisor social support moderated the relationship between negative emotions and work effort, but not the relationship between negative emotions and CWBs. Study implications and limitations are discussed.

Keywords: Workplace incivility, Emotions, Work Motivation, Counterproductive Work Behaviors

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Introduction

Stress may be an inevitable aspect of people's life. Likewise, facing stressors at the workplace, such as rude customers, coworkers, or an angry supervisor, may be a fact of life for some employees. Nevertheless, our common sense tells us that when employees frequently face such noxious aspects of the work environment, they become less happy and less able to focus on their job tasks. In recent years, one type of work stressor that has received a great deal of research attention is workplace incivility (e.g., Bowling & Beehr, 2006; Lim, Cortina, & Magley, 2008). Workplace incivility refers to interpersonal mistreatment with ambiguous intent that is discourteous, rude, and shows a lack of regard for others in violation of norms for mutual respect (Andersson & Pearson, 1999). Research indicates that targets of incivility tend to report lower levels of affective wellbeing (Sakurai, Jex, & Gillespie, 2011), job satisfaction (Penney & Spector, 2005), work effort (Burnes & Pope, 2007), and a higher turnover intent (Lim, et al., 2008). Given its associations with undesirable work-related outcomes, a high degree of incivility among employees may be a business concern for organizations (Pearson & Porath, 2009). In one estimate, incivility at the workplace can cost businesses \$14,000 a year per employee due to distraction, loss of work time and project delays (Pearson & Porath, 2009). For occupational health researchers, understanding and reducing workplace incivility should be a concern given the voluminous evidence showing that interpersonal stressors lead to physiological and psychological strains (e.g., Tepper, 2000; Schat, Kelloway, & Desmarais, 2005; Nielsen, Matthiesen, & Einarsen, 2008).

Whereas previous research has exerted considerable effort toward examining incivility and its work-related outcomes, investigation of how employees cope with incivility is scarce in the literature. For example, do individuals who experience incivility from coworkers react less negatively if they receive high levels of social support from their supervisor? Alternatively, does a particular coping style lead to a decrease in the frequency of incivility over time? Addressing such questions should merit research attention because incivility is not only harmful to targets' wellbeing, but also causes targets to engage in counterproductive work behaviors. In a recent study, however, Cortina and Magley (2009)

demonstrated that there are individual differences in coping orientations to incivility (e.g., support seekers and assertive avoiders), as well as the degree of perceived threat. The study is instrumental in directing our attention to employee coping with incivility, but there is a need for further investigation of employees' coping with incivility, to address whether different types of coping strategies or coping resources interact with incivility to influence subsequent work-related key variables.

In the current study, I applied affective events theory (Weiss & Cropanzano, 1996) to examine the relationship between coworker incivility and both counterproductive work behaviors and work effort, mediated by targets' negative emotions. The current study also examined the moderating role of supervisor social support, as a coping resource, for the relationship between employee negative emotion and the two aforementioned work outcomes. Although supervisor social support has been studied extensively in occupational health and related fields (e.g., Viswesvaran, Sanchez, and Fisher, 1999; Halbesleben, 2006; Van Daalen, Willemsen, & Sanders, 2006), it has not been studied in the context of incivility. Additionally, because much of the existing incivility studies have relied on cross-sectional research designs (e.g., Cortina, Magley, Williams, & Langhout, 2001; Lim et al, 2008; Sakurai, et al., 2011), there are needs for more rigorous investigations of incivility and its purported outcomes, in order to clarify the nature of their relationships. The current study helps address this by utilizing a two-wave study design. Specifically, the current study investigated the concurrent effects of coworker incivility on both work effort and counterproductive work behaviors.

Theoretical Background

Affective Events Theory

According to affective events theory (AET; Weiss & Cropanzano, 1996), events that occur in the workplace and one's affective disposition influence affects experienced at the work, which in turn influence work behaviors. In particular, events that elicit negative affect, such as conflict with one's supervisor or colleagues, are posited to increase the propensity with which employees engage in inefficient work behaviors. Past research has established that people experience negative affect as a result of interpersonal conflict at the workplace (Bowling & Beehr, 2006). Affects are thought to influence the way in which a person reacts because affect not only influence one's thought processes but also facilitate behaviors that are intended to reduce negative affect (Rusting & DeHart, 2000). Indeed, research on human emotions suggests that people attempt to control their affect through behaviors that optimize their energy and tension level (Thayer, Newman, & McClain, 1994). For example, behaviors such as cigarette smoking and sugar intake relate to changes in individuals' subsequent affect (Benton, 2002). Similarly, research in occupational health has shown that negative emotions created by mistreatments at the workplace may bring about adaptive responses, though not necessarily for the organization, such as work withdrawal behaviors (Van Yperen, Hagedoorn, Zweers, & Postma, 2000) and expressions of frustration (Barclay, Skarlicki, & Pugh, 2005). Based on AET, the current study conceptualized coworker incivility as events that elicit negative affect (Figure 2). Decrease in work effort and increase in CWBs are conceptualized as affect-driven inefficient work behaviors. In the subsequent sections, I discuss and provide support for these hypotheses.

Relevant Research

Workplace Incivility

Workplace incivility is often distinguished from other specific forms of interpersonal deviances, such as workplace bullying (Hoel & Cooper, 2001) and abusive supervision (Tepper, 2000), based on two characteristics. First, incivility consists of low intensity interpersonal mistreatment. That is, if interpersonal deviance is classified along a continuum of severity or intensity, incivility would constitute lower end of this continuum (Andersson & Pearson, 1999; Schat & Kelloway, 2005). This means that low intensity mistreatment such as rude comments and speaking to a colleague in a condescending manner would constitute incivility, but more intense aggression such as physical violence does not. The literature suggests that such low intensity verbal forms of mistreatment are more common place in the work environment (Kaukiainen et al., 2001).

Secondly, the intent behind acts of incivility is ambiguous. Andersson and Pearson (1999) originally theorized that incivility instigators may behave in uncivil manner as a way to harm the organization, the target, to benefit themselves, or may also without conscious intent. For example, a person may make a rude joke about another employee as a way to humiliate the person, to show dissatisfaction with the work unit or the organization, or the person may simply have a very poor sense of humor. This is in contrast to other interpersonal deviance, such as bullying and abusive supervision wherein the intent to inflict harm to another is indisputable (Tepper, 2000; Hoel, & Cooper, 2001; Duffy, Ganster, & Pagon, 2002).

Perhaps due to its low intensity nature and instigator ambiguous intention to harm the victim, incivility incidents can be rather persistent and prevalent. For example, Cortina et al. (2001) found that 71% of employees surveyed ($n = 808$) have experienced incivility in the past 5 years. Moreover, Burns and Pope (2007) reported that over one-third of employees have either witnessed or experienced incivility incidents at least several times a month. Nevertheless, only a fraction of incivility victims file a formal complaint (i.e., 6%). One explanation for this is that the victims fear retaliation from the instigator because power, both formal and informal ones, plays in incivility incidents (Cortina et al., 2001). Other

scholars suggest that low intensity mistreatments may persist because organizations do not have sufficient understandings of incivility, or employees believe that their organization and supervisor would not be responsive to such low intensity forms of mistreatments (Estes & Wang, 2008). Regardless, what makes workplace incivility especially noteworthy is its associations with employee behaviors that would hinder the effective employee and organizational performance. Based on a large number of employee interviews and surveys, Pearson and Porath (2009) concluded that even though incivility rarely led to physical violence, people who experienced incivility were nonetheless affected deeply, and nearly everyone took an action to get even. Research indeed suggests that employees who experienced incivility tend to engage in counterproductive work behaviors directed toward other employees (Penney & Spector, 2005), report putting less work effort and reduce commitment to the organization (Burns & Pope, 2007), while some actually change their job because of incivility instigator(s) (Lim et al, 2008; Pearson & Porath, 2009).

Structures and Experiences of Affect

Affect is a broad term that can be more specifically described in terms of mood and emotions (Brief & Weiss, 2002). *Mood* is an enduring affective state typically measured in terms of the hedonic tone and arousal level (Russell, 1980), or positivity and negativity (Watson & Clark, 1984). In contrast, *emotions* are discrete, phenomenological experiences described along the two bipolar continua of the pleasure-misery and arousal-sleepiness (Russell, 1980; Warr, 1987, 2005). At the experiential level, mood is thought to be less intense, though more lasting, than emotions (Zajonc 1998). For example, a person may enjoy a mild pleasant mood throughout the day, whereas intense yet relatively short emotional feelings of surprise and fear can be experienced when the person finds a poisonous spider on his or her head. Mood and emotions are also distinguishable by their specificity. Whereas mood is typically not tied to a specific object or a person (Morris, 1989), emotions are often preceded by a known emotion eliciting event (e.g., I was surprised because of the spider; Frijda, 1993). In AET, Weiss and Cropanzano (1996) also defined affect in terms of both mood and emotions. However, they suggested that because mood is often disconnected from their causal objects or events, they bear fewer behavioral implications (Weiss & Cropanzano, 1996; c.f., Morris, 1989; Repetti, 1989). On the other hand, emotions

are specific and events- or situation-oriented feelings that are intense enough to influence individual behaviors, as well as their thought processes (Zajonc, 1998). In effect, employees' on-the-job emotions can be important for understanding and predicting their affective and behavioral strains at the workplace. The current study also defined affect as employee emotional experiences.

Hypotheses Development

Coworker Incivility and Employee Emotional Reaction

AET (Weiss & Cropanzano, 1996) suggests that people are emotionally responsive to events at the workplace. Earlier research has indeed demonstrated that positive events such as social interactions with colleagues promote positive emotions (Nielsen, Jex, & Adams, 2000; Greenglass & Fiksenbaum, 2009), whereas negative events such as facing abusive supervisors can induce negative emotions in subordinates (Harvey, Stoner, Hochwarter, & Kacmar, 2007). Moreover, there is a meta-analytical evidence to suggest that interpersonal mistreatments relate to a variety of undesirable affective reactions including dissatisfaction with work, depression, a decrease in self-esteem, and anxiety (e.g., Bowling & Beehr, 2006). Thus, interpersonal mistreatments can be antecedents to negative emotional responses in individuals (Feshbach, 1986). Similarly, experiencing workplace incivility from colleagues, such as being treated in rude or condescending manners, is damaging to the targeted individuals' emotions (Pearson Andersson, & Wegner, 2001). Thus, both theory and research suggest that incivility should relate negatively to individual's emotion. Accordingly, I hypothesize;

Hypothesis 1 (H1): Coworker instigated workplace incivility is positively related to negative emotions.

Emotion and Work Behavior

Work effort. Work effort can be broadly defined as the amount of attentional resources that a person expends toward job tasks (Yeo & Neal, 2004). Work effort has also been defined in terms of the consistency, persistence, and intensity of individuals to completing some tasks (Campbell, 1990). Based on a large number of motivation studies (e.g., Bagozzi, Baumgartner, & Pieters, 1998; Dalal, Lam, Weiss, Welch, & Hulin, 2009; see DeShon & Gillespie, 2005, for discussion), we know that people's emotions and effort expenditures are closely tied together. At the physiological level, emotion-related activities are processed widely across the brain (Braver, Cohen, & Barch, 2002), and these activities exert fast and powerful influence on the attention management mechanism, such as dividing and switching of attentions (Paulitzki, Risko, Oakman, & Stolz, 2008). Moreover, an increase or a decrease in dopamine, an affect-

related neurotransmitter, modulates the maintenance of effortful, self-regulation (Diefendorff & Lord, 2008). At higher-order levels, emotion may contribute to people's volitions (Klein, Austin, & Cooper, 2008). For example, a manipulation of emotion influences whether a person accepts a challenging task (Hom & Arbuckle, 1988). Moreover, research on work engagement suggests that there is a great correspondence between people's emotion and behavioral engagement. For example, positive emotions such as enjoyment and joy predict behavioral engagement such as effort, action initiations, and persistence (Skinner, Furrer, Marchand, & Kindermann, 2008). In contrast, negative emotions such as sadness and frustration predict behavioral disengagement such as inattention and slacking.

AET (Weiss & Cropanzano, 1996) postulates that significant affective events are able to influence employee behaviors because these events impact people's emotions. Such a proposition is not entirely new. Motivation scholars also argue that emotions mediate the relationship between events and behaviors (e.g., Mitchell, Harman, Lee, & Lee, 2008). Indeed, positive events at the workplace influence positive emotions, whereas negative events influence negative emotions (Miner, Glomb, & Hulin, 2005). Positive emotions, in turn, promotes a socially expansive, approach motivation (Cunningham, Steinberg, & Grey, 1980), and these motives may also bring about employee willingness to engaging in such motivation-laden behaviors as organization-directed and colleague-directed citizenship behaviors (Dalal et al., 2009). On the other hand, negative emotion tends to increase individuals' propensity to disengage from their job duties (Nolen-Hoeksema, 1991; Van Yperen et al., 2000). From a motivation perspective, negatively aroused affective states hinder individuals' energy or attentional resource expenditures because a person's attention is focused on the issues underlining the negative event(s) and these emotions use up time and attentional resources that could otherwise be directed toward the focal task (Weiss & Cropanzano, 1996). From an occupational health perspective, emotion-driven behaviors would be considered functional (Lazarus, 1991; Spector, 1998). That is, individuals experiencing positive emotions are motivated to maintaining positive emotions via engaging in behaviors intended to maintain that emotions, whereas negative emotions can influence individuals' propensity to engage in behaviors and thoughts that are designed to deal with negative emotions, such as escape thoughts (Brief & Weiss, 2002).

Thus, one plausible explanation as to why work incivility targets tend to report lower work effort is because incivility, by definition, is an interpersonal stressor that brings about negative emotions in them (Sakurai et al., 2011). Accordingly, it was hypothesized that negative emotion mediates the relationship between workplace incivility and employee self-reported work effort.

Hypothesis 2 (H2): Negative emotion mediates the negative relationship between coworker incivility and work effort.

Counterproductive work behaviors. Counterproductive work behaviors (CWBs) refer to employee voluntary behaviors that harm the interests of an organization (Robinson & Bennett, 1995). Previous incivility studies showed that the frequency of incivility incidents relate positively to employee CWBs including theft, work withdrawal, and production deviance (Penney & Spector, 2005). Traditionally, occupational health scholars have recognized employee emotion as a key ingredient to understanding CWBs. Lazarus and Folkman (1984), recognizing that emotions represent the immediate response to situations that are perceived as stressful, suggested that behavioral strains may reflect individuals' attempt to reduce aroused emotional states. When an employee attempts to eliminate negative emotion, s/he may engage in actions designed to eliminate that negative emotion (i.e., emotion-focused coping), some of which may be harmful to the organization (Lazarus, 1995). Similarly, Spector (1998), and Spector and Fox (2002) suggested that while CWBs, such as absenteeism and substance abuse, cannot be considered functional for the organization, these behaviors may nevertheless provide temporal solutions for employees to cope with the stressors. For example, individuals who perceive overwhelming stressors at the work may take a longer lunch break than allowed, or they may appear to be busy when they are actually not.

Like the aforementioned occupational health scholars, AET (Weiss & Cropanzano, 1996) proposes that employee affect, especially negative emotions, influences employee subsequent inefficient work behaviors. Because workplace stressors tend to evoke negative emotions in persons, and negative emotions fosters responses that are often incompatible with successful behaviors on the job (Martinez-Iñigo, Totterdell, Alcover, & Holman, 2007; Karatepe, Yorganci, & Haktanir, 2008), Weiss and

Cropanzano (1996) defined negative emotion as a mediating variable for the relationship between work events and inefficient work performances. Recent meta-analytical studies have showed that CWB relates more strongly to negative emotions (i.e., $r_m = .34$) than to perceptions of interpersonal stressors, including interactional injustice and interpersonal injustice (i.e., r_m ranged between .06 and .22; Dalal, 2005; Berry, Ones, & Sackett, 2007). These results are not the direct test of the stressor-emotion-behavioral strain hypothesis (Weiss & Cropanzano, 1996; Spector & Fox, 2002); however, studies have demonstrated that work stressors relate indirectly to CWBs through negative emotions. For example, mistreatment at work significantly related to employee negative emotion, which in turn is associated with withdrawal behaviors including an absenteeism (Schat & Kelloway, 2000) job neglect behaviors (Van Yperen, Hagedoorn, Zweers, & Postma, 2000), and angry behaviors such as expressions of frustration (Barclay, Skarlicki, & Pugh, 2005). By the same fashion, I argue that one mechanism by which workplace incivility incidents relate to employee CWBs is through the mediating effect of negative emotion. Thus, I hypothesize;

Hypothesis 3 (H3): Negative emotion mediates the relationship between coworker incivility and counterproductive work behaviors.

Social Exchange Theory

With regard to supervisor social support as a moderator of the relationship between negative emotions and the two aforementioned negative work behaviors, social exchange theory (SET; Gouldner, 1960; Blau, 1964) guided my thinking. SET is concerned with mutual investments and perceived obligations that exist between two parties, such as an employee and an organization. For example, an employee makes tangible and intangible investments to the relationship with an organization by contributing his/her time, work effort, and royalty. In turn, the employee anticipates that these contributions will be recognized (e.g., pay) and that the organization would care for her/his well-being as a member of the organization (Blau, 1964). According to the theory, receipts of benefits from the exchanging partner bring about feelings of gratitude, trust, and guilt (i.e., under-investment). In contrast, feelings of resentment and unfairness are experienced whenever their provisions of benefits are not reciprocated by the exchanging partner (i.e., over-investment). These feelings in turn have specific

implications for people's felt obligations and motivation to reciprocate benefits toward the partner. In short, the theory suggests that people are aversive to both over- and under-investment in a social exchange.

SET has served a theoretical framework for much organizational research examining the interaction between employees and their employer, and empirical support for the theory has generally been strong (e.g., Cropanzano & Mitchell, 2005; Van Knippenberg, Van Dik, & Tavares, 2007). For example, employee perceptions of the employer obligation fulfillment (e.g., fair pay for their job responsibilities and fair treatment) predicts employee felt obligation toward the organization, as well as their own fulfillment of obligations over a three years time period (Coyle-Shapiro & Neuman, 2004). Eisenberger, Armeli, Rexwinkel, Lynch, and Rhoades (2001) also demonstrated that employee affect fully mediates the relationship between perceived organizational support, and both employee organizational affective commitment and organizational spontaneity behaviors (e.g., making constructive suggestions and assisting a supervisor with their tasks). Organizational researchers have also applied social exchange theory to understanding the relationship between employee interactions with colleagues, and their subsequent affective and behavioral outcomes. Specifically, because colleagues are organizational members and parts of the organizational system, interactions with them constitute a type of employee organizational experience (Schneider, 1987). In SET, such interpersonal experiences constitute socioemotional outcome, which is defined as the symbolic and particularistic resource that promotes or hinders one's social and esteem need (Shore, Tetrick, & Barksdale, 2001). Thus, favorable treatment by organizational members brings about positive emotions and a sense of obligation to reciprocate benefits to the exchanging partner, such as one's work unit and the organization. In contrast, unfavorable treatment brings about negative emotions and a decrement in one's motivation to reciprocate. Using this framework, Chiaburu and Harrison (2008) conducted a meta-analysis to show that coworker social support correlates positively to employee organizational commitment, and negatively to job involvement and effort reduction. In contrast, coworker antagonism (e.g., incivility) correlates positively to counterproductive

work behaviors and effort reduction, and negatively to employee organizational affective commitment and job involvement.

Supervisor Social Support. Supervisor social support has been defined as communications that reflect caring, empathy, and esteem-building (i.e., *emotional support*), and the assistance in problem solving by means of tangible help or instrumental information (i.e., *instrumental support*; House, 1981; Thoits, 1985). Supportive behaviors by one's supervisor convey messages to the employee that they are treated with dignity and are a valued member of the organization (Shore et al., 2001). In the context of SET, supervisor social support would constitute a type of socioemotional outcome that motivates individuals to reciprocate positive benefits to the organization because supervisors are agents of the organization. Supervisor support also guides employee motivation for positive reciprocity because supportive behaviors by a supervisor promote employee belief or anticipations for future receipts of benefits. Indeed, research suggests that supervisor social support relate positively to employee self-reported job and organizational engagement (Saks, 2006). Support behaviors by supervisor also relate significantly to subordinates' work performance, as rated by an objective measure (Baruch-Feldman, Brondolo, Ben-Dayana, & Schwartz, 2002) and by supervisor rating (Gerstner & Day, 1997).

From the social exchange perspective, coworker instigated incivility would result in employee motivation to reduce their contributions to the organization because of felt negative reciprocity and negatively aroused emotion. However, given that supervisor social support is another socioemotional resource that promotes employee sense of obligation and motivation to reciprocate benefits toward the organization, it is possible that individuals with high levels of supervisor social support are less susceptible to reducing their levels of organizational contributions despite negative feelings created by coworker(s). This is because even though negative emotional responses to stressful stimuli (e.g., coworker incivility) may be rather natural responses, our reasons can also guide our decisions not to engage in voluntary behaviors, such as CWB and effort reduction (Greenberg, 2008). Likewise, SET theorizes individuals' decision to change their levels of contributions is a rational process. That is, people's motivation for positive and negative reciprocities is guided by their underlining perceptions of a

fair inter-dependence as well as anticipation of future receipts of benefits. Because the focal exchange partner is the organization, supervisor social support may help employees retain the sense of obligation toward the organization, as well as belief concerning future receipts of benefits from the supervisor and the organization. Therefore, I hypothesized that for those individuals with high levels of supervisor support, negative emotions should have less influence on their propensity to engaging in negative work behaviors. In contrast, low levels of supervisor social support should have little or no influence on the effects of negative emotions on employee negative reciprocity behaviors, namely CWBs and work effort reduction.

Hypothesis 4 (H4): Supervisor social support moderates the relationship between negative emotion and work effort such that the negative relationship between negative emotion and work effort is stronger for individuals with low levels of supervisor support.

Hypothesis 5 (H5): Supervisor social support moderates the relationship between negative emotion and counterproductive work behaviors such that the positive relationship between negative emotion and counterproductive work behaviors is stronger for individuals with low levels of supervisor support.

Method

Participants and Procedures

In the current two-wave study, the data were collected from a mid-sized university's full-time employees on two different occasions (2 months apart). For both Time 1 and Time 2 surveys, employees were asked to complete either a paper-and-pencil survey or an online survey (See Appendix A for the Human Subject Review Board approved consent letter). Both the number of the survey items and the contents of the items were the same between the paper-and-pencil survey and the on-line survey. The employees were also asked to provide some demographic information (see Appendix B). Of 856 employees contacted for the first survey, a total of 230 people returned their survey (response rate = 26.8%). Data from four employees had to be discarded because of a large number of unanswered questions. In the second-wave survey, 209 people returned their survey (response rate = 90.8%). Data from these 209 employees were analyzed for the current study.

In terms of the demographic characteristics, the majority of the participants was female (70%; see Table 1), the average age was 44.3 years old, and the average tenure was 13.72 years. Forty-four percent of people were administrative employees (e.g., budget coordinators and accountants) and fifty-five percent of people were classified employees (e.g., electricians and service maintenances). In terms of racial background, the majority of the participants were Caucasians (90%), followed by African Americans (4.8%), Hispanics and Latinos (3%), Asian Americans (1.3%), and Native Americans (0.9%). Chi-square tests suggest that the respondents' demographic characteristics are comparable to the overall demographic characteristics of the university employees with respect to position ($\chi^2_{(1)} = .51, ns$) and racial background ($\chi^2_{(4)} = 1.34, ns$). However, female employees ($\chi^2_{(1)} = 5.399, p < .01$) and younger employees ($t_{(229)} = -3.34, p < .05$) were more represented in the current sample.

Control Variables

Negative Affectivity. Trait negative affectivity (NA) is a stable and pervasive individual difference characterized by a tendency to experience aversive emotional states (Watson & Clark, 1984). In AET, Weiss and Cropanzano (1996, p.37) suggested that such an individual disposition "sets a stage

for individuals to have more or less intense bouts of emotions.” Research indeed suggests that trait NA can have a substantial influence on how individuals react emotionally and psychologically to work stressors (e.g., Parkes, 1990; Schaubroeck, Ganster, & Fox, 1992; Kaplan, Bradley, Luchman, & Haynes, 2009). Chen and Spector (1991) also demonstrated that a correlation between interpersonal stressor and a variety of negative emotions decrease by 31% to 48% when NA is introduced as a covariate. In the current study, I included trait NA as a control variable because it may inflate the observed stressor-strain relationships (Podsakoff, MacKenzie, Podsakoff, & Lee, 2003).

Job Autonomy. Job autonomy refers to the extent of freedom, independence, and discretion that a job provides to an employee in carrying out his or her work (Hackman & Oldham, 1975). The current study included job autonomy as a control variable because employees with different degrees of job autonomy might differ in their freedom to engage in inefficient work behaviors, to deal with work stressors (Fox, Spector, & Miles, 2001).

Age. The current study controlled for age because past studies suggest that older employees are less likely than younger employees to engage in counterproductive work behaviors (Berry et al, 2007; Ng & Feldman, 2008).

Job Type. Participants in the current study can be classified into two major job groups: administrative and classified employees. I controlled for job type because administrative and classified employees may differ in the degree of social interactions required to conduct their work. When the degree of social demands are different, emotional demands and the frequency of incivility incidents experienced may also differ.

Analytical Approach

Concurrent Effect Analyses. The current study was designed to examine the concurrent effects of coworker incivility on employees’ negative emotions, work effort, and CWBs. A concurrent effect refers to synchronous effects of a Time 2 predictor on a Time 2 criterion variable while controlling for the effects of Time 1 criterion variable. For example, in order to test Hypothesis 1, Time 2 negative emotion was regressed on both Time 1 negative emotions and Time 2 coworker incivility. Conceptually, a

concurrent effect analysis controls for initial levels of strains, and this helps researchers rule out some, if not all, alternative interpretations (e.g., Time 2 strain is due to effects of Time 1 strain). In the current study, I controlled for the effect of the relevant Time 1 criterion variable in all of the hypotheses tests.

Mediation. In order to test Hypotheses 2 and 3 (see Figure 2), mediation tests were required. According to Baron and Kenny (1986), mediation occurs when a third variable functions as a generating mechanism through which the focal predictor variable is able to influence the criterion variable. According to these authors, one needs to show four specific conditions in order to demonstrate a mediation effect. These include a) an effect of the predictor on the middle variable, b) an effect of the predictor on the criterion, c) an effect of the middle variable on the criterion variable, and d) a smaller main effect of the middle variable on the criterion than that of the predictor variable when both the predictor and the middle are entered into the equation. The current study also follows this four-step approach to testing the mediation hypotheses.

In addition, bootstrap tests were run to supplement the last of the four-step mediation test (i.e., the indirect effect test). The bootstrap test is a non-parametric simulation test and, when applied to a mediation test, it can be used to estimate a lower and a higher interval of the indirect effect (Shrout & Bolger, 2002). A significant indirect effect is demonstrated when the confidence interval does not overlap with zero (Shrout & Bolger, 2002). The bootstrap test of the indirect effect is preferable over the traditional Sobel test (1982) because the standard error estimate in an indirect effect test tends to deviate from a normal distribution (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), and therefore the *p*-value estimate based on Sobel's test's (which uses a normal Z-distribution) is not always accurate.

Moderation. In order to test Hypotheses 4 and 5, moderator analyses were required. A moderator variable's function is to partition the predictor variable into two or more subgroups, such that the magnitude or the direction of the relationship between different levels of the predictor and the criterion differ (Baron & Kenney, 1986). In order to test the moderator hypotheses, I ran hierarchical moderated regression analyses, wherein the control variables (Step 1), the predictor and the moderator (Step 2), and the interaction term (Step 3) were entered into the regression equation in a successive order.

Based on West and Aiken's (1991) recommendation, both the predictor and the moderator in these hypotheses (i.e., negative emotions and supervisor social support) were centered around the grand mean score. The main purpose of centering variables is to increase the interpretability of the analysis output (i.e., read the regression outputs in their standard unit terms).

Conditional Indirect Effect. The hypothesized model (Figure 2) suggests that coworker incivility has indirect effects on both work effort and CWBs via negative emotions. However, assuming that supervisor social support moderates the relationship between negative emotions and both work effort and CWBs, it is plausible that the strength of the indirect effects of coworker incivility are weaker for employees who report high levels of supervisor social support than employees who report low levels of supervisor social support. In order to fully consider such contingent indirect effects, or what has been termed *conditional indirect effects* (Edwards & Lambert, 2007), I conducted a series of analyses outlined by Preacher, Rucker, and Hayes (2007). According to Preacher et al. (2007), a conditional indirect effect is demonstrated when the strength of the first predictor effect on the criterion variable (i.e., indirect effect) differs across high and low levels of a moderator variable. Following Preacher et al.'s (2007) recommendation, I have operationalized a high and a low moderator values as one standard deviation above the mean and one standard deviation below the mean, respectively.

Additionally, because a conditional indirect effect test is simply an extension of a mediation test, which applies the normal distribution Z-test for the product of two causal path estimates conditioned on a given value of a moderator variable (Preacher et al.'s, 2007), concerns about a violation of normal distribution assumption still applies. Therefore, I have conducted bootstrap tests of conditional indirect effects analyses in order to supplement the aforementioned Z-test of conditional indirect effects. Bootstrap tests of conditional indirect effects will be used to examine a) the null hypothesis of no indirect effect (i.e., confidence interval includes zero) for different values of the moderator, and b) whether the size of indirect effects are stronger for low levels of supervisor social support than high levels of supervisor social support.

Measures

Trait negative affectivity. Trait negative affectivity was measured by the Positive Affect and Negative Affect scale (PANAS; Watson, Clark, & Tellegen, 1988; Appendix C). PANAS consists of 20 adjectives that describe positive and negative emotions (e.g., enthusiastic and afraid), and respondents indicated the extent to which they generally feel each of these emotions on a 5-point Likert-type scale, ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). Only the 10 items pertaining to trait negative affectivity were used for the current study. Reliability, as measured by Cronbach's alpha for this sample was $\alpha = .89$.

Job autonomy. Job autonomy was measured by job autonomy items from the revised Job Diagnostic Survey (Idaszak & Drasgow, 1987; Appendix D). The scale contains three items and the respondents rated the items on a 7-point Likert type scale ranging from 1(very little) to 7(very much). A sample item is, "how much autonomy is there in your job?" Reliability, as measured by Cronbach's alpha for this sample was $\alpha = .88$.

Coworker incivility. The Workplace Incivility Scale (WIC) by Cortina et al. (2001; Appendix E) was used to measure coworker incivility. Respondents were asked to indicate the frequency with which their coworker(s) engaged in each incivility in the past month. The items were rated on a 5-point Likert-type scale, ranging from 1 (*never*) to 5 (*every day*). A sample item is, "Have you been in a situation where any one of your coworker put you down or was condescending to you?" Reliability, as measured by Cronbach's alpha was $\alpha = .86$.

Negative emotion. Ten items from the Job-related Affective Wellbeing Scale (JAWS; Van Katwyk, Fox, Spector, & Kelloway, 1999) were used to measure negative emotions. Respondents indicated on a 5-point Likert-type scale the degree to which they experienced 10 specific negative emotions because of their coworkers (Appendix F). Reliability, as measured by Cronbach's alpha was Time 1, $\alpha = .90$, and Time 2, $\alpha = .91$.

Supervisor social support. The supervisor social support subscale from Caplan, Cobb, French, Van Harrison, & Pinneau's (1975; Appendix G) social support scale was used. This measures on a 5-point Likert-type scale the extent to which a respondent perceives that a supervisor provides emotional

and instrumental support. A sample item is “Your supervisor goes out of their way to do things to make your work life easier for you.” Reliability, as measured by Cronbach’s alpha was $\alpha = .91$.

Work effort. The Work Effort Scale (WES) by De Cooman, De Gieter, Pepermans, Jegers, and Van Acker (2009) was used to measure self-reported work effort (Appendix H). A sample item is, “I did my best to do what is expected of me” Respondents indicated the degree to which they agree with each of the six items on a 7-point Likert-type scale. Reliability, as measured by Cronbach’s alpha was Time 1, $\alpha = .96$ and Time 2, $\alpha = .94$.

Counterproductive work behaviors (CWB). CWB was measured by a nineteen-items scale by Bennett and Robinson (2000; Appendix I). The respondents indicated the frequency with which they have engaged in each of the behaviors over the past month. The items were measured on a 5-point ranging from 1(never) to 5(every day). A sample item is “(I have) taken properties from work without permission.” Reliability, as measured by Cronbach’s alpha was Time 1, $\alpha = .86$ and Time 2, $\alpha = .88$.

Results

Descriptive statistics and zero-order correlation for all the variables are shown in Table 2. Time 2 coworker incivility was positively correlated with both Time 2 emotional strain ($r = .53$) and Time 2 CWBs ($r = .26$). In contrast, time 2 coworker incivility was negatively correlated with Time 2 work effort ($r = -.30$). These outcomes replicate previous studies which found that targets of workplace incivility tend to report affective (Pearson et al., 2001) and behavioral strains (Penney & Spector, 2005; Burnes & Pope, 2007). CWBs scores had a low average score ($M = 1.45$) with a relatively low variation ($SD = 0.54$). Although these are consistent with CWBs literature which suggest that CWBs tend to be low base-rate phenomena with low to moderately low variance (Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006; Spector, Bauer, & Fox, 2010), one possible problem for the current study is the underestimation of regression weights due to a restriction of range and a violation of linearity assumption. I decided not to perform a data transformation given that multiple regression analyses are generally robust in the face of departures from these assumptions (Hanushek & Jackson, 1977; Pedhazur, 1997).

Hypotheses Testing

Relationship between coworker incivility and negative emotions. According to Hypothesis 1, coworker incivility would predict targets' negative emotions. Controlling for trait negative affectivity, age, and Time 1 negative emotions, coworker incivility was significantly related to negative emotions ($b = .26, p < .01, \Delta R^2 = .06$; Table 3). Therefore, Hypothesis 1 was supported. This result also satisfies the first condition of Baron and Kenny's (1986) four-step mediation test for both Hypotheses 2 and 3. In order to avoid redundancy, the result regarding the relationship between coworker incivility and negative emotions is not repeated in the subsequent mediation test sections.

Negative emotions as a mediator of the relationship between coworker incivility and work effort. Hypothesis 2 predicted that negative emotions would mediate the relationship between coworker incivility and work effort. As Table 4 shows, coworker incivility was significantly and negatively related to work effort ($b = -.15, p < .01$). This result satisfies the second condition of Baron and Kenny's (1986) mediation test. Negative emotion was significantly related to work effort ($b = -.27, p < .01$); therefore,

the third condition was also satisfied. Finally, when both coworker incivility and negative emotion were entered into the equation, coworker incivility no longer predicted work effort ($b = -.08$, ns ; $\Delta R^2 = .03$). Results from the bootstrapping procedure indicated that the estimated indirect effect coworker incivility on work effort was statistically significant ($-.08$, $p < .01$). The confidence interval did not include zero as well (i.e., the 95% CI ranged from $-.03$ to $-.14$). Thus, there was support for hypotheses H2.

Negative emotions as a mediator of the relationship between coworker incivility and CWBs.

Hypothesis 3 predicted that negative emotions would mediate the relationship between coworker incivility and CWBs. As Table 4 shows, coworker incivility was significantly and negatively related to CWBs ($b = .14$, $p < .05$). This result satisfies the second condition of Baron and Kenny's (1986) mediation test. Negative emotion was significantly related to CWBs ($b = .47$, $p < .01$). Finally, when both coworker incivility and negative emotion was entered into the equation, coworker incivility no longer predicted CWBs ($b = .02$, ns ; $\Delta R^2 = .09$). Results from the bootstrap procedure indicated that the indirect effect of coworker incivility on CWBs was statistically significant ($.13$, $p < .01$; the 95% CI ranged from $.06$ to $.19$). Thus, there was support for hypotheses H3.

Supervisor social support as a moderator of the relationship between negative emotions and work effort. According to Hypotheses 4 and 5, supervisor social support would moderate the relationship between negative emotions, and work efforts and CWBs, respectively. As Table 5 shows, supervisor social support moderated the relationship between negative emotions and work effort ($b = .19$, $p < .01$, $\Delta R^2 = .03$). The significant regression coefficient of the interaction term suggests that the strength of the relationship between negative emotions and work effort differed depending on the degree of supervisor social support. Specifically, the negative relationship between negative emotions and work effort was stronger for employees who reported high levels of supervisor social support compared to employees who reported low levels of supervisor social support (Figure 3). A follow up simple slope analyses showed that negative emotions were related to lower work effort for employees who reported low level of supervisor social support, $t(206) = -.420$, $p < .01$. In contrast, negative emotions did not

significantly decrease (or increase) work effort for employees who benefited from high levels of supervisor social support, $t(206) = -.049, ns$. Therefore, there was support for Hypothesis 4.

Conditional indirect effect. With regard to conditional indirect effects, results (Table 6) show that the indirect effect of coworker incivility on work effort was statistically significant and stronger when the supervisor social support value is high (indirect effect = $-.174, p < .05$) compared to when supervisor social support is low (indirect effect = $-.008, ns$). Figure 4 shows both bootstrap mean estimates and the 95% confidence interval of coworker incivility's indirect effects on work effort across a range of supervisor social support (i.e., the moderator). As can be seen in the figure, negative indirect effects of coworker incivility on work effort are stronger for lower levels of supervisor social support than higher levels of supervisor social support. In addition, at the supervisor social support value of 3.1, the indirect effect is no longer statistically significant because the confidence intervals include zero. With regard to Hypothesis 5, the relationship between negative emotions and CWBs was not moderated by supervisor social support ($b = -.08, ns, \Delta R^2 = .01$). Therefore, there was no support for Hypothesis 5.

Discussion

Summary of Findings

The current study investigated the relationships among coworker incivility, CWBs and work effort. Based on affective events theory, I proposed that coworker incivility has negative influences on work effort and CWBs via the mediating effects of negative emotions. Study results supported both of the hypothesized mediated relationships. In addition, I investigated the moderator effects of supervisor social support for the relationship between negative emotions and the aforementioned inefficient work behaviors. With regard to work effort, study results supported the moderator hypothesis: when employees perceived a high level of supervisor social support, negative emotions were not as strongly related to decreased work effort, compared with employees for whom the level of supervisor social support was low. With regard to CWBs, however, supervisor social support did not moderate the relationship between negative emotions and CWBs. One possible explanation for this is that there was insufficient statistical power. The statistical power of a moderated regression analysis can be low because the effect size of the interaction term is reduced by the main effects of low-order variables and an inflated standard error of the product of the low-order predictors (Aiken & West, 1991; Aguinis, 1995). Statistical power can be further decreased when there are not enough variations in the criterion variable (Aguinis, 1995). In the current study, CWB's variability and frequency were low ($SD = .54$; $M = 1.45$).¹ Consequently, the statistical power to detect a significant interaction was inevitably lowered.

Alternatively, it is possible that supervisor social support simply did not help reduce employees' propensity to engage in counterproductive work behaviors because employees did not find supervisor support to be helpful when dealing with uncivil coworkers. The employees may have instead attempted to deal with negative emotions from coworker incivility by taking a longer break, or by littering work areas near the rude coworkers' desk. Importantly, counterproductive behaviors are not always visible by one's supervisor. More typically, it is in the best interest of an employee to hide such behaviors from his/her supervisor (Spector, Bauer, & Fox, 2010). It is possible that social support did not serve as an effective coping resource to help employees refrain from engaging in counterproductive behaviors

¹ In a follow-up analysis, I rerun the same moderator analysis with three extremely low frequency CWB items removed (i.e., more than 80% indicating "never"). However, the result was the same.

because they perceive that they can engage in such behaviors without being noticed by their supervisor, and in doing so, felt that they could deal with negative emotions (e.g., take longer breaks or intentionally litter the work areas).

Theoretical Implications

I believe that the results from the current study extend the existing incivility literature in several ways. First, one of the defining characteristic of incivility is its ambiguous nature with respect to the instigator's intent (Andersson & Pearson, 1999). As such, incivility victims are often confused about the intention behind seemingly rude, uncivil behaviors. For example, incivility targets might perceive that the instigator has malicious intent, poor social skills, or is simply having a bad day at work (Pearson et al., 2001). According to Lazarus (1995), an event becomes stressful when a person perceives an actual or potential harm in the event. In affective events theory, Weiss and Cropanzano (1996) suggested similarly that for a person to experience an emotion, events in the person's environment have to be appraised. Because the intent behind incivility incidents is ambiguous and there can be variations in how targets interpret the act of incivility, one critical key for understanding the impact of incivility may be the degree to which incivility brings about negative emotional responses. Following this logic, Cortina and Magley (2009) demonstrated that there are indeed individual differences in threat appraisals to incivility incidents including the degree of frustration, embarrassment, and annoyance. In the current study, I extended this result by showing that incivility might be detrimental to work-related outcomes (e.g., CWBs and work effort) when incivility is associated with negative emotions in victims.

Secondly, I determined whether supervisor social support, as a socio-emotional resource, would mitigate the indirect effects of coworker incivility on work effort. Results supported the moderated mediation mechanism, whereby the indirect effects on work effort are weaker for incivility targets who reported high levels of supervisor social support than those who reported low levels of support. In AET, Weiss and Cropanzano (1996) acknowledged that affective-driven behaviors may be influenced by coping resources or mood management processes; however, their theoretical model does not explicitly address moderator variables. Results from the current study imply that the relationship between an affective event,

affective reactions, and affect-driven behaviors may be somewhat more complex than proposed. It is possible that, as social exchange theory (Gouldner, 1960; Shore et al., 2001) suggests, supervisor social support may have helped employees maintain high levels of work effort (i.e., organizational contribution) because it promoted employees' felt obligation to benefit the organization, anticipation of future benefits, or both. Additionally, one of the most important goals of the current investigation was to study workplace incivility from the stress coping perspective because such research is scarce in the incivility literature. Results from the current study suggest that social support might be a helpful coping resource for incivility victims with regard to some work-related variables.

Thirdly, much of the existing workplace incivility studies have relied on cross-sectional research designs (e.g., Cortina et al., 2001; Lim et al., 2008; Sakurai, et al., 2011) or a student sample (Spector & Fox, 2005). Therefore, several authors have called for more rigorous investigations of workplace incivility, in order to clarify the relationship between incivility and its purported employee outcomes (Cortina et al., 2001; Penney & Spector, 2005). The current study helps address this by showing a concurrent direct effect of coworker incivility on emotional strains, as well as concurrent indirect effects of coworker incivility on both work effort and counterproductive work behaviors.

The current study found that employee negative emotion is significantly associated with CWBs ($r = .47$). This outcome is similar to the mean correlation between negative emotion and CWBs of .41 reported by a recent meta-analytical study by Dalal (2005). In the occupational health literature, an increasing popular view is that employee emotions play a key role in the prediction of work-related behaviors (Spector, 1998; Brief & Weiss, 2002; Spector & Fox, 2002; Schat & Kelloway, 2005). According to this perspective, employees' aroused emotion fosters certain action tendencies. In the case of negative emotions, people are posited to engage in behaviors that are designed to reduce that negative emotion (Spector & Fox, 2002), some of which are counterproductive to the organization's goals. The current analyses also found that negative emotions significantly predict CWBs while controlling for the baseline negative emotions and CWBs (i.e., Time 1 variables; Table 2). This result provides additional support for the contention that negative emotions foster employee counterproductive work behaviors.

Practical Implications

Workplace incivility might be a prevalent phenomenon in many organizations (Andersson & Pearson, 1999; Pearson et al., 2001). Research findings are also accumulating that organizations may lose productivity (Penney & Spector, 2005; Burnes & Pope, 2007) and employees due to voluntary turnover (Lim et al., 2008). Admittedly, however, incivility can be a difficult phenomenon for organizations to recognize or to control because incivility is a low intensity form of interpersonal mistreatment and targeted employees do not always make formal complaints. Furthermore, it may be the case that incivility is an inevitable aspect of the work environment to some degree because people in many organizations need to work with other employees who have different values, personalities, and standards for interpersonal behaviors in terms of what is acceptable and what is not. As Zemke, Raines, and Filipczak (2000) described,

There is a problem in the workplace—a problem not derived from downsizing, right sizing, change, technology, foreign competition, pointy-haired bosses, bad breath, cubicle envy, or greed. It is a problem of values, ambitions, views, mindsets, demographics and generations in conflict. (pp. 9-10).

Nevertheless, there are several ways in which organizations may reduce incivility or mitigate its impacts. First, some incivility incidents may be attributed to miscommunications by the instigator or misinterpretations on the part of incivility victim because people do not always convey their intent accurately through words nor do people always perceive others' messages accurately (Keysar & Henly, 2002; Brone, 2008). Thus, for example, supervisors may stress the importance of accurate and respectful communications among their employees. Secondly, the current study found that supervisor social support moderates the negative indirect effects of coworker incivility on work effort. This means that supportive supervisors may function as a resource that mitigates employees' behavioral strains in response to workplace incivility.

Limitations and Future Research

The current study has several limitations that may have affected the results. First, I used self-reported measures for all the analyses. The use of self-reports potentially raises concerns about common method bias (Podsakoff et al., 2003). However, I attempted to minimize common method variance by controlling for the base-line criterion scores, trait negative affectivity, and by stressing to the participants about anonymity of their responses. Secondly, the participants consisted mainly of females (70%) and Caucasians (90%). Such over-representations of particular groups raise concerns in terms of the generalizability of the findings (Brewer, 2000). On a related point, the low response rate (24.4%) is a potential problem in terms of sample representativeness or a discrepancy between respondents and non-respondents (Fowler, 1988). However, a meta-analysis by Schalm and Kelloway (2001) showed that correlations between effect sizes and response rate are small in occupational health research. As such, disqualifying study findings based on a low response rate alone may not be justified. Thirdly, the current study did not control for the number of social interactions between the respondents and their coworkers. The number of social interactions or the social demands of the job may influence the observed relationships between coworker incivility and employee work behaviors because coworker incivility is less likely to occur when employees rarely or do not see their coworkers. In the current study, I controlled for job type, which may relate to the number of social interactions on the job. Nonetheless, it would have been better to control for the actual number of social interactions.

With regard to future directions, occupational health researchers can extend investigations of coping with workplace incivility. Because workplace incivility is a type of an interpersonal stressor, and it therefore must occur between two (or more) persons, the way in which the target reacts to the instigator may have important implications. For example, a person may respond to an uncivil coworker with anger, humor, avoidance, cynicism, and so on. These behaviors, in turn, may influence the frequency of incivility incidents over time or the intensity of interpersonal aggression between the employees as Andersson and Pearson (1999) have described. In addition, although the current study focused on coworker-based incivility, it is possible for employees to experience incivility from other sources, such as their supervisor and customers (Kern & Grandey, 2009). One logical next research step, therefore, might

be to address employees' coping with incivility from different sources. Another future direction is to conduct more scientifically rigorous studies of workplace incivility. Although the current study has several strengths, it does not allow for causal conclusions to be drawn. More research is needed to clarify the true directionality between variables studied in the current study. In a related point, the current study examined hypotheses based on AET (Weiss & Cropanzano, 1996) using two-wave survey data. However, because the theory describes dynamic events-based processes among an affective event, affective response, and employees' spontaneous behaviors, a more appropriate test of the theory requires alternative research design, such as the event based method or the diary study approach (Bolger, Davis, & Rafaeli, 2003).

Conclusion

Although workplace incivility is a low intensity form of interpersonal mistreatment, a growing consensus among incivility researchers seems to be that a high level of incivility among employees has negative influences on targeted employees' work performance, as well as the work unit's performance (Cortina et al., 2001; Pearson & Porath, 2009). Results from the current study suggest that while incivility relate to undesirable work-related outcomes (i.e., effort reduction and CWBs), their relationships are mediated by the targets' negative affective response. These observations may be attributed to ambiguous nature of incivility with respect to the instigator's intention to harm the target. It may that, for example, a similar incivility incident is appraised differently because people do not always perceive others' intention accurately. Alternatively, it may be that an incivility incident poses different degree of threat to the incivility target because of differences in the nature of the relationship between the instigator and the target, such as the degree of task-interdependence or the physical proximity of the working space. Finally, although incivility may be a difficult problem for the organizations to control, organizational leaders and managers should note the importance of supervisor social support when dealing with behavioral strains of the targeted employees that harm the performance of the organization. It is important to note, however, that social support does not directly deal with incivility incidents. In the future, researchers should focus on identifying factors that separate organizations that have a high level of

incivility among their employees from those that do not. In addition, research identifying individual differences in experienced incivility may have important implications for reducing incivility in the workplace.

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Table 1

A Comparison of the Study Sample's Demographics and University Population Pool Demographics

	Current Study's Sample (<i>N</i> = 209)	University Population Pool (<i>N</i> = 1289)
Job Type:		
Administrative Employees	44%	42%
Classified Employees	55%	58%
Gender:		
Female Employees	70%	63%
Male Employees	30%	37%
Age (Mean):	44.3 years old	47.27 years old
Racial Background:		
Caucasians	90%	89.9%
African Americans	4.8%	3.8%
Hispanics and Latinos	3.4%	4.8%
Asian Americans	1%	1.2%

Table 2

Descriptive Statistics and Correlations

Variable	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	44.3 (11.4)												
2. Job Type	1.44 (0.50)	-.03											
3. Negative Affectivity	1.60 (0.60)	-.19	.02	(.89)									
4. Job Autonomy	5.55 (1.30)	.02	.08	-.16	(.88)								
5. Supervisor Social Support	2.81 (0.86)	-.02	.06	-.24	.33	(.91)							
6. Negative Emotions (Time 1)	2.16 (0.79)	-.26	.03	.57	-.23	-.44	(.90)						
7. Work Effort (Time 1)	6.32 (0.91)	.20	.03	-.10	-.01	.14	-.31	(.96)					
8. CWBs (Time 1)	1.53 (0.55)	-.27	-.04	.14	.01	-.13	.30	-.33	(.86)				
9. Coworker Incivility (Time 2)	1.67 (0.70)	-.03	-.04	.27	-.23	-.35	.42	-.14	.13	(.86)			
10. Negative Emotions (Time 2)	2.05 (0.81)	-.13	.07	.46	-.18	-.43	.73	-.25	.22	.53	(.91)		
11. Work Effort (Time 2)	6.13 (0.85)	.14	.13	-.28	.08	.28	-.41	.64	-.27	-.30	-.47	(.94)	
12. CWBs (Time 2)	1.45 (0.54)	-.16	-.02	.22	-.08	-.25	.32	-.27	.65	.26	.46	-.48	(.88)

Note. $N = 202$. CWBs = Counterproductive Work Behaviors. Job Type: 1 = classified and 2 = for administrative. Correlation coefficients greater than .14 and .18, and smaller than -.14 and -.18 are statistically significant at $p < .05$ and $p < .01$, respectively.

Table 3

A Hierarchical Regression Analysis Examining Coworker Incivility as a Predictor of Negative Emotions

	Criterion: Negative Emotions (Time 2)	
	Step 1	Step 2
Age	.07	.04
Negative Affectivity	.06	.04
Job Type	.04	.06
Negative Emotions (Time 1)	.72**	.61**
Coworker Incivility (Time 2)		.26**
R^2	.55**	.61**
ΔR^2		.06**

Note. Standardized values are shown. Job Type: 1 = classified and 2 = for administrative. * $p < .05$, ** p

$< .01$

Table 4

Hierarchical Regression Analyses Examining Negative Emotions as Mediator of the relationship between Coworker Incivility and Work Behaviors.

	Criterion Variables					
	Work Efforts			CWBs		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Control Variables						
Age	-.04	-.03	-.02	.05	.04	.02
Negative Affectivity	-.15*	-.14*	-.12*	.08	.07	.05
Job Autonomy	.04	.02	.02	-.05	-.03	-.03
Job Type	-.14**	-.15**	-.13**	.01	.02	-.01
Negative Emotions (Time 1)	-.14*	-.09	.08	.09	.04	-.25**
Work Effort (Time 1)	.59**	.59**	.58**	—	—	—
Counterproductive Work Behaviors (Time 1)	—	—	—	.63**	.62**	.62*
Predictor Variable						
Coworker Incivility (Time 2)		-.15**	-.08		.14*	.02
Mediator Variable						
Negative Emotions (Time 2)			-.27**			.47**
R^2	.49**	.51*	.54**	.45**	.47*	.55**
ΔR^2		.02*	.03**		.02*	.09**

Note. Standardized values are shown. Job Type: 1 = classified and 2 = for administrative. * $p < .05$, ** $p < .01$. CWBs = Counterproductive Work Behaviors.

Table 5

Hierarchical Regression Analyses Examining Supervisor Social Support as Moderator of the relationship between Negative Emotions and Work Behaviors.

	Criterion Variables					
	Work Efforts			CWBs		
	Step 1	Step2	Step 3	Step 1	Step 2	Step 3
Control Variables						
Age	-.03	-.02	.00	.04	.04	.03
Negative Affectivity	-.21**	-.10	-.11*	.13*	-.01	-.01
Job Autonomy	.07	.01	.01	-.06	-.01	-.01
Job Type	-.15**	-.14**	-.14**	-.03	-.01	-.01
Work Effort (Time 1)	.63**	.57**	.54**			
Counterproductive Work Behaviors (Time 1)				.65**	.59**	.59**
Predictor Variable						
Negative Emotions (Time 2)		-.24**	-.20**		.33**	.31**
Moderator Variable						
Supervisor Social Support		.08	.06		-.04	-.02
Interaction Term						
Negative Emotions x Supervisor Social Support			.19**			-.08
R^2	.48**	.54**	.57**	.45**	.53**	.54
ΔR^2		.06**	.03**		.09**	.01

Note. Standardized values are shown. * $p < .05$, ** $p < .01$. CWBs = Counterproductive Work Behaviors.

Table 6

Conditional Indirect effects of Coworker Incivility on Work Behaviors at a high and a low Supervisor Social Support.

	Criterion: Work Effort (Time 2)		
	Indirect Effect	SE	Z
Supervisor Social Support Values			
1.95 (-1 SD)	-.174	.07	-2.43*
2.81 (Mean)	-.083	.04	-2.09*
3.68 (+1SD)	-.008	.05	-.14

Note. * $p < .05$

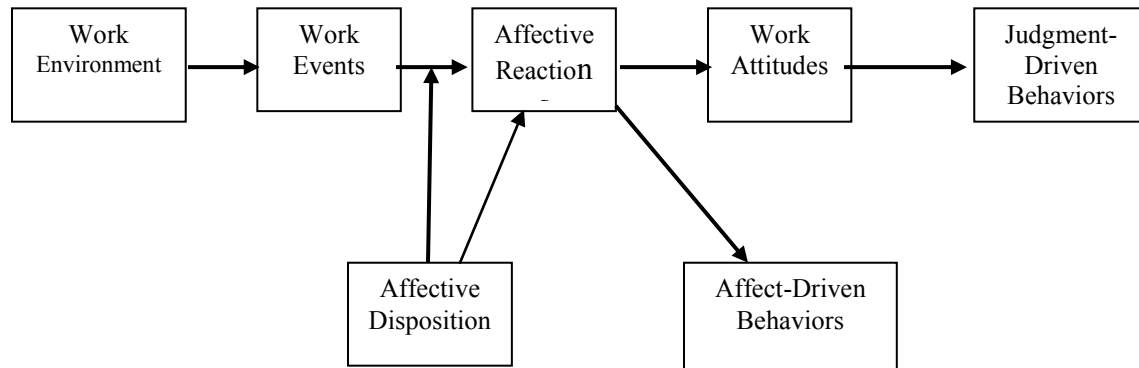


Figure 1. Affective events theory (Weiss & Cropanzano, 1996).

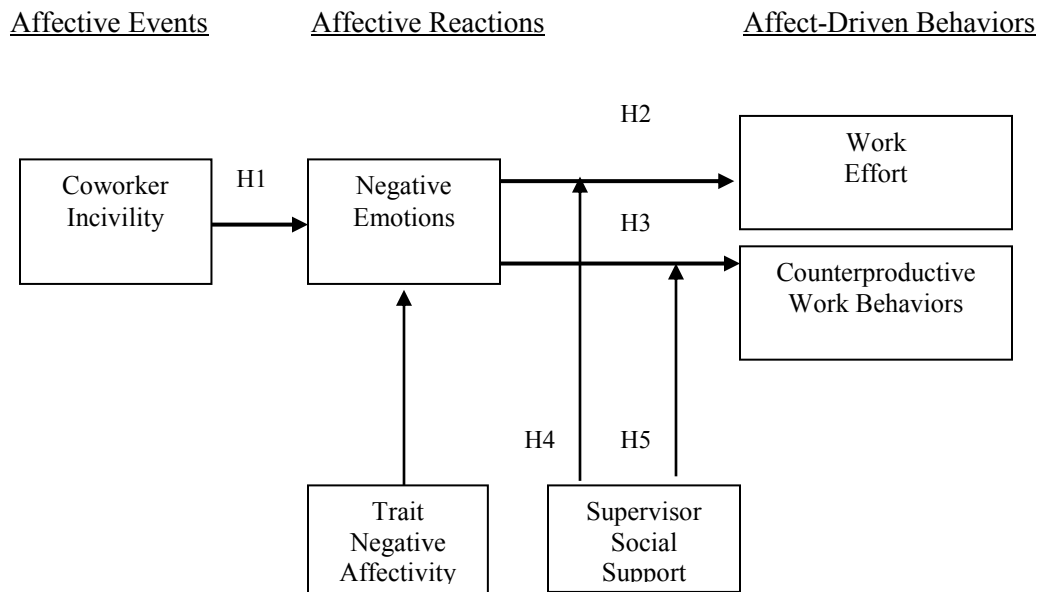


Figure 2. Affective event theory based model of coworker incivility to inefficient work behaviors.

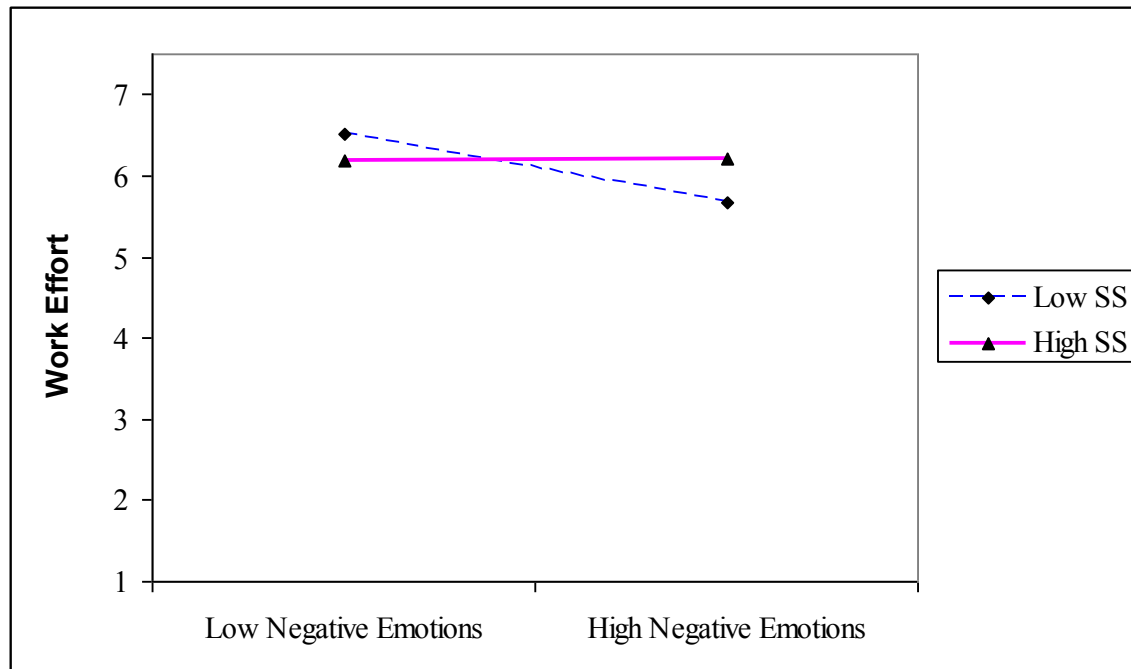


Figure 3. A plot showing interaction effects of negative emotions and supervisor social support on work effort. SS = Supervisor social support.

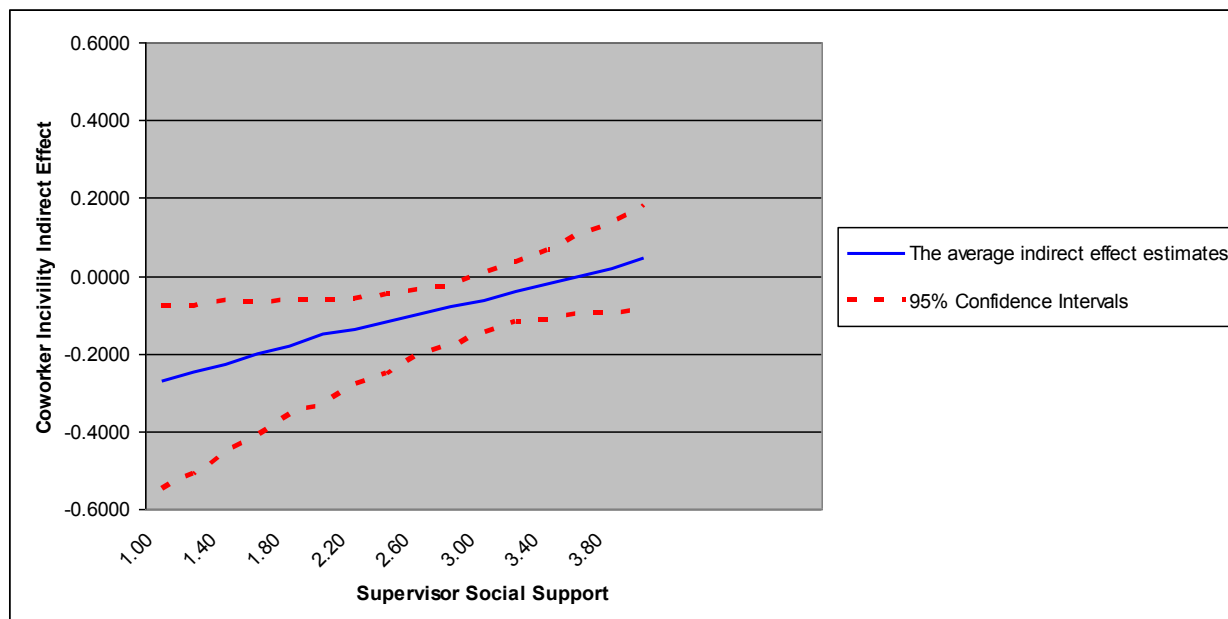


Figure 4. A plot showing bootstrap indirect effect estimates of coworker incivility on work effort across different values of supervisor social support. The straight line shows the average indirect effect estimates and the dashed lines show the upper and the lower 95% confidence intervals.

Appendix A

HSRB Consent Letter



BOWLING GREEN STATE UNIVERSITY

 Department of Psychology, Bowling Green State University 43403
 (419) 372-2301

 INFORMATION STATEMENT FORM
 Workplace Incivility Survey Study

I am Ken Sakurai, a doctoral student at Bowling Green State University, and I am recruiting BGSU employees for a survey research. I am specifically recruiting BGSU employees who 1) work full time, 2) are at least 18 years old, and 3) have at least one supervisor and a coworker (a coworker refers to another employee of a similar organizational status). If these apply to you, please volunteer for this confidential survey. As a token of my appreciation for your participation, you will be entered in a raffle to win a \$20 gift card (any store of your choice: Kroger, Meijer, or Wal-Mart). The survey examines how uncivil behaviors by colleagues affect employees' wellbeing and work motivation. The goal of the study is to understand the relationship between interpersonal stressors and employee stress reactions, as well as how employees manage that stress.

This study consists of two parts. First, I will ask that you complete the survey that is included in this envelope. This survey asks questions about demographic information, coworker behaviors, emotional wellbeing, and your perceived levels of supervisor support. If you complete the survey, please use the enclosed envelope to send your survey to me. If you are more comfortable answering questions on-line, you can complete an on-line version of the survey, which has exactly the same number of questions. The on-line survey is not hosted by BGSU, so the university does not store the opinions you provide. The survey should take no longer than 15 minutes to complete.

The second part of the study will be conducted one month following the first survey. Just like the first survey, I will ask that you complete either a hard-copy or an on-line survey. This survey consists of questions about uncivil behaviors you face, your wellbeing, and your work motivation. The survey will take no longer than 10 minutes. If you complete both surveys, you will be entered in a raffle to win a \$20 gift card. A total of 80 BGSU employees who participate in the survey will win the card.

Your confidentiality: Protecting the information you provide to me is extremely important. For this reason, I will protect the survey data with a secure password so that your information is not accessible to anyone beside me. In addition, information you provide will remain confidential and your identity will not be released to anyone or any organization. If you complete the surveys on-line, I ask that you clear your browser's cache and page history in order to protect your identity. Some employers use tracking software to monitor and record keystrokes, mouse clicks, and web sites visited. Alternatively, you may use your home computer in order to avoid tracking software. Whether you decide to participate in the study or not, your employment status and your relationship with the university will not be affected. You are also free to stop participating at any time during the study.

In the surveys, I will ask for your e-mail address. The only reason why I need your e-mail address is because I will contact participants regarding gift cards at the end of this study. Your e-mail address will not be released to anyone and will be deleted as soon as I complete sending out gift cards. You will not receive e-mails from me for any other reasons. The only exception is if you completed an online survey for part 1 survey. You will receive an e-mail instead of an envelope regarding the part 2 survey. If you choose to revoke your authorization for me to use your e-mail address even after you submit your survey, you can instruct me to discard all information I collected from you.

If you have any concerns or questions about the study, please contact the principal investigator, Ken Sakurai, at 419-372-4305 (sakurak@bgsu.edu), or his advisor, Dr. Jex, at 419-372-2132 (sjex@bgsu.edu) for research questions, and contact the chair of the Human Subjects Review Board at 419-372-7716 (hsrb@bgsu.edu) if any concerns arise during the study.

 BGSU HSRB - APPROVED FOR USE
 ID # H11D005667
 EFFECTIVE 9-14-10
 EXPIRES 7-22-11



BOWLING GREEN STATE UNIVERSITY

Department of Psychology, Bowling Green State University 43403
(419) 372-2301

To summarize, here is what the schedule of the survey looks like.

Part I Survey: Expected time required to complete = 15 minutes.

How? [Complete the survey enclosed in this envelope
Or complete it online by visiting
<https://www.surveymonkey.com/s/coworker>].

When? [it must be completed and mailed before September 23rd]

Part II Survey: Expected time required to complete = 10 minutes.

How? [Complete the 2nd survey you will receive a month from today
Or complete it online by visiting
<https://www.surveymonkey.com/s/coworker2>].

When? [it must be completed and mailed before October 23rd].

[Note: Please complete both Part I and Part II. Otherwise, I cannot use the data that I obtain from you].

INFORMATION STATEMENT

The procedure for this study has been described to me. I am aware that all data will be kept strictly confidential. My e-mail address will be used only for the incentive purpose and that I can revoke authorization to use my e-mail address for the drawing once I request to do so. I have been informed that my participation in this study is entirely voluntary and I am free to withdraw at any time without penalty. I have been informed that my decision to participate in this study will not impact my employment status or my relationship to the university. I have been informed that I may contact the principal investigator, Ken Sakurai, or his advisor, Dr. Jex, for research questions, and contact the chair of the Human Subjects Review Board if any concerns arise during the study.

By completing and returning the survey enclosed, you are indicating your consent to participate in workplace incivility study.

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EXPIRES 7.22.11

Appendix B

Demographic Information

Please provide some background information about you.

1. What is your gender?
2. How long have you been employed at the university (in years)?
3. What is your age?
4. What is your race? (African American, Asian and Pacific Islanders, Caucasian, Hispanic and Latino, Native American, or None of the above).
5. Are you a classified employee or administrative personnel?

Appendix C

Negative Affectivity Scale

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you generally feel this way, that is, how you feel on the average. Use the following scale to record your answers.

- 1) distressed,
- 2) upset,
- 3) guilty,
- 4) scared,
- 5) hostile,
- 6) irritable,
- 7) ashamed,
- 8) nervous,
- 9) jittery,
- 10) afraid,

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

Appendix D

Job Autonomy Scale

- 1) How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own?

1	2	3	4	5	6	7
Very little			Moderate autonomy			Very much

- 2) The job gives me considerable opportunity for independence and freedom in how I do my work.

- 3) The job gives me a chance to use my personal initiative and judgment in carrying out the work.

1	2	3	4	5	6	7
very accurate	mostly accurate	slightly accurate	uncertain	slightly accurate	mostly accurate	very accurate

Appendix E

Workplace Incivility Scale

Over the past 30 days, have you been in a situation where any of your coworkers:

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

1	2	3	4	5
never	once a month	twice a month	once or twice per week	every day

Appendix F

Job-related Affective Wellbeing Scale

Below are a number of statements that describe different emotions that a job can make a person feel. Please indicate the amount to which any of your coworkers has made you feel each of the 10 specific emotions in the past 30 days.

- 1) Feel angry
- 2) Feel anxious
- 3) Feel bored
- 4) Feel depressed
- 5) Feel discouraged
- 6) Feel disgusted
- 7) Feel fatigued
- 8) Feel frightened
- 9) Feel furious
- 10) Feel gloomy

1	2	3	4	5
never	rarely	occasionally	a moderate amount	a great deal

Appendix G

Supervisor Social Support Scale

The following 4 questions ask about your supervisor's levels of social support. Please rate these questions on the following 5 point scale.

- 1) How much does your immediate supervisor go out of his/her way to do things to make your work life easier for you?
- 2) How easy is it to talk with your immediate supervisor?
- 3) How much can you rely on your immediate supervisor when things get too tough at work?
- 4) How much your immediate supervisor is willing to listen to your personal problems?

0	1	2	3	4
don't have any supervisor	not at all	a little	somewhat	very much

Appendix H

Work Effort Scale

The questions below are about your level of work effort over the past 30 days. Please indicate the extent to which you agree or disagree with each statement.

- 1) I do not give up quickly when something does not work well.
- 2) I do my best to get my work done, regardless of potential difficulties.
- 3) When I start an assignment, I pursue it to the end.
- 4) I do my best to do what is expected of me.
- 5) I am trustworthy in the execution of the tasks that are assigned to me.
- 6) I really do my best to achieve the objectives of the organization.
- 7) I do my best to achieve the objectives of the organization.
- 8) I think of myself as a hard worker.
- 9) I put a lot of energy into the tasks that I commence.
- 10) I always exert equally hard during the execution of my job.

1	2	3	4	5	6	7
fully disagree	moderately disagree	disagree a little	neither agree nor disagree	agree a little	moderately agree	fully agree

Appendix I

Counterproductive Work Behaviors Scale

Please indicate the extent to which you have engaged in each of the following in the past 30 days.

- | | | | | | |
|-------|--|---------------|---------------------------|-----------|--|
| 1. | Taken property from work without permission | | | | |
| 2. | Spent too much time fantasizing or daydreaming instead of working | | | | |
| 3. | Falsified a receipt to get reimbursed for more money than you spent on business expenses | | | | |
| 4. | Taken an additional or longer break than is acceptable at your workplace | | | | |
| 5. | Come in late to work without permission | | | | |
| 6. | Littered your work environment | | | | |
| 7. | Neglected to follow your boss's instructions | | | | |
| 8. | Intentionally worked slower than you could have worked | | | | |
| 9. | Discussed confidential company information with an unauthorized person | | | | |
| 10. | Used an illegal drug or consumed alcohol on the job | | | | |
| 11. | Put little effort into your work | | | | |
| 12. | Dragged out work in order to get overtime | | | | |
| 1 | 2 | 3 | 4 | 5 | |
| never | once a month | twice a month | once or twice
per week | every day | |