

**DOES RUDENESS REDUCE CREATIVITY? EXAMINING THE ROLE OF
APPRAISAL AND RUMINATION FOLLOWING INCIVILITY AT WORK**

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ABSTRACT

The current study examines how rude customers might deplete the creativity of service workers by investigating the roles of negative appraisal and rumination following customer incivility. Simultaneously, we also examine an alternative: can customer incivility promote the creativity of service workers? We propose that challenge appraisal of incivility is instrumental to boosting creativity. We ground our hypotheses in the conservation of resources theory (Hobfoll, 1989, 2001) and transactional model of stress and coping (Lazarus & Folkman, 1984), positioning incivility experiences as potential resource-depleting and/or resource-boosting events. This study contributes to the incivility and creativity literature by investigating dual pathways linking incivility to creativity via appraisal and rumination. We found that service employees often view customer incivility as negative, and it triggers rumination, while focal and post hoc analyses show that challenge appraisals can be associated with greater creativity. Further findings, theoretical and practical implications, and future research directions are discussed.

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CHAPTER 1. INTRODUCTION

Increasing globalization requires organizations to look to their employees to develop new ways of working and creating in order to maintain a competitive advantage (Jiménez-Jiménez & Sanz-Valle, 2011; Lee & Choi, 2003). Baer and Oldham (2006) note that “employee creativity can make a substantial contribution to an organization’s growth and competitiveness” (p. 963). This need for creativity may be especially pertinent to the service sector, which holds a vast share of employment opportunities for Canadians: 79.24% of Canada's workforce was employed in the service sector in 2019 (O’Neill, 2019). Moreover, the service sector contributes significantly to the world economy (Eichengreen & Gupta, 2013; Menguc et al., 2017). The growth of service organizations leads to higher competition, which requires increasing service standards to keep loyal customers and clients (Kasiri et al., 2017; Liao & Chuang., 2004). One way service organizations may garner a competitive edge is for their employees to be nimble and creative in their roles (Jha et al., 2017; Ogilvie et al., 2017). Employee creativity may be a distinctive feature to facilitate exceptional service by offering alternative solutions. Because of the fundamental role of the service economy and the importance of creativity in crafting competitive service offerings, our study examines creativity amongst service employees.

Unfortunately, along with pressures to develop creative ideas, service employees face degrading social norms and spiking incidence of customer incivility (e.g., Grandey et al., 2007; LeBlanc & Kelloway, 2002; Sliter et al., 2010; Wilson & Holmval, 2013). Customer incivility can take many forms, including a retail employee hearing, “I do not need you for anything. Leave me alone. If I need you, I will call you. You are here to serve, not to talk with me” or being berated by a customer for a food order not being completely correct (Porath, 2022, para. 11). In the face of such mistreatment it may be especially hard for service employees to mask their emotions, or fake positive ones through emotional labor, which may degrade employees cognitively, emotionally, and physically (Sliter et al., 2010). This leads us to focus on how these experiences of rude customers might shape an employee’s ability to be creative on the job.

Incivility is “low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect” (Andersson & Pearson, 1999, p. 457). The perceptions of incivility vary depending on the intensity of behavior (Cortina & Magley, 2009). Unfortunately, incivility is not a rare occurrence: previous studies suggest that most employees encounter incivility throughout their careers (Porath & Pearson, 2013); for example, 76% of frontline employees experienced incivility at least once a month (Porath, 2022).

The negative outcomes of experiencing incivility as a service employee are wide ranging and are related to health issues, changing work-related behaviors and performance (Han et al., 2021). Han et al. (2021)’s meta-analysis revealed that the negative effect of incivility on job performance was higher for service employees and healthcare providers as compared to educators. Customer incivility has been linked to service employee emotional exhaustion and damaged psychological well-being (Janssen et al., 2010; Sliter et al., 2010), which reduces service performance (Baranik et al., 2017; Hu et al., 2018), capacity to surpass customer expectations (Al-Hawari et al., 2020), and creativity (Hur et al., 2016; Porath & Erez, 2007).

Notably, the ambiguity surrounding incivility experiences (“Did she mean to interrupt me?”; “I understand she’s upset with the product, but why did she yell at me?”) opens the door for the potential for multiple interpretations, challenge appraisals (i.e., opportunities to learn, grow, and develop; Marchiondo et al., 2018; Matthews et al., 2022), and outcomes. For example, a terse customer can spur a service employee to find an innovative solution to their problem. This potential “bright side” of incivility (Marchiondo et al., 2018) may be triggered through a process of challenge appraisal and reduced rumination on rude events.

Building on conservations of resources theory and transactional model of stress and coping, in this study, we test dual pathways linked to creativity, via appraisal and rumination, through which incivility can be explained as a draining stressor (reducing resources – reducing creativity), or alternatively as an opportunity for employees to learn and grow (acting as an information resource – improving creativity). We examine the role

of rumination because it may be critical to understanding how incivility can result in these differing effects.

Our empirical test of this process represents a contribution to the literature, which to date paints a muddied picture of the role of incivility and creativity. Much of the past literature showed a negative relationship between incivility and creativity, indicating that incivility mitigates creativity (Hur et al., 2016; Porath & Erez, 2007, 2009; Sharifirad, 2016; Zhan et al., 2019); however, Matthews et al. (2022) found a positive relationship between client incivility and provider creativity. This begs the question: what cognitive or emotional processes occur to reduce (or trigger) creative outcomes? By further understanding the detrimental nature of customer incivility (or alternatively, how it may be used to spur creativity), organizations will be better suited to help service employees process and address uncivil customers.

CHAPTER 2. RESEARCH DEVELOPMENT

This chapter will review past research and build seven hypotheses by looking at the theoretical background and relevant studies. We start by reviewing the literature on employee creativity and customer incivility to understand the potential aspects of incivility that may increase or decrease creativity and the reasoning behind it. Next, by drawing on the conservation of resources theory (Hobfoll, 1989, 2001) and the transactional model of stress and coping (Lazarus & Folkman, 1984) we explore the roles that negative appraisal, challenge appraisal, and rumination play with respect to incivility and creativity. We end the chapter by articulating our hypotheses.

2.1 EMPLOYEE CREATIVITY

In recent years, employee creativity has received much attention among practitioners and scholars (Amabile & Pratt, 2016). Creativity is the ability to generate novel and valuable ideas (Amabile, 1983). Individuals with creative thinking abilities are identified as viewing the same thing from different angles, which makes them inventive and able to offer creative solutions. Creativity may be particularly important to service employees, as they may need to develop novel and alternative solutions to fulfill client demands and satisfy customer expectations (Coelho et al., 2011).

Creativity is related bringing about new ideas, while in contrast, innovation intends to implement those creative ideas (Amabile, 1996). In other words, creativity can occur without innovation, but innovation cannot happen without creativity. Hon and Lui (2016) state that the “management literature has often considered creativity to be the first step for innovation” (p. 864). For this reason, we examine creativity as an outcome in the current study, acknowledging that any innovative behavior first requires creativity (Janssen, 2000).

We look to the psychological and management literature to better understand employee creativity. Past research has found employee creativity to be impacted by contextual factors (i.e., relationships at the workplace; Coelho et al., 2011), individual factors (i.e.,

personality, mental process, cognitive abilities; Coelho & Augusto, 2010; Shalley et al., 2004), and environmental factors (e.g., workplace climate, autonomy; Amabile, 1983). According to the dynamic componential theory of creativity, social and environmental factors impact individual creativity through sources of supplies or support (Amabile & Pratt, 2016). Work environments, such as work-related challenges or hindrances, are crucial factors in producing creativity in organizations (Amabile, 1997). Given this past research pointing to the complex process of creativity, we examine incivility from customers as a common social experience of service employees (Andersson & Pearson, 1999; Cortina et al., 2001) and investigate the process through which employees' meaning-making (Marchiondo et al., 2018) via rumination. More specifically, we look at the role of appraisal (both challenge and negative appraisal) and rumination to determine the potential positive and negative relationships between incivility and creativity.

2.2 CUSTOMER INCIVILITY

Customer incivility includes being rude, yelling, communicating disrespectfully (Walker et al., 2014), and disregarding service offerings (Sliter et al., 2010). Previous research on customer incivility finds it to be more common than that from supervisors or coworkers (Grandey et al., 2007; LeBlanc & Kelloway, 2002). Although the work-related stress of service employees mainly comes from interactions with customers' rude and inconsiderate behavior (Han et al., 2016), further stress is experienced when employees are expected to encounter and undergo these unpleasant situations (Cho et al., 2016) in the spirit of fulfilling their main mission: to serve the customer. Furthermore, the work role of a service provider dictates specific emotional display rules ("service with a smile"). Abiding by these rules in a rude environment may erode employee resources due to emotion management (i.e., emotional labor) (Diefendorff et al., 2011; Grandey, 2003; Holman et al., 2002). Furthermore, the power differential between service employees and customers makes them vulnerable to mistreatment (Al-Hawari et al., 2020; Arnold & Walsh, 2015; Cheng et al., 2020).

Being on the receiving end of customer incivility can be very stressful: no one wants to be treated disrespectfully, but at the same time, service employees' explicit job roles

involve satisfying customer needs and demands. Perhaps frustrating for service employees, there are rarely negative consequences for rude customers, and service employees must treat them with politeness since most organizations stick to the “customer is always right” rule (Ben-Zur & Yagil, 2005; Harris & Reynolds, 2003). This leads to daily stressful encounters that require additional resources to cope with (Yang et al., 2020). This coping process results in negative outcomes for employees, including emotional and psychological exhaustion (Lim & Cortina, 2005; Sliter et al., 2010). Moreover, it negatively impacts employees’ well-being through increased depression and anxiety (Baranik et al., 2017).

While largely examined as a barrier to employee performance and well-being, research has started to investigate how incivility might impact employee creativity. Incivility and its effect on creativity has been studied, finding negative effects of workplace incivility on service employees’ creativity and performance through mechanisms of emotional exhaustion, cognitive disruption, and intrinsic motivation (Hur et al., 2016; Porath & Erez, 2007). However, incivility may not always erode creativity: Matthews et al. (2022) found that customer incivility may signal service employees to change their negative experiences into learning from their mistakes. Therefore, the current study examines this relationship between customer incivility and creativity to uncover through which mechanisms incivility might erode vs. boost creativity. We position appraisal and rumination as fundamental to this process and will review them next.

2.3 APPRAISAL OF UNCIVIL EVENTS

According to Lazarus & Folkman’s (1984) transactional model of stress and coping, individuals respond to stressors (e.g., uncivil events) through the cognitive appraisal process, which involves the evaluation of whether the confrontation (customer incivility, in this case) is irrelevant, positive, or stressful. Appraising a stressor as irrelevant or positive does not trigger particular reactions; however, appraising it as stressful involves immediate reaction, and by this, events are viewed as threatening (potential harm to well-being or self-esteem) or challenging (personal growth), and they also can co-occur (Lazarus & Folkman, 1984). Cortina and Magley (2009) leveraged this theory in their

early work, examining the incivility appraisal process. In their study, they confirmed that experiencing incivility as a potential stressor triggers the emotional and cognitive process to assess the meaning of incivility experience and its effect on well-being.

We utilize meaning-making as a psychological process because “appraisal is a universal meaning-making process through which people evaluate the nature of events and their implications for well-being” (Marchiondo et al., 2018, p. 371). Previous research that examined this appraisal process found employees are (mildly to highly) frustrated and offended by encountering workplace incivility but not specifically threatened (Cortina & Magley, 2009). Broadly their results showed that workplace incivility caused mildly negative appraisals to emerge. On the other hand, Marchiondo and colleagues (2018) found that while some incivility is negatively appraised, it may be simultaneously appraised as challenging. They suggested a “bright side” of incivility can occur through a meaning-making process, in which employees need to understand the hidden meaning of incivility, such as dissatisfaction from a customer, and use that information to learn and improve. Thus, meaning-making and signaling processes play an essential role in interpreting the incivility incidents as challenging, such that meaning-making (Marchiondo et al., 2018) helps identify vague information under discontent and frustration, and signaling (Matthews et al., 2022) aids in understanding the information coming from clients through incivility which signals to improvement.

Collectively, the transactional model of stress and coping, along with past research finding incivility to be appraised both as negative and as a challenge, leads us to investigate this process further, along with the additional cognitive process of rumination, to which we turn to next.

2.4 RUMINATION

Following an appraisal process (whether it be negative or challenging), employees may then ruminate on the uncivil encounter. Rumination is a preoccupation with continuous thoughts about negative experiences (Frone, 2015; Watkins, 2008; Whitmer & Gotlib, 2013) and psychological response to stress (Brosschot et al., 2006), leading to a nasty

cognitive process. He et al. (2021) found that negative rumination depletes emotional and cognitive resources as a reaction to workplace incivility, which increases stress levels and depressed mood. Further, previous studies also found negative consequences of rumination, including increased negative emotions for an extended duration (Bushman et al., 2005; Papageorgiou & Wells, 2004). Rumination can also erode well-being (Brosschot et al., 2006). Therefore, constantly thinking about negative experiences exhausts cognitive and emotional resources and leads to resource depletion, which aligns with the conservation of resources theory (Hobfoll, 1989). Unfortunately, rumination may reoccur without one's intention or despite efforts to halt it (Rachman, 1981; Wenzlaff, 1993). However, rumination is not always bad: sometimes rumination aids in identifying the real reason behind negative incidents and can lead to reassessing actions to avoid them happening again (Keller & Nesse, 2006). In this way, rumination helps to cope with stress and depression instead of simply averting negative emotions (Stanton et al., 2000).

Past research positioned rumination as fundamental in understanding the effects of incivility on negative outcomes (Schilpzand et al., 2016; Volmer et al., 2012). We are particularly concerned about the potential negative consequences of rumination for service employees following customer incivility. Past research suggests that customer/client incivility can result in ruminating on the uncivil event (Wang et al., 2013) and we expect to find a similar relationship, driven first by appraisal.

Given the value of creativity in the workplace and the potential for incivility to degrade it (or boost it), we examine the appraisal and cognitive process through which we can explain these effects. We next turn to explain the theoretical rationale for our hypothesis by first explaining the conservation of resources theory, followed by the transactional model of stress and coping.

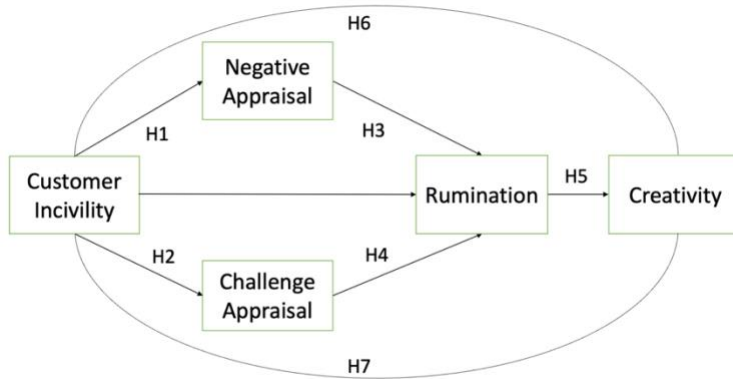


Figure 1. Conceptual Model with Associated Hypotheses

*Note: H6 & H7 proposes serial mediation, through negative or challenge appraisal & rumination

2.5 THEORETICAL FRAMEWORK

Our hypotheses (see the conceptual model depicted in Figure 1) are grounded in the conservation of resources theory (COR; Hobfoll, 1989, 2001) which states that people attempt to preserve their psychological and physical resources while confronting stressors (e.g., incivility) and reacting to their environment. The available resources are utilized to deal with stress; however, these resources are limited (Hobfoll, 2001). Consequently, relying on limited resources causes an increase in stress levels and, subsequently, brings more resource loss. In other words, psychologically and physically exhausted people may come to think their remaining resources are no longer enough to manage the stressor (Hobfoll, 2001).

If people are good at utilizing their resources, they can better control their stress levels; however, not all people have equal resources, and some people are susceptible to additional loss (Dohrenwend, 1978). If resources are utilized to prevent more loss (e.g., for rumination in this case), it will cause further depletion in the existing resource and makes people more vulnerable to poor mental health (Hobfoll, 2001). The result of psychological and physical exhaustion causes a reduction in employee effort and performance (Halbesleben & Bowler, 2007; Wright & Cropanzano, 1998). Recently, in the review of COR theory, Hobfoll et al. (2018) implied that employees suffering from the state of resource depletion “enter a defensive mode to preserve the self that is often

aggressive and may become irrational” (p.104). Of particular interest to our study is that if employees lack resources, they are not able to see the potential bright side of the stressors (i.e., view stressors as an opportunity to learn or grow; Matthews et al., 2022), which could explain how some incivility leads to negative outcomes, compared to positive.

The transactional model of stress and coping (Lazarus and Folkman, 1984) helps us further delineate the process through which various appraisals of customer incivility might trigger cognitive processes and resource loss/gain. Lazarus and Folkman (1984) stated that “psychological stress is a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (p.19). And this relationship proceeds via cognitive appraisal and coping stages. Cognitive appraisal is the “process of categorizing an encounter, and its various facets, with respect to its significance for well-being ” (Lazarus and Folkman, 1984, p.31). Hence, if the situation is evaluated as stressful by the cognitive appraisal stage, the event is viewed as threatening (potential future harm) or challenging (personal growth). And threat and challenge appraisals can co-occur at the same time (Lazarus & Folkman, 1984). Further, Lazarus and Folkman (1984) determined that people’s appraisal and coping strategies with the situation are connected to individual (personal traits) and situational characteristics (response to the environment). Regarding situational factors, the uncertainty of the situation and timing factors (e.g., leaving time to scrutinize the event) can be important. Moreover, forming subsequent appraisals (e.g., challenge, negative) is based on an evaluation of the extent to which the employee can deal with the stressor (relying on their available resources). Challenge appraisal prevents negative thoughts, lessens physiological stress reactions restore resources (Folkman & Moskowitz, 2000). Particular to an evaluation of incivility, employees may appraise it differently based on personal resources or an individual desire to grow and develop. This is consistent with past scholars who note that employees will evaluate different events considering their well-being and fundamental concerns (Schmidt et al., 2010). Siemer et al. (2007) found that ambiguous situations triggered various emotional reactions, and they concluded that “appraisals may be necessary and sufficient to determine different

emotional reactions towards a particular situation” (p. 592). This shows that the appraisal process of uncivil events (that are ambiguous in nature) may play a critical role in the type of response.

In summary, COR theory and the Transaction Model of Stress and Coping help inform our predictions as to how targets manage and accumulate resources while appraising and ruminating (e.g., resource loss or restoration) on incivility. The COR theory helps to understand the stress process, predicting stress experiences considering existing resources, while the transactional model of stress and coping helps to understand how this stress process is viewed by targets. In this study, we position customer incivility as an event that service employees need to endure or interpret. More specifically, we investigate if different aspects of appraisals and rumination can lead to resource loss (appraising customer incivility negatively and ruminating about it, and thus decreasing creativity) and simultaneously restore or preserve resources (appraising customer incivility as challenging and less ruminating on it, and thus boosting creativity). That is, we investigate negative and challenge appraisal and rumination as mediators in the negative and positive relationship between customer incivility and creativity. Next, we turn to the literature and support for our specific hypotheses.

2.6 HYPOTHESIS

Negative Appraisal of Incivility

Cortina and Magley (2009) argue that incivility is a subjective perception, such that the manner of coping with rude customers depends on how employees perceive them as threatening or challenging. As noted above, incivility is an act of disregard, disrespect, or rudeness. It perhaps is unsurprising that being at the receiving end of such treatment is likely to result in negative appraisal. Past research has found empirical support for this, such that targets of incivility describe the experience as annoying, distressing, and frustrating (Cortina & Magley, 2009). Recently, Holm et al. (2023) found that employees reported incivility as pervasive in the food service culture, which was described as frustrating and distressing.

While appraisal is not always empirically measured, coping strategies with incivility are intricately related to the appraisal process, revealing evidence that uncivil experiences are often negatively viewed by targets. As an example, Hur et al. (2016) suggested that workplace incivility hampers the preservation of cognitive resources because of increased emotional exhaustion and decreased intrinsic motivation. Moreover, even when incivility is perceived to be mildly negative, this is enough to trigger negative emotions (Cortina & Magley, 2009). Given the potential costs of incivility (e.g., negative emotions, increased emotional exhaustion, decreased motivation), it is likely that service employees will react negatively to customers' incivility. This leads us to hypothesize:

H1: Customer incivility is appraised negatively by service employees.

Challenge Appraisal of Incivility

How can rudeness be evaluated as a challenge? Appraisal is important in the meaning-making process of uncivil events (Cortina & Magley, 2009), and through this process, targets can appraise workplace incivility incidents as a challenge and an opportunity to develop. Finding empirical support for the potential of challenge appraisals of incivility, Marchiondo et al. (2018) presented evidence of a bright side to incivility such that employees who perceived incivility as a challenge also had positive outcomes (i.e., job satisfaction and thriving). Results such as these are consistent with COR (Hobfoll, 1989, 2001): employees experience uncivil events not only as resource loss but also as resource gain.

To gain further insight into challenge appraisal, we can look to the literature on career commitment. Namely, career commitment may offer a broader perspective on interpreting situations (Unsworth & Clegg, 2010), such that the act of receiving incivility from a customer may be viewed as an opportunity for development or creativity. Further, incivility could be conceptualized as negative feedback points (e.g., explaining customer dissatisfaction with work performance/ service) and determining areas for improvement (Fang et al., 2014). In line with this theorizing, service employees may appraise uncivil

events as an opportunity to learn and change their way of providing solutions in response to customer discontent. Furthermore, appraising incivility as a challenge may also function as a protection mechanism from self-harm. That is, targets may choose to view customer incivility as a challenge rather than negatively to avoid the negative effect on their well-being (Bohner et al., 1988; Miller, 2001). This leads us to hypothesize:

H2: Customer incivility is appraised as a challenge by service employees.

Rumination following Negative Appraisal of Customer Incivility

Once an employee appraises customer incivility as negative, this may lead to increased rumination. Based on Martin and Tesser's (1996) model of self-regulation, Smith and Alloy (2009) found that in the face of frequent adverse incidents, employees may think continuously about them. Such negative thoughts can be hard to eliminate, resulting in ruminating over them. Research in this area has found that employees facing abusive customers are more likely to ruminate on negative experiences even after work hours (Wang et al., 2013). In line with these findings, if negative appraisal of incivility depletes cognitive and emotional resources, resource loss continues with thinking repetitively over that negative experience. Therefore, we hypothesize:

H3: The more strongly customer incivility is appraised as a negative, the more rumination a service employee will do on the incident.

Rumination following Challenge Appraisal of Customer Incivility

Challenge appraisals indicate an employee is viewing the customer's rudeness as a chance to learn, develop or grow. Would such an appraisal increase rumination on rudeness? Early appraisal theorists indicate no. Challenge appraisal can be a strategy to avert negative actions of thinking, which subsequently lessens physiological stress responses and thereby restore one's resources (Folkman & Moskowitz, 2000).

However, there are some indications that challenge appraisal might even go so far as to boost resources, and we propose that that may *reduce* rumination on events. For example, Schneider (2004) found that if the customer demands are formulated as challenging rather than threatening, it enhances employees' emotional resources. This is likewise consistent with the conservation of resources theory (Hobfoll, 1989), which posits that accumulating resources by understanding one's mistakes and learning from them to improve performance can promote energy. Taken together, we suggest that resources can be restored by challenge appraisal, leading to less rumination on the uncivil event. In this regard, we anticipate that:

H4: The more strongly customer incivility is appraised as a challenge, the less rumination a service employee will do on the incident.

The Role of Rumination on Creativity

COR (Hobfoll, 2001) asserts that individuals' resources are limited, and that resources are needed to process uncivil events. The central reason for more resource loss due to rumination is that employees repetitively think about the continuous incivility experience over a specific period, which diminishes the capacity for regaining resources (Hobfoll, 2001). Generally, the literature supports this finding that rumination saps resources and depletes cognitive, emotion, and problems solving. For example, Frone (2015) found that workplace rumination is associated with decreased work performance and also hampers problem-solving skills (Nolen-Hoeksema et al., 2008). The dependency on limited resources leads to continuous resource loss when in a state of rumination, subsequently causing a rise in stress and more resource loss.

Specific to rumination on negative interpersonal events, Niven et al. (2013) found that continuous cognitive impairment caused by rumination over uncivil events distracts from forming solutions to problems and presumably causes more resource depletion. Moreover, high levels of rumination trigger stronger and ongoing negative emotions (e.g., depression, hostility, Bushman et al., 2005; Papageorgiou & Wells, 2004) and also

negatively effects well-being (Brosschot et al., 2006). Resource depletion, cognitive impairment, negative emotion, and well-being are crucial in influencing creativity (Csikszentmihalyi, 1996). Fredrickson & Branigan (2005) implied that positive emotions are crucial in generating thoughts, actions, and physiological reactions, and we expect that they are important factors in developing creative thoughts in our study. On the other hand, negative emotions, such as anger and disgust (from rumination in this case), narrow thought-action repertoires (Fredrickson & Branigan, 2005). This line of theorizing, along with past research that shows rumination to decrease creativity (Gailliot et al., 2007; Van Dyne et al., 2002), leads us to hypothesize that rumination on uncivil events will decrease service employee creativity.

H5: Rumination on an uncivil event will decrease creativity.

The Role of Customer Incivility on Creativity, via Negative Appraisal and Rumination.

Collectively and in line with the COR (Hobfoll, 1989, 2001) and transactional model of stress and coping (Lazarus and Folkman, 1984), we propose that customer incivility will negatively affect creativity through a serial mediation process via negative appraisal and rumination. Once employees' resources decrease primarily from negative appraisal, they become susceptible to more resource loss from rumination, which impedes creativity. Therefore, we expect that:

H6: Negative appraisal and rumination mediate a negative relationship between customer incivility and creativity at work.

The Role of Customer Incivility on Creativity, via Challenge Appraisal and Rumination

We move now into collectively hypothesizing that customer incivility may have a positive effect on creativity via challenge appraisal and reduced rumination. According to the conservation of resources theory (Hobfoll, 2001), challenge appraisal can free up resources triggering positive emotions and subsequent cognitive resources, increasing problem-solving abilities (Sonnetag & Fritz, 2007). While somewhat counterintuitive,

when appraised as a challenge, customer incivility may boost service employees' creativity. Support for this theorizing comes from Matthews et al. (2022), who used the signaling theory (Connelly et al., 2011; Spence, 1973) to posit that incivility may signal healthcare providers to change their decisions regarding client care by using information gleaned from client incivility. Matthews et al. found that incivility is a way a client can signal treatment dissatisfaction, so the provider may view the incivility from clients as challenging and carefully pay attention and take action on the helpful information to improve care. A particular nuance to the study was that this positive effect of client incivility on creativity manifested after a significant time period, suggesting that health providers need time to reflect on the client's incivility. What is left unknown is the appraisal and cognitive processes that might need to take place during this time gap in order to make uncivil signals translate into meaningful information to boost creativity. We argue that challenge appraisals and associated reductions of rumination on incivility may push service employees to improve their creative problem-solving skills. Further, the employee may understand the customer's frustration or dissatisfaction as a signal of the need to upgrade their service quality by appraising it as challenging (which in turn reduces the likelihood of rumination).

Thus, customer incivility that is appraised as a challenge will reduce rumination on the event, which frees up resources (cognitive, time, emotional), enabling creativity. Applied here, we hypothesize the following:

H7: Challenge appraisal and rumination mediate a positive relationship between customer incivility and creativity at work.

CHAPTER 3. RESEARCH METHODOLOGY

3.1 PROCEDURE

Firstly, all procedures were conducted in compliance with Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans and approved by The Social Sciences & Humanities Research Ethics Board at Dalhousie University. Secondly, we obtained data by recruiting participants via Prolific (www.prolific.co), a crowdsourcing website with a 15-minute survey (see Appendix B - for recruitment and survey material). After potential participants passed our prescreening requirements in Prolific (18 years and older; residing in the US, the UK, or Canada; currently employed full- or part-time in retail or marketing & sales sector; with decision-making responsibilities in customer/client and marketing/sales/advertising; in a customer-facing/front-line role; and English fluency), they were routed to our survey hosted on Qualtrics. At the beginning of the survey, participants provided consent to participate in the survey and to confirm that they have read the explanation about our study – including the data storage, using their anonymous quotes for publications and presentations (optional), and their participation is voluntary.

After providing consent, our survey started with a re-check of some inclusion criteria (for qualifications that might have changed since the participant initially filled out pre-screen data with Prolific: current location, employed in a customer-facing/front-line role, working in the retail or marketing and sales sector, and employment status) and demographic and job information questions. Participants then completed the focal measures, including incivility experiences within the past month from customers/clients, supervisors, and coworkers, separately. Given our focus on customer/client incivility, participants who reported experiencing customer incivility, were then directed to reflect on the most recent incivility experience (by writing 50-100 words). Participants then reported their appraisal (17 items based on Fitzgerald et al., 1997; Grandey et al., 2004 as used by Marchiondo et al., 2018) and rumination on the uncivil event (4 items from Keller & Nesse, 2006). Lastly, participants responded to items to assess creativity (7 items from Gilson & Madjar, 2011; Madjar et al., 2011) (more on measurement below).

3.2 PARTICIPANTS

Initially, we recruited 300 participants, of which three were excluded due to no data, leaving 297 participants. We included two items to measure insufficient effort (Huang et al., 2015), which asked participants, "...please select "daily" to this question" and "I have paid no attention to this survey so far." We required that participants pass both of these items in order to be included in our analysis. Eleven participants were filtered out for not passing the attention checks, leading to a final sample size of 286 participants.

Due to 1 participant skipping the demographics part of the survey, Table 1 includes 285 participants' demographic information. The sample demographics show that 40.2% of participants were men, 58% were women, and 4% were non-binary, had a mean age of 34.83 years old ($SD=12.34$), and predominantly identified as white (84.6%). Participants currently reside in the United Kingdom (63.3%), the United States (30.8%), and Canada (5.9%). Further, 66.8% of participants were employed full-time, while 33.2% of participants worked part-time. Participants worked primarily in the retail sector (85.7%) and the remaining (14%) in marketing and sales. Lastly, over the past month, 62.2 % of the sample had not worked remotely or away from the central store/office, 3.1 % had worked completely remotely (or away from the central store/office), and the remaining 34.4% worked a mix of remote and in-person work.

Table 1. Demographics

Variables	<i>n</i>	%	Mean	<i>SD</i>
Gender			1.6	.52
Man	115	40.2		
Woman	166	58		
Non-binary	4	1.4		
Age			34.83	12.34
Race			7.54	1.46
Black	12	4.2		
East/South Asian	5	1.7		
Indigenous	2	.7		
Latino	6	2.1		
Middle Eastern	3	1		
South Asian	9	3.1		
White	242	84.6		
Other	6	2.1		
Country of Residence			1.75	.55
United States	88	30.8		
United Kingdom	181	63.3		
Canada	17	5.9		
Employment Status			1.33	.47
Full-time	191	66.8		
Part-time	95	33.2		
Employment Sector			15.81	.95
Marketing & Sales	40	14		
Retail	245	85.7		

Note. *N* = 285

3.3 MEASUREMENT

Customer Incivility

To measure customer incivility, we used ten items from Wilson & Holmvall (2013), which assesses the mistreatment and rudeness from organizational outsiders during the past month. Sample items read "...continued to complain despite your efforts to assist them," "...made gestures (e.g., eye-rolling, sighing) to express their impatience," and "...grumbled to you about slow service during busy times". Participants reported on a 7-point response scale from *never* to *more than three times per day*. The reliability test results present the internal consistency via Cronbach's alpha (α) = .95, which indicates the set of items are closely related as a group.

Most Recent Uncivil Experience

Given that our core research questions focused on customer incivility, we prioritized gathering reflections of the most recent incident of incivility from customers (if a participant reported these experiences¹). In order to do this, participants who reported at least one experience of customer incivility were asked to describe their "most recent uncivil experience." We used a critical incident technique for the following reasons: 1) to collect details on the specific uncivil incidents, 2) to prime participants to reflect on and make more salient their memories of the most recent incivility experience from customers, and 3) to subsequently collect appraisal and rumination measures particular to a distinct customer incivility encounter (Lazarus & Folkman, 1984).

Appraisal

Challenge appraisal and negative appraisal of the most recent uncivil events were assessed with items developed by Marchiondo and colleagues (2018; based on items initially adapted from Fitzgerald et al., 1997; Grandey et al., 2004). Participants were directed to respond with their appraisal of the specific incivility event they reflected on. Seven items captured negative appraisal— offensive, annoying, embarrassing, frustrating,

¹ Participants reporting no customer incivility in the past month ($n=6$) were branched to instead appraise either their supervisor or coworker incivility experience and are not included in analyses of customer incivility.

stressful, hurtful, and serious ($\alpha = .84$), and five items captured challenge appraisal – helpful, learning experience, the opportunity for development, contribution to growth, and challenging ($\alpha = .76$). Participants responded to these items using a 5-point scale from *not at all* to *extremely* response scale.

Rumination

To measure repetitive thoughts on the critical incident of incivility, we used four items from Keller & Nesse's (2006) rumination scale. Sample items include "I could not "let go" of certain thoughts about the experience" and, "I thought about how I could have done things differently" ($\alpha = .77$). We recoded the second item, "I was able to clear problems from my mind following the experience," while doing data analysis because it is opposite in nature to rumination. Participants reported how they strongly agree or disagree with each statement on a five-point Likert scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*)².

Creativity

To evaluate creativity, we used seven items from Madjar et al. (2011) and Gilson & Madjar (2011). Because of the multidimensional nature of creativity, we ran a Principal Component Analysis (PCA) to explore the relationships between incremental and radical creativity items (four items per subscale; see Appendix 1 for the full analysis). The PCA revealed factor loading issues for the second incremental creativity item (see Appendix 1), leading us to remove it and use remaining seven items for all analyses. Thus, we retained three items to assess incremental creativity (e.g., "I easily modified existing processes to suit the current needs of my customers/clients") and four items to assess radical creativity (e.g., "I identified brand new highly creative opportunities and ways for meeting my clients' needs"). Responses to all items were on a five-point Likert scale, ranging from 1 (*Never*) to 5 (*Constantly*). Cronbach's alpha showed .90 for the seven creativity items ($\alpha = .85$ and .90 for incremental and radical creativity subscales, respectively).

² We modified the "rating scale" (changing from a 1 to 7 to a 1 to 5 point) and the stem slightly to provide greater clarity.

3.4 CONTROL VARIABLES

In our study, we included measures of potential control variables: supervisor incivility, coworker incivility, and the percentage of work conducted remotely. Our selection of these variables was guided by theoretical and empirical findings demonstrating that they may affect our hypothesized model. We included measures of supervisor incivility because past research has found a relationship between supervisor incivility and its negative impact on employee outcomes (Al-Hawari et al., 2020; Samma et al., 2020). Furthermore, coworker incivility may be an alternate explanation for why service employee might experience worsened creativity (Breidenthal et al., 2020; Hur et al., 2015; Sliter et al., 2012). We included remote work as a potential control given that physical separation between a rude customer and a service employee might decrease the effect on creativity (Niven et., 2022; Shimura et., al 2021).

Supervisor and Coworker Incivility

Participants separately reported incivility coming from their supervisor and coworkers using 12-items of Cortina et al. (2013). Sample items include “paid little attention to your statements or showed little interest in your opinions,” “rated you lower than you deserved on an evaluation,” and “targeted you with anger outbursts or “temper tantrums.” The respondents described their experiences during the past month on a 5-point response scale from 1 (*never*) to 5 (*many times*). The supervisor incivility measure and coworker incivility measure both had acceptable internal consistency ($\alpha = .93$ and $.91$, respectively).

Percentage of Remote Work

Participants reported percent of the time within the last month of working remotely (on a scale of 0 to 100% of time): 62.2 % of the sample had not worked remotely or away from the central store/office, 3.1 % had worked completely remotely (or away from the central store/office), and the remaining 34.4% worked a mix of remotely and in-person remote work. The response option was a slider bar, from 0=no remote work to 100=all remote work.

Besides theoretical reasoning, we also sought to confirm an empirical association between potential control variables and constructs of interest before including them in our analyses (Becker et al., 2016). We examined correlational analysis in order to see the positive or negative correlations between them and our focal variables before selecting them as controls, as current practices suggest only including constructs that show an empirical association.

Table 2 demonstrates a significant relationship between these potential control variables and focal constructs, which suggests that they may change our results, justifying their inclusion (Becker et al., 2016). For example, supervisor incivility shows a strong relationship with customer incivility, negative appraisal, and rumination. So it may be something about having a rude supervisor that is associated with also having rude customers, appraising rude customers more negatively, and also a preoccupation with those rude events. Similarly, the increase in coworker incivility is associated with customer incivility and negative appraisal. Moreover, the increase in the percentage of remote work shows a strong association with customer incivility, challenge appraisal, and creativity. From this, we can imagine that when working remotely or away from the central store/office increases, customer incivility may decrease, leading to more appraising as challenging and using more creativity. This can be because fewer incivility incidents may happen when interacting with the customers/clients remotely.

Since a significant relationship exists, these variables may alter our results, and we will test their potential effects. Consistent with practices recommended by Spector & Brannick (2011), we will first present our model without controls, followed by analyses including the three control variables, one at a time.

CHAPTER 4. DATA ANALYSES

Our main analyses included 280 participants who reported they experienced at least some customer incivility within the past month. First, we screened for acceptable internal consistency reliability using Cronbach's alpha. We deemed the scale to be reliable when α is .70 or higher (Cortina, 1993; see Table 2). All scales were deemed acceptable. Our primary and post hoc analyses were conducted using Hayes' PROCESS macro (version 4.3, 2023) for SPSS, testing for direct and indirect effects. We implemented Model 80 (parallel and serial mediation) in our primary analysis and Model 4 (simple mediation) to perform post hoc analysis. All indirect effects were subjected to follow-up bootstrap analyses of 5000 and 95% bias-corrected confidence intervals (Preacher & Hayes, 2008).

4.1 DESCRIPTIVE STATISTICS

Table 2 provides the descriptive statistics and correlations, a sample of 240 participants among the study variables (customer incivility, challenge appraisal, negative appraisal, rumination, creativity, supervisor and coworker incivility, and percentage of remote work). Results revealed several significant correlations. For instance, customer incivility was highly correlated with negative appraisal ($r = .39, p < .01$) and supervisor incivility ($r = .29, p < .01$), coworker incivility ($r = .42, p < .01$), and percentage of remote work ($r = -.19, p < .01$). Results also showed that challenge appraisal of uncivil events was strongly correlated with negative appraisal ($r = .28, p < .01$), rumination ($r = .23, p < .01$), creativity ($r = .31, p < .01$; confirming how appraising as challenging customer incivility may increase employee creativity, Matthews et al., 2022), and percentage of remote work ($r = .21, p < .01$). Negative appraisal of uncivil events was highly correlated with rumination ($r = .54, p < .01$), creativity ($r = .15, p < .05$), supervisor incivility ($r = .17, p < .01$), and coworker incivility ($r = .17, p < .01$). Finally, rumination was correlated with supervisor incivility ($r = .20, p < .01$) and creativity with the percentage of remote work ($r = .13, p < .05$).

Table 2. Descriptive Statistics and Correlation Coefficients

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1.Customer Incivility	2.93	1.34	(.95)							
2.Challenge Appraisal	2.14	.88	-.01	(.76)						
3.Negative Appraisal	2.72	.92	.39**	.28**	(.84)					
4.Rumination	2.71	.91	.06	.23**	.54**	(.77)				
5.Creativity	3.09	.78	-.08	.31**	.15*	.09	(.90)			
6.Supervisor Incivility	1.42	.60	.29**	.10	.17**	.20**	-.01	(.93)		
7.Coworker Incivility	1.46	.54	.42**	.05	.17**	.09	-.02	.65**	(.91)	
8.% of Remote Work	11.99	25.79	-.19**	.21**	.04	.08	.13*	-.01	-.02	

N = 240 ***p* < .01 (2-tailed). **p* < .05 (Cronbach's *α* coefficients are displayed on the diagonal)

4.2 TEST OF HYPOTHESIS

Collectively, our hypotheses suggest a parallel serial multiple mediation model (see Figure 1). To test these relationships, we utilized Model 80 (parallel and serial mediation) of Hayes' PROCESS macro (version 4.3, 2023). Table 3 presents the results (without control variables). We report unstandardized coefficients (B) because standardization would not have altered either the *t* ratios or *p* values (Preacher et al., 2007).

From the results, the first direct pathway ($B = .27, t = 6.92, p < .001$) showed that the effect of customer incivility on negative appraisal was statistically significant, supporting Hypothesis 1. Hypothesis 2 was not supported since the customer incivility on the challenge appraisal pathway was not significant ($B = .01, t = .18, p = .86$). This suggests that service employees are more likely to appraise the uncivil events as a negative experience rather than challenging, which is consistent with what Cortina and Magley (2009) found. Further, the direct pathway of negative appraisal on rumination was significant ($B = .57, t = 10.47, p < .001$), thus Hypothesis 3 was supported; however, the direct effect of challenge appraisal on rumination was not significant ($B = .10, t = 1.76, p = .08$), failing to support Hypothesis 4. And also, the direct effect of rumination on creativity was not significant ($B = -.04, t = .66, p = .51$), which was an indication that Hypothesis 5 was not supported either. Further, the indirect effect of customer incivility on creativity through mediators-negative appraisal and ruminations was not significant ($B = -.01, 95\% \text{ CI } [-.02; .01]$). Similarly, the indirect effect of customer incivility on creativity through mediators – challenge appraisal and rumination- was not significant ($B = .00, \text{ CI } [-.001; .001]$). Thus, Hypothesis 6 and 7 were not supported.

4.3 COVARIATES

Consistent with current best practices examining control variables (Spector & Brannick, 2011), we first presented our main analyses without controls. However, the inclusion of controls (three controls were tested separately, one at a time) did not change our hypothesis (for a summary of these results see Table 4). From this, supervisor and

coworker incivility and the percentage of remote work, as covariates, did not affect our results. This provides assurance that our results remain robust even with the inclusion of other potential variables.

Table 3. Focal Analysis: Hayes Model 80 (Parallel and Serial Mediation Model)

Direct Effect	B	t-value	95% confidence interval	
			CI _{low}	CI _{high}
1. Customer Incivility->Negative Appraisal	.27	6.92***	.19	.35
2. Customer Incivility->Challenge Appraisal	.01	.18	-.07	.08
3. Customer Incivility->Rumination	-.11	-2.86**	-.18	-.03
4. Negative Appraisal->Rumination	.57	10.47***	.46	.67
5. Challenge Appraisal->Rumination	.10	1.76	-.01	.20
6. Customer Incivility->Creativity	-.09	-2.58**	-.17	-.02
7. Negative Appraisal->Creativity	.12	1.93*	.01	.24
8. Challenge Appraisal->Creativity	.26	4.91***	.16	.36
9. Rumination->Creativity	-.04	-.66	-.16	.08
Indirect Effect	Effect value			
1. Customer Incivility->Negative Appraisal->Creativity	.03	.002	.07	
2. Customer Incivility->Challenge Appraisal->Creativity	.002	-.02	.02	
3. Customer Incivility->Rumination->Creativity	.004	-.01	.02	
4. Customer Incivility->Negative Appraisal->Rumination->Creativity	-.01	-.02	.01	
5. Customer Incivility->Challenge Appraisal->Rumination->Creativity	.00	-.001	.001	

N = 280. **p* < .05 ***p* < .01 *** *p* < .001 (*B*=Unstandardized coefficients)

Table 4. Results of Hypothesis Testing

Hypotheses	No Controls	Adding Controls		
	Main Model (N=280)	Supervisor Incivility (N=245)	Coworker Incivility (N=275)	% of Remote work (N=279)
H1: Customer Incivility->Negative Appraisal	Supported	Sup*	Sup*	Sup*
H2: Customer Incivility->Challenge Appraisal	NS	NS	NS	NS
H3: Negative Appraisal of most recent uncivil event-> Rumination	Supported	Sup*	Sup*	Sup*
H4: Challenge Appraisal of most recent uncivil event->Rumination	NS	NS	NS	NS
H5: Rumination->Creativity	NS	NS	NS	NS
H6: Customer Incivility->Negative Appraisal->Rumination->Creativity	NS	NS	NS	NS
H7: Customer Incivility->Challenge Appraisal->Rumination->Creativity	NS	NS	NS	NS

CHAPTER 5. POST HOC ANALYSES

Over the course of the thesis project, we reflected further on the use of mean levels of incivility as a predictor in our main analyses. While customary practice to do so (see Marchiondo et al., 2018), there is theoretical inconsistency in using mean level of incivility (over the course of a month) to understand the appraisal of a critical incident of incivility. For this reason, we present post hoc analyses, using appraisal of the critical incident (negative and challenge appraisal, separately) to predict rumination on that incident and, subsequently, creativity. In this post hoc analysis, we also take a more nuanced analysis of the creativity construct by examining incremental and radical creativity as outcomes separately (see Figures 2 - 5). These post hoc analyses will allow us an alternative method of assessing support for H3 – H5 (see Table 5 for a summary of these results: negative/challenge appraisal of the most recent uncivil event to incremental/radical creativity via rumination). The post hoc analyses (Table 6 -9) were conducted using Hayes’ PROCESS macro (version 4.3, 2023), Model 4 (simple mediation) for SPSS. Before diving into post hoc analysis results, we will briefly explain the difference between incremental and radical creativity, which we turn to next.

Table 5. Results of Post Hoc Analyses

	Main Model	Post Hoc: Incremental creativity (DV)	Post Hoc: Radical Creativity (DV)
<i>Negative Appraisal-> Rumination-> Creativity sub-type</i>			
H3: Negative Appraisal of uncivil event-> Rumination H5: Rumination->Creativity	Sup* NS	Supported NS	Supported NS
<i>Challenge Appraisal -> Rumination->Creativity sub-type</i>			
H4: Challenge Appraisal of uncivil event-> Rumination H5: Rumination->Creativity	NS NS	*(opposite direction) NS	*(opposite direction) NS

Incremental vs. Radical Creativity

While general creativity has been shown to be a positive force for organizations generally, scholars have also started to distinguish between subtypes of creativity to understand the manner of creative behavior better. Creativity can range from minor changes to revolutionary breakthroughs (Gilson & Madjar, 2011). Incremental creativity entails minor modifications to actual practices and mostly solution-related ideas (Gilson & Litchfield, 2017), such as a few adjustments in frameworks, which do not require a long time to take action. On the other hand, radical creativity is defined as divergent thinking, which is considerably different from an organization's actual operation (Dewar & Dutton, 1986; Ettl et al., 1984), such as a dramatically new and revolutionary framework. In the retail or marketing and sales context, service employees may use incremental creativity more since modifying the existing process will be quicker, and time is usually of the essence when dealing with customer service. Relationships may not be as strong relating to radical creativity because implementing entirely new ideas takes a longer time, more resources, and risk. In an exploratory manner, we examine these two sub-types of creativity in our post hoc analyses.

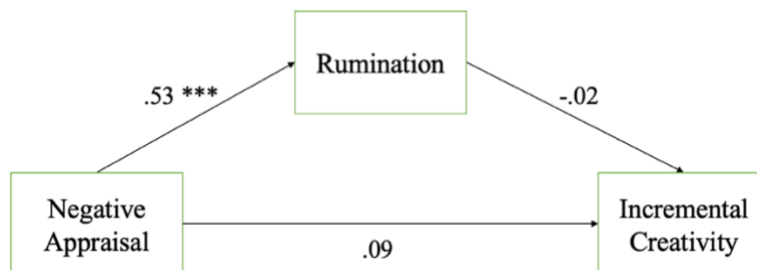


Figure 2. Negative Appraisal on Incremental Creativity

Table 6. Negative Appraisal on Incremental Creativity via Rumination

			95% CI	
Direct Effect	B	t-value	CI _{low}	CI _{high}
Negative Appraisal->Rumination	.53	10.91***	.44	.63
Negative Appraisal->Incremental Creativity	.09	1.43	-.03	.21
Rumination->Incremental Creativity	-.02	-.26	-.14	.11
Indirect Effect	Effect value			
Negative appraisal->Rumination ->Incremental Creativity		-.01	-.07	.06

$N = 280$. $*p < .05$ $**p < .01$ $***p < .001$ (B=Unstandardized coefficients)
 Table 6 shows the analysis of the negative appraisal of the most recent uncivil events on incremental creativity via rumination. The effect of negative appraisal on rumination is significant (B = .53, $t = 10.91$, $p < .001$), with a 95% CI [.44; .63], once more confirming support for Hypothesis 3. Similar to model 80 results which looked at global creativity, there was no significant relationship between rumination and incremental creativity (B= -.02, t -value= -.26, $p = .80$); thus, Hypothesis 5 was not supported again.

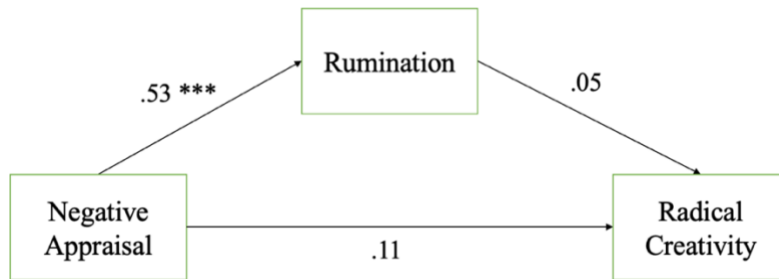


Figure 3. Negative Appraisal on Radical Creativity

Table 7. Negative Appraisal on Radical Creativity via Rumination

Direct Effect	B	t-value	95% CI	
			CI _{low}	CI _{high}
Negative Appraisal->Rumination	.53	10.91***	.44	.63
Negative Appraisal->Radical Creativity	.11	1.6	-.03	.25
Rumination->Radical Creativity	.05	.73	-.09	.20
Indirect Effect	Effect value			
Negative appraisal->Rumination-> Radical Creativity		.03	-.05	.10

$N = 280$. $*p < .05$ $**p < .01$ $***p < .001$

Table 7 shows the analysis of the negative appraisal of the most recent uncivil events on radical creativity via rumination. The effect of negative appraisal on rumination is significant (B= .53, $t = 10.91$, $p < .001$), once more supporting Hypothesis 3. However, the results did not show a significant relationship between rumination and radical creativity (B= .05, $t = .73$, $p = .46$), which is consistent with the main model results and indicates a lack of support for Hypothesis 5.

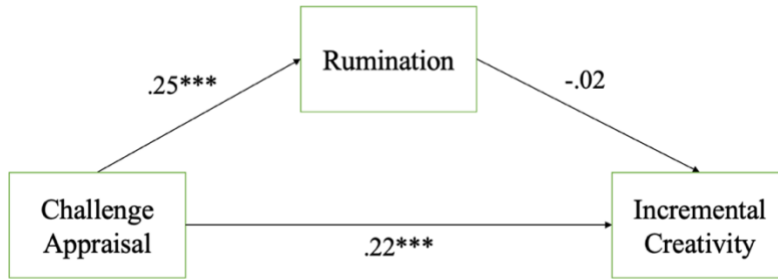


Figure 4. Challenge Appraisal on Incremental Creativity

Table 8. Challenge Appraisal on Incremental Creativity via Rumination

Direct Effect	B	t-value	95% CI	
			CI _{low}	CI _{high}
Challenge Appraisal->Rumination	.25	4.17***	.13	.37
Challenge Appraisal->Incremental Creativity	.22	4.0***	.11	.33
Rumination->Incremental Creativity	-.02	-.35	-.12	.09
Indirect Effect		Effect value		
Challenge appraisal->Rumination-> Incremental Creativity		-.01	-.03	.03

N = 280. **p* < .05 ***p* < .01 *** *p* < .001

Table 8 shows the analysis of the challenge appraisal of the most recent uncivil events on incremental creativity via rumination. Interestingly, the effect of challenge appraisal of uncivil events on rumination ($B = .25, t = 4.17, p < .001$) presents a significant relationship, whereas this pathway was not significant in the main analysis (H4). However, the results showed a positive relationship between challenge appraisal and rumination, opposite in direction to what we initially hypothesized as a negative relationship. Akin to model 80 results, there was no significant relationship between rumination and incremental creativity ($B = -.02, t = -.35, p = .73$), thus no support for Hypothesis 5.

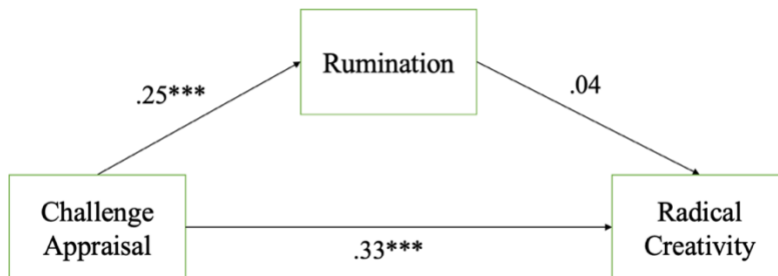


Figure 5. Negative Appraisal on Radical Creativity

Table 9. Challenge Appraisal on Radical Creativity via Rumination

Direct Effect	B	t-value	95% CI	
			CI _{low}	CI _{high}
Challenge Appraisal->Rumination	.25	4.17***	.13	.37
Challenge Appraisal->Radical Creativity	.33	5.27***	.21	.45
Rumination->Radical Creativity	.04	.67	-.08	.16
Indirect Effect	Effect value			
Challenge appraisal->Rumination-> Radical Creativity		.01	-.02	.04

N = 280. **p* < .05 ***p* < .01 *** *p* < .001

Finally, Table 9 illustrates the analysis of the challenge appraisal of the most recent uncivil events on radical creativity via rumination. Strikingly, the same as Table 8 analysis, the direct effect of challenge appraisal of uncivil events on rumination ($B = .25$, $t = 4.17$, $p < .001$) presents a positive relationship, opposite in direction to what we predicted in Hypothesis 4. The results did not reveal a significant relationship between rumination and radical creativity ($B = .04$, $t = .67$, $p = .51$), thus no support for Hypothesis 5.

Looking across the four post hoc model results, we see no support for an indirect effect of appraisal (negative or challenge) of an uncivil event on creativity (of either kind). All indirect effect results contain zero within the confidence interval ranges. While not an exact test of our H6 and H7, these results suggest that rumination does not significantly explain creativity outcomes following incivility appraisal. However, results from post hoc analyses examining the direct effect of challenge appraisal on incremental/radical creativity remain similar to the main analysis such that the challenge appraisal of uncivil events significantly related to incremental creativity ($B = .22$, $t = 4.00$, $p < .001$) and radical creativity ($B = .33$, $t = 5.27$, $p < .001$).

CHAPTER 6. DISCUSSIONS AND CONCLUSIONS

6.1. DISCUSSION

How does incivility from customers derail employees' creativity? Or might it boost it instead? These are important questions given the amount of customer incivility service employees face (Porath & Pearson, 2013). Research to date reveals mixed findings that led us to investigate the dual pathways from incivility experience to creativity via appraisals and rumination. We drew on the conservation of resources theory (Hobfoll, 1989, 2001) and the transactional model of stress and coping (Lazarus & Folkman, 1984) to hypothesize the negative and positive effects of uncivil events on creativity by proposing that dual pathways – negative and challenge appraisal and rumination- may explain these processes. We were particularly interested in the service context as service employees experience rude interactions with their customers/clients, sometimes on a daily basis (Grandey et al., 2004; Sommovigo et al., 2019; Yang et al., 2020). The ambiguity of incivility leaves multiple interpretations open for possibility: service employees may negatively interpret the customer's interactions as rude *or* as a time for learning and development (and may do both forms of appraisal simultaneously, Marchiondo et al., 2018). Incivility from customers can be a form of communication that customers use to convey dissatisfaction or a desire for change (Matthews et al., 2022).

Discussion of Main Analysis

Broadly, results from the main analysis - Model 80 (serial and parallel mediation) - showed a significant positive effect of customer incivility on negative appraisal ($B = .27$, $t = 6.92$, $p < .001$), whereas the effect of customer incivility on the challenge appraisal was non-significant ($B = .01$, $t = .18$, $p = .86$) (support for Hypothesis 1- customer incivility is appraised negatively by service employees; while no support for Hypothesis 2- customer incivility is appraised as a challenge by service employees). These analyses indicate that employees are more likely to appraise customer incivility events as negative.

Our results suggest that negatively appraising uncivil events triggers rumination ($B = .57$, $t = 10.47$, $p < .001$), which supports Hypothesis 3 (the more strongly customer incivility is

appraised as a negative, the more rumination a service employee will do on the incident); however, we did not find support for Hypothesis 4 ($B = .10$, $t = 1.76$, $p = .08$; the more strongly customer incivility is appraised as a challenge, the less rumination a service employee will do on the incident). Broadly, this supports Hobfoll's proposition (2001) that cognitive and psychological resource loss continues following negative reactions due to emotional and cognitive resource depletion and limited resources. These findings draw attention for managers to have a closer look at the negative impacts of incivility in retail and marketing, and sales employment sectors, as a rumination on negative events could disrupt performance and well-being outcomes. Furthermore, it is noteworthy that although we theorized that service employees might simultaneously appraise customer incivility as negatively *and* as challenging, it appears that incivility was more strongly related to negative appraisal. This may be on account of resource loss and limited capacity to handle the customer incivility incidents.

In terms of rumination and creativity relationships, our results did not reveal a significant effect ($B = -.04$, $t = .66$, $p = .51$) (no support for Hypothesis 5 - rumination on an uncivil event will decrease creativity). From this, we conclude that rumination did not play a role in this appraisal-to-creativity process. This may be due to the strong nature of negative appraisal, which causes employees to assume incivility as a negative stressor and threat to their well-being (Yang et al., 2020) even before the rumination process starts. Negative appraisal of incivility may lead to a decrease in employee emotional and cognitive resources (Sliter et al., 2010). So, whether employees ruminate about the incidents or not, their creativity or problem-solution skills may already diminish from the negative appraisal.

Further, we expected negative and challenge appraisal via rumination to explain the complicated relationship between incivility and creativity (Hypothesis 6- negative appraisal and rumination mediate a negative relationship between customer incivility and creativity at work; Hypothesis 7- challenge appraisal and rumination mediate a positive relationship between customer incivility and creativity at work). However, we did not find significant relationships through the serial-mediated pathways. There may be a few

explanations for this. First, our model was complex, with both negative and positive appraisal entered in simultaneously – which may reduce the potential power of variables (Holmes, 2017) to explain changes in variance. Second, some measurement decisions might have limited our ability to fully capture constructs of interest. For example, to measure rumination we used the four-item scale by Keller and Nesse (2006). Rumination, as conceptualized by the literature and likewise these items, captures it largely from a negative perspective: that recurring thoughts are bad or interrupt cognitive processes. Given our hypotheses regarding the potential benefit of challenge appraisals, there may be a parallel (but positive) construct of rumination that could better capture and explain this resource enabling process. For example, if after a service employee perceives the uncivil event to be an opportunity to learn, they may need time to process this and come up with new potential actions. This processing time may not be realized in the traditional “rumination” measure.

While not pertaining to our hypothesized relationships, results from our main analysis (Table 3) reveal that customer incivility has a significant negative direct effect on rumination ($B = -.11, t = -2.86, p < .01$), which implies that the increase in customer incivility may decrease rumination. A potential explanation may be that service employees who encounter frequent customer incivility incidents get used to the rude treatment, leading to resilience in the face of rudeness (manifesting as less rumination). Therefore, even though uncivil events occur, employees may not be preoccupied with rude customers and do not spend time processing or thinking about them.

As noted earlier, there are mixed findings in the literature about the directionality of the direct effect of incivility on creativity (negative: Hur et al., 2016; or positive: Matthews et al., 2022). Our analyses likewise paint a complicated picture. For example, our main analysis reveals the direct effect of customer incivility on creativity was negative ($B = -.09, t = -2.58, p < .01$). This indicates that taking all variables in our model into consideration, customer incivility experiences translate into less creativity.

However, looking closely at our main and post hoc analysis results, we see indications of how incivility can have a “bright side.” The effect of challenge appraisal on creativity highlighted a significant positive effect ($B = .26, t = 4.91, p < .001$), which means appraising uncivil events as challenging may boost employee creativity. Interestingly, our post hoc analysis once more confirmed this significant relationship, predicting incremental ($B = .22, t = 4.00, p < .001$) and radical creativity ($B = .33, t = 5.27, p < .001$). Given these mixed indications, researchers and practitioners should be cautioned against uniformly characterizing incivility as positive or negative. Our results point to the fundamental role appraisals can play and how outcomes of incivility may rest in the appraisal process. If managers are aware of the bright side of incivility via challenge appraisal, they may use it to their benefit.

We also examined our hypotheses with the inclusion of control variables. Notably, our examined relationships did not change with the inclusion of control variables (supervisor and coworker incivility and the percentage of remote work). This gives us confidence that our results cannot be explained by other forms of rudeness (from supervisors or coworkers). Furthermore, of interest to many organizations post-COVID, these relationships remain the same regardless of the online/in-person nature of work.

Discussion of Post Hoc Analyses

Further, while developing and working on this study, we reflected further on the mean levels of incivility included as the main predictor. There is theoretical inconsistency with using mean levels of incivility (over the past month) to determine the process which drives appraisal of critical uncivil events. Therefore, in post hoc analyses we modified the model to exclude the mean level of incivility measure and positioned negative/challenge appraisal of an uncivil experience to predict rumination (on that same experience), examining incremental and radical creativity as outcomes separately.

Strikingly, the post hoc analysis examining challenge appraisal on incremental/radical creativity via rumination showed a strong positive relationship between challenge appraisal and rumination ($B = .25, t = 4.17, p < .001$), whereas this linkage was not

significant in the main analysis. Interestingly, challenge appraisal of uncivil events is associated with more rumination, which is opposite to what we initially hypothesized as a negative relationship (Hypothesis 4). One possible explanation for this is provided by Taylor and Schneider (1989) who suggested that some types of rumination act as mental simulations and assist in problem-solving. For example, rumination aids in identifying the real reason behind negative incidents and helps targets to reevaluate the situation to avoid them happening again (Keller & Nesse, 2006). From this, challenge appraisal may make it more likely that an employee will ruminate and that this process may benefit the employee over time. However, regarding rumination and creativity relationships, the post hoc results did not reveal any significant effect either (with negative/challenge and incremental/radical creativity), similar to the main analysis (no support for Hypothesis 5). These findings suggest that the role of appraisal and rumination is more complex.

6.2 THEORETICAL CONTRIBUTIONS

The findings from our study extend the literature on the relationship between incivility and creativity. First, we further explored the conservation of resources theory (COR) (Hobfoll, 1989) by testing whether different appraisals of incivility (negative or challenge) might help to understand the process through which customer incivility might act as a resource or stressor to service employees. Our results suggest that service employees are more likely to appraise incivility negatively, giving an indication that customer rudeness erodes employee resources and, through a process of resource loss, may reduce creativity. Future research could investigate other potential negative outcomes such as burnout or innovation. On the other hand, we found some, albeit tentative, indications that customer incivility serves as a resource to service employees. Although results indicate the potential benefit (main analyses in Table 3 and post hoc analyses in Tables 8 and 9) of challenge appraisal, we were not led to confident conclusions about this process. Resource gain or restoring lost resources is more likely a difficult process, which can be done only if the stressor is determined as challenging (Marchiondo et al., 2018). Because our data reveal that negative appraisal and challenge appraisal do co-occur to some extent ($r = .28, p < .01$), it may be difficult for employees to overpower negative thoughts to capitalize on a potential learning experience. Past

research finds negative thoughts to be more powerful than positive ones (Baumeister et al., 2001).

Second, previous studies mainly focus on the indirect effect of incivility on creativity through mediators and moderators, such as intrinsic motivation, emotional exhaustion, and cognitive process (e.g., Hur et al., 2016; Porath & Erez, 2007), not through dual pathways of negative/ challenge appraisal and rumination. Our research was the first one which studied the dual pathways of appraisal and rumination as mediators. This acknowledges the complex process of appraisal, which includes the ability to hold multiple appraisals (negative and challenging) for one event (Marchiondo et al., 2018). Although we did not find support for significant indirect pathways, the model complexity and limited statistical power may be one possible explanation.

Lastly, while studying the relevant literature, we realized that most previous research has primarily focused on the negative effects of incivility, and very few studies (e.g., Marchiondo et al., 2018; Matthews et al., 2022) have linked incivility to positive outcomes, such as employee performance and creativity. Therefore, our study theoretically built on these nascent works when examining the positive association of incivility with creativity through challenge appraisal. Our results shed light on the mechanism through which we can explain potential positive effects of incivility, such as Matthews et al. (2022)'s finding that client incivility could signal valuable information to improve the creativity of client care. Our results suggest that challenge appraisal may play a role in facilitating positive outcomes.

6.3 PRACTICAL IMPLICATIONS

Our research revealed that customer service employees are most likely to interpret uncivil events as negative rather than challenging. And post hoc analysis revealed a potential positive effect of challenge appraisal of uncivil events on creativity. Therefore, organizations should be aware of the adverse effects of customer incivility and offer intervention or training to promote challenge appraisal of incivility. Employees may learn to improve their social and psychological resource protection strategies through training

to avoid negative appraising uncivil events. Further, understanding the unavoidability of customer incivility in some cases may help customer service employees prepare for customer interaction challenges in advance and provide appropriate solutions to increase their creativity. It will make employees aware of uncivil events, customer dissatisfaction, or mistreatment and enable them to use coping strategies effectively.

For example, incivility could be re-framed as feedback to promote employees' creativity (Ford & Gioia, 2000). This might be accomplished by setting a culture of self-improvement and growth in the organization. Supervisors can foster an environment wherein employees are not negatively evaluated based on customer complaints but rather have an opportunity to grow from them. In this way, employees may become more apt to view rude customers as a challenge. Further, a manager can encourage challenge appraisals to employees by recognizing and rewarding when an employee does this well - this helps incentivize challenge appraisal and individual improvement/learning - and also demonstrates to other employees how to do it (i.e., social learning). Moreover, a growth mindset (Dweck, 2006) may help employees embrace the challenges and mistakes and believe they can improve their services by learning, practicing, experiencing, and instructions, rather than be demotivated by incivility (Murphy & Dweck, 2016). Because a growth mindset focuses on employees meeting their potential and searching for opportunities to improve performance over time they may be less disturbed by making mistakes in their role (Dweck & Yeager, 2019). Managers can use a growth mindset framework to demonstrate to employees how to interpret customer incivility as challenging. For example, managers may explain what new skills employees need to work on or develop, moving employees past negative appraisal and rumination on incivility to viewing it as an indicator of room for growth.

Further, encouraging employees to share their negative customer incivility experience with coworkers or supervisors may lead to gathering positive suggestions to deal with such incidents or glean helpful information from them (e.g., the customer was terse with me because I wasn't able to fully understand their issue. I will work on active listening to improve).

Lastly, direct supervisors may also help employees through this process by providing autonomy. Facing rude customers day in and day out provides supervisors an opportunity to give service employees autonomy in determining how best to approach each situation. For example, service employees who must always endorse “the customer is always right” may feel defeated when having to deal with repeat rude customers. Giving employees options for referring rude customers to managers or determining when someone is egregiously rude could go far in helping service employees cope with customer incivility.

6.4 LIMITATIONS AND FUTURE DIRECTIONS

As with all research, this study is not without limitations. Since we used a cross-sectional study, we are limited in the conclusions we can make. We relied on participant reflection on incivility events, appraisal, and rumination, which may have been up to 30 days ago. In fact, a singular incivility incident might not be appraised as stressful but would be if stress accumulated over a prolonged period of time or is persistent, leading to negative outcomes (Kern and Grandey, 2009; Sliter et al., 2012). The experience of prolonged uncivil incidents (numerous interactions with rude customers) may spur significant resource loss. Therefore, a longitudinal study design may be better for assessing incivility as a frequent experience (Zhou & Hoever, 2014). Moreover, our study was not time-lagged, and customer incivility and its outcomes, such as creativity, were measured simultaneously, which may increase common method bias, as Podsakoff et al. (2012) implied. Future studies may employ longitudinal and qualitative studies to more thoroughly investigate the complicated relationship between incivility and creativity.

Our study utilized an established measure of creativity (Gilson & Madjar, 2011; Madjar et al., 2011), and as noted earlier, creativity is about the production of creative ideas, which can then inform implementation. While we cannot speak directly to the implementation of innovation, upon close examination of our measure, some items pertain to implementing creative ideas: "I easily modified existing processes to suit the current needs of my customers/clients." and "I made fundamental changes to how things were done to meet my clients' needs." This suggests that our findings on creativity take a

particular applied approach and may help to understand innovative behaviors. Our creativity measure thus might infringe upon the implementation stage of innovation, which is a precursor to innovative work behavior.

Further, this paper explored creativity at the individual level. Future research may consider team-level factors that affect the appraisal of incivility, such as supportive team members. In other words, appraisal of customer incivility experiences may change (e.g., not as negative; more challenging) when working in a supportive team environment. This may increase the likelihood that incivility will positively link to creativity.

Another fruitful area of study will be to include cultural context to examine its effect on how employees behave differently toward uncivil customers, appraisal of incivility, and associated creative outcomes. For example, Asian countries have a high-context culture in which relationships (e.g., employee-customer or employee-coworker) are important (Hall, 1997) and demonstrate long-term orientation (Hofstede, 2001). Thus, customers in Asian culture may be less likely to be rude or ignore the service employees' offerings compared to Western culture because of thinking about long-term relationships and staying away from interaction conflicts. Relying on these reasons and the relevant literature (see Brush, 2019; Uethschy et al., 2009; Wong, 2004), challenge appraisal in Asian culture may be embraced more, opposite to what we found.

Next, we only studied the incivility and creativity relationship in customer service employees of retail or marketing and sales sectors. Future studies may examine the same relationship in the advertising and marketing industries since being creative is key in developing advertising products and offering critical solutions in sales. Given the importance of creativity in these contexts and the interdependent nature of client-salesperson, incivility may have stronger effects on creativity. Future research will need to test this possibility.

Moreover, past researchers suggested that the social power of the target of incivility determines how they perceive the stressor (Cortina and Magley, 2009). In this, social

power may determine whether the target feels as though they are in control of their environment. Powerful individuals can bring changes to their environment without being disturbed by problems, which leads to viewing uncivil events as challenging (Cortina & Magley, 2009). In contrast, powerless individuals regard their environment as lacking control, which makes them susceptible to changes around them (e.g., Mainiero, 1986; Ragins & Sundstrom, 1989; Thacker & Ferris, 1991) and consequently, may appraise uncivil events as more negative. Thus, future research might investigate social power as a moderator between customer incivility and appraisals to see how social power influences interpreting the stressor as negative or challenging.

Lastly, our study did not probe how the hypothesized relationships might vary based on individual differences. We suggest that future research may include individual traits because personality differences may determine how uncivil events are appraised differently. Some may react to the incidents optimistically, thereby handling the situations (Brees et al., 2013), or will not negatively react to incivility at work (Miner & Smittick, 2016).

6.5 CONCLUSION

We examined dual pathways from customer incivility to explain service employee creativity via negative/challenge appraisal and rumination. Our hypothesis and theoretical connections were grounded in the conservation of resources theory (Hobfoll, 1989, 2001) and the transactional model of stress and coping (Lazarus & Folkman, 1984). We found that customer service employees more often view customer incivility negatively (e.g., irritating, frustrating) rather than as a challenge (e.g., an opportunity to learn, develop, and grow). This suggests that negative appraisal is associated with cognitive and psychological resource loss. Further, appraising customer incivility as negative is associated with an increase in rumination, which indicates that instead of restoring the resources, employees continue to lose more resources from repetitively thinking about a negative experience. However, some results from main and post-hoc analyses provide reasons for optimism: challenge appraisals of incivility were associated with higher creativity. Collectively our results point to the continued need to understand how

employees cope with incivility, acknowledging there may be some pathways to positive outcomes.

REFERENCES

- Al-Hawari, M. A., Bani-Melhem, S., & Quratulain, S. (2020). Do frontline employees cope effectively with abusive supervision and customer incivility? Testing the effect of employee resilience. *Journal of Business and Psychology, 35*(2), 223–240. <https://doi.org/10.1007/s10869-019-09621-2>
- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology, 45*(2), 357–376. <https://doi.org/10.1037/0022-3514.45.2.357>
- Amabile, T. M. (1996) Creativity and innovation in organizations. *Harvard Business School Background Note* 396-239, January 1996.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review, 40*(1), 39–58. <https://doi.org/10.2307/41165921>
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior, 36*, 157–183. <https://doi.org/10.1016/j.riob.2016.10.001>
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *The Academy of Management Review, 24*(3), 452–471. <https://doi.org/10.2307/259136>
- Arnold, K. A., & Walsh, M. M. (2015). Customer incivility and employee well-being: testing the moderating effects of meaning, perspective taking and transformational leadership. *Work and Stress, 29*(4), 362–378. <https://doi.org/10.1080/02678373.2015.1075234>

- Baer, M., & Oldham, G. R. (2006). The Curvilinear relation between experienced creative time pressure and creativity: Moderating effects of openness to experience and support for creativity. *Journal of Applied Psychology, 91*(4), 963–970. <https://doi.org/10.1037/0021-9010.91.4.963>
- Baranik, L. E., Wang, M., Gong, Y., & Shi, J. (2017). Customer mistreatment, employee health, and job performance: Cognitive rumination and social sharing as mediating mechanisms. *Journal of Management, 43*(4), 1261–1282. <https://doi.org/10.1177/0149206314550995>
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology, 5*(4), 323–370. <https://doi.org/10.1037/1089-2680.5.4.323>
- Becker, A. G., Breugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior, 37*(2), 157–167. <https://doi.org/10.1002/job.2053>
- Ben-Zur, H., & Yagil, D. (2005). The relationship between empowerment, aggressive behaviours of customers, coping, and burnout. *European Journal of Work and Organizational Psychology, 14*(1), 81–99. <https://doi.org/10.1080/13594320444000281>
- Bohner, B. H., Schwarz, N., & Strack, F. (1988). What triggers causal attributions? The impact of valence and subjective probability. *European Journal of Social Psychology, 18*(4), 335–345. <https://doi.org/10.1002/ejsp.2420180404>

- Breidenthal, A. P., Liu, D., Bai, Y., & Mao, Y. (2020). The dark side of creativity: Coworker envy and ostracism as a response to employee creativity. *Organizational Behavior and Human Decision Processes*, 161, 242–254. <https://doi.org/10.1016/j.obhdp.2020.08.001>
- Brosschot, J. F., Gerin, W., & Thayer, J. F. (2006). The perseverative cognition hypothesis: A review of worry, prolonged stress-related physiological activation, and health. *Journal of Psychosomatic Research*, 60, 113–124. <https://doi.org/10.1016/j.jpsychores.2005.06.074>
- Brush, G. J., (2019). Similarities and differences in Asian and Western travelers' service performance measurement, evaluation and outcomes. *Journal of Retailing and Consumer Services*, 50, 351–361. <https://doi.org/10.1016/j.jretconser.2018.07.010>
- Bushman, B. J., Bonacci, A. M., Pedersen, W. C., Vasquez, E. A., & Miller, N. (2005). Chewing on it can chew you up: Effects of rumination on triggered displaced aggression. *Journal of Personality and Social Psychology*, 88, 969–983. <https://doi.org/10.1037/0022-3514.88.6.969>
- Cheng, G. G., Tian, J., & Shaalan, A. (2020). Customer incivility and service sabotage in the hotel industry. *International Journal of Contemporary Hospitality Management*, 32(5), 1737–1754. <https://doi.org/10.1108/IJCHM-06-2019-0545>
- Cho, B. M. A., Han, S. J., & Lee, K. H. (2016). Workplace incivility and its effect upon restaurant frontline service employee emotions and service performance. *International Journal of Contemporary Hospitality Management*, 28(12), 2888–2912. <https://doi.org/10.1108/IJCHM-04-2015-0205>
- Coelho, F. & Augusto, M. (2010). Job characteristics and the creativity of frontline service employees. *Journal of Service Research: JSR*, 13(4), 426–438. <https://doi.org/10.1177/1094670510369379>

- Coelho, F., Augusto, M., & Lages, L. F. (2011). Contextual factors and the creativity of frontline employees: The mediating effects of role stress and intrinsic motivation. *Journal of Retailing*, 87(1), 31–45. <https://doi.org/10.1016/j.jretai.2010.11.004>
- Connelly, B. R., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A Review and Assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>
- Cortina, L. M., & Magley, V. J. (2009). Patterns and profiles of response to incivility in the workplace. *Journal of Occupational Health Psychology*, 14(3), 272–288. <https://doi.org/10.1037/a0014934>
- Cortina, L. M., Kabat-Farr, D., Leskinen, E. A., Huerta, M., & Magley, V. J. (2013). Selective incivility as modern discrimination in organizations: Evidence and impact. *Journal of Management*, 39(6), 1579-1605. <https://doi.org/10.1177/0149206311418835>
- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, 6(1), 64–80. <https://doi.org/10.1037/1076-8998.6.1.64>
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98–104. <https://doi.org/10.1037/0021-9010.78.1.98>
- Csikszentmihalyi, M. (1996). Creativity. Flow and the psychology of discovery and invention. *New York, NY: Harper Collins Publishers, Inc.*
- Dewar, R. D., & Dutton, J. E. (1986). The adoption of radical and incremental innovations: An empirical analysis. *Management Science*, 32(11), 1422–1433. <https://doi.org/10.1287/mnsc.32.11.1422>

- Diefendorff, E. R. J., Grandey, A. A., & Dahling, J. J. (2011). Emotional display rules as work unit norms: a multilevel analysis of emotional labor among nurses. *Journal of Occupational Health Psychology, 16*(2), 170–186.
<https://doi.org/10.1037/a0021725>
- Dohrenwend, B. S. (1978). Social status and responsibility for stressful life events. In C. D. Spielberger & L. G. Sarason (Eds.), *Stress and anxiety* (Vol. 5, pp. 25-42). *New York: Wiley.*
- Dweck, C. S. (2006). *Mindset: The new psychology of success. Random House.*
- Dweck, C. S., & Yeager, D. S. (2019). Mindsets: A view from two eras. *Perspectives on psychological science, 14*(3), 481–496.
<https://doi.org/10.1177/1745691618804166>
- Eichengreen, B., & Gupta, P. (2013). The two waves of service-sector growth. *Oxford Economic Papers, 65*(1), 96–123. <https://doi.org/10.1093/oep/gpr059>
- Ettlie, J. E., Bridges, W. P., & O’Keefe, R. D. (1984). Organization Strategy and Structural Differences for Radical Versus Incremental Innovation. *Management Science, 30*(6), 682–695. <https://doi.org/10.1287/mnsc.30.6.682>
- Fang, C., Kim, J.-H. (Jason), & Milliken, F. J. (2014). When bad news is sugarcoated: Information distortion, organizational search and the behavioral theory of the firm. *Strategic Management Journal, 35*(8), 1186–1201.
<https://doi.org/10.1002/smj.2146>

- Fitzgerald, L. F., Swan, S., & Magley, V. J. (1997). But was it really sexual harassment? Legal, behavioral, and psychological definitions of the workplace victimization of women. In O'Donohue, W. (Ed.), *Sexual harassment: Theory, research, and treatment* (pp. 5–28). Needham Heights, MA: Allyn & Bacon.
<https://psycnet.apa.org/record/1996-98843-001>
- Folkman, S., & Moskowitz, J. T. (2000). Positive affect and the other side of coping. *American Psychologist*, *55*(6), 647–654. <https://doi.org/10.1037/0003-066X.55.6.647>
- Ford, C. M., & Gioia, D. A. (2000). Factors influencing creativity in the domain of managerial decision making. *Journal of Management*, *26*(4), 705–732.
<https://doi.org/10.1177/014920630002600406>
- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion*, *19*(3), 313–332.
<https://doi.org/10.1080/02699930441000238>
- Frone, M. R. (2015). Relations of negative and positive work experiences to employee alcohol use: Testing the intervening role of negative and positive work rumination. *Journal of Occupational Health Psychology*, *20*(2), 148–160. <https://doi.org/10.1037/a0038375>
- Gailliot, M. T., Baumeister, R. F., DeWall, C. N., Maner, J. K., Plant, E. A., Tice, D. M., Brewer, L. E., & Schmeichel, B. J. (2007). Self-control relies on glucose as a limited energy source: Willpower is more than a metaphor. *Journal of Personality and Social Psychology*, *92*(2), 325–336. <https://doi.org/10.1037/0022-3514.92.2.325>

Gilson, L. L., & Madjar, N. (2011). Radical and incremental creativity: Antecedents and processes. *Psychology of Aesthetics, Creativity, and the Arts*, 5(1), 21–28.

<https://doi.org/10.1037/a0017863>

Gilson, L. L., & Litchfield, R. C. (2017). Idea collections: A link between creativity and innovation. *Innovation*, 19(1), 80–85.

<https://doi.org/10.1080/14479338.2016.1270765>

Gottlieb, B. H. (1997). Conceptual and measurement issues in the study of coping with chronic stress. In Gottlieb, B. H. (ed.), *Coping with Chronic Stress*, Plenum Press, New York, pp. 3–4.

Grandey, A. A. (2003). When “the show must go on”: Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46, 86–96. [http:// dx.doi.org/10.2307/30040678](http://dx.doi.org/10.2307/30040678)

Grandey, A. A., Kern, J. H., & Frone, M. R. (2007). Verbal abuse from outsiders versus insiders: Comparing frequency, impact on emotional exhaustion, and the role of emotional labor. *Journal of Occupational Health Psychology*, 12(1), 63–79.

<https://doi.org/10.1037/1076-8998.12.1.63>

Grandey, A., Dicketer, D., & Sin, H. (2004). The customer is not always right: Customer aggression and emotion regulation of service employees. *Journal of Organizational Behavior*, 25, 397–418. doi:10.1002/job.252

Halbesleben, J. R., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92(1), 93–106.

<https://doi.org/10.1037/0021-9010.92.1.93>

Hall, S. (1997). Representation: Cultural Representations and Signifying Practices. London: Sage Publications & Open University.

- Han, S. J., Bonn, M. A., & Cho, M. (2016). The relationship between customer incivility, restaurant frontline service employee burnout and turnover intention. *International Journal of Hospitality Management*, 52, 97–106. <https://doi.org/10.1016/j.ijhm.2015.10.002>
- Han, S., Harold, C. M., Oh, I.-S., Kim, J. K., & Agolli, A. (2021). A meta analysis integrating 20 years of workplace incivility research: Antecedents, consequences, and boundary conditions. *Journal of Organizational Behavior*. Advance online publication. <https://doi.org/10.1002/job.2568>
- Harris, L. C., & Reynolds, K. L. (2003). The consequences of dysfunctional customer behavior. *Journal of Service Research: JSR*, 6(2), 144–161. <https://doi.org/10.1177/1094670503257044>
- He, Y., Walker, J. M., Payne, S. C., & Miner, K. N. (2021). Explaining the negative impact of workplace incivility on work and non-work outcomes: The roles of negative rumination and organizational support. *Stress and Health*, 37(2), 297–309. <https://doi.org/10.1002/smi.2988>
- Hobfoll, S., E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *The American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hobfoll, S. E., (2001). The Influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337–421. <https://doi.org/10.1111/1464-0597.00062>

- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual review of Organizational Psychology and Organizational Behavior*, 5(1), 103–128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online BrushReadings in Psychology and Culture, 2, 8. <http://dx.doi.org/10.9707/2307-0919.1014>
- Holm, K., Torkelson, E., & Bäckström, M. (2023). Coping with workplace incivility in the foodservice industry. *Journal of Human Resources in Hospitality & Tourism*, ahead-of-print(ahead-of-print), 1–24. <https://doi.org/10.1080/15332845.2023.2180964>
- Holman, D., Chissick, C., & Totterdell, P. (2002). The effects of performance monitoring on emotional labor and well-being in call centers. *Motivation and Emotion*, 26(1), 57– 81. <http://dx.doi.org/10.1023/A:1015194108376>
- Holmes, A., Illowsky, B., & Dean, S. (2017). Introductory business statistics. OpenStax College, Rice University
- Hon, A. H. Y., & Lui, S. S. (2016). Employee creativity and innovation in organizations. *International Journal of Contemporary Hospitality Management*, 28(5), 862–885. <https://doi.org/10.1108/IJCHM-09-2014-0454>
- Huang, J. L., Bowling, N. A., Liu, M., & Li, Y. (2015). Detecting insufficient effort responding with an infrequency scale: Evaluating validity and participant reactions. *Journal of Business and Psychology*, 30(2), 299–311. <https://doi.org/10.1007/s10869-014-9357-6>

- Hu, X., Zhan, Y., Garden, R., Wang, M., & Shi, J. (2018). Employees' reactions to customer mistreatment: The moderating role of human resource management practices. *Work and Stress*, 32(1), 49–67.
<https://doi.org/10.1080/02678373.2017.1330836>
- Hur W-M, Kim, B.-S., & Park, S.-J. (2015). The relationship between coworker incivility, emotional exhaustion, and organizational outcomes: The mediating role of emotional exhaustion. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 25(6), 701–712. <https://doi.org/10.1002/hfm.20587>
- Hur, W-M., Moon, T. W., & Jun, J. K. (2016). The effect of workplace incivility on service employee creativity: The mediating role of emotional exhaustion and intrinsic motivation. *Journal of Services Marketing*, 30, 302-315.
<https://doi.org/10.1108/JSM-10-2014-0342>
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302. <https://doi.org/10.1348/096317900167038>
- Janssen, O., Lam, C. K., & Huang, X. (2010). Emotional exhaustion and job performance: The moderating roles of distributive justice and positive affect. *Journal of Organizational Behavior*, 31(6), 787–809.
- Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, 64, 408–417.
<http://dx.doi.org/10.1016/j.jbusres.2010.09.010>
- Jha, S., Balaji, M. S., Yavas, U., & Babakus, E. (2017). Effects of frontline employee role overload on customer responses and sales performance: Moderator and mediators. *European Journal of Marketing*, 51(2), 282–303. <https://doi.org/10.1108/EJM-01-2015-0009>

- Kasiri, L.A., Guan Cheng, K. T., Sambasivan, M., & Sidin, S. M. (2017). Integration of standardization and customization: Impact on service quality, customer satisfaction, and loyalty. *Journal of Retailing and Consumer Services*, 35, 91–97. <https://doi.org/10.1016/j.jretconser.2016.11.007>
- Keller, M. C., & Nesse, R. M. (2006). The evolutionary significance of depressive symptoms: Different adverse situations lead to different depressive symptom patterns. *Journal of Personality and Social Psychology*, 91(2), 316–330. <https://doi.org/10.1037/0022-3514.91.2.316>
- Kern, J. H., & Grandey, A. A. (2009). Customer incivility as a social stressor: The role of race and racial identity for service employees. *Journal of Occupational Health Psychology*, 14(1), 46–57. <https://doi.org/10.1037/a0012684>
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. *New York: Springer*
- LeBlanc, M. M., & Kelloway, E. K. (2002). Predictors and outcomes of workplace violence and aggression. *Journal of Applied Psychology*, 87(3), 444–453. <https://doi.org/10.1037/0021-9010.87.3.444>
- Lee, H., & Choi, B. (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of Management Information Systems*, 20, 179–228. <http://dx.doi.org/10.1080/07421222.2003.11045756>
- Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal*, 47(1), 41–58. <https://doi.org/10.5465/20159559>

- Lim, S., & Cortina, L. M. (2005). Interpersonal mistreatment in the workplace: The interface and impact of general incivility and sexual harassment. *Journal of Applied Psychology, 90*(3), 483–496. <https://doi.org/10.1037/0021-9010.90.3.483>
- Madjar, N., Greenberg, E., & Chen, Z. (2011). Factors for radical creativity, incremental creativity, and routine, noncreative performance. *Journal of Applied Psychology, 96*, 730–743. <http://dx.doi.org/10.1037/a0022416>
- Mainiero, L. A., (1986). Coping with powerlessness: The relationship of gender and job dependency to empowerment-strategy usage. *Administrative Science Quarterly, 31*(4), 633–653. <https://doi.org/10.2307/2392967>
- Marchiondo, Cortina, L. M., & Kabat-Farr, D. (2018). Attributions and appraisals of workplace incivility: Finding light on the dark side? *Applied Psychology, 67*(3), 369–400. <https://doi.org/10.1111/apps.12127>
- Martin, L. L., & Tesser, A. (1996). Some ruminative thoughts. In R. S. Wyer Jr. (Ed.), *Ruminative thoughts* (pp. 1-47). Hillsdale, NJ: Erlbaum.
- Matthews, R. A., Walsh, B. M., Smith, C. E., Whitman, M. V., & McKersie, S. J. (2022). Can incivility be informative? Client incivility as a signal for provider creativity. *Journal of Occupational Health Psychology, 27*(4), 392–410. <https://doi.org/10.1037/ocp0000323>
- Menguc, B., Auh, S., Yeniaras, V., & Katsikeas, C. S. (2017). The role of climate: implications for service employee engagement and customer service performance. *Journal of the Academy of Marketing Science, 45*(3), 428–451. <https://doi.org/10.1007/s11747-017-0526-9>
- Miller, D. T. (2001). Disrespect and the experience of injustice. *Annual Review of Psychology, 52*, 527–553. <https://doi.org/10.1146/annurev.psych.52.1.527>

- Miner K. N. & Smittick A. L. (2016). Workplace incivility, culture of honor, and aggression: Precarious manhood and the demoralized male. *Culture, Society and Masculinities*, 8, 20-38.
- Murphy, M. C., & Dweck, C. S. (2016). Mindsets shape consumer behavior. *Journal of Consumer Psychology*, 26(1), 127–136.
- Niven, K., Connolly, C., Stride, C. B., & Farley, S. (2022). Daily effects of face-to-face and cyber incivility via sadness, anger and fear. *Work and Stress*, 36(2), 147–163. <https://doi.org/10.1080/02678373.2021.1976882>
- Niven, K., Sprigg, C. A., Armitage, C. J., & Satchwell, A. (2013). Ruminative thinking exacerbates the negative effects of workplace violence. *Journal of Occupational and Organizational Psychology*, 86, 67–84. <https://doi.org/10.1111/j.2044-8325.2012.02066.x>
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science*, 3(5), 400–424. <https://doi.org/10.1111/j.1745-6924.2008.00088.x>
- Ogilvie, J., Rapp, A., Bachrach, D. G., Mullins, R., & Harvey, J. (2017). Do sales and service compete? The impact of multiple psychological climates on frontline employee performance. *Journal of Personal Selling & Sales Management*, 37(1), 11- 26. <https://doi.org/10.1080/08853134.2016.1276398>
- O’Neill, A. (2019) Distribution of the workforce across economic sectors in Canada. Retrieved from <https://www.statista.com/statistics/271244/distribution-of-the-workforce-across-economic-sectors-in-canada/#statisticContainer>
- Papageorgiou, C., & Wells, A. (2004). Depressive rumination: Nature, theory and treatment. *Chichester, West Sussex: John Wiley & Sons Ltd.*

- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Porath, C. L. (2022). Frontline work when everyone is angry. *Harvard Business Review*. Retrieved from <https://hbr.org/2022/11/frontline-work-when-everyone-is-angry?ab=seriesnav-bigidea>
- Porath, C. L., & Erez, A. (2007). Does rudeness really matter? The effects of rudeness on task performance and helpfulness. *Academy of Management Journal*, 50(5), 1181–1197. <https://doi.org/10.2307/20159919>
- Porath, C. L., & Erez, A. (2009). Overlooked but not untouched: How rudeness reduces onlookers' performance on routine and creative tasks. *Organizational Behavior and Human Decision Processes*, 109(1), 29–44. <https://doi.org/10.1016/j.obhdp.2009.01.003>
- Porath, C. L., & Pearson, C. (2013). The price of incivility. *Harvard Business Review*, 91(1-2), 114–146.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891. <https://doi.org/10.3758/BRM.40.3.879>
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions. *Multivariate Behavioral Research*, 42(1), 185–227. <https://doi.org/10.1080/00273170701341316>

- Rachman, S., (1981). Part I. Unwanted intrusive cognitions. *Advances in Behaviour Research and Therapy*, 3(3), 89–99. [https://doi.org/10.1016/0146-6402\(81\)90007-2](https://doi.org/10.1016/0146-6402(81)90007-2)
- Ragins, B. L., & Sundstrom, E. (1989). Gender and Power in Organizations: A Longitudinal Perspective. *Psychological Bulletin*, 105(1), 51–88. <https://doi.org/10.1037/0033-2909.105.1.51>
- Samma, M., Zhao, Y., Rasool, S. F., Han, X., & Ali, S. (2020). Exploring the relationship between innovative work behavior, job anxiety, workplace ostracism, and workplace incivility: Empirical evidence from small and medium sized enterprises (SMEs). *Healthcare (Basel)*, 8(4), 508–. <https://doi.org/10.3390/healthcare8040508>
- Schilpzand, P., Leavitt, K., & Lim, S. (2016). Incivility hates company: Shared incivility attenuates rumination, stress, and psychological withdrawal by reducing self-blame. *Organizational Behavior and Human Decision Processes*, 133, 33–44. <https://doi.org/10.1016/j.obhdp.2016.02.001>
- Schmidt, T. C., Levine, L. J., & Testa, S. (2010). Appraisals, emotions and emotion regulation: An integrative approach. *Motivation and Emotion*, 34(1), 63–72. <https://doi.org/10.1007/s11031-010-9155-z>
- Schneider T. R., (2004). The role of neuroticism on psychological and physiological stress responses. *Journal of Experimental Social Psychology*, 40(6), 795–804. <https://doi.org/10.1016/j.jesp.2004.04.005>
- Shalley C. E., Zhou, J., & Oldham, G. R. (2004). The Effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30(6), 933–958. <https://doi.org/10.1016/j.jm.2004.06.007>

- Sharifirad, M. S. (2016). Can incivility impair team's creative performance through paralyzing employee's knowledge sharing? A multi-level approach. *Leadership & Organization Development Journal*, 37(2), 200–225. <https://doi.org/10.1108/LODJ-05-2014-0092>
- Shimura, A., Yokoi, K., Ishibashi, Y., Akatsuka, Y., & Inoue, T. (2021). Remote work decreases psychological and physical stress responses, but full-remote work increases presenteeism. *Frontiers in Psychology*, 12, 730969–730969. <https://doi.org/10.3389/fpsyg.2021.730969>
- Siemer, M., Mauss, I., & Gross, J. J. (2007). Same Situation-Different Emotions: How Appraisals Shape Our Emotions. *Emotion (Washington, D.C.)*, 7(3), 592–600. <https://doi.org/10.1037/1528-3542.7.3.592>
- Sliter, M., Jex, S., Wolford, K., & McInnerney, J. (2010). How rude! Emotional labor as a mediator between customer incivility and employee outcomes. *Journal of Occupational Health Psychology*, 15(4), 468–481. <https://doi.org/10.1037/a0020723>
- Sliter, M., Sliter, K., & Jex, S. (2012). The employee as a punching bag: The effect of multiple sources of incivility on employee withdrawal behavior and sales performance. *Journal of Organizational Behavior*, 33(1), 121–139. <https://doi.org/10.1002/job.767>
- Smith, J. M., & Alloy, L. B. (2009). A roadmap to rumination: A review of the definition, assessment, and conceptualization of this multifaceted construct. *Clinical Psychology Review*, 29(2), 116–128. <https://doi.org/10.1016/j.cpr.2008.10.003>
- Sommovigo, V., Setti, I., Argentero, P., & O'Shea, D. (2019). The impact of customer incivility and verbal aggression on service providers: A systematic review. *Work (Reading, Mass.)*, 62(1), 59–86. <https://doi.org/10.3233/WOR-182842>

- Sonnentag, S., & Fritz, C. (2007). The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology, 12*, 204–221. doi:10.1037/1076-8998.12.3.204
- Spector, P. E., & Brannick, M. T. (2011). Methodological urban legends: The misuse of statistical control variables. *Organizational Research Methods, 14*(2), 287–305. <https://doi.org/10.1177/1094428110369842>
- Spence, M., (1973). Job Market Signaling. *The Quarterly Journal of Economics, 87*(3), 355–374. <https://doi.org/10.2307/1882010>
- Stanton, Kirk, S. B., Cameron, C. L., & Danoff-Burg, S. (2000). Coping through emotional approach: Scale construction and validation. *Journal of Personality and Social Psychology, 78*(6), 1150–1169. <https://doi.org/10.1037/0022-3514.78.6.1150>
- Taylor, S. E., & Schneider, S. K. (1989). Coping and the simulation of events. *Social Cognition, 7*(2), 174–194. <https://doi.org/10.1521/soco.1989.7.2.174>
- Thacker, R. A., & Ferris, G. R. (1991). Understanding sexual harassment in the workplace: The influence of power and politics within the dyadic interaction of harasser and target. *Human Resource Management Review, 1*(1), 23–37. [https://doi.org/10.1016/1053-4822\(91\)90009-2](https://doi.org/10.1016/1053-4822(91)90009-2)
- Ueltschy, L. C., Laroche, M., Zhang, M., Cho, H., & Yingwei, R. (2009). Is there really an Asian connection? Professional service quality perceptions and customer satisfaction. *Journal of Business Research, 62*(10), 972–979. <https://doi.org/10.1016/j.jbusres.2008.03.003>

- Unsworth, K., & Clegg, C. W. (2010). Why do employees undertake creative action? *Journal of Occupational and Organizational Psychology*, 83(1), 77–99. <https://doi.org/10.1348/096317908X398377>
- Van Dyne, L., Jehn, K. A., & Cummings, A. (2002). Differential effects of strain on two forms of work performance: individual employee sales and creativity. *Journal of Organizational Behavior*, 23(1), 57–74. <https://doi.org/10.1002/job.127>
- Volmer, Binnewies, C., Sonnentag, S., & Niessen, C. (2012). Do social conflicts with customers at work encroach upon our private lives? A diary study. *Journal of Occupational Health Psychology*, 17(3), 304–315. <https://doi.org/10.1037/a0028454>
- Walker, D. D., van Jaarsveld, D. D., & Skarlicki, D. P. (2014). Exploring the effects of individual customer incivility encounters on employee incivility: The moderating roles of entity (in)civility and negative affectivity. *Journal of Applied Psychology*, 99(1), 151–161. <https://doi.org/10.1037/a0034350>
- Wang, M., Liu, S., Liao, H., Gong, Y., Kammeyer-Mueller, J., & Shi, J. (2013). Can't get it out of my mind: Employee rumination after customer mistreatment and negative mood in the next morning. *Journal of Applied Psychology*, 98(6), 989–1004. <https://doi.org/10.1037/a0033656>
- Watkins, E. R. (2008). Constructive and unconstructive repetitive thought. *Psychological Bulletin*, 134(2), 163–206. <https://doi.org/10.1037/0033-2909.134.2.163>
- Wenzlaff, R. M. (1993). The mental control of depression: Psychological obstacles to emotional well-being. In D. M. Wegner & J. W. Pennebaker (Eds.), *Handbook of mental control* (pp. 239–257). Prentice-Hall, Inc.

- Whitmer, A. J., & Gotlib, I. H. (2013). An attentional scope model of rumination. *Psychological Bulletin*, 139(5), 1036–1061. <https://doi.org/10.1037/a0030923>
- Wilson, N. L., & Holmvall, C. M. (2013). The development and validation of the Incivility from customers scale. *Journal of Occupational Health Psychology*, 18(3), 310–326. <https://doi.org/10.1037/a0032753>
- Wong, N., Y., (2004). The role of culture in the perception of service recovery. *Journal of Business Research*, 57(9), 957–963. [https://doi.org/10.1016/S0148-2963\(03\)00002-X](https://doi.org/10.1016/S0148-2963(03)00002-X)
- Wright, T.A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, 83(3), 486–493. <https://doi.org/10.1037/0021-9010.83.3.486>
- Yang, F., Lu, M., & Huang, X. (2020). Customer mistreatment and employee well-being: A daily diary study of recovery mechanisms for frontline restaurant employees in a hotel. *International Journal of Hospitality Management*, 91, 102665. <https://doi.org/10.1016/j.ijhm.2020.102665>
- Zhan, X., Li, Z., & Luo, W. (2019). An identification-based model of workplace incivility and employee creativity: Evidence from China. *Asia Pacific Journal of Human Resources*, 57(4), 528–552. <https://doi.org/10.1111/1744-7941.12204>
- Zhou, J., & Hoever, I. J. (2014). Research on workplace creativity: A review and redirection. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 333–359. <https://doi.org/10.1146/annurevorgpsych-031413-091226>

APPENDIX

APPENDIX 1: PRINCIPAL COMPONENTS ANALYSIS

We conducted Principal Components Analysis for the creativity variable to classify items among incremental and radical creativity subscales. By doing PCA, we retained seven variables out of eight.

Table 10 illustrates that all the correlation matrices were statistically significant since a low correlation value was greater than $|.30|$, indicating that all variables were interrelated. Regarding higher boundaries, the table shows correlation statistics are less than $|.80|$, reducing concerns for multicollinearity. Further, the determinant value of the correlation matrix was $.005$, higher than $.00001$, demonstrating that the correlations of 8 variables are suitable for Factor Analysis.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) is $.9$ (between $.5$ and 1), indicating that data was scalable and factor analysis was appropriate. Bartlett's Test of Sphericity showed that incremental and radical creativity items were uncorrelated in the population, and each item had a good correlation with another. The results also show Bartlett's $p < .001$, smaller than $.05$. Thus, factor or principal component analysis could be done meaningfully on our eight items. The communalities row in Table 10 presents that all items (in the extraction column) were functioning correctly and would load on our factors since they were closer to 1 .

Table 11 includes the summary of the important eigenvalues, showing we need to pay attention to 1st and 2nd-factor solutions (extraction sum of squared loadings), which were extracted—the first component with 5.004 , which explained 62.552% of the observed variance in the data, and the second one with 1.026 , which explained 12.819% . Altogether, two extracted components explained 75.37% of the variance, more than the recommended standard of 50% . The Component Correlation Matrix shows that the correlation between extracted factors 1 and 2 is $.61$, which estimated that both components had good correlations, showing that factors were rotated through 60 degrees.

Regarding the Pattern Matrix, the extracted second component (the second item of incremental creativity subscale: Incremental Creat_2) for Factor 1 and 2 did not precisely load on one factor. Therefore, we removed the 2nd item of incremental creativity and reran the factor analysis. The PCA results without Item 2 revealed that all items loaded into one factor well. Moreover, the determinant value of the correlation matrix improved from .005 to .011, showing higher correlations among components. The two extracted components explained 76.96 % of the variance, which had increased as well. Thus, after removing the second item (Incremental Creat_2), incremental and radical creativity can be considered as two empirically similar concepts.

Table 10. Correlations among extracted factors and communalities

Variable	1	2	3	4	5	6	7	8	Communalities
Incremental Creat_1	1.000								.66
Incremental Creat_2	.61	1.00							.69
Incremental Creat_3	.60	.60	1.00						.81
Incremental Creat_4	.58	.59	.77	1.00					.80
Radical Creativity_1	.43	.58	.50	.54	1.00				.67
Radical Creativity_2	.45	.64	.48	.49	.72	1.00			.83
Radical Creativity_3	.44	.58	.43	.40	.60	.75	1.00		.81
Radical Creativity_4	.49	.63	.51	.51	.60	.72	.73	1.00	.76
KMO			.9						
Bartlett's Test. P-value			<.001						

99

Table 11. Total variance explained

Component	Eigenvalue	% of Variance	Cumulative %	SS Loadings		Pattern Matrix	
				Extracted	Cumulative%	Factor1	Factor2
1	5.00	62.55	62.55	5.004	62.55	.04	.78
2	1.03	12.82	75.37	1.026	75.37	.44	.49
3	.53	6.60	81.97			-.03	.92
4	.40	5.05	87.03			-.02	.91
5	.34	4.29	91.32			.73	.14
6	.26	3.29	94.61			.92	-.02
7	.22	2.75	97.35			.97	-.13
8	.21	2.65	100.00			.82	.09
Correlation Matrix						.61	.61

APPENDIX A: ETHICS APPROVAL

Social Sciences & Humanities Research Ethics Board Letter of Approval

January 24, 2023
Sevarakhon Dekhkonova
Management\Rowe School of Business

Dear Sevarakhon,

REB #: 2022-6414
Project Title: Does Rudeness Reduce Creativity? Examining the Role of Appraisals and Rumination following Incivility at Work.

Effective Date: January 24, 2023
Expiry Date: January 24, 2024

The Social Sciences & Humanities Research Ethics Board has reviewed your application for research involving humans and found the proposed research to be in accordance with the Tri-Council Policy Statement on *Ethical Conduct for Research Involving Humans*. This approval will be in effect for 12 months as indicated above. This approval is subject to the conditions listed below which constitute your on-going responsibilities with respect to the ethical conduct of this research.

Sincerely,

Dr. Megan Bailey
Chair, Social Sciences and Humanities Research Ethics Board
Dalhousie University

–

Post REB Approval: On-going Responsibilities of Researchers

After receiving ethical approval for the conduct of research involving humans, there are several ongoing responsibilities that researchers must meet to remain in compliance with University and Tri-Council policies.

1. Additional Research Ethics approval

Prior to conducting any research, researchers must ensure that all required research ethics approvals are secured (in addition to Dalhousie approval). This includes, but is not limited to, securing appropriate research ethics approvals from: other institutions with whom the PI is affiliated; the institutions of research team members; the institution at which participants may be recruited or from which data may be collected; organizations or groups (e.g. school boards, Indigenous communities, correctional services, long-term care facilities, service agencies and community groups) and from any other responsible review body or bodies at the research site.

2. Reporting adverse events

Any significant adverse events experienced by research participants must be reported **in** writing to Research Ethics within 24 hours of their occurrence. Examples of what might be considered “significant” include: a negative physical reaction by a participant (e.g. fainting, nausea, unexpected pain, allergic reaction), an emotional breakdown of a participant during an interview, report by a participant of some sort of negative repercussion from their participation (e.g. reaction of spouse or employer) or complaint by a participant with respect to their participation, report of neglect or abuse of a child or adult in need of protection, or a privacy breach. The above list is indicative but not all-inclusive. The written report must include details of the situation and actions taken (or proposed) by the researcher in response to the incident.

3. Seeking approval for changes to research

Prior to implementing any changes to your research plan, whether to the risk assessment, methods, analysis, study instruments or recruitment/consent material, researchers must submit them to the Research Ethics Board for review and approval. This is done by completing the amendment request process (described on the website) and submitting an updated ethics submission that includes and explains the proposed changes. Please note that reviews are not conducted in August.

4. Continuing ethical review - annual reports

Research involving humans is subject to continuing REB review and oversight. REB approvals are valid for up to 12 months at a time (per the Tri-Council Policy Statement (TCPS) article 6.14). Prior to the REB approval expiry date, researchers may apply to extend REB approval by completing an Annual Report (available on the website). The report should be submitted 3 weeks in advance of the REB approval expiry date to allow time for REB review and to prevent a lapse of ethics approval for the research. Researchers should note that no research involving humans may be conducted in the absence of a valid ethical approval and that allowing REB approval to lapse is a violation of the University Scholarly Misconduct Policy, inconsistent with the TCPS and may result in the suspension of research and research funding, as required by the funding agency.

5. Final review - final reports

When the researcher is confident that all research-related interventions or interactions with participants have been completed (for prospective research) and/or that all data acquisition is complete, there will be no further access to participant records or collection of biological materials (for secondary use of information research), a Final Report (available on the website) must be submitted to Research Ethics. After review and acknowledgement of the Final Report, the Research Ethics file will be closed.

6. Retaining records in a secure manner

Researchers must ensure that records and data associated with their research are managed consistent with their approved research plans both during and after the project. Research information must be confidentially and securely retained and/or disposed of in such a manner as to comply with confidentiality provisions specified in the protocol and consent forms. This may involve destruction of the records, or continued arrangements for secure storage.

It is the researcher's responsibility to keep a copy of the REB approval letters. This can be important to demonstrate that research was undertaken with Board approval. Please note that the University will securely store your REB project file for 5 years after the REB approval end date at which point the file records may be permanently destroyed.

7. Current contact information and university affiliation

The lead researchers must inform the Research Ethics office of any changes to contact information for the PI (and supervisor, if appropriate), especially the electronic mail address, for the duration of the REB approval. The PI must inform Research Ethics if there is a termination or interruption of their affiliation with Dalhousie University.

8. Legal Counsel

The Principal Investigator agrees to comply with all legislative and regulatory requirements that apply to the project. The Principal Investigator agrees to notify the University Legal Counsel office in the event that they receive a notice of non-compliance, complaint or other proceeding relating to such requirements.

9. Supervision of students

Faculty must ensure that students conducting research under their supervision are aware of their responsibilities as described above and have adequate support to conduct their research in a safe and ethical manner.

APPENDIX B: SURVEY (INCLUDING STUDY MEASURES)

We are now interested in learning more about your social experiences at work. We'll ask about how your experiences with your coworkers, supervisors, and customers separately. Keep in mind that these experiences may be in-person, online, or in written correspondence.

(Measures will be presented in random order within blocks)

BLOCK 1: incivility experiences from supervisor and coworkers:

<p>Incivility Scale Cortina, L. M., Kabat-Farr, D., Leskinen, E. A., Huerta, M., & Magley, V. J. (2013). Selective incivility as modern discrimination in organizations evidence and impact. <i>Journal of Management</i>, 39, 1579–1605. http://dx.doi.org/10.1177/0149206311418835</p> <p><u>Items slightly modified for the past month time frame (verb-tense)</u></p> <p>(Insufficient effort items from: Huang, J. L., Bowling, N. A., Liu, M., & Li, Y. (2015). Detecting insufficient effort responding with an infrequency scale: Evaluating validity and participant reactions. <i>Journal of Business and Psychology</i>, 30, 299-311. They cite Meade, A. W., & Craig, S. B. (in press). Identifying careless responses in survey data. <i>Psychological Methods</i>.)</p> <p>Do you have a supervisor? <u>Yes, No.</u> (If no, branch to the next scale.) <i>Thinking about the past month, how often did you experience the following from your supervisor</i></p>	<p><i>1 = never</i> <i>2 = once or twice</i> <i>3 = sometimes</i> <i>4 = often</i> <i>5 = many times</i></p>
<p>Paid little attention to your statements or showed little interest in your opinions.</p>	<p>SIN1</p>
<p>Doubted your judgment on a matter over which you had responsibility.</p>	<p>SIN2</p>
<p>Gave you hostile looks, stares, or sneers.</p>	<p>SIN3</p>
<p>Addressed you in unprofessional terms, either publicly or privately.</p>	<p>SIN4</p>
<p>Interrupted or “spoke over” you.</p>	<p>SIN5</p>
<p>Rated you lower than you deserved on an evaluation.</p>	<p>SIN6</p>
<p>Yelled, shouted, or swore at you.</p>	<p>SIN7</p>
<p>Made insulting or disrespectful remarks about you.</p>	<p>SIN8</p>
<p>Ignored you or failed to speak to you (e.g., gave you “the silent treatment”).</p>	<p>SIN9</p>
<p>Accused you of incompetence.</p>	<p>SIN10</p>

Targeted you with anger outbursts or “temper tantrums.”	SIN11
Made jokes at your expense.	SIN12
Do you work with coworker(s)? Yes, No. (If no, branch to the next scale.)	
<i>Thinking about the past month, how often did you experience the following from your coworker(s):</i>	
Paid little attention to your statements or showed little interest in your opinions.	CWIN1
Doubted your judgment on a matter over which you had responsibility.	CWIN2
Please select “often” as a response to this question	IER1
Gave you hostile looks, stares, or sneers.	CWIN3
Addressed you in unprofessional terms, either publicly or privately.	CWIN4
Interrupted or “spoke over” you.	CWIN5
Rated you lower than you deserved on an evaluation.	CWIN6
Yelled, shouted, or swore at you.	CWIN7
Made insulting or disrespectful remarks about you.	CWIN8
Ignored you or failed to speak to you (e.g., gave you “the silent treatment”).	CWIN9
Accused you of incompetence.	CWIN10
Targeted you with anger outbursts or “temper tantrums.”	CWIN11
Made jokes at your expense.	CWIN12

BLOCK 2: Incivility from customers/clients:

Wilson, N. L., & Holmvall, C. M. (2013). The Development and Validation of the Incivility From Customers Scale. <i>Journal of Occupational Health Psychology, 18</i> (3), 310–326. https://doi.org/10.1037/a0032753	1 = never 2 = once or twice 3 = monthly 4 = weekly 5 = daily 6 = 2–3 times per day 7 = more than 3 times per day
<i>Thinking about the past month, how often have customers/clients. . .</i>	
1. . .continued to complain despite your efforts to assist them	CIN1
2. . .made gestures (e.g., eye rolling, sighing) to express their impatience	CIN2
3. . .please select "daily" to this question	IER2
4. . .grumbled to you about slow service during busy times	CIN3
5. . .made negative remarks to you about your organization	CIN4
6. . .blamed you for a problem you did not cause	CIN5

7. . .used an inappropriate manner of addressing you (e.g., “Hey you”)	CIN6
8. . .failed to acknowledge your efforts when you have gone out of your way to help them	CIN7
9. . .grumbled to you that there were too few employees working	CIN8
10. . .complained to you about the value of goods and services	CIN9
11. . .made inappropriate gestures to get your attention (e.g., snapping fingers)	CIN10

(Branching: If customer incivility mean score ≥ 0.1 . Then reflect on customer incivility and write on it, and continue on (Block 3))

(If customer incivility mean score=0, and supervisor incivility mean score ≥ 0.083 Then reflect on supervisor incivility and continue on (Block 3))

(If customer incivility mean score=0 and supervisor incivility mean score=0 and coworker incivility mean score >0.083 . Then reflect on coworker incivility and continue on (Block 3))

(If customer incivility mean score= 0, supervisor incivility mean score= 0, coworker incivility mean score= 0 then right to Block 4.)

Now we want to ask you in more detail about one of your experiences with a Customer/Client (Supervisor or Coworker) that you just reported.

Please describe the experience that occurred most RECENTLY. By “experience,” we mean a behavior or pattern of behaviors that came from the same person(s), even if the behavior happened over a period of time. _____

(Note: Participants will describe incivility experience from only one source)

Please describe this experience in about 50-100 words	CustIncivDescription
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Please describe this experience in about 50-100 words	SupIncivDescription
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Please describe this experience in about 50-100 words	CowIncivDescription
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BLOCK3: Appraisal and Rumination

Uncivil Experience: The next set of questions asks more about the uncivil experience you just described.

<p>The paper obtained Appraisal scales (Fitzgerald et al., 1997; Grandey et al., 2004) as cited in Marchiondo et al., 2018</p> <p>(Marchiondo, Cortina, L. M., & Kabat-Farr, D. (2018). Attributions and Appraisals of Workplace Incivility: Finding Light on the Dark Side? <i>Applied Psychology</i>, 67(3), 369–400. https://doi.org/10.1111/apps.12127)</p> <p>Fitzgerald, L. F., Swan, S., Magley, V. J. (1997). But was it really sexual harassment? Legal, behavioral, and psychological definitions of the workplace victimization of women. In O’Donohue, W. (Ed.), <i>Sexual harassment: Theory, research, and treatment</i> (pp. 5–28). Needham Heights, MA: Allyn & Bacon. https://psycnet.apa.org/record/1996-98843-001</p> <p>Grandey, A. A., Dickter, D. N., & Sin, H.-P. (2004). The customer is not always right: Customer aggression and emotion regulation of service employees. <i>Journal of Organizational Behavior</i>, 25, 397–418. http://dx.doi.org/10.1002/job.252</p> <p>Piped in for participants’ references from comments of customer/supervisor/coworker incivility experience (on qualtrics)</p> <p>We’d like to know more about your thoughts on this experience. How would you describe it? Rate the extent to which each word describes the experience. <i>To what degree was this incident: (items will be presented randomly)</i></p>	<p><i>1= not at all</i> <i>2=slightly</i> <i>3=moderately</i> <i>4=very</i> <i>5 =extremely</i></p>
<p><i>We obtained items by contacting an author of the paper</i></p>	

<p><u>Rumination</u></p> <p>Keller, & Nesse, R. M. (2006). The Evolutionary Significance of Depressive Symptoms: Different Adverse Situations Lead to Different Depressive Symptom Patterns. <i>Journal of Personality and Social Psychology</i>, 91(2), 316–330. https://doi.org/10.1037/0022-3514.91.2.316</p> <p><i>Thinking about the experience you just described, how much did you experience the following?</i></p>	<p><i>1=strongly disagree</i> <i>2=disagree</i> <i>3=neutral</i> <i>4=agree</i> <i>5=strongly agree</i></p>
<p>I couldn’t “let go” of certain thoughts about the experience.</p>	<p>RM1</p>
<p>I was able to clear problems from my mind following the experience.</p>	<p>RM2</p>
<p>I thought about how I could have done things differently.</p>	<p>RM3</p>
<p>I would catch myself thinking about the experience.</p>	<p>RM4</p>

BLOCK 4: Outcomes

<p><u>Creativity</u></p> <p>Gilson, & Madjar, N. (2011). Radical and Incremental Creativity: Antecedents and Processes. <i>Psychology of Aesthetics, Creativity, and the Arts</i>, 5(1), 21–28. https://doi.org/10.1037/a0017863</p> <p>Madjar, Greenberg, E., & Chen, Z. (2011). Factors for Radical Creativity, Incremental Creativity, and Routine, Noncreative Performance. <i>Journal of Applied Psychology</i>, 96(4), 730–743. https://doi.org/10.1037/a0022416</p> <p><u>We would now like to know more about your work behavior and attitudes:</u></p> <p><i>Thinking about the past month, when it came to meeting the needs of your customers/clients, how often did you do each of the following?</i></p> <p>Incremental:</p>	<p><i>Incremental Creativity</i> <i>1 = Never</i> <i>2 = Rarely</i> <i>3 = Sometimes</i> <i>4 = Very often</i> <i>5= Constantly</i></p> <p><i>Radical Creativity</i> <i>1 = Never</i> <i>2 = Rarely</i> <i>3 = Sometimes</i> <i>4 = Very often</i> <i>5= Constantly</i></p>
<p>I easily modified existing processes to suit the current needs of my customers/clients.</p>	<p>InC1</p>
<p>I found creative new uses for existing methods or equipment to better suit my customers/clients’ needs</p>	<p>InC2</p>
<p>I effectively adapted existing processes for current purposes</p>	<p>InC3</p>
<p>I was very good at adapting already existing ideas to better meet my customers/clients’ need</p>	<p>InC4</p>
<p>Radical:</p>	
<p>I demonstrated <u>true originality</u> in meeting my clients' needs</p>	<p>RaC1</p>
<p>I identified <u>brand new highly creative</u> opportunities and ways for meeting my clients' needs</p>	<p>RaC2</p>
<p>I developed <u>truly radically new</u> ways of meeting the needs of my clients</p>	<p>RaC3</p>
<p>I made <u>fundamental changes</u> to how things were done to meet my clients' needs</p>	<p>RaC4</p>

<p><u>Work Attitudes</u></p> <p>Intention to Quit Balfour, D. L., & Wechsler, B. (1996). Organizational Commitment: Antecedents and Outcomes in Public Organizations. <i>Public Productivity & Management Review</i>, 19(3), 256-277. https://doi.org/10.2307/3380574</p>	<p><i>1 = strongly disagree</i> <i>2 = disagree</i> <i>3 = somewhat disagree</i> <i>4 = neutral</i></p>
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<p>Job Satisfaction Cammann, Fichman, Jenkins and Klesh (1983). Part of the Michigan Organizational Assessment Questionnaire. In S. Seashore, Lawler, Mirvis, & Cammann (Eds.), <i>Assessing organizational change: A guide to methods, measures and practices</i>. New York: John Wiley.</p> <p>During the <u>past month</u>, to what extent would you say that you agreed or disagreed with the following statements... * = reverse scored</p>	<p>5 = somewhat agree 6 = agree 7 = strongly agree</p>
I often thought about quitting this job.	intentq1
I will probably look for a new job during the next year.	intentq2
In general, I don't like my job. *	jobsat1
All in all, I am satisfied with my job.	jobsat2
In general, I like working here.	jobsat3
<p>Rumination(trait-type): Trapnell, & Campbell, J. D. (1999). Private Self-Consciousness and the Five-Factor Model of Personality: Distinguishing Rumination From Reflection. <i>Journal of Personality and Social Psychology</i>, 76(2), 284–304. https://doi.org/10.1037/0022-3514.76.2.284</p> <p><i>In general...</i></p>	<p>1=strongly disagree 2=disagree 3=neutral 4=agree 5=strongly agree</p>
My attention is often focused on aspects of myself I wish I'd stop thinking about.	RMT1
I always seem to be rehashing in my mind recent things I've said or done.	RMT2
Sometimes it is hard for me to shut off thoughts about myself.	RMT3
Long after an argument or disagreement is over with, my thoughts keep going back to what happened.	RMT4
I have paid no attention to this survey so far.	IER2
I tend to "ruminate" or dwell over things that happen to me for a really long time afterward.	RMT5
I don't waste time rethinking things that are over and done with.	RMT6
Often I'm playing back over in my mind how I acted in a past situation.	RMT7
I often find myself reevaluating something I've done.	RMT8
I never ruminate or dwell on myself for very long.	RMT9
It is easy for me to put unwanted thoughts out of my mind.	RMT10
I often reflect on episodes in my life that I should no longer concern myself with.	RMT11
I spend a great deal of time thinking back over my embarrassing or disappointing moments.	RMT12

<p>Before we wrap up, do you have any additional comments about the topics you were asked about in this survey? Do you have any feedback about the survey itself? If not, you can continue to the next screen to be redirected to Prolific for the completion code.</p>	<p>open-ended</p>
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