Conceptualizing the Role of Severity in Counterproductive Work Behavior: Predicting Employee Engagement in Minor and Severe CWBs

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CONCEPTUALIZING THE ROLE OF

SEVERITY IN COUNTERPRODUCTIVE WORK BEHAVIOR:

PREDICTING EMPLOYEE ENGAGEMENT IN MINOR AND SEVERE CWBS

by

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ABSTRACT

Counterproductive work behaviors (CWBs) have been identified as pervasive employee behaviors with the potential to cause significant harm in the workplace (e.g., Sackett & DeVore, 2001). Because of the considerable threat CWBs pose to organizational and employee well-being, a literature has emerged to better understand the structure of these behaviors and identify the factors and conditions that effect employee engagement in counterproductive acts. While past research has distinguished between types of CWBs, i.e., theft, sabotage, withdrawal, less attention has been paid to the specific forms these behaviors take. For example, being two hours late to work is more serious and harmful than being five minutes late, and traditional frequency-based measures fail to distinguish between these behaviors. In order to understand and account for the full range of variation in employee CWBs, research must advance in ways that incorporates severity. The current study introduces a novel conceptualization of CWB severity that distinguishes between intra-behavioral differences and develops modified versions of the CWB-C (Spector et al., 2006; Bennett & Robinson, 2000) which assess engagement in low and high severity versions of each CWB. These new measures are utilized to test a hypothesized model of CWB severity that predicts how individual (negative affect) and contextual factors (self-control & perceived consequences) interact to predict low and high severity CWBs. This research seeks to expand our understanding of the diverse ways employees respond to stressful work conditions and represents an important first step in identifying the types of employees and work environments that are associated with the most harmful, high severity, CWBs. Implications for future CWB research are discussed.

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CHAPTER ONE: INTRODUCTION

Research has continued to reveal the considerable direct and indirect costs of

counterproductive work behaviors (CWB) on organizations as well as the pervasiveness of these

types of behaviors in the workplace (e.g., Stewart, Bing, Davidson, Woehr, & McIntyre, 2009;

Vardi & Weitz, 2004). CWB refers to a set of volitional behaviors that endanger the legitimate

interests of an organization and can potentially harm organizational stakeholders (i.e. employees,

supervisors, customers) and the organization directly (Sackett & DeVore, 2001; Sackett, 2002).

These behaviors take on many forms, including theft, absenteeism, and harassment, and have

been described in the literature as aversive responses to work conditions and coping strategies for

managing job-related stressors (Spector & Fox, 2002; Spector & Fox, 2005). Although their

harm-doing is not necessarily intentional, these behaviors frequently violate organizational or

social norms and can be reasonably predicted to be harmful (Spector & Fox, 2005). With an

estimated annual profit loss of billions of dollars attributed to employee theft (e.g., Hollinger &

Langton, 2006; Coffin, 2003) and other negative outcomes connected to CWBs, including

decreases in employee and organizational productivity and reputation (e.g., Dunlop & Lee, 2004;

Lim & Cortina, 2005), there is a need to better understand and accurately assess these

problematic behaviors (Bowling & Gruys, 2010). For this purpose, the current research seeks to

address one understudied issue in the conceptualization and measurement of CWBs: severity and

the distinction between minor and severe counterproductive acts.

Severity in the context of CWBs can be considered in two distinct ways: (1) how the

consequences of some CWBs are more severe than others (e.g., acts of interpersonal aggression

cause more harm than theft) and (2) how engagement in particular CWBs can take on more or

less severe behavioral forms (e.g., wasting an hour of worktime is more harmful than wasting fifteen minutes). While this issue has been primarily discussed from the first, inter-behavioral, perspective (e.g., Robinson & Bennett, 1995; Fox & Spector, 1999; Ambrose, Seabright, & Schminke, 2002), to fully understand the processes and consequences associated with CWBs the second, intra-behavioral, perspective must also be employed. By differentiating between minor and severe CWBs and utilizing measures that account for not only behavioral frequency but also behavioral form, we can expand our understanding of the underlying dynamics driving engagement in specific CWBs. Making use of such measures may also boost organizations' abilities to identify those employees whose patterns of dysfunctional behavior most strongly threaten organizational and employee well-being. The act of stealing a pencil is not equivalent to stealing a computer, and current conceptualizations and measurement of CWBs fail to account for the differential effects one instance of theft, for example, may have over another. To close this gap, the current study proposes a conceptualization of CWB severity that incorporates both behavioral form and frequency and integrates this view into modified versions of a commonly utilized CWB measure, the Counterproductive Work Behavior-Checklist (Spector et al., 2004; Bennett & Robinson, 2000).

The primary purpose of the current study is to integrate intra-behavioral severity into a traditional frequency-based CWB scale and to test a moderation model predicting employee engagement in minor and severe CWBs. CWBs are often conceptualized as part of a stress response, where individuals engage in potentially harmful behaviors as a means of coping with or changing workplace stressors (e.g., Fox & Spector, 2006; Krischer, Penney, & Hunter, 2010). Thus, accounting for greater variation in CWB-related behavior can tell us more about the ways

in which employees respond to stressful workplace situations or escalating stressors in the workplace. By measuring CWBs in a way that accounts for intra-behavioral severity and looking at how the severity of these behaviors may be affected by individual difference traits and organizational context (e.g., self-control and organizational consequences), I hope to further develop the field's understanding of patterns of CWB engagement.

This study's primary contribution to the literature is an exploration of the multiple ways severity can be conceptualized in the context of CWBs with a unique focus on the issue of intra-behavioral severity that has rarely been explored in previous research. Further, by developing and validating an adapted measure of the Counterproductive Work Behavior-Checklist (Spector et al., 2004; Bennett & Robinson, 2000), which assesses not only the frequency with which individuals engage in CWBs but also whether individuals report engaging in minor or severe behavioral forms, we can account for variability in employee behavior that is difficult to capture with current methodology. By integrating severity directly into our measures of severe and minor CWBs, the current study contributes two interconnected, yet independently scored, measures which can be utilized in future research on the specific influences and drivers of CWBs in the workplace. Finally, by testing the effects of negative affect, self-control, and organizational consequences on severe and minor CWBs we can take the first steps in exploring the contexts in which employees are more likely to engage in higher and lower severity behaviors.

CHAPTER TWO: LITERATURE REVIEW

Structure of Counterproductive Work Behavior

CWBs have been studied from both very broad perspectives, regarding CWB as a single underlying construct, to more narrow ones, where researchers distinguish between specifically defined behaviors such as theft and sabotage (Spector et al., 2006). In the past, CWB-related constructs like interpersonal mistreatment (e.g., Lim & Cortina, 2005), retaliation (e.g., Skarlicki & Folger, 1997), sabotage (e.g., Ambrose, Seabright, & Schminke, 2002), and theft (e.g., Greenberg, 1990; 1997) have frequently been studied in relative isolation, contributing to a lack of agreement on the structure of CWBs and the relations between specific counterproductive acts (e.g., Gruys & Sackett, 2003; Bowling & Gruys, 2010; Marcus et al., 2016). While some studies model CWB as a single latent construct, others have treated it as an "umbrella term" under which multiple lower-level factors fall. Many modern CWB models differentiate between types of CWBs that act as distinct facets of the construct (e.g., lateness and sabotage), and incorporate multi-dimensional, and hierarchical models, which classify behaviors based on dimensions such as behavioral target, task relevance, and severity. Spector and colleagues (2006) presented a five-dimensional model, where CWBs could be classified as abuse, sabotage, withdrawal, theft, or production deviance, while Gruys & Sakett's (2003) model utilizes a 2-factor dimensional structure where CWBs are categorized based on their target and task relevance. Central to the purpose of the current study, Robinson and Bennett (1995) proposed a two-dimensional model with CWBs identified based on their behavioral target and severity.

Specifically, Robinson and Bennet's (1995) two-dimensional typology of deviant workplace behaviors categorizes CWBs within a quadrant solution, based on the behavior's

target, i.e. whether the behavior is targeted at an organization (i.e., CWB-O) or an individual within that organization (CWB-I), and severity, whether the behavior is minor or severe. Here CWB severity is defined as the "seriousness or harmfulness of the deviant act" (p. 560) and CWBs are classified along a continuum ranging from minor to severe. On the extreme end(s) of this continuum, CWBs were identified as [not] serious or [not] harmful to the organization or individuals targeted. "Employee hiding in the backroom to read newspapers" and "employee gossiping" were identified by subject matter experts as the most minor CWB-Os, while CWB-I items "employee sabotaging equipment" and "employee physically abusing a customer" were rated the most severe. This continuum allows for a ranking of CWBs, such that some types of behaviors, such as sabotage or theft, are treated as more serious/harmful than others, such as time wasting (i.e., hiding and reading newspapers). Robinson and Bennett followed up this theoretical model with a measure of deviant workplace behavior (i.e., Bennett & Robinson, 2000), but dropped the severity dimension from their scale, arguing that severity represents a "quantitative rather than a qualitative distinction" (p.350) and that "serious and minor deviant behaviors would not, by themselves reflect two different types of deviance" (p. 350).

Although, it is true that the minor and severe distinction may not represent different categories of deviance, I argue there is value in investigating the quantitative differences between behaviors if the consequences of engaging in specific CWBs, or types/forms of CWBs, are significantly different (i.e., produce more or less harm). Additionally, CWBs occur within a broader organizational context and can influence a range of work-related processes (e.g., task performance or communication) making it important to consider whether organizational stakeholders attribute different levels of seriousness or significance to engaging in each of these

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behaviors. Thus, the value of incorporating severity into the study and measurement of CWBs is

two-fold. First, it allows researchers and organizations to predict which employees are likely to

engage in the most severe CWBs and to address circumstances, i.e. traits and stressors,

associated with the most severe acts. Second, it permits for more accurate estimations of the

monetary and performance-related harm associated with CWBs, such that the direct and indirect

consequences of engaging in particular acts may be better understood. To achieve these aims the

current study first explores two distinct ways severity can be applied to CWBs.

<center>Counterproductive Work Behavior Severity</center>

First it is essential to address the different ways that severity has been defined and

measured in the literature, while clarifying the definition utilized in the current research.

Although a limited number of CWB studies have addressed the issue of behavioral severity

directly, these studies have defined CWB severity, and calculated severity levels, in a variety of

ways. When defining organizational misbehavior (OMB), a construct similar to CWB, Vardi

and Wiener (1996) argued that because OMB is multidimensional its measurement may take

both behavioral and attitudinal forms, based on frequency counts and strength of intention

respectively. Their frequency-based measure incorporated a weighted index of severity which

assessed acts of misbehavior based on the centrality of the norm or value violated and the degree

of planning involved in displaying the behavior. Similarly, Chiaburu and Harrison (2008)

classified antagonistic coworker behaviors (e.g., incivility and interpersonal abuse) from more

than a hundred published and unpublished studies as low or high severity based on perceptions

of the degree of sustained effort required and the "deviation from norms of appropriateness"

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involved (p. 1087). Reynolds and Harris (2009) directed hospitality customers to rate the severity of their dysfunctional customer behavior, which often takes on similar behavioral forms to CWBs (e.g. theft and interpersonal mistreatment), using a four-item measure containing items regarding the acceptableness or inappropriateness of the behaviors (i.e., degree of norm violation). Alternatively, Escartín and colleagues (2009) left the definition of behavioral severity more open to participant interpretation, instructing employed individuals from a range of industries to rate the severity of bullying behaviors on a scale of zero, indicating "no harassment," to 10, indicating "maximum severity." Generally, however, most of these studies have utilized a definition of severity like Robinson and Bennett's (1995) that incorporates both seriousness and harmfulness (e.g., Boye & Slora, 1993; Cassematis & Wortley, 2013; Fox & Spector, 1999). For the purposes of this study, I also employed a similar definition treating severity as the combination of the perceived seriousness and magnitude of harm associated with specific counterproductive acts.

Although CWBs are defined as going against the "legitimate interests" of organizations (Gruys & Sackett, 2003), if the severity associated with counterproductive acts differ, it is important to identify where these differences can be found and how these differences can be measured. There are two major perspectives, or levels of analysis, that can be employed when conceptualizing CWB severity. The first is the inter-behavioral approach, which compares severity across distinct CWBs and assumes that some counterproductive behaviors are more harmful or serious than others. For example, an employee who "take excessive breaks" is engaging in a less severe deviant behavior than an employee who "verbally abuses customers" because the latter is perceived to more serious and result in a greater amount of harm than the

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former. Robinson and Bennett (1995) utilized an inter-behavioral approach to severity, by classifying specific types of CWBs on a minor-severe continuum. Several other studies have also used this between-behavior approach to study differences in perceptions of counterproductive behaviors (e.g., Boye & Slora, 1993; Bolin & Heatherly, 2001) and responses to counterproductive acts (e.g., punishment and whistleblowing). While studying the link between employee status and CWBs, Karelaia and Keck (2013) divided participants into low and high severity conditions where counterproductive acts like "being late for meetings" and "making personal phone calls" were classified as low severity and "sexually harassing coworkers" was high severity (p. 787). Participants then rated the magnitude of harm and appropriate punishment related to each CWB scenario to determine how differences in the intrinsic severity of these behaviors effected perceptions of appropriate consequences. While this study compares severity across types of behaviors, this method also implies that every time an employee takes an unauthorized break, regardless of for how long, the behavior is less severe and deserving of more minor punishment than an act of sexual harassment. The broad nature of these items neglects to recognize how in practice being late or purposely sabotaging work tasks, for example, can manifest in different ways. Thus, this approach's failure to account for behavioral variation valuable to our understanding of CWBs creates a need to better understand how behavioral differences within specific CWBs can also impact related consequences and processes.

The intra-behavioral perspective fills this gap by dealing with differences in severity within, rather than between, specific CWBs. For example, a researcher looking at severity from this perspective would be less interested in whether a sabotage-related behavior was more

harmful than theft, but rather whether stealing something inexpensive at work was less harmful

than stealing an expensive piece of equipment or work-related good (see Table 1).

Table 1
Sample CWB Severity Items (Intra-Behavioral and Inter-Behavioral Types*)*

Inter-Behavioral Severity[1]	
Minor	• "Purposely wasted company materials/supplies" • "Failed to help a coworker"
Severe	• "Purposely damaged a valuable piece of property or equipment" • "Started an argument with someone from work"
Intra-Behavioral Severity[2]	
Minor	• "Purposely wasted pens, paper or other inexpensive materials/supplies" • "Stole something inexpensive from someone at work, such as a pen or gum"
Severe	• "Purposely wasted electronic materials or other expensive materials/supplies" • "Stolen something expensive from someone at work, such as a phone or electronic tablet"

Note. [1]Inter-behavioral sample examples were taken from Fox and Spector (1999); [2]Intra-behavioral sample examples are items from the current studies modified CWB-C Minor and Severe scales.

While stealing office supplies and electronic equipment are both acts of theft, they

represent quantitative differences in the way this behavior can manifest. An employee may steal

a pencil through a very similar process to how they steal a cell phone but the consequences of

these behaviors and the factors driving them are potentially highly distinct. An example of how

this perspective is currently utilized is the way in which constructs are commonly differentiated

in the mistreatment literature (see Hershchovis & Barling, 2010). Measures of incivility, a type of mistreatment that is defined as low in intensity and ambiguous in intent (Anderson & Pearson, 1999), consist of items that appear to be less severe manifestations, or behavioral forms, of higher intensity mistreatment constructs, such as bullying. Bullying, e.g., aggression that is high intensity, endures overtime, and is perceived as hostile (Einarsen, 1999), is measured with items such as "ridiculed you" and "socially excluded you from co-workers or social situations" that display a great deal of overlap with incivility items such as "put you down in a condescending way" and "ignored or excluded you" (Herchovis, 2011). Thus, these mistreatment constructs are assessed using behavioral examples that are not wholly independent but instead represent similar behaviors of varying intensity, which capture more minor (i.e., incivility) and severe (i.e., bullying) manifestations of interpersonal mistreatment. While interpersonal mistreatment concepts (i.e., CWB-Is) are further complicated by variability in intentionality and duration built into these constructs, this low and high intensity distinction demonstrates one way the literature has undertaken addressing the issue of intra-behavioral severity with CWBs. Overall, this intra-behavioral distinction is important because it demonstrates how assessing CWBs using very general items fails to distinguish between very important differences in how employees engage in CWBs. It also is important to note that these two (inter- and intra-behavioral) perspectives are not incompatible but simply represent different levels at which severity can be studied, and that for the purposes of this study, CWB severity refers to intra-behavioral severity where specific types of CWBs can manifest in ways that are differentially harmful or serious.

Integrating Severity & Frequency

Current methods for assessing engagement in CWBs are generally self-report and are designed in such a way as to treat each item, or CWB, as equally harmful. The measures are frequency based, directing participants to rate how often they engage in each behavior, and use sum scoring methods to calculate overall CWB scores. This means that an individual who reports that they litter could receive an equivalent score to an individual who abuses their coworkers, if they engage in these behaviors with the same frequency. Under most circumstances abuse is far more harmful than improperly disposing of trash demonstrating how CWB scores may not be truly representative of the harm individuals are causing towards their organization or individuals within their organization.

Another similar issue deals with how broadly CWB items have been written, such that respondents may interpret these to represent specific behaviors that are wildly different in effect and form. For example, the Counterproductive Work Behavior Checklist (Spector et al., 2006; Bennett & Robinson, 2000) contains an item that directs individuals to report how frequently they steal from their employer. While all work-related theft is intrinsically bad, there are some things that much more harmful to steal than others and this item allows for no distinction. Employees who report engaging in theft may be referring to anything from pens to expensive electronic equipment and the incredibly general wording of this item makes it impossible to distinguish between minor and severe forms of theft.

These two issues of weighting and the generality of items demonstrate why adapting scales to include some form of severity could be highly valuable to our ability to understand more about the consequences and impact of CWBs. Items utilized in current CWBs measures

are weighted equally in a way that implies equal significance. Thus, frequency is treated as a type of severity where employees who engage in CWBs with the highest frequency receive the highest score and are treated as though they induce the most harm, regardless of the types of CWBs engaged in. To determine the overall seriousness of an employee's CWB-related behavior and better estimate their overall harm, frequency and severity must be integrated together. This will allow researchers to make important distinctions between, for example, employees who infrequently engage in highly damaging behaviors and those who engage in low harm behaviors daily.

As previously noted, the purpose of the current study is to incorporate severity into the study of CWBs in such a way as to facilitate the prediction of the most harmful employee behaviors and determine how the direct study of severity effects our understanding of antecedent-CWB relations. To achieve this aim, I adapt items from the Counterproductive Work Behavior Checklist (CWB-C) to reflect intra-behavioral severity and measure individuals' engagement in minor and severe CWBs. These interconnected, yet independently scored measures, will assess the frequency with which individuals engage in a range of low and high severity CWBs. By having individuals respond to items that vary in their potential consequences, we can account for more variation in CWBs, and patterns of counterproductive acts, while having the ability to better estimate the damage induced by these behaviors. Further details on the development and validation of these measures can be found in the methods section below.

Model & Hypothesis Testing

To explore the factors driving minor and severe CWBs, this study tests a model of negative affect, self-control, and perceived organizational consequences to predict the frequency with which employees engage in low and high severity CWBs. By investigating this model, I hope better to understand the conditions under which employees engage in high severity CWBs most frequently. This research should also shed light on whether the strength and direction of the relationships between individual traits, contextual factors, CWBs differ depending on the severity of the target behavior. Utilizing emotion-focused CWB theories (e.g., Stressor-Emotion Model, Spector & Fox, 2005) and affective events theory (Judge, Scott, & Illies, 2006; Weiss & Cropanzano, 1996), this study strives to understand more about CWB severity and related predictors. Keeping these goals in mind, I now discuss the proposed model (Figure 1) and develop the study hypotheses.
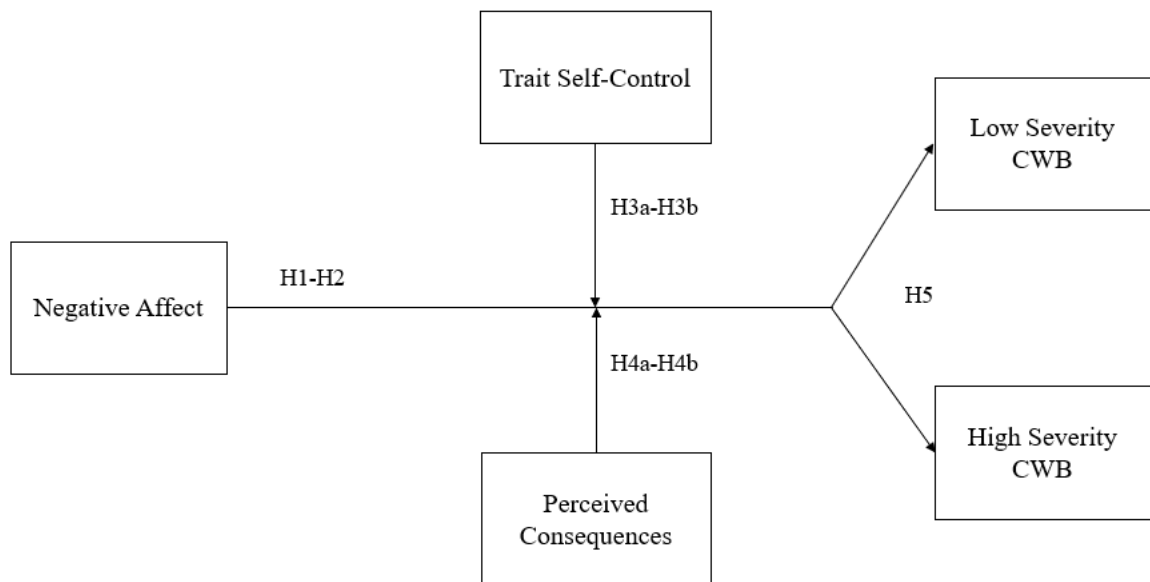
Figure 1: Hypothesized Model

Negative Affect & CWBs

Past CWB research has focused extensively on determining factors that drive employees to engage in counterproductive acts and understanding the range of functions CWBs serve in organizations. CWBs have been broadly characterized as behavioral strain (i.e., behavioral responses to stressful work experiences; e.g., Penney & Spector, 2005; Spector, 1998) and are utilized by employees for a variety of purposes. This includes as a means of re-establishing justice (Bies & Tripp, 1996), getting revenge on one's organization (Jones, 2009), protesting negative work conditions (Kelloway, Francis, Prosser, & Cameron, 2010), and coping with workplace stressors (Krischer et al., 2010). Many factors, individual and contextual, have been identified as distal predictors of CWB (e.g., justice, personality; Cohen-Charash & Spector, 2001; Berry, Ones, & Sackett, 2007). In contrast, negative affect has been cited as a primary proximal predictor of counterproductive acts (e.g., Dalal, Baysinger, Brummel, & LeVreton, 2012; Fox, Spector, & Miles, 2001; Spector & Fox, 2002). Both general affective states and discrete negative emotions, e.g., anger and frustration, have been found to directly predict a range of CWBs (e.g., Bauer & Spector, 2015; Chen & Spector, 1992; Dalal, 2005; Yang & Diefendorff, 2009). Although Fox and Spector (2010) have identified some CWB as purely instrumental acts, intended to achieve work-related goals, emotion-based CWB theories have framed these behaviors as "reactive responses" to negative emotions.

The stressor-emotion model (Spector & Fox, 2005), posits a causal relationship between the appraisal of environmental stressors, negative emotion, and CWB. Here, employees are driven to engage in CWBs "in emotion-arousing situations" (p. 161) when they interpret workplace events as threatening to cognitive, physical, or emotional resources (Lazarus, 1991),

and a negative emotional response is produced. Central to Spector and Fox's (2005) model is the importance of the "perception-appraisal" of environmental stressors and the idea that "given the same conditions, not all individuals will respond in the same manner" (p.158). Due to this appraisal process (Lazarus & Folkman, 1984), potentially stressful environments only induce engagement in CWBs when employees experience negative affect and employees engage in deviant acts as a means of "managing a stressful situation and reducing the consequent unpleasant negative emotions" (Fida et al., 2014, p. 132). Similarly, Judge, Scott, and Ilies (2006) applied affective events theory (Weiss & Cropanzano, 1996) to the study of workplace deviance, finding that counterproductive acts are driven by affective and attitudinal responses to work environment. Thus, while negative emotions may mediate the relationship between stressors and CWB, negative affect is also independently a critical proximal antecedent. Based on the centrality of negative emotional reactions in popular CWB models, and the plethora of evidence that negative affect predicts CWBs, regardless of their specific form (e.g., Kaplan, Bradley, Luchman, & Hayes, 2009; Spector et al., 2006; Yang & Diefendorff, 2009), I argue that negative affect will be related to both high and low severity CWB.

Hypothesis 1: Negative affect will be positively related to the frequency of low and high severity CWBs.

It is also important to determine whether the relationships between negative affect and CWBs are distinct depending on the severity of the behavior, i.e., whether the relationships between negative affect and low and high severity CWBs differ. Determining if this difference exists, and whether higher magnitude emotional experiences induce severe CWBs, requires a greater understanding of potential mechanisms that drive employees to engage in minor and

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severe behaviors. The relationship between negative affect and high severity CWB should be stronger than that with low severity CWBs, because individuals are most likely to be driven to engage severe counterproductive acts in when their negative affective experience is extremely high.   Alternatively, instead of engaging in more severe behaviors individuals may instead engage in minor CWBs with increasing frequency or respond with a combination of high and low severity behaviors because of a fear of punishment or drive to maintain a positive self-concept (e.g., Mazar, Amir, & Ariely, 2008). Thus, to begin to understand how behavioral severity impacts our understanding of antecedent-CWB relations, we must first investigate the direct effects of negative affect on high and low severity CWBs. While existing studies have failed to investigate the direct relationship between emotion and CWB severity, we can infer from previous CWB and interpersonal mistreatment research some affect-based processes through which employees may be pushed to engage in more severe behavioral forms of counterproductive acts

First, many authors have acknowledged the similarities between CWB and emotion-focused coping, such that individuals engage in CWBs as a means of coping with stressors and reducing negative affective experiences (e.g., Krischer et al., 2010; Penney & Spector, 2007; Spector & Fox, 2002). Here, "CWB is not simply a reaction to negative workplace experiences; rather, it is a volitional choice in response to these events" (Shoss, Jundt, Reynolds, & Kobler, 2016, p. 573). Krischer and colleagues (2010) argued employees engage in withdrawal, and passive forms of production deviance, to limit their contact with stressors and allow time for negative emotions to abate. For example, following a negative emotional experience at work an employee may leave early as a means of avoiding the source of their distress and re-establishing

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a positive mood. Among employees who experience low levels of procedural justice, those who engage in high levels of withdrawal experienced less emotional exhaustion than those who engaged in low levels of these behaviors (Krischer et al., 2010).

Applying this emotion-focused coping perspective to CWB severity, indicates that employees may manage higher levels of negative affect by not only engaging in CWBs with higher frequency but engaging in more severe forms of the behavior. Low severity CWBs may been insufficient for coping with high-levels of negative affect, such that individuals who are high in negative affect may need to engage in high severity counterproductive acts to effectively cope. This may be especially true in contexts where frequent engagement in low severity CWBs is difficult. For example, an employee who experiences low levels of frustration may effectively cope by taking several short unauthorized breaks. Alternatively, an employee who is highly distressed may still experience significant negative emotion after taking similar breaks and may need to engage in a more serious withdrawal behavior, such as many extended breaks, in to recover. Thus, to effectively cope individuals may need to match the severity of their CWB with the strength of their negative emotional experience, such that individuals who are high in negative affect are more motivated to engage in higher severity CWB.

Next, Anderson and Pearson's (1999) theory of incivility spirals posits that cycles of mistreatment emerge due to workplace incivility. Here, dyads engage in patterns of low severity mistreatment that can escalate to a "tipping point" where individuals advance to engaging in more intense aggression, i.e., high severity CWB. While the current study is not longitudinal or focused on incivility, this dynamic model may also apply to the relationship between negative affect and CWB severity. When an employee engages in a counterproductive act negative affect

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may increase, which in turn pushes individuals to engage in more serious forms of CWB. This may escalate to a "tipping point" where employees respond with highly destructive, and severe, counterproductive acts. While testing this model is outside the scope of the current study, this model is partially supported by findings from the behavioral ethics literature that indicates engaging in unethical behaviors can trigger negative emotions, such as guilt or anxiety, in perpetrators (e.g., Gino, Ayal & Ariely, 2013).

Finally, studies on the additive effects of stressors and negative affect indicate that as these accumulate, and reach certain thresholds, individuals may switch from one type of behavioral response to another. For example, McLean, Parks, and Kidder (1994) theorized about such a relationship between types of injustice (i.e., distributive, procedural, and interactional) which they described as a "catastrophe function." If individuals experience a relatively low level of injustice they should respond with positive behaviors (i.e., OCBs) towards their organization. However, as perceptions of injustice rise and aggregate injustice levels hit a certain threshold behavioral response should become more negative, with employees engaging in undesirable behaviors like CWBs. Ambrose, Seabright, and Schminke (2002) utilized this perspective to study the relationship between work-related injustice and the severity of sabotage responses. They found that after accounting for the addictive effects of distributive, procedural, and interactional injustice, individuals who experienced multiple types of injustice responded with more severe behaviors than those who reported experiencing minor injustice or only one or two types of injustice. A similar additive model has been proposed in the aggression literature (Baron & Neumon, 1996) to explain how increasing workplace frustration can trigger higher levels of aggressive behavior. While these theories have been primarily been tested in the

context of more distal antecedents, this additive effect should also apply to negative affect such that increases in negative emotion can trigger more severe behavioral strain responses, i.e., higher severity CWBs.

Integrating this previous research with CWB severity indicates that high levels of these constructs can result in not only a higher frequency of CWB engagement but also engagement in more severe behavioral forms. That is, employees may respond to negative affective experiences in increasingly severe ways such that they hit a "tipping point" where they retaliate with severe CWBs. While the purpose of the current study is to identify indicators of high severity CWB, rather than determining the specific underlying processes driving these behaviors, it is important to consider whether the relationship between emotion and CWB severity differs in strength or direction for minor and severe CWBs. The first bit of evidence for such a relationship would be that individuals who report higher negative affect are increasingly likely to engage in higher severity behaviors.

Hypothesis 2: The relationship between negative affect and high severity CWBs will be stronger than the relationship between negative affect and low severity CWBs.

Self-Regulation & CWBs

While our previous hypotheses address the direct relationships between negative affect and CWBs, additional factors such as the capacity for self-regulation (i.e., trait self-control) may affect the severity of individuals' behavioral responses to negative emotional experiences. Self-control has been studied as both a trait and a state that impacts individuals' abilities to manage undesirable behavior (e.g., Bechtoldt, Welk, Zapf, & Hartig, 2007; Douglas & Martinko, 2001).

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State self-control has been primarily studied from the perspective of self-regulatory resource models (Baumeister, 1984; Muraven & Baumeister, 2000), which posits that individuals possess a finite level of resources that support cognitive, affective, and behavioral responses. When these resources are high, individuals can regulate their emotional states and inhibit undesirable behaviors with relative ease. However, when resources decrease, individuals' self-control diminishes (e.g., DeWall, Baumeister, Stillman, & Gailliot, 2007; Gailliot, Schmeichel, & Baumeister, 2006) and it becomes more difficult to inhibit or suppress potentially harmful behaviors, such as CWBs. Alternatively, dispositional self-control theories argue that self-control is a relatively stable trait that varies across individuals and represents one's capacity for regulating cognition, managing thoughts and emotions, and controlling impulsive behaviors (de Boer, van Hooft, & Bakker, 2015; Tangney, Boone, & Baumeister, 2004). The current study focuses on this latter trait perspective, to test the extent to which a stable personality trait, i.e., self-control, effects individual's propensity for engaging in high severity CWBs.

The self-control theory of criminal behavior (Gottfredson & Hirschi, 1990) postulates that while the immediate benefits of deviant behavior are appealing, through self-control individuals may resist engaging in these behaviors when their long-term consequences surpass short-term benefits. "Self-control enables individuals to resist short-term temptations…to achieve long-term aims" (Gino, Schweitzer, Mead, & Ariely, 2011, p.192) such that counterproductive behaviors occur when employees are unable to delay immediate gratification and avoid engaging in inappropriate behavior (Blackwell & Piquero, 2005; Van De Linden et al., 2005). Tangney and colleagues (2004) defined self-control as the "ability to override or change one's inner responses, as well as to interrupt undesired behavioral tendencies and refrain from

acting on them" (p. 275). For example, while individuals may be tempted to engage in incivility as a means of retaliating for coworker mistreatment, those who are high in self-control can prevent themselves from engaging CWBs as a means of avoiding the long-term social consequences, despite immediate emotional benefits. Existing research has treated self-control as an important mechanism through which employees engage in impulse control and achieve higher order, long-term, goals.

Because individuals who are high in self-control possess a larger reserve of self-regulatory resources they possess a larger capacity for inhibiting a range of aggressive/violent acts (e.g., Piquero, MacDonald, Dobrin, Daigle, & Cullen, 2005), unethical behavior (e.g., Gino, Schweitzer, Mead, & Ariely, 2011; Muraven, Pogarsky, & Shmueli, 2006), and CWBs (e.g., Marcus & Schuler, 2004; Langton, Piquero, & Hollinger, 2006). Dispositional self-control has also been found to moderate the relationship between negative affect and CWB, as well as burnout and CWB, such that those who are higher in self-control are less likely to engage in counterproductive acts even while experiencing negative emotions (e.g., Galić & Ružojčić, 2017; Geen, 1990) and depleted resources (Bolton, Harvey, Grawitch, & Barber, 2012). Self-control has generally been presented as a means of regulating negative emotions, attitudes, or impulsive behaviors, and as a protective factor against employee engagement in CWBs.

While previous research has focused on the capacity of higher self-control individuals to engage in CWBs with lower frequency, high self-control may also predispose individuals to engage in less severe forms of CWB. For example, if an employee feels as though he/she is being compensated unfairly, and they deserve additional benefits, they may consider retaliating against their organization through time theft, i.e., put in to be paid for more hours than worked.

Employees how are low in self-control may attempt to steal large amounts of time, asking to be paid for many more hours than worked, because they lack the self-regulatory resources to resist. Alternatively, high self-control individuals may believe they deserve many hours of extra pay, but only actually steal a small amount because they are able to manage their initial behavioral impulses and consider the long-term costs. Bowling and Gruys (2010) contended that individuals are more likely to engage in minor CWBs because they are not seen as seriously, which should result in individuals engaging in less serious counterproductive acts when actively self-regulating. When individual utilize their self-regulatory resources, they are better able to recognize how engaging in serious CWBs may result in negative outcomes and inhibit one's ability to achieve future goals. Even if they are unable to completely resist engaging in counterproductive acts, employees who are high in self-control may still resist engaging in the most severe forms of CWBs. They may instead engage in more minor CWB, even in contexts where negative affect is high. Thus, self-control may not only reduce the frequency but also the severity of CWBs, such that low trait self-control is important for identifying individuals who are most predisposed to engage in the serious forms of CWB.

Hypothesis 3a: Trait self-control will moderate the relationship between negative affect and the frequency of high severity CWBs, such that this relationship is weaker when self-control is higher.

Hypothesis 3b: Trait self-control will moderate the relationship between negative affect and the frequency of low severity CWBs, such that this relationship is stronger when self-control is higher.

Perceived Consequences & CWBs

While self-control represents an individual difference factor that effects engagement in high and low severity CWB, there may also be contextual factors and situational constraints that influence the frequency and form of employee CWB. Detert and colleagues (2007) echoed the sentiments of many researchers (e.g., Gilman, 1982; Hollinger & Clark, 1983) when they stated that "a common explanation for CWBs…is that they occur more frequently where opportunity is greatest" (p.994). Factors that constrain behaviors are broadly defined as environmentally induced barriers that limit behavior (Rosse & Miller, 1984). Within the context of the current study these represent factors that limit the ability of employees to engage in specific forms of CWBs (i.e. low/high severity) or CWBs in general. Organizational constraints generally take the form of either physical barriers, which limit opportunities to engage in CWBs, or psychological barriers that produce an intense awareness of the consequences of CWBs (e.g., Bowling & Gruys, 2010; Lawrence & Robinson, 2007). Due to physical barriers, Bowling and Gruys (2010) argued that CWBs researchers should be using situation specific measures, or include a "not applicable" response option, because there is not always the opportunity to engage in specific CWBs across all jobs, organizations, or industries. For example, salaried employees are unlikely to engage in time theft because they are not paid based on an hourly metric and have more flexible work hours than hourly workers.

Additionally, situational factors such as perceptions of organizational surveillance, degree of supervisor oversight, and the strictness and content of organizational sanctions/punishments can produce psychological limitations on CWBs. Individuals frequently initiate counterproductive acts by first engaging in cognitive processes that include a "rational,

instrumental calculation about the likelihood of being observed, caught, or punished" (Detert, Treviño, Burris, & Andiappan, 2007, p. 994). Psychological factors can then increase employee perceptions of the cost of CWBs and the potential personal consequences of being caught. Lawrence and Robinson (2007) proposed that these types of constraints on workplace deviance would weaken the relationship between negative affect, i.e. frustration, and organizationally targeted CWBs because of the increased saliency of deviance related costs. Employees who perceive the cost of CWBs to be too high may then consider alternative behavioral responses to negative emotional experiences. Hollinger and Clark (1983) found significant relationships between perceptions of punishment and theft, such that individuals who perceived that they were likely to be caught and that the sanctions brought against them would be severe, were significantly less likely to steal. Research has also found that employee make less unethical choices in organizations with an enforced code of ethics (Kish-Gephart, Harrison, & Treviño, 2010) demonstrating the value of implementing similar policies. Overall these results indicate that in organizations where employees perceive that CWBs are associated with high potential consequences individuals are less likely to engage in these behaviors. For the purposes of this study, I focused on perceptions of consequences as a psychological factor constraining CWBs.

In the same way that self-control may affect the frequency and form of CWBs, I hypothesize that when perceptions of CWB consequences are high individuals will engage in severe CWBs with lower frequency. In this context, perceptions of consequences refer to an employee's perceptions of how serious the consequences and punishment are for members of their organization who are caught engaging in counterproductive acts. If individuals believe that there are significant financial or social costs to CWBs they are less likely to engage in those

CWBs perceived to be the most serious and harmful to their organization. Underreporting of CWBs, especially serious ones, due to factors like social desirability or "because they know that reporting might impact recruiting and employment decisions" (Bowling & Gruys, 2010, p.58), is a significant issue in the literature. If employees are reluctant to report certain CWBs, due to fears of retribution, they likely recognize that the consequences of some CWBs are much stronger than others. Employees may face some punishment for damaging inexpensive or easily replaced equipment, but these consequences are likely to be minor and employees are unlikely to face serious discipline within most organizations. Alternatively, if employees work in an organization with a strict employee compliance policy and more restrictions on employee behavior, they will likely be punished for purposely damaging any equipment and will likely be fired for damaging the most expensive equipment. High perceptions of punishment make the potential costs of engaging in CWBs extremely salient such that employees will be much less likely to engage in higher severity CWB because the emotional benefits of severe behaviors do not outweigh the costs. Under these conditions, employees may instead select to engage in lower severity CWBs, even in cases where negative affect is extremely high.

Hypothesis 4a: Consequence perceptions will moderate the relationship between negative affect and the frequency of high severity CWBs, such that this relationship is weaker when perceived consequences are higher.

Hypothesis 4b: Consequence perceptions will moderate the relationship between negative affect and the frequency of low severity CWBs, such that this relationship is stronger when perceived consequences are higher.

Frequency & CWB Severity

While few studies have addressed the issue of base rates among minor and severe CWBs directly, it is generally assumed, based on anecdotal evidence, that lower severity behaviors are also higher frequency behaviors (Dalal, Lam, Weiss, Welch, & Hulin, 2009). For example, Judge, Scott, and Ilies (2006) utilized items representative of low severity CWBs because these behaviors are more likely to occur daily and vary across the workday. Higher severity CWBs are associated with higher perceived consequences, making individuals more likely to consider the potential costs of engaging in these acts. Although we have no specific expectations surrounding what percentage of employees will report engaging in each category and severity of CWB, we do expect that severity will be negatively related to frequency, in terms of both the number of employees that report engaging in minor/severe CWBS and the frequency with which these behaviors occur.

Hypothesis 5: Low severity CWB scores will be significantly higher than high severity scores, indicating that high severity CWBs occur less frequently than low severity CWBs.

CHAPTER THREE: THE DEVELOPMENT AND VALIDATION OF MINOR AND SEVERE CWB-C SCALES

To test my model of CWB severity and determine whether the hypothesized factors can be utilized to predict engagement in high severity CWB, measures of minor and severe CWB were first developed and validated. This process took place in two distinct phases, i.e., pilot tests, where existing CWB-C items were first modified to reflect minor and severe CWB (phase 1). These adapted scales were then evaluated for reliability and validity in an independent sample of working individuals (phase 2).

Phase 1 (Pilot Testing): Item Modification

The 45-item and 32-item versions of Spector & Fox's Counterproductive Work Behavior Checklist (CWB-C) (Spector et al., 2006; Bennett & Robinson, 2000) were adapted into separate, independently scored, minor and severe CWB self-report scales comprised of items respectively representing low and high severity behaviors. The CWB-C was selected because of its ability to be scored based on both behavioral target (i.e. interpersonal and organizational subscales), and a five-dimensional model representing distinct categories of CWB (e.g., sabotage, productive deviance). The current study also focuses on organizationally directed CWBs because of the significant number of CWB-I related constructs that already exist within the mistreatment literature (see Herchovis & Barling, 2010) which capture more minor (i.e., incivility) and severe (i.e., bullying) manifestations of interpersonal mistreatment. The frequency-based scoring method of the CWB-C was also maintained such that respondents were

directed to report how often they engaged in each behavior in their current position (1 = never; 5 = everyday).

Twenty-two items from the CWB-C were adapted, fifteen of which represent items utilized in the five-dimension subscales, and seven of which are exclusively employed in CWB-O scoring. A single CWB-I item, "Stole something belonging to someone at work," was kept because of its inclusion in the Theft subscale. Forty-four items in total were modified to reflect minor and severe behavioral manifestations of CWBs, which were then incorporated into two twenty-two item scales capturing low and high severity variants. For example, the item "Took supplies or tools home without permission" was adapted to capture that supplies or tools might be inexpensive (minor variant) or expensive (severe variant). While there was no expectation that items representing different categories of CWBs (i.e., minor theft and minor withdrawal items) would be perceived as equally severe, there was an attempt to adapt items within the same category as relatively similar in their severity. After developing the initial modified items, SMEs (industrial-organizational doctoral students) rated the seriousness and harmfulness of each item and provided general item feedback. This feedback was incorporated into the final minor and severe CWB-C scales. The full list of original and modified CWB-C items can be found in Table 2.

Table 2
Original and adapted CWB-C items by subscale

Original CWB-C Item	Minor Item	Severe Item	Dimension
1. Purposely wasted your employer's materials or supplies	Purposely wasted pens, paper, or other inexpensive materials/supplies.	Purposely wasted electronic materials or other expensive materials/supplies.	CWB-O; Sabotage

Original CWB-C Item	Minor Item	Severe Item	Dimension
2. Purposely damaged a piece of equipment or property	Purposely damaged a piece of equipment or property that is easy and/or inexpensive to fix or replace.	Purposely damaged a piece of equipment or property that is difficult and/or expensive to fix or replace.	CWB-O; Sabotage
3. Purposely dirtied or littered your place of work	Purposely dirtied or littered your desk, private office, or any personal workspace.	Purposely dirtied a shared or public workspace regularly accessed by coworkers or customers.	CWB-O; Sabotage
4. Purposely did your work incorrectly	Purposely did your work incorrectly on a task that was not very important.	Purposely did your work incorrectly on a very important task.	CWB-O; Production Deviance
5. Purposely worked slowly when things needed to be done	Purposely worked slowly on a low priority task.	Purposely worked slowly on a high priority task.	CWB-O; Production Deviance
6. Purposely failed to follow instructions	Purposely failed to follow instructions on a minor task of low importance.	Purposely failed to follow instructions on a critical task of high importance.	CWB-O; Production Deviance
7. Stayed home from work and said you were sick	Stayed home from work on a light workday, when only minor tasks needed completely.	Stayed home from work on a critical workday when a presentation or other important tasks needed completing.	CWB-O; Withdrawal
8. Came to work late without permission	Came to work a little late without permission.	Came to work significantly late without permission.	CWB-O; Withdrawal
9. Taken a longer break than you were allowed to.	Taken a slightly longer break than you were allowed to.	Taken a much longer break than you were allowed to.	CWB-O; Withdrawal
10. Left work earlier than you were allowed to.	Left work a little earlier than you were allowed to.	Left work significantly earlier than you were allowed to.	CWB-O; Withdrawal

Original CWB-C Item	Minor Item	Severe Item	Dimension
11. Stolen something belonging to your employer.	Stolen something inexpensive from your employer, such as office supplies or stamps.	Stolen something expensive from your employer, such as a computer.	CWB-O; Theft
12. Took supplies or tools home without permission.	Took inexpensive supplies or tools, such as highlighters or hand tools, home without permission.	Took expensive supplies or tools, such as scanners or printers, home without permission.	CWB-O; Theft
13. Put in to be paid for more hours than you worked.	Put in to be paid for a little more time than you worked.	Put in to be paid for substantially more time than you worked.	CWB-O; Theft
14. Took money from your employer without permission.	Took a small amount of money from your employer without permission.	Took a large amount of money from your employer without permission.	CWB-O; Theft
15. Stole something belonging to someone at work.	Stole something inexpensive from someone at work at work, such as a pen or food.	Stole something expensive from someone at work, such as a phone or electronic tablet.	CWB-I; Theft
16. Told people outside the job what a lousy place you work for.	Discussed minor complaints about your organization, such as office temperature or desk space, with someone outside the job.	Discussed major complaints about your organization, such as management effectiveness, or organizational strategy, with someone outside the job.	CWB-O
17. Refused to take on an assignment when asked.	Refused to take on a low priority task when asked.	Refused to take on a high priority task when asked.	CWB-O
18. Complained about insignificant things at work.	Complained to coworkers about office temperature, workload, or other minor issues at work.	Complained to coworkers about supervisor relations, management effectiveness, or other major issues at work.	CWB-O

Original CWB-C Item	Minor Item	Severe Item	Dimension
19. Daydreamed rather than did your work.	Daydreamed rather than did your work for a brief period of time.	Daydreamed rather than did your work for an extended period of time.	CWB-O
20. Tried to look busy while doing nothing.	Tried to look busy for a brief period while doing nothing.	Tried to look busy for an extended period while doing nothing.	CWB-O
21. Purposely came late to an appointment or meeting.	Purposely came to an appointment or meeting slightly late.	Purposely came to an appointment or meeting very late.	CWB-O
22. Failed to report a problem so it would get worse.	Failed to report a minor work problem so it would get worse.	Failed to report a serious problem so it would get worse.	CWB-O

Note. Items were adapted from the 45-item and 32-item Counterproductive Work Behavior-Checklist (CWB-C) (Fox & Spector, 2002; Spector et al., 2006; Bennett & Robinson, 2000) to reflect minor, & severe forms of counterproductive behavior; CWB-O, CWB directed against an organization, CWB-I, CWB directed against an individual associated with an organization.

Participants & Materials

The data for the pilot study was collected from 61 employed participants (30 female; 48 White) recruited through the crowdsourcing platform Amazon Mechanical Turk (Amazon Mturk). Participants were required to be at least 18-years of age and currently work at least 15 hours per week. Most of the sample was employed full-time (91.8%) in a permanent position (83.6%) and worked an average of 40.67 hours weekly.

Participants were asked to read a series of forty-four items representing high and low severity CWBs (see Table 2), and to indicate how serious and harmful they perceived each behavior to be. Each item was rated on a 5-point Likert scale, with 1 indicating the behavior was "not at all serious" or "not at all harmful," and 5 indicating the behavior was "extremely serious" or "extremely harmful." Additionally, demographics, including age, gender, race/ethnicity, and employment information, were also collected.

Based on Robinson and Bennett's (1995) method of classifying "minor" and "severe" behavior, each item's individual seriousness and harmfulness ratings were averaged to compute a total severity score. A series of paired sample t-tests were run to determine whether minor and severe items (e.g., working slowly on a low or high priority task) were assigned significantly different total severity ratings.

Results

Means, standard deviations, and ranges for all minor and severe CWB-C subscales are presented in Table A1, while the results of the paired sample t-tests can be found in Table A2. These t-test results reveal a significant effect ($p < .05$) of scale on severity rating for twenty-one, of the twenty-two, item pairs. This indicates that severe items were given significantly higher ratings than minor items for all CWBs, except the CWB-O item relating to trying to look busy while doing nothing. While the mean difference between the minor and severe versions of this item were non-significant, they were in the expected direction with the severe item receiving a higher mean score ($M = 2.78$, $SD = 1.01$) than the minor ($M = 2.52$, $SD = 1.15$). Overall, minor CWB-C items were rated to be less severe ($M = 2.83$, $SD = 0.70$) than severe CWB-C items ($M = 3.41$, $SD = 0.71$; $t (60) = 6.64$, $p < .01$). These significant differences indicate that these scales are composed of items representing engagement in lower and higher severity CWBs, respectively. With the relative severity of our adapted CWB-C scales confirmed, a second pilot study was conducted to further validate our measure and ensure reliability.

<u>Phase 2 (Pilot Testing): Reliability & Validity Testing</u>

Participants & Materials

The second studies sample also consisted of currently employed individuals recruited via Amazon MTurk (N = 91), and inclusion criteria mirrored study one with the addition of not having participated in the previous study. The sample was 55.7% male and majority White (81.4%), with an average age of 34.10 years. Most participants were employed full-time (85.6%) in permanent positions (83.5%) and worked an average of 38.13 hours weekly.

In addition to the adapted CWB-C scales, participants responded to measures of work stressors (organizational constraints, justice, and negative affect). These specific variables were measured because they have been found in previous research to significantly relate to CWBs (e.g., Cohen-Charash & Spector, 2002; Dalal, 2005; Spector & Fox, 2002) and were thus utilized to establish construct validity, i.e., that our high and low severity CWB scales are significantly related to theoretically relevant constructs. Organizational constraints were assessed with Spector and Jex's (1998) 11-item scale which measures how frequently employees experience constraints, including inadequate training and job demands. Procedural, distributive, and interpersonal justice were measured using Colquitt's (2001) organizational justice measures which had participants rate the extent to which they experienced work-related justice in their current job. Finally, the PANAS's (Watson, Clark, & Tellegen, 1988) 10-item negative affectivity scale had individuals report the extent to which they regularly experience specific negative feelings and emotions. Five-point Likert scales were used in each measure and additional demographic information was also collected.

Results

Descriptive statistics, reliabilities and correlations between study variables can be found in Table B1. The Cronbach alpha of each CWB-C scale achieved an acceptable level (α = .93 - .99) indicating strong internal consistency reliability. High and low severity CWB frequency rates were tested by comparing the percentage of participants who reported engaging in minor and severe CWBs and the mean CWB-C subscale scores (Table B2). The mean endorsement rate across all twenty-two items was 45.44% for minor items and 38.71% for severe, with engagement in minor CWBs ranging from 39.2% for sabotage subscale items to 74.2% for withdrawal. Alternatively, engagement in severe items ranged from 33.0% for theft to 57.5% for withdrawal, indicating that overall a higher percentage of employees engage in minor CWBs than severe. Overall scores on the minor CWB-C (M = 2.12, SD = 1.22) were significantly different than those on the severe CWB-C (M = 2.01, SD = 1.31) such that participants reported engaging in minor forms of counterproductive acts with significantly higher frequency than severe acts (t (96) = 4.02, p < .01).

Next a positive relationship between job-related stressors and negative affect and both minor and severe CWBs was tested as a means of establishing concurrent validity and identifying potential differences in these relationships for minor and severe behaviors. Table B1 shows zero-order correlations among our study variables, which fit our expected pattern since job-related stressors, apart from interpersonal justice, and negative affect were significantly correlated with both minor and severe CWBs (r = .24-.84).

To further explore these stressor-CWB relationships we ran a series of multiple regression analyses to determine the extent to which stressors and negative affect account for

variability in both scales. Separate analyses were run by CWB-C subscale to account for potential differences in predictors across subscales (Spector et al., 2006). The results of these regression analyses (Table B3) show that organizational constraints and negative affect significantly predicted variance across all CWB-C minor and severe subscales (β = .38 - .50, p <.01; β = .41- .57, p <.01). Perceptions of distributive justice accounted for significant variance in minor withdrawal (β = .21, p <.01) and three severe subscales (sabotage, production deviance and withdrawal; β = .13-.14, p <.05), while procedural and interpersonal justice did not predict CWBs. The positive relationship between stressors and negative affect and both minor and severe CWBs, was generally supported by the strength and direction of both the correlations and the regression analyses.

Additionally, to determine whether engagement in minor behaviors predicted engagement in more severe ones, we completed a second set of analyses with minor CWBs added as a predictor of severe CWB. These supplemental analyses revealed that the addition of minor CWBs to our predictors significantly increased the model's ability to predict severe CWB engagement (ΔR^2 = .06 -.13).

Pilot Testing Discussion

These results indicate considerable variability in the percent of employees who report engaging in minor and severe behaviors and demonstrate that for many CWBs employees engage in minor forms at higher rates than severe ones. Additionally, while our results indicate that severe CWBs are likely lower base rate behaviors, employees still indicated engaging in these acts with relatively high frequency. Thus, to understand the full breadth of harmful employee

behavior it is vital that researchers consider employee engagement in both minor and severe forms of CWBs. Overall, these results also support the construct validity and reliability of our adapted CWB-C measures and provides some preliminary evidence for a positive relationship between negative affect and both high and low severity CWBs. After validating our measures for future use, we tested our hypotheses to determine more about the factors eliciting CWBs of differing severity levels**.**

CHAPTER FOUR: RESEARCH METHOD

Data was collected from 550 participants recruited via the online crowdsourcing platform Amazon Mechanical Turk (MTurk). Participants included employed individuals living within the United States, who work a minimum of 20 hours per week and have been in their current position for at least 3 months. This three-month job tenure requirement was implemented to ensure that individuals had settled into their current position and had time to develop perceptions of CWB-related consequences. Data was be collected in two waves. At Time 1, predictor (negative affect), moderator (self-control and perceived consequences), and outcome (high and low severity CWB) variables were assessed, along with demographics, job-related information, and controls. Participants who completed the Time 1 survey, and correctly responded to attention check items (Meade & Craig, 2012), were invited to complete the Time 2 survey. Distributed two weeks later, this survey assessed the outcome variables, i.e., high and low severity CWBs. Overall, data from 99 participants were removed at Time 1 and data from 6 participants were removed at Time 2 for missed attention checks. The final data set included an overall sample of 446 participants, with 302 individuals participating at both time-points. This indicates a retention rate of 68% between the Time 1 and Time 2 surveys. Forty-nine percent of the sample was female, twenty-nine percent were of minority ethnicity, and the average age was 33.60 years (SD = 9.81). Most of the sample held full-time positions (74.8%), with an average organizational tenure of 56.04 months ($SD = 58.50$) and positional tenure of 43.79 months ($SD = 51.76$). Most held non-supervisory positions (67.6%) and described themselves as permanent (89.1%), hourly (54.0%), employees. Participants worked for an average of 39.04 hours per

week (*SD* = 7.81) in a variety of industries including retail, education, healthcare, and hospitality. Participants were compensated $1.00 per survey completed.

Measures

State & Trait Negative Affect

The Time 1 questionnaire assessed negative affect using the Job-related Affective Well-being Scale (JAWS; Van Katwyk, Fox, Spector, & Kelloway, 2000). This 10-item negative affect scale (α = .90) has individuals report the extent to which their job has made them experience specific negative feelings and emotions over the last thirty days. Respondents were asked to, "indicate the amount to which any part of your job (e.g., the work, coworkers, supervisor, clients, pay) has made you feel that emotion in the six months and items included "angry," "discouraged," and "furious." Responses were recorded on a 5-point Likert type scale which ranged from 1 (never) to 5 (extremely often). Trait negative affect was assessed using the PANAS's (Watson, Clark, & Tellegen, 1988) 10-item negative affectivity scale. Participants were presented with a series of negative emotions, e.g., distressed, irritable, and instructed to indicate the extent to which, "you generally feel this way." Items were assessed using a on a 5-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely).

Self-Control

Trait self-control was assessed using the 13-item Brief Self-Control Scale (Tangney et al., 2004). Respondents were asked "how much each of the following statements reflect how you typically are…" and items included "I am good at resisting temptation" and "I have trouble

concentrating" (reverse coded) (α = .88). Items were presented with a 5-point Likert type scale ranging from 1 (not at all) to 5 (very much).

Perception of Consequences

Perceptions of CWB consequences was measured using 5-items from Shoss and colleague's measure of CWB-related consequences (Shoss, Jundt, Reynolds, & Kobler, 2016). Respondents reported the likelihood that engaging in CWBs in their current position would result in a range of negative outcomes including "result in being punished," "cause more problems in the long run," "result in being caught," "result in being scolded," and "harm my reputation" (α = .92). Items were rated on a 7-point Likert type scale ranging from 1 (very unlikely) to 7 (very likely). I also conducted a confirmatory factor analysis to assess the measurement model of perceived consequences, because the five-item version of this measure had not been used in previous studies. The results of our hypothesized model indicated acceptable fit, ($\chi 2$ (5) = 68.56, $p < .001$, CFI = .96, RMSEA = .17), such that I felt comfortable utilizing the shortened scale.

Counterproductive Work Behavior

Engagement in high and low severity CWBs was measured using the 22-item Minor and Severe Counterproductive Work Behavior-Checklists developed during our scale development phases (see Table 2) (α = .84-90). Additional information on these scales can be found in descriptions of our pilot testing, found above. Individuals responded to these items on a 5-point Likert scale ranging from 1 (never) to 5 (everyday) indicating how frequently they've engaged in each behavior over the last two weeks.

Demographics & Control Variables

Demographics were collected in the Time 1 survey, including measures of gender, race/ethnicity, and age. Job-related characteristics, such as part-time/full-time status, organizational tenure, work hours, temporary/permanent status and supervisory responsibilities, were also assessed. To identify any potential changes in employment, participants responded to these job-related questions in the Time 2 questionnaire as well. Additionally, at Time 1 positive affect, social desirability, and state exhaustion were measured as control variables.   Positive affect and social desirability were selected as controls based on their potential effects on CWB self-reporting. Criticisms of self-report CWBs scales that argue that social desirability bias results in the under-reporting of CWBs (e.g., Spector, 2006) and research that has found stronger relations between CWBs and constructs that are believed to be similarly effected by social desirability (e.g., conscientiousness, job satisfaction) than those that are perceived to be unrelated (e.g., organizational justice, conflict) (Berry, Carpenter, & Baratt, 2012).   Thus, by controlling for these constructs I sought to account for variance in CWB reporting that emerges as a result of differing levels of predisposition with positive self-perception. Positive affect was assessed with ten items from the JAWS (Van Katwyk, Fox, Spector, & Kelloway, 2000; $\alpha = .94$), while the 16 -item Balanced Inventory of Desirable Responding Short-Form (BIDR-16) (Paulhus, 1991; Hart, Richie, Hepper, & Gebauer, 2015) evaluated social desirability ($\alpha = .82$). State exhaustion was measured using three-items from the Profile of Mood States (McNair, Lorr, & Droppleman, 1992) where individuals indicate the extent to which they are currently experiencing feelings (i.e., exhausted, fatigued, and worn-out; $\alpha = .91$). Measuring state exhaustion allows for the control of state differences in self-regulatory resources, while still accounting for trait differences

in self-control. Finally, bogus (i.e., "I work twenty-eight hours in a typical workday") and captcha items, intended to identify inattentive response patterns and prevent non-human respondents, were included in both surveys. Appendix C contains all study measures.

<div align="center">Analysis Plan</div>

I first conducted a series of confirmatory factor analyses on our minor and severe CWB-C items. I examined the fit of a model with the minor and severe items loading onto separate factors (the 2-factor model) versus a model with minor and severe items loading onto a single factor (the 1-factor model). CFAs were run in MPlus version 8.2 using the maximum likelihood mean-adjusted (MLM) estimator to better account for non-normality (Muthén & Muthén, 2019). In both models, the errors of "matching" minor and severe CWB items (e.g., sabotage minor item 1 and sabotage severe item 1) were allowed to covary in order to account for additional covariance that similarly worded items can produce in high-order factors (Reeve et al., 2007).

After establishing the fit of our modified models, we examined scale reliabilities and tested our hypothesized relationships. Hypotheses 1 was tested using correlational and linear regression analyses to determine the extent to which negative affect is related to, and accounts for variance in, low and high severity CWB. Additionally, regression analyses were utilized to determine whether negative affect accounts for more variance in high severity CWB than low severity CWB, as presented in hypothesis 2. This hypothesis was also tested using Fisher's r to z transformation to determine whether the magnitude of the correlations between negative affect and low and high severity CWB are significantly different. To test the moderating effects proposed in hypotheses 3 and 4, I used the linear moderation analyses, recommended by Hayes

(2017), to examine the effects of self-control and CWB-related consequences perceptions on negative affect and minor/severe CWBs. Consistent with Aiken & West (1991), all predictors were mean-centered and significant interactions were plotted and interpreted at high and low levels (+1/–1 SD) of the moderator. Finally, to explore the frequency of high and low severity CWB (hypothesis 5), a series of t-tests were run to determine whether individuals report significantly higher low severity CWB scores than high severity ones. The endorsement percentage of each low and high severity item were compared to determine the percentage of participants that endorse each behavior.

It is also important to note that analyses including CWB-Os collected at Time 1 and Time 2 have been separated to reflect the cross-sectional or time-lagged nature of the data collection. Since all dependent variables were measured at Time 1, analyses that include Time 1 CWB ratings were labeled as "cross-sectional," while those involving Time 2 are labeled "time-lagged" to reflect the multi-wave data collection. I chose to independently report Time 1 and Time 2 CWB data in order to determine whether significant differences in variable relations would exist depending on whether predictor and outcome data was collected simultaneously or at separate time points.

CHAPTER FIVE: RESULTS

Test of the Measure Model

As noted above, we first conducted a pair of confirmatory factor analyses to determine the appropriate factor structure for our measures. Our proposed model is an oblique two-factor model where 21 CWB-O items each load onto factors reflecting minor and severe CWBs. Both factors were allowed to correlate and the error variance between pairs of minor and severe items were set to covary. This model represents a factor structure in which minor and severe CWB are treated as related, yet distinct, constructs with unique items representing each latent factor. Alternatively, we tested a one-factor model where all 42 CWB-O items load directly onto one factor representing a single latent construct. Here the minor and severe CWB items were simultaneously loaded onto a single CWB construct that reflects both high and low severity CWB-Os. Results of our CFAs indicated poor to adequate fit for both the two-factor model ($\chi2$ (797) = 2260.51, CFI = .69, TLI = .66, SRMR = .13, RMSEA = .08) and the one-factor model ($\chi2$ (798) = 2572.01, CFI = .64, TLI = .61, SRMR = .12, RMSEA = .07), with the RMSEA indicating adequate fit to the data but other indices evidencing inadequate fit.

One explanation for this poor model fit is that, as argued by Spector and colleagues (2006), factor analyses are less appropriate when testing the CWB-C because of the very nature of casual indicator scales, i.e., formative models. They argue that because each item is not an inter-changeable measure of the latent construct, and independent items may not be highly related (i.e, theft and withdrawal behaviors are unique in their antecedents and outcomes), that it is less likely for these items to load onto a single factor. Rather than requiring "that relationships among indicators of a construct reflect underlying latent common causes or constructs (Bollen &

Lennox, 1991; Edwards & Bagozzi, 2000)" (p. 208), as is the case with reflective models, these formative scales are built based on common consequences rather than common causes (Marcus et al., 2016). Despite the poor model fit, I chose to proceed with analyses utilizing the two-factor model, that differentiates low and high severity CWBs, because of pilot results that indicated significant differences in how employed individuals perceive the low and high severity items.

Variable Correlations and Descriptive Statistics

Means, standard deviations, reliabilities, and correlations between variables are presented in Table D1. The Cronbach alpha of each CWB-C scale achieved an acceptable level ($\alpha = .84 - .90$) indicating strong internal consistency reliability. Hypothesis 1 was supported as both low ($r = .37$ and $.29$) and high ($r = .40$ and $.31$) severity CWB were positively correlated with negative affect at both time points ($ps < .01$). To test hypothesis 2, whether this relationship was stronger for high severity CWB than low severity, a fisher's r to z transformation was used to compare the magnitude of these correlations (Table D2). The analysis failed to support hypothesis 2, revealing no statistically significant ($p < .05$) comparisons. This indicates no significant differences in the strength of correlation between negative affect and low and high severity CWB.

Regression Analyses

Hierarchical linear regressions indicated that controls (i.e., positive affect, social desirability, and exhaustion) and negative affect accounted for significant amounts of variance in low and high severity CWBs (see Table D3). Negative affect significantly predicted minor CWB at Time 1 ($B = .13$, SE $= .03$), and severe CWB at Time 1 ($B = .15$, SE $= .03$) and Time 2

($B = .08$, SE $= .03$). However, negative affect failed to predict minor CWB at Time 2 ($B = .05$, SE $= .05$). These results provide further support for hypothesis 1 and indicate partial support for hypothesis 2 as the addition of negative affect significantly improves the model's ability to predict severe CWB-O ($\Delta R^2 = .02$, $p < .05$) but not minor CWB-O ($\Delta R^2 < .01$, ns), at Time 2. This indicates that the relationship between negative affect and high severity CWBs is stronger than the relationship between negative affect and low severity CWBs, when a time-lagged data collection is utilized.

Hypotheses 3 and 4 predicted that self-control and perceived consequences, respectively, would moderate the relationships between negative affect and low and high severity CWB. A series of regression analyses were run to estimate the effects of the study variables on low and high severity CWBs, and test whether the relationship between negative affect and CWB differed depending on an individual's level of self-control or perceived consequences (see Table D3). I found no significant interactions ($p > .05$) between negative affect and self-control, for both cross-sectional (low severity, $B = -.01$, SE $= .03$, ns; high severity, $B = -.02$, SE $= .02$, ns) and time-lagged (low severity, $B = .01$, SE $= .04$, ns; high severity, $B < -.01$, SE $= .03$, ns) data. Non-significant interactions ($p > .05$) were also found between negative affect and perceived consequences, for both cross-sectional (low severity, $B < -.01$, SE $= .01$, ns; high severity, $B < -.01$, SE $= .01$, ns) and time-lagged (low severity, $B = -.01$, SE $= .02$, ns; high severity, $B = -.01$, SE $= .01$, ns) data. To further explore the effects of negative affect, self-control, and perceived consequences on high and low severity CWBs, a series of three-way interactions were tested but these interactions were found to be non-significant ($p > .05$). Thus hypotheses 3 and 4 were not supported.

While the hypothesized interactions were non-significant, investigating the direct effects of self-control and perceived consequences on CWBs may still be important for understanding differences in constructs driving engagement in minor and severe CWBs. Self-control significantly predicted both low (cross-sectional, $B = -.11$, SE $= .03$, $p < .01$; time-lagged, $B = -.13$, SE $= .04$, $p < .01$) and high severity CWBs (cross-sectional, $B = -.10$, SE $= .02$, $p < .01$; time-lagged, $B = -.07$, SE $= .03$, $p < .05$). Perceived consequences failed to predict low severity CWBs (cross-sectional, $B = -.01$, SE $= .01$, ns; $B = -.02$, SE $= .01$, ns), but significantly predicted high severity behaviors (cross-sectional, $B = -.02$, SE $= .02$, $p < .05$; time-lagged, $B = -.02$, SE $= .01$, $p < .05$). This indicates that while self-control and perceived consequences fail to moderate the relationship between negative affect and CWB, there is evidence of significant direct effects.

To further explore the relationship between predictors and low and high severity CWBs, I ran a relative importance analysis (Johnson, 2000) to better understand the contribution of each variable to the prediction of low and high severity CWB. Relative importance analyses have been presented as an effective supplement to multiple regression as "they provide information not readily available from the indices typically produced from a multiple regression analysis" (Tonidandel & LeBreton, 2011, p. 2). I used the process developed by Tonidandel and LeBronton (2011) to estimate relative weights and confidence intervals using bias-corrected bootstrapping. As observed in Table D4, the strongest predictors of low severity CWBs (in descending order) were social desirability (37.5% of the variance accounted for), self-control (25.6%), negative affect (14.8%), trait negative affect (10.8%), and exhaustion (7.8%), at Time 1, and social desirability (38.5%), self-control (28.8%), exhaustion (11.0%), trait negative affect (10.4%), negative affect (8.4%), Time 2. Each of these predictors were significant, while

positive affect and perceived consequences were not. The strongest predictors of high severity

CWBs (in descending order) were negative affect (27.7%), self-control (25.6%), social

desirability (17.5%), trait negative affect (13.8%), and exhaustion (7.7%), for Time 1. Perceived

consequences had a small relative weight (3.1%) but was significant. For high severity CWB,

assessed at Time 2, social desirability (31.3%), self-control (19.1%), trait negative affect

(15.0%), negative affect (14.3%), and exhaustion (13.9%) were the strongest predictors. Positive

affect and perceived consequences were not significant predictors.

T-tests & Endorsement Rates

Finally, hypothesis 5 proposed that low severity CWB scores would be higher than high

severity CWB scores, indicating that individuals engage in low severity behaviors with higher

frequency. High and low severity CWB frequency rates were tested by comparing the

percentage of participants who reported engaging in minor and severe CWBs (see Table D5) and

the mean minor and severe CWB-C scores (see Table D6). Endorsement rates for each low

severity CWB-C item ("purposely wasted...inexpensive materials/supplies"; Time 1 = 25.6%;

Time 2 = 29.2%) were higher than that of their respective high severity CWB item ("purposely

wasted…expensive materials/supplies; Time 1 = 12.8%; Time 2 = 11.0%) indicating that

participants engaged in low severity CWB-Os more frequently. For the cross-sectional data,

overall scores on the minor CWB-C ($M = 1.63$, $SD = .45$) were significantly different than those

on the severe CWB-C ($M = 1.35$, $SD = .32$) such that participants reported engaging in minor

forms of counterproductive acts with significantly higher frequency than severe acts ($t(445) =$

19.64, $p < .01$). For the time-lagged data, overall scores on the minor CWB-C ($M = 1.65$, $SD =$

.48) were significantly different than those on the severe CWB-C ($M = 1.35$, $SD = .38$) such that participants reported engaging in minor forms of counterproductive acts with significantly higher frequency than severe acts (t (300) = 19.54, $p <.01$). These results indicate full support for hypothesis 5.

Supplemental Analyses

Additionally, to assess differences in the impact of state and trait negative affect on low and high severity CWBs, I conducted a series of regression analyses with trait negative affect entered instead of state negative affect (see Table E1). These results did not differ from those found with state negative affect. I also conducted a series of analyses with the CWB-C subdimensions (i.e., sabotage, production deviance, withdrawal, and theft) as outcomes. While the results of these analyses can be found in Tables E2-E13, based on the low endorsement rates of many items and the extreme non-normality of this data I am reluctant to interpret these analyses due to potential bias and misleading results.

CHAPTER SIX: DISCUSSION

The current study expanded on existing theory of CWB structure and measurement to argue that there is theoretical and practical value to conceptualizing CWB severity and differentiating between low and high severity forms of CWBs. By introducing intra-behavioral severity to modified versions of Spector and colleagues (2006) Counterproductive Work Behavior-Checklist (CWB-C), I sought to better account for variability in employee CWB and test a model predicting employee engagement in minor and severe counterproductive acts. While my results failed to support the full range of hypotheses, they did indicate some differences in the processes driving engagement in low and high severity CWBs through differences in the strength and significance of CWB-related predictors.

My results suggest that negative affect is related to both minor and severe CWBs and provide some preliminary support that this relationship is stronger for high severity CWBs than low severity CWBs. The former is consistent with a wealth of prior research that identifies negative affect as an important proximal predictor of CWBs (e.g., Dalal, Baysinger, Brummel, & LeVreton, 2012), indicating that employees may engage in both low and high severity counterproductive acts, and potentially a combination of both, to alleviate negative affective states. While the results regarding the strength of the relationships between negative affect and CWBs is more mixed, regression analyses indicate that state, and trait, negative affect may be a weaker predictor of low severity behavior, than of high. Employees may feel as though engaging in high severity CWBs is the only viable solution for dealing with high levels of negative affect, while low severity behaviors may be influenced by a broader range of affective, and non-affective, factors. Additionally, because many of our low severity items appear to

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represent extremely minor forms of CWBs, engaging in some low severity behaviors may be perceived as ineffective responses to stressful work environments and negative affective experiences. Overall, my results indicate significant, potentially complicated, relationships between negative affect and low and high severity CWBs the nature of which requires additional research.

While self-control and perceived consequences were not found to significantly moderate the relationship between negative affect and low or high severity CWBs, I did find evidence of direct relationships between these constructs. Self-control accounted for significant variance in and was identified as the second strongest predictor of both low and high severity CWBs indicating that an employee's capacity for self-regulation is an important predictor of both. While I argued that individuals with high self-control may manage their behavior by engaging in low, rather than high, severity CWBs it appears that self-control may similarly impact engagement in both low and high severity CWBs. Those who are high in self-control are less likely than those who are low in self-control to engage in any form of CWB, regardless of its severity. While self-control may appear to effect engagement in low and high severity CWBs similarly, there could be different underlying mechanisms driving these relationships. For example, individuals who are high in self-control may resist engaging in severe CWBs because the potential long-term costs of these behaviors outweigh the short-term benefits (e.g., self-control theory; Gottfredson & Hirschi, 1990). These same individuals may resist engaging in low severity CWBs because the associated short-term benefits are so small, they fail to exceed any predictions of long-term costs. Overall, my results indicate a direct relationship between

trait self-control and CWB, such that individuals who are low in self-control are more likely to engage in CWBs of any severity.

Alternatively, the perceived consequences of CWBs appear to only effect employee engagement in severe forms of CWBs and not minor ones. This indicates that perceived consequences may act as a functional barrier against CWB engagement, but only in cases where the behaviors themselves are severe, such that employee engagement in low severity CWBs is unaffected by perceptions of potential consequences. This could be because employees believe that consequences related to low severity CWBS are so small that they are unlikely to be punished in any significant way even if these behaviors are witnessed by others. By their nature high severity CWBs should be associated with higher consequences and more significant punishment or judgements, such that there is considerable apprehension associated with being caught engaging in these behaviors. Research from the information systems security literature also indicates that failure to comply with security policy depends on not only the potential consequences of this failure but also employee perceptions regarding the certainty of detection and social and moral norms (Merhi & Ahluwalia, 2019). The impact of perceived consequences requires further study as its role as a preventative factor against harmful employee behavior may be more complex than previously understood. While the effect of perceived consequences on high severity CWBs does appear to be relatively small, there is still evidence that consequences may act as a deterrent against employees' engagement in some higher severity behaviors.

Finally, it is worth noting that social desirability appears to be a very strong predictor of both low and high severity CWBs. While social desirability has been framed by some as a means of detecting faking and response distortion (e.g., Zerbe & Paulhus, 1987), others have

argued that these scales are "poor indicators of within-subject score change" (Peterson et al., 2011, p. 271) and that the construct represents "a real individual difference in personality" (Ones, Viswesvaran, & Reiss, 1996, p.662). For example, in their meta-analysis Ones and colleague (1996) found that social desirability related most strongly to the big-five personality dimensions emotional stability and conscientiousness. In past research, strong negative relationships have been found between conscientiousness and emotional stability, and CWBs (Berry, Carpenter, & Barrett, 2012), such that social desirability may represent an essential individual difference construct for identifying individuals who are most likely to engage in low, and most importantly, high severity CWBs. Social desirability was highly predictive of both low and high severity CWBs indicating a need for a further exploration of this construct and its relation to CWB severity.

<div align="center">Limitations & Future Directions</div>

One potential limitation of our data is the lack of adequate model fit found with my modified low and high severity CWB-C scales. While debating the nature of CWB as a reflexive or formative construct is outside the purview of the current study, I do acknowledge the limitations of utilizing a scale developed using largely exploratory methods, that lacks "empirical base for deciding whether or not an act belongs to [the CWB] domain" (Marcus et al., 2016, p. 208). The inclusion of behavioral severity within the current measures likely further complicates these methodological issues. Additional research on the theoretical and factor-analytic structure of CWBs, especially within the context of CWB severity, should help to address these issues in future research.

A major contribution of this paper is an emphasis on conceptualizing and measuring CWB severity. Utilizing a method that differentiates between low and high severity CWB allows us to account for valuable variation in CWB-related behavior in a way that is not possible with traditional measures. Despite the significance of this development, the method used to assess low and high severity CWBs is a limitation of this study. While these items do appear to represent low and high severity CWBs they fail to account for more moderate behaviors and, by utilizing separate low and high severity CWB-C scales, may create the false impression that CWB severity is a binary construct. Since individuals likely engage in moderately severe behaviors with relatively high frequency these measures are limited in their ability capture the full range of employee CWBs. Future studies should consider alternative methods through which to account for and measure CWBs of a wider range of severity. Studying more moderate severity CWBs could also provide valuable new insight into the mechanisms underlying the relationships between predictors and CWB severity, while alleviating some of the methodological issues related to high severity CWBs, i.e., very low endorsement rates.

An additional limitation of our study is the use of self-report data. Concerns regarding self-report CWB data include relationship inflation, related to common method bias, and worries that individuals will under-report their engagement in CWBs due to a "reluctance to describe oneself in negative terms" (Berry, Carpenter, & Barratt, 2012, p. 614). I have addressed these concerns in part by collecting data at multiple time points, creating temporal separation, and assuring participants of the anonymity of their responses. However, deliberate response distortion, i.e., intentionally misrepresenting one's CWBs, may be an even larger risk when attempting to measure high severity CWBs. Participants are said to misrepresent the frequency

with which they engage in CWBs to prevent others and themselves from viewing them unfavorably (e.g., Dalal & Hakel, 2016), and this motivation to under-report may be especially strong when dealing with high severity CWBs that are perceived to be particularly undesirable. To avoid negative self-perceptions participants may under-report their engagement in high severity CWBs or report higher severity behaviors as lower severity ones, either to avoid revealing the harmful extent of their behavior or because they fail to objectively assess the severity of their own behavior.

Although, Berry and colleagues (2007) found little advantage to utilizing other-report over self-report CWB methods, the measurement of high and low severity CWBs may create distinct advantages and drawbacks to utilizing each. While participants may struggle to assess the severity of their own behavior, many CWBs, especially severe ones, likely occur in secret and are not frequently observed by others. Alternatively, while co-workers and supervisors may not observe the full range of employee CWBs, because there is less social pressure to under-report or under-estimate severity, their assessments may be more accurate. While only minimal differences have been found between self- and other-report methods with traditional CWB scales, future research should consider how the inclusion of severity in CWB measures may produce new complications with utilizing each.

While my study does benefit from a multi-wave collection strategy, future studies of CWB severity should utilize longitudinal methods that better assess the temporal dynamics between work stressors and high and low severity CWBs. A multi-way longitudinal method, such as Meier and Spector's (2013) time-lagged study, could be used to evaluate how the relationship between stressors and high and low severity CWBs emerge overtime. Testing these

reciprocal effects could help identify whether, like posited in Anderson and Pearson's (1999) theory of incivility spirals, individuals escalate to engaging in more severe forms of CWB after experiencing increasing levels of stressors overtime. Additionally, by utilizing experience sampling methods (ESM) we can study CWB severity as part of a dynamic, within-person, process. While the number of CWBs utilizing ESM are limited (e.g., Dalal et al., 2009) they have found within-person variation in CWB engagement such that engagement in minor and severe CWBs may vary across the workday. Utilizing more advanced longitudinal research methods will allow researchers to better understand how the dynamic relationship between stressors and CWB changes across time and how these changes influence the severity of the CWBs employee engage in.

A final limitation of this study is the method used to measure state and trait negative affect. While I used the JAWS (Van Katwyk et al., 2000) and PANAS (Watson, Clark, & Tellegen, 1988), scales that have been widely established and validated, to measure state and trait negative affect respectively the specific directions used in this study may be problematic. For state negative affect participants were asked, "Please select one response for each item that best indicates how often you've experienced each emotion at work over the past six months," while participants were asked to "Indicate to what extent you generally feel this way, i.e. how you feel on the average," when responding to trait negative affect items. Because six months is such a long period of time participants' scores on this measure may not truly reflect state negative affect. This makes it difficult to determine whether the relationship whether the relationship between these variables and CWB severity are truly similar or whether the way they

were measured simply makes them appear so. Future studies should utilize state and trait negative affect measures that better clarify the differences between these constructs.

Conclusion

Most research, barring a few notable exceptions (e.g., Robinson & Bennett, 1995), has failed to recognize the value of integrating severity into the study of CWBs. Moreover, previous research has almost exclusively utilized CWB measures that account for differences in behavioral frequency but fail to recognize variation in behavioral form. The present study has addressed these issues by presenting a conceptualization of CWB severity that distinguishes between inter- and intra-behavioral differences, with a specific focus on intra-behavioral severity. A novel method of measuring CWBs was also introduced which allows for researchers to account for increased variation in CWBs by differentiating between employee engagement in low and high severity behaviors. While further research is required to fully understand the complex dynamics between workplace stressors and low and high severity CWBs, this study is an important first step. My results indicate that not only do employees engage in a combination of low and high severity CWBs but that the factors influencing engagement in these behaviors are unique. By further integrating severity into the study of CWBs, we can understand more about the ways in which employees respond to stressful workplace conditions and identify the types of individuals and contexts most strongly associated with CWBs that pose the largest threat to organizational and employee well-being.

APPENDIX A: PILOT STUDY 1 RESULTS

Table A1
Descriptive statistics for adapted CWB-C Scales (Pilot Study 1)

Dimension (Scale)	Number of Items	Seriousness		Harmfulness		Total Severity Rating		
		Mean	SD	Mean	SD	Observed Range[a]	Mean	SD
Sabotage (Minor)	3	3.21	0.89	3.04	1.03	2.85 – 3.53	3.11	0.89
Sabotage (Severe)	3	3.52	1.02	3.50	0.97	3.17 – 3.93	3.52	0.89
Production Deviance (Minor)	3	2.98	0.87	2.97	0.90	2.73 – 3.09	2.96	0.80
Production Deviance (Severe)	3	3.77	0.93	3.68	0.99	3.53 – 3.88	3.70	0.92
Withdrawal (Minor)	4	2.66	1.01	2.52	1.07	2.52 – 2.61	2.57	1.00
Withdrawal (Severe)	4	3.36	0.82	3.18	1.03	2.92 – 3.54	3.24	0.92
Theft (Minor)	5	3.36	0.84	3.21	0.95	3.01 – 3.64	3.27	0.82
Theft (Severe)	5	4.00	1.06	3.95	0.97	3.71 – 4.16	3.97	0.93
CWB-O[b] (Minor)	21	2.90	0.67	2.78	0.78	2.16 – 3.64	2.83	0.70
CWB-O[b] (Severe)	21	3.41	0.80	3.36	0.77	2.63 – 4.16	3.41	0.71

Note. N = 59-61. Values calculated using combined item response data, based on item scale, i.e. minor or severe, and dimension. For example, "Sabotage (Minor)" results were calculated using responses to the minor versions of items 1, 2, & 3 (see Table 2). [a] Observed range represents the range of mean total severity ratings observed across all relevant items. [b] Includes all CWB-O items, regardless of subscale categorization.

Table A2
Paired Sample T-tests (Pilot Study 1)

Item (Subscale)[a]	M difference	SD	t	d
Item 1 (Sabotage)	-0.51**	1.07	-3.68	0.48
Item 2 (Sabotage)	-0.39**	1.09	-2.82	0.36
Item 3 (Sabotage)	-0.32*	1.04	-2.40	0.31
Item 4 (PD)	-0.61**	1.30	-3.71	0.47
Item 5 (PD)	-.80**	1.21	-5.19	0.66
Item 6 (PD)	-0.81**	1.22	-5.19	0.67
Item 7 (Withdrawal)	-0.95**	1.50	-4.95	0.63
Item 8 (Withdrawal)	-0.68**	1.11	-4.72	0.61
Item 9 (Withdrawal)	-0.39**	0.96	-3.19	0.41
Item 10 (Withdrawal)	-0.65**	1.00	-5.07	0.65
Item 11 (Theft)	-0.84**	1.38	-4.72	0.61
Item 12 (Theft)	-1.02**	1.43	-5.53	0.71
Item 13 (Theft)	-0.35*	1.17	-2.35	0.30
Item 14 (Theft)	-0.52**	0.96	-4.21	0.54
Item 15 (Theft)	-0.78**	1.22	-4.97	0.64
Item 16	-0.52**	1.08	-3.79	0.48
Item 17	-0.47**	1.18	-3.09	0.40
Item 18	-0.40**	1.06	-2.95	0.38
Item 19	-0.31**	0.98	-2.49	0.32
Item 20	-0.26	1.06	-1.94	0.25
Item 21	-0.57**	0.89	-5.01	0.64
Item 22	-0.58**	1.25	-3.63	0.46

Note. N = 56-61. See Table 1 for additional item information. [a] Differences in mean severity scores for minor and severe forms of each item. * $p < .05$, ** $p < .01$.

APPENDIX B: PILOT STUDY 2 RESULTS

Table B1

Descriptive statistics (Pilot Study 2)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Org. Constraint[a]	(.95)														
2. Procedural Justice	.21*	(.91)													
3. Distributive Justice	.14	.69**	(.94)												
4. Inter. Justice[b]	-.23*	.44**	.36**	(.83)											
5. Negative Affect	.71**	.21*	.07	-.16	(.98)										
6. Sabotage (minor)	.81**	.37**	.28**	-.03	.80**	(.94)									
7. Sabotage (severe)	.82**	.39**	.31**	-.03	.79**	.95**	(.95)								
8. PD (minor)[c]	.82**	.32**	.24*	-.08	.81**	.91**	.92**	(.94)							
9. PD (severe)[d]	.81**	.39**	.30**	-.04	.81**	.94**	.96**	.92**	(.96)						
10. Withdrawal (minor)	.79**	.30**	.28**	-.09	.75**	.88**	.87**	.85**	.87**	(.93)					
11. Withdrawal (severe)	.79**	.35**	.28**	-.05	.79**	.92**	.93**	.91**	.94**	.92**	(.96)				
12. Theft (minor)	.80**	.36**	.28**	-.04	.81**	.95**	.95**	.94*	.96**	.88**	.94**	(.97)			
13. Theft (severe)	.78**	.36**	.27**	-.02	.84**	.95**	.97**	.92**	.97**	.87**	.95**	.97**	(.98)		
14. CWB-O (minor)	.84**	.33**	.27**	-.07	.83**	.96**	.95**	.94**	.96**	.94**	.96**	.97**	.96**	(.98)	
15. CWB-O (severe)	.83**	.35**	.27**	-.06	.83**	.96**	.97**	.94**	.98**	.90**	.98**	.97**	.99**	.98**	(.99)
M	2.40	3.38	3.49	4.10	1.94	1.88	1.90	2.00	1.89	2.28	2.05	1.92	1.87	2.12	2.01
SD	1.13	1.03	1.20	0.83	1.21	1.34	1.37	1.33	1.34	1.26	1.36	1.33	1.38	1.22	1.31

Note. $N = 97$. Alpha is found on the diagonal. [a] Organizational constraints. [b] Interpersonal justice. [c] Production deviance (minor). [d] Production deviance(severe). * $p < .05$. ** $p < .01$.

Table B2

Descriptive statistics: Scale scores and percent reported (Pilot Study 2)

Scale	# of Items	M	SD	Median	Interquartile Range (25-75%)	Percent Reported[a]
Sabotage (minor)	3	1.88	1.34	1.00	1.00-3.00	39.2%
Sabotage (severe)	3	1.90	1.37	1.00	1.00-3.33	36.1%
Production Deviance (minor)	3	2.00	1.33	1.33	1.00-3.33	53.6%
Production Deviance (severe)	3	1.89	1.34	1.00	1.00-3.00	40.2%
Withdrawal (minor)	4	2.28	1.26	1.75	1.00-3.50	74.2%
Withdrawal (severe)	4	2.05	1.36	1.25	1.00-3.13	57.7%
Theft (minor)	5	1.92	1.33	1.00	1.00-3.10	46.4%
Theft (severe)	5	1.87	1.38	1.00	1.00-3.10	33.0%
CWB-O (minor)	21	2.12	1.22	1.57	1.17-3.21	89.7%
CWB-O (severe)	21	2.01	1.31	1.29	1.29-3.07	82.5%

Note. $N = 97$. [a] Percentage of sample who reported engaging in one or more related behavior (i.e. minor sabotage behaviors) at least once a month.

Table B3
Regression analyses examining the effect of study variables on minor and severe CWB-C subscales

Criterion variable	Ordered predictors	Step 1 β	Step 2 β	R^2	ΔR^2
Sabotage (minor)	1. Organizational constraints	.48**		.78**	
	Procedural justice	.05			
	Distributive justice	.12			
	Interpersonal justice	.08			
	Negative affect	.45**			
Sabotage (severe)	1. Organizational constraints	.50**	.14*	.79**	
	Procedural justice	.08	.03		
	Distributive justice	.13**	.04		
	Interpersonal justice	.06	.00		
	Negative affect	.41**	.07		
	2. Sabotage minor		.76**	.92**	.13**
Production deviance (minor)	Organizational constraints	.48**		.78**	
	Procedural justice	.03			
	Distributive justice	.11			
	Interpersonal justice	.05			
	Negative affect	.46**			
Production deviance (severe)	1. Organizational constraints	.46**	.19**	.81**	
	Procedural justice	.08	.06		
	Distributive justice	.13*	.07		
	Interpersonal justice	.06	.03		
	Negative affect	.47**	.21**		
	2. Production deviance minor		.56**	.87*	.06**
Withdrawal (minor)	Organizational constraints	.50**		.72**	
	Procedural justice	-.04			
	Distributive justice	.21**			
	Interpersonal justice	.03			

Criterion variable	Ordered predictors	Step 1 β	Step 2 β	R^2	ΔR^2
Withdrawal (severe)	Negative affect	.40**			
	Organizational constraints	.44**	.13*	.76**	
	Procedural justice	.03	.06		
	Distributive justice	.14*	.01		
	Interpersonal justice	.06	.04		
	Negative affect	.47**	.22**		
	Withdrawal minor		.63**	.87**	.11**
Theft (minor)	Organizational constraints	.43**		.79**	
	Procedural justice	.05			
	Distributive justice	.12			
	Interpersonal justice	.07			
	Negative affect	.50**			
Theft (severe)	Organizational constraints	.38**	.03	.80**	
	Procedural justice	.04	.00		
	Distributive justice	.12	.02		
	Interpersonal justice	.10	.04		
	Negative affect	.57**	.17**		
	Theft minor		.80**	.94**	.14**

Note. $N = 97$. * $p < .05$. ** $p < .01$.

APPENDIX C: SURVEY

Job-Related Affective Well-being Scale (Van Katwyk, Fox, Spector, & Kelloway, 2000; 20 item)
Please select one response for each item that best indicates how often you've experienced each emotion at work over the past six months.

Positive Affect

1. My job made me feel at ease.
2. My job made me feel calm.
3. My job made me feel content.
4. My job made me feel ecstatic.
5. My job made me feel energetic.
6. My job made me feel enthusiastic.
7. My job made me feel excited.
8. My job made me feel inspired.
9. My job made me feel relaxed.
10. My job made me feel satisfied.

Negative Affect

1. My job made me feel angry.
2. My job made me feel anxious.
3. My job made me feel bored.
4. My job made me feel depressed.
5. My job made me feel discouraged.
6. My job made me feel disgusted.
7. My job made me feel fatigued.
8. My job made me feel frightened.
9. My job made me feel furious.
10. My job made me feel gloomy.

1 (never) 2 (rarely) 3 (sometimes) 4 (quite often) 5 (extremely often)

Negative Affectivity Scale (PANAS) (Watson, Clark, & Tellegen, 1988; 10 item)
This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you generally feel this way, i.e. how you feel on the average. Use the following scale to record your answers.
1. Distressed
2. Upset
3. Guilty
4. Scared

5. Hostile
6. Irritable
7. Ashamed
8. Nervous
9. Jittery
10. Afraid

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

Brief Self-Control Scale (Tangney et al., 2004)
Using the scale provided, please indicate how much each of the following statements reflects how you typically are.
1. I am good at resisting temptation.
2. I have a hard time breaking bad habits. (R)
3. I am lazy. (R)
4. I say inappropriate things. (R)
5. I do certain things that are bad for me, if they are fun. (R)
6. I refuse things that are bad for me.
7. I wish I had more self-discipline. (R)
8. People would say I have iron self-discipline.
9. Pleasure and fun sometimes keep me from getting work done. (R)
10. I have trouble concentrating. (R)
11. I am able to work effectively towards long-term goals.
12. Sometimes I can't stop myself from doing something, even if I know it is wrong. (R)
13. I often act without thinking through all the alternatives. (R)

1 (not at all like me) – 5 (very much like me)

Measure of CWB Consequences (Shoss, Jundt, Reynolds, & Kobler, 2016)
Counterproductive work behaviors refer to employee behaviors that are against the legitimate interests of an organization and have the potential to harm the organization or people in the organization (for example: coworkers, supervisors, customers). While these behaviors are not always intended to cause harm, they must be engaged in voluntarily and not accidentally or unconsciously. Examples of these behaviors include arriving late to work/leaving early, stealing, wasting time, mistreating coworkers, and sabotaging work tasks.

Please answer each of the following questions by clicking the option that best describes your opinion. Some of the questions may appear to be similar, but they do address somewhat different issues. Please read each question carefully. Remember: There are no correct or incorrect responses; we are merely interested in your personal point of view.

In your current job, engaging in a counterproductive work behavior (for example: arriving late to work/leaving early, stealing, wasting time, mistreating coworkers, sabotaging work tasks) will…

1. Result in being punished.
2. Cause more problems in the long run.
3. Result in being caught.
4. Result in being scolded.
5. Harm my reputation.

1 (very unlikely) – 7 (very likely)

Counterproductive Work Behavior Checklist (CWB-C) (Spector et al., 2006; Bennett & Robinson, 2000)
Please indicate the extent to which you have engaged in each of the following in your current position over the last two weeks.

1. Purposely wasted your employer's materials or supplies.
2. Purposely damaged a piece of equipment or property.
3. Purposely dirtied or littered your place of work.
4. Purposely did your work incorrectly.
5. Purposely worked slowly when things needed to be done.
6. Purposely failed to follow instructions.
7. Stayed home from work and said you were sick.
8. Came to work late without permission.
9. Taken a longer break than you were allowed to.
10. Left work earlier than you were allowed to.
11. Stolen something belonging to your employer.
12. Took supplies or tools home without permission.
13. Put in to be paid for more hours than you worked.
14. Took money from your employer without permission.
15. Stole something belonging to someone at work.
16. Told people outside the job what a lousy place you work for.
17. Refused to take on an assignment when asked.
18. Complained about insignificant things at work.
19. Daydreamed rather than did your work.
20. Tried to look busy while doing nothing.
21. Purposely came late to an appointment or meeting.
22. Failed to report a problem so it would get worse.

1 (never) – 5 (everyday)

Counterproductive Work Behavior Checklist (CWB-C): Minor Behaviors
Please answer each of the following questions by clicking the option that best describes your behavior. Some of the questions may appear to be similar, but they do address somewhat different behavior. Please read each question carefully and answer as accurately as you can.

Please indicate the extent to which you have engaged in each of the following in your current position over the last two weeks.

1. Purposely wasted pens, paper, or other inexpensive materials/supplies.
2. Purposely damaged a piece of equipment or property that is easy and/or inexpensive to fix or replace.
3. Purposely dirtied or littered your desk, private office, or any personal workspace.
4. Purposely did your work incorrectly on a task that was not very important.
5. Purposely worked slowly on a low priority task.
6. Purposely failed to follow instructions on a minor task of low importance
7. Stayed home from work on a light workday, when only minor tasks needed completely.
8. Came to work a little late without permission.
9. Taken a slightly longer break than you were allowed to.
10. Left work a little earlier than you were allowed to.
11. Stolen something inexpensive from your employer, such as office supplies or stamps.
12. Took inexpensive supplies or tools, such as highlighters or hand tools, home without permission.
13. Put in to be paid for a little more time than you worked.
14. Took a small amount of money from your employer without permission.
15. Stole something inexpensive from someone at work at work, such as a pen or gum.
16. Discussed minor complaints about your organization, such as office temperature or desk space, with someone outside the job.
17. Refused to take on a low priority task when asked.
18. Complained to coworkers about office temperature, workload, or other minor issues at work.
19. Daydreamed rather than did your work for a brief period of time.
20. Tried to look busy for a brief period while doing nothing.
21. Purposely came to an appointment or meeting slightly late.
22. Failed to report a minor work problem so it would get worse.

1 (never) – 5 (everyday)

Counterproductive Work Behavior Checklist (CWB-C): Severe Behaviors
Please indicate the extent to which you have engaged in each of the following in your current position over the last two weeks.

1. Purposely wasted electronic materials or other expensive materials/supplies.
2. Purposely damaged a piece of equipment or property that is difficult and/or expensive to fix or replace.
3. Purposely dirtied a shared or public workspace regularly accessed by coworkers or customers.
4. Purposely did your work incorrectly on a very important task.
5. Purposely worked slowly on a high priority task.
6. Purposely failed to follow instructions on a critical task of high importance.

7. Stayed home from work on a critical workday, when a presentation or other important tasks needed completing.
8. Came to work significantly late without permission.
9. Taken a considerably longer break than you were allowed to.
10. Left work significantly earlier than you were allowed to.
11. Stolen something expensive from your employer such as a computer.
12. Took expensive supplies or tools, such as scanners or printers, home without permission.
13. Put in to be paid for substantially more time than you worked.
14. Took a large amount of money from your employer without permission.
15. Stole something expensive from someone at work, such as a phone or electronic tablet.
16. Discussed major complaints about your organization, such as management effectiveness or organizational strategy, with someone outside the job.
17. Refused to take on a high priority task when asked.
18. Complained to coworkers about supervisor relations, management effectiveness, or other major issues at work.
19. Daydreamed rather than did your work for an extended period of time.
20. Tried to look busy for an extended period while doing nothing.
21. Purposely came to an appointment or meeting considerably late.
22. Failed to report a serious work problem so it would get worse.

1 (never) – 5 (everyday)

Balanced Inventory of Desirable Responding Short-Form (BIDR-16) (Paulhus, 1991; Hart, Richie, Hepper, & Gebauer, 2015; 16 item)
Using the scale below as a guide, indicate how much you agree with each statement.
1. I have not always been honest with myself.
2. I always know why I like things.
3. It's hard for me to shut off a disturbing thought.
4. I never regret my decisions.
5. I sometimes lose out on things because I can't make up my mind soon enough.
6. I am a completely rational person.
7. I am very confident of my judgments
8. I have sometimes doubted my ability as a lover.
9. I sometimes tell lies if I have to.
10. I never cover up my mistakes.
11. There have been occasions when I have taken advantage of someone.
12. I sometimes try to get even rather than forgive and forget.
13. I have said something bad about a friend behind his/her back.
14. When I hear people talking privately, I avoid listening.
15. I never take things that don't belong to me.
16. I don't gossip about other people's business.

1 (strongly disagree) – 7 (strongly agree)

State Exhaustion: Profile of Mood States (McNair, Lorr, & Droppleman, 1992)

Below is a list of words that describe the feelings people have. Indicate which word best describes how you feel <u>right now.</u>
1. Exhausted
2. Fatigued
3. Worn-out

1 (not at all) – 5 (extremely)

Demographic & Job-Related Items
1. Please indicate your age (in years).   _____
2. Are you employed?   Yes, full-time (more than 35 hours per week), Yes, part-time (less than 35 hours per week), No
3. How many hours do you work per week?   _____
4. How comfortable are you with the English language (including speaking and writing)? Not at all comfortable, A little comfortable, Somewhat comfortable, Comfortable, Very comfortable
5. What is your gender? Male, Female
6. What is your race/ethnicity? Black/African American, Asian, Hispanic/Latino, White/Caucasian, Other
7. How long have you been employed in your <u>current position</u>?
   Months, Years
8. How long have you been employed at your <u>current organization</u>?
   Months, Years
9. Are you an hourly or salaried employee?   Hourly, Salaried
10. Are you a temporary or permanent employee?   Temporary, Permanent
11. On average, what percentage of the workweek do you spend working remotely (away from your organization's primary local office)? 0% - 20% 21% - 40% 41% - 60% 61% - 80% 81% - 100%
12. What is your job title?
13. In what industry do you work?
14. Do you hold a supervisory position in your current position?
15. <u>If yes, how many employees do you currently supervise?</u>
16. Please use the url link below to access O*Net Online. Select "Find Occupations" and find the O*Net-SOC code and Occupation title that best represents your current position. Type and submit this code and title in the text box below. https://www.onetonline.org/

Additional Items
1. If you qualify, are you willing to complete a follow-up survey that is part of this study? Yes, No
2. Lastly, it is vital to our study that we only include responses from people that devoted their full attention to this study. Otherwise years of effort (the time of researchers and other participants) could be wasted. You will receive credit for this study no matter what,

however, please tell us how much effort you put forth towards this study: I put forth _____ effort towards this study.   None, Little, Some, Substantial

3. In your honest opinion, should we use your data in our analyses for this study?   Yes, No

APPENDIX D: RESULTS

Table D1

Descriptive Statistics: Means, standard deviations, reliabilities, and intercorrelations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Time 1														
1. Age														
2. Gender	.05													
3. Tenure	.42**	.02												
4. Soc Des	.08	.01	.01	(.82)										
5. Exhaust	-.13**	.01	-.01	-.32**	(.91)									
6. PA	-.02	.07	.00	.24**	-.29**	(.94)								
7. NA	-.06	-.04	.05	-.36**	.50**	-.64**	(.90)							
8. TNA	-.14**	.00	-.07	-.44**	.52**	-.35**	.65**	(.91)						
9. SC	.11*	.13**	.06	.67**	-.32**	.22**	-.33**	-.47**	(.88)					
10. Con	.08	.12*	.05	.09	.04	.06	-.07	-.04	.06	(.92)				
11. CWB L	-.14**	-.11*	-.01	-.50**	.29**	-.21**	.37**	.37**	-.45**	-.07	(.87)			
12. CWB H	-.10*	-.14**	.03	-.36**	.27**	-.20**	.40**	.36**	-.40**	-.11*	.75**	(.84)		
Time 2														
13. CWB L	-.23**	-.05	-.06	-.46**	.29**	-.15**	.29**	.33**	-.43**	-.07	.75**	.69**	(.90)	
14. CWB H	-.18**	-.01	-.01	-.40**	.30**	-.11	.31**	.34**	-.35**	-.11	.64**	.72**	.84**	(.90)
M	33.60	0.51	56.04	4.26	2.32	3.19	2.29	1.74	3.57	4.83	1.63	1.35	1.65	1.35
SD	9.81	0.50	58.50	0.88	1.08	0.87	0.77	0.68	0.74	1.60	0.45	0.32	0.48	0.38
skew/	1.00/	-0.02/	1.97/	0.30/	0.64/	0.01/	0.55/	1.31/	-0.27/	-0.62/	1.27/	2.06/	1.38/	2.93/
kurtosis	0.76	-2.01	4.39	0.06	0.42	-0.52	-0.30	1.93	-0.17	-0.58	3.02	7.12	2.94	14.12

Note. N = 290-446. Reliability coefficients are displayed on the diagonal. Org. tenure = organizational tenure (in months); Soc Des = social desirability; Exhaust = exhaustion; PA = positive affect; NA = negative affect; TNA = trait negative affect; SC = trait self-control; Con = perceived consequences; CWB L = low severity CWB-O; CWB H = high severity CWB-O. * $p < .05$, ** $p < .01$.

Table D2

Correlation comparisons between predictors and low & high severity CWB-Os

	r with CWB-O (low severity)	r with CWB-O severe (high severity)	z	p
Cross-sectional				
Negative Affect	0.37	0.40	-0.52	0.302
Trait Negative Affect	0.37	0.36	0.15	0.881
Self-Control	-0.45	-0.40	-0.91	0.181
Consequences	-0.07	-0.11	0.60	0.274
Time-lagged				
Negative Affect	0.29	0.31	-0.26	0.397
Trait Negative Affect	0.33	0.34	-0.15	0.881
Self-Control	-0.43	-0.35	-1.13	0.129
Consequences	-0.07	-0.11	0.48	0.316

Note. $N = 291\text{-}446$. Fisher's r to z transformation. Cross-sectional indicates predictors and CWB data collected at Time 1; Time-Lagged indicates predictors collected at Time 1 and CWB data collected at Time 2. No significant comparisons were found.

Table D3
Regression analyses: Direct and interaction effects

| | Cross-sectional | | | | Time-lagged | | | |
| | CWB-O (low severity) | | CWB-O (high severity) | | CWB-O (low severity) | | CWB-O (high severity) | |
Variable	*B*	SE	*B*	SE	*B*	SE	*B*	SE
Model 1								
Positive Affect	-0.03	0.02	0.04$^+$	0.02	0.02	0.04	0.05$^+$	0.03
Exhaustion	0.03	0.02	0.01	0.02	0.06*	0.03	0.04*	0.02
Social Desirability	-0.21**	0.02	-0.09**	0.02	-0.21**	0.03	-0.12**	0.02
Negative Affect	0.13**	0.03	0.15**	0.03	0.05	0.05	0.08*	0.03
R^2	.30**		0.23**		.24**		.22**	
Model 2								
Positive affect	0.03	0.03	0.04$^+$	0.02	0.03	0.03	0.05$^+$	0.03
Social desirability	-0.15**	0.03	-0.04$^+$	0.02	-0.14**	0.04	-0.09**	0.03
Exhaustion	0.02	0.02	0.01	0.01	0.06*	0.03	0.04*	0.02
Negative affect	0.13**	0.03	0.14**	0.03	0.05	0.05	0.08*	0.03
Self-control	-0.11**	0.03	-0.10**	0.03	-0.13**	0.04	-0.06$^+$	0.03
NA*SC	-0.01	0.03	-0.02	0.02	0.01	0.04	<-0.01	0.03
R^2	.32**		.25**		.27**		.23**	
ΔR^2	.02**		.03**		-.02**		.01$^+$	
Model 3								
Positive affect	0.03	0.03	0.04$^+$	0.02	0.03	0.03	0.05$^+$	0.02
Social desirability	-0.21**	0.02	-0.09**	0.02	-0.20**	0.03	-0.11**	0.02
Exhaustion	0.03	0.02	0.02	0.01	0.06*	0.03	0.05*	0.02
Negative affect	0.13**	0.03	0.15**	0.03	0.05	0.05	0.08*	0.03
Consequences	-0.01	0.01	-0.02$^+$	0.01	-0.01	0.01	-0.02*	0.01
NA*Con	<-0.01	0.01	<-0.01	0.01	-0.01	0.02	-0.01	0.01
R^2	.30**		.23**		.25**		.23**	
ΔR^2	<.01		.01$^+$		<.01		.01$^+$	
Model 4								
Positive affect	0.03	0.03	0.04$^+$	0.02	0.03	0.03	0.05*	0.03
Social desirability	-.15**	0.03	-0.04$^+$	0.02	-0.14**	0.04	-0.08**	0.03
Exhaustion	0.02	0.02	0.01	0.01	0.06*	0.03	0.05*	0.02
Negative affect	0.13**	0.03	0.14**	0.03	0.04	0.05	0.07*	0.03
Self-control	-0.11**	0.03	-0.10**	0.02	-0.13**	0.04	-0.07*	0.03
NA*SC	-0.01	0.03	-0.02	0.02	0.01	0.04	0.01	0.03
Consequences	-0.01	0.01	-0.02*	0.01	-0.02	0.02	-0.02*	0.01
NA*Con	<0.01	0.02	<0.01	0.01	<0.01	0.02	<-0.01	0.01
SC*Con	<0.01	0.02	<0.01	0.01	0.02	0.02	0.02	0.01
NA*SC*Con	-0.01	0.02	-0.02	0.01	0.02	0.02	<-0.01	0.02
R^2	.32**		.26**		.27**		.24**	
ΔR^2	.02**		.03**		.03**		.02*	

Table D4

Relative weights analysis: Predictors of low and high severity CWB-Os

| | Cross-sectional | | | | Time-lagged | | | |
| | CWB-O (low severity) | | CWB-O S (high severity) | | CWB-O M (low severity) | | CWB-O S (high severity) | |
Variable	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2
PA	.009	3.0%	.012*	4.6%	.004	1.7%	.006	2.45%
Soc D	.118*	37.5%	.045*	17.5%	.101*	38.5%	.073*	31.3%
Ex	.023*	7.5%	.020*	7.7%	.029*	11.0%	.032*	13.9%
NA	.047*	14.8%	.071*	27.7%	.022*	8.4%	.033*	14.3%
TNA	.034*	10.8%	.035*	13.8%	.027*	10.4%	.035*	15.0%
SC	.081*	25.6%	.066*	25.6%	.075*	28.8%	.044*	19.1%
Con	.003	0.8%	.008*	3.1%	.003	1.21%	.009	4.0%
Total R^2	.31		.26		.26		.24	

Note. N = 301-446. All variables entered simultaneously. PA = positive affect; Soc D = social desirability; Ex = exhaustion; NA = negative affect; TNA = trait negative affect; SC = self-control; Con = perceived consequences. * $p < .05$ indicated by confidence intervals that exclude zero.

Table D5

Paired sample t-tests (low & high severity CWB-O)

Variable	*M* difference	*SD*	*t*	d
CWB-O (Time 1)	.27**	.29	19.64	0.93
CWB-O (Time 2)	.29**	.26	19.54	1.12

Note. N = 301-446. Compares total scores for minor and severe CWB-O. ** $p < .01$.

Table D6

Endorsement rates of low & high severity CWB-O items

Item	Dimension	Time 1		Time 2	
		% Endorsed (low severity)	% Endorsed (high severity)	% Endorsed (low severity)	% Endorsed (high severity)
Item 1	CWB-O; Sabotage	25.6	12.8	29.2	11.0
Item 2	CWB-O; Sabotage	5.8	2.9	6.3	3.0
Item 3	CWB-O; Sabotage	8.3	5.8	9.9	4.3
Item 4	CWB-O; PD	12.6	4.5	12.6	3.3
Item 5	CWB-O; PD	48.6	20.2	48.7	24.0
Item 6	CWB-O; PD	13.0	6.1	16.3	5.3
Item 7	CWB-O; Withdrawal	41.0	13.7	42.1	12.6
Item 8	CWB-O; Withdrawal	61.4	28.7	58.5	26.7
Item 9	CWB-O; Withdrawal	63.7	38.9	68.9	41.9
Item 10	CWB-O; Withdrawal	58.9	30.0	63.5	33.7
Item 11	CWB-O; Theft	25.7	3.4	27.8	2.3
Item 12	CWB-O; Theft	30.4	3.6	32.6	3.7
Item 13	CWB-O; Theft	16.6	8.1	15.3	6.3
Item 14	CWB-O; Theft	3.1	1.8	3.3	2.0
Item 15	CWB-I; Theft	25.8	1.3	25.2	1.7
Item 16	CWB-O	69.3	67.3	75.5	64.5
Item 17	CWB-O	22.2	15.2	18.0	14.0
Item 18	CWB-O	72.6	64.6	75.8	64.8
Item 19	CWB-O	86.1	72.0	86.8	71.1
Item 20	CWB-O	70.8	49.1	73.1	50.2
Item 21	CWB-O	19.1	9.5	23.5	12.0
Item 22	CWB-O	17.5	7.6	15.9	9.7

Note. N = 290-460.   Percentage of sample who reported engaging in one or more related behavior (i.e. low severity sabotage behaviors) at least once a month. PD = production deviance.

APPENDIX E: SUPPLEMENTAL ANALYSES

Table E1
Regression analyses: Direct and interaction effects

Variable	Cross-sectional				Time-lagged			
	CWB-O (low severity)		CWB-O (high severity)		CWB-O (low severity)		CWB-O (high severity)	
	B	SE	B	SE	B	SE	B	SE
Model 1								
Positive affect	-0.02	0.02	-0.02	0.02	0.01	0.03	0.02	0.02
Social desirability	0.04[+]	0.02	-0.09**	0.02	-0.20**	0.03	-0.11**	0.02
Exhaustion	-0.21**	0.02	0.02	0.02	-0.06*	0.03	0.04*	0.02
TNA	0.09**	0.03	0.09**	0.03	0.07	0.05	0.08*	0.03
R^2	.29**		.19**		.25**		.21*	
Model 2								
Positive affect	-0.02	0.02	-0.02	0.02	0.03	0.03	0.02	0.02
Social desirability	-0.16**	0.03	-0.04*	0.02	-0.14**	0.04	-0.09**	0.03
Exhaustion	0.03	0.02	0.02	0.02	0.06*	0.03	0.04*	0.02
Trait negative affect	0.08*	0.04	0.08**	0.03	0.05	0.05	0.07*	0.03
Self-control	-0.10**	0.04	-0.09**	0.03	-0.12**	0.04	-0.05[+]	0.03
TNA*SC	0.02	0.03	0.01	0.02	0.03	0.05	0.02	0.03
R^2	.30**		.21**		.27**		.22**	
ΔR^2	.01**		.02**		.02**		.01[+]	
Model 3								
Positive affect	-0.02	0.02	-0.02	0.02	0.01	0.03	0.03	0.02
Social desirability	-0.21**	0.02	-0.09**	0.02	-0.20**	0.03	-0.11**	0.02
Exhaustion	0.04[+]	0.02	0.03[+]	0.02	0.06*	0.03	0.05*	0.02
Trait negative affect	0.09**	0.03	0.09**	0.03	0.07	0.05	0.08*	0.03
Consequences	-0.01	0.01	-0.02*	0.01	-0.02	0.01	-0.02*	0.01
TNA*Con	-0.01	0.02	-0.01	0.01	-0.02	0.02	-0.01	0.02
R^2	.29**		.20**		.25**		.23**	
ΔR^2	<.01		.01*		<.01		.01*	
Model 3								
Positive affect	-0.02	0.02	-0.02	0.02	0.02	0.03	0.03	0.02
Social desirability	-0.16**	0.03	-0.04[+]	0.02	-0.14**	0.04	-0.08**	0.03
Exhaustion	0.03	0.02	0.02	0.02	0.06*	0.03	0.04*	0.02
Trait negative affect	0.07*	0.04	0.08**	0.03	0.05	0.05	0.07*	0.04
Self-control	-0.10**	0.03	-0.09**	0.03	-0.13**	0.04	-0.06[+]	0.03
TNA*SC	0.03	0.03	0.01	0.02	<-0.01	0.05	0.01	0.04
Consequences	-0.01	0.01	-0.02*	0.01	-0.01	0.02	-0.02*	0.01
TNA*Con	-0.01	0.02	-0.01	0.01	<-0.01	0.02	<-0.01	0.02
SC*Con	<0.01	0.02	<0.01	0.01	0.03	0.02	0.02	0.02
TNA*SC*Con	0.01	0.02	<-0.01	0.01	0.03	0.03	0.01	0.02
R^2	.30**		.22**		.27**		.24**	
ΔR^2	.01*		.03**		.02*		.03*	

Table E2
Descriptive Statistics (Sabotage)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age														
2. Gender	.05													
3. Tenure	.42**	.02												
4. Soc Des	.08	.01	.01	(.82)										
5. Exhaust	-.13**	.01	-.01	-.32**	(.91)									
6. PA	-.02	.07	.00	.24**	-.29**	(.94)								
7. NA	-.06	-.04	.05	-.36**	.50**	-.64**	(.90)							
8. TNA	-.14**	.00	-.07	-.44**	.52**	-.35**	.65**	(.91)						
9. SC	.11*	.13**	.06	.67**	-.32**	.22**	-.33**	-.47**	(.88)					
10. Con	.08	.12*	.05	.09	.04	.06	-.07	-.04	.06	(.92)				
Time 1														
11. Sab L	-.11*	.08	-.05	-.20**	.17**	.03	.12*	.18**	-.21**	-.07	(.71)			
12. Sab H	-.13**	-.16**	-.07	-.07	.09	.11*	.05	.09$^+$	-.13**	-.07	.65**	(.70)		
Time 2														
13. Sab L	-.10	-.05	-.05	-.23**	.10	.10	.05	.12*	-.22**	-.06	.50**	.44**	(.67)	
14. Sab H	-.11	-.08	-.02	-.11	.09	.16**	.01	.09	-.09	-.11	.40**	.59**	.72**	(.82)
M	33.60	0.51	56.04	4.26	2.32	3.19	2.29	1.74	3.57	4.83	1.89	1.10	1.23	1.09
SD	9.81	0.50	58.50	0.88	1.08	0.87	0.77	0.68	0.74	1.60	0.43	0.33	0.45	0.36
skew/	1.00/	-0.02/	1.97/	.30/	.64/	.01/	.55/	1.31/	-.27/	-.62/	3.75/	5.19/	3.51/	5.53/
kurtosis	0.76	-2.01	4.39	.06	.42	-.52	-.30	1.93	-.17	-.58	18.25	34.02	16.48	34.76

Note. N = 301-446. Reliability coefficients are displayed on the diagonal. Org. tenure = organizational tenure (in months); Soc Des = social desirability;
Exhaust = exhaustion; PA = positive affect; NA = negative affect; TNA = trait negative affect; SC = trait self-control; Con = perceived consequences;
Sab L = low severity Sabotage; Sab H = high severity Sabotage. * $p < .05$, ** $p < .01$.

Table E3
Regression Analyses (Sabotage)

| Variables | Cross-sectional | | | | Time-lagged | | | |
| | Sabotage (low severity) | | Sabotage (high severity) | | Sabotage (low severity) | | Sabotage (high severity) | |
	B	SE	*B*	SE	*B*	SE	*B*	SE
Positive affect	0.09**	0.03	0.09**	0.02	0.11**	0.03	0.10**	0.02
Social desirability	-0.04	0.03	0.02	0.02	0.06$^+$	0.03	-0.02	0.03
Exhaustion	0.04$^+$	0.02	0.02	0.02	0.02	0.02	0.03	0.02
Negative affect	0.06	0.04	0.06$^+$	0.03	0.03	0.04	0.03	0.03
Self-Control	-0.08*	0.04	-0.07*	0.03	-0.08$^+$	0.04	-0.03	0.03
NA*SC	-0.04	0.03	0.01	0.02	0.04	0.04	0.04	0.03
Consequences	-0.02	0.01	-0.02$^+$	0.01	-0.01	0.01	-0.03**	0.01
NA*Con	0.01	0.02	<-0.01	0.01	<0.01	0.02	0.01	0.01
SC*Con	<0.01	0.02	<-0.01	0.01	<-0.01	0.02	0.01	0.01
NA*SC*Con	-0.01	0.02	-0.02	0.01	<-0.01	0.02	-0.03	0.02
R^2	.09**		.06**		.11**		.10**	

Note. N = 290-443. Cross-sectional indicates predictors and CWB data collected at Time 1; Time-Lagged indicates predictors collected at Time 1 and CWB data collected at Time 2. $^+ p < .10$, $* p < .05$, $** p < .01$.

Table E4
Relative Weights Analysis: Predictors of Minor & Severe Sabotage

| | Cross-sectional | | | | Time-lagged | | | |
| | Sabotage (low severity) | | Sabotage (high severity) | | Sabotage (low severity) | | Sabotage (high severity) | |
Variable	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2
PA	.011	13.3%	.023	40.2%	.023*	23.9%	.038*	47.4%
Soc D	.015	18.2%	.002	4.0%	.032*	33.0%	.007	9.2%
Ex	.014	16.1%	.005	8.9%	.004	4.5%	.006	8.1%
NA	.007	8.2%	.006	9.7%	.005	5.0%	.006	7.0%
TNA	.012	14.8%	.004	6.3%	.005	5.1%	.006	7.1%
SC	.020	24.1%	.012	21.5%	.025*	25.6%	.004	4.8%
Con	.004	5.30%	.005	9.5%	.003	2.9%	.013	16.3%
Total R^2	.08		.06		.10		.08	

Note. N = 301-446. Cross-sectional is time 1 predictors of time 1 CWBs; Time-lagged is time 1 predictors of time 2 CWBs. significance indicated by confidence intervals that exclude zero derived from bias-corrected bootstrapping. pairwise deletion was used. PA = positive affect; Soc D = social desirability; Ex = exhaustion; NA = negative affect; TNA = trait negative affect; SC = self-control; Con = perceived consequences. * $p < .05$.

Table E5

Descriptive Statistics (Production Deviance)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age														
2. Gender	.05													
3. Tenure	.42**	.02												
4. Soc Des	.08	.01	.01	(.82)										
5. Exhaust	-.13**	.01	-.01	-.32**	(.91)									
6. PA	-.02	.07	.00	.24**	-.29**	(.94)								
7. NA	-.06	-.04	.05	-.36**	.50**	-.64**	(.90)							
8. TNA	-.14**	.00	-.07	-.44**	.52**	-.35**	.65**	(.91)						
9. SC	.11*	.13**	.06	.67**	-.32**	.22**	-.33**	-.47**	(.88)					
10. Con	.08	.12*	.05	.09	.04	.06	-.07	-.04	.06	(.92)				
Time 1														
11. PD L	-.14**	-.16**	-.10*	.36**	.22**	-.15**	.29**	.30**	-.33**	-.07	(.56)			
12. PD H	-.12*	-.18**	-.06	-.13**	.14**	-.02	.17**	.19**	-.17**	.06	.55**	(.57)		
Time 2														
13. PD L	-.21**	-.07	-.11	-.38**	.20**	-.12*	.22**	.24**	-.36**	-.05	.62**	.32**	(.61)	
14. PD H	-.26**	-.08	-.06	-.35**	.20**	<.01	.17**	.22**	-.26**	-.10	.43**	.37**	.65**	(.69)
M	33.60	0.51	56.04	4.26	2.32	3.19	2.29	1.74	3.57	4.83	1.38	1.14	1.39	1.15
SD	9.81	0.50	58.50	0.88	1.08	0.87	0.77	0.68	0.74	1.60	0.52	0.34	0.54	0.37
skew/	1.00/	-.02/	1.97/	.30/	.64/	.01/	.55/	1.31/	-.27/	-.62/	2.08/	3.70/	2.04/	5.11/
kurtosis	.76	-2.01	4.39	.06	.42	-.52	-.30	1.93	-.17	-.58	5.65	17.16	5.31	36.48

Note. N = 291-444. Reliability coefficients are displayed on the diagonal. Org. tenure = organizational tenure (in months); Soc Des = social desirability;
Exhaust = exhaustion; PA = positive affect; NA = negative affect; TNA = trait negative affect; SC = trait self-control; Con = perceived consequences;
PD L = low severity Production Deviance; PD H = high severity Production Deviance. * p < .05, ** p < .01.

Table E6
Regression Analyses (Production Deviance)

| | Cross-sectional | | | | Time-lagged | | | |
| | PD (low severity) | | PD (high severity) | | PD (low severity) | | PD (high severity) | |
Variable	B	SE	B	SE	B	SE	B	SE
Positive affect	0.04	0.03	0.06*	0.02	0.02	0.04	0.06**	0.02
Social desirability	-0.14**	0.04	<-0.01	0.02	-0.15**	0.04	-0.09**	0.02
Exhaustion	0.02	0.03	0.02	0.02	0.04	0.03	0.03$^+$	0.02
Negative affect	0.12**	0.04	0.09**	0.03	0.02	0.06	0.04	0.03
Self-Control	-0.08$^+$	0.04	-0.06$^+$	0.03	-0.12*	0.05	-0.02	0.03
NA*SC	-0.05	0.04	-0.02	0.02	-0.08$^+$	0.05	-0.01	0.03
Consequences	-0.01	0.02	-0.02	0.01	-0.01	0.02	-0.02	0.01
NA*Con	-0.01	0.02	<0.01	0.01	<-0.01	0.02	0.01	0.01
SC*Con	0.01	0.02	<-0.01	0.01	0.03	0.02	0.01	0.01
NA*SC*Con	0.01	0.02	-0.02$^+$	0.01	0.03	0.03	-0.01	0.02
R^2	.18**		.07**		.19**		.17**	

Note. N = 290-443. Cross-sectional indicates predictors and CWB data collected at Time 1; Time-Lagged indicates predictors collected at Time 1 and CWB data collected at Time 2. PD = production deviance. $^+ p < .10$, $* p < .05$, $** p < .01$.

Table E7

Relative Weights Analysis: Predictors of Minor & Severe Production Deviance

| | Cross-sectional | | | | Time-lagged | | | |
| | Production Deviance (low severity) | | Production Deviance (high severity) | | Production Deviance (low severity) | | Production Deviance (high severity) | |
Variable	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2
PA	.005	3.0%	.006	9.6%	.003	1.6%	.011	7.1%
Soc D	.060*	34.8%	.005	7.6%	.073*	42.5%	.073*	45.2%
Ex	.012*	6.9%	.007	10.8%	.011	6.4%	.016	9.7%
NA	.028*	16.0%	.017*	27.0%	.013	7.5%	.013*	8.1%
TNA	.026*	14.8%	.013	20.8%	.013	7.8%	.015*	9.2%
SC	.040*	22.8%	.012	19.2%	.057*	33.5%	.026*	16.0%
Con	.003	1.7%	.003	5.0%	.001	0.7%	.007	4.6%
Total R^2	.17		.06		.17		.16	

Note. N = 301-446. Cross-sectional is time 1 predictors of time 1 CWBs; Time-lagged is time 1 predictors of time 2 CWBs. significance indicated by confidence intervals that exclude zero derived from bias-corrected bootstrapping. pairwise deletion was used. PA = positive affect; Soc D = social desirability; Ex = exhaustion; NA = negative affect; TNA = trait negative affect; SC = self-control; Con = perceived consequences. * p < .05.

Table E8
Descriptive Statistics (Withdrawal)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age														
2. Gender	.05													
3. Tenure	.42**	.02												
4. Soc Des	.08	.01	.01	(.82)										
5. Exhaust	-.13**	.01	-.01	-.32**	(.91)									
6. PA	-.02	.07	.00	.24**	-.29**	(.94)								
7. NA	-.06	-.04	.05	-.36**	.50**	-.64**	(.90)							
8. TNA	-.14**	.00	-.07	-.44**	.52**	-.35**	.65**	(.91)						
9. SC	.11*	.13**	.06	.67**	-.32**	.22**	-.33**	-.47**	(.88)					
10. Con	.08	.12*	.05	.09	.04	.06	-.07	-.04	.06	(.92)				
Time 1														
11. With L	-.09	-.12	.01	-.43**	.22**	-.13**	.24**	.27**	-.41**	-.11*	(.75)			
12. With H	-.03	-.04	.05	-.29**	.17**	-.09	.22**	.21**	-.35**	-.10*	.61**	(.72)		
Time 2														
13.With L	-.14*	-.08	-.04	-.36**	.21**	-.11	.17**	.23**	-.37**	-.07	.72**	.58**	(.81)	
14. With H	-.09	-.06	.03	-.32**	.17**	-.02	.14*	.18**	-.33**	-.06	.60**	.71**	.75**	(.81)
M	33.60	.51	56.04	4.26	2.32	3.19	2.29	1.74	3.57	4.83	1.90	1.38	1.89	1.40
SD	9.81	.50	58.50	.88	1.08	.87	.77	.68	.74	1.60	.74	.54	.75	.55
skew/	1.00/	-.02/	1.97/	.30/	.64/	.01/	.55/	1.31/	-.27/	-.62/	.86/	1.86/	.91/	2.02/
kurtosis	.76	-2.01	4.39	.06	.42	-.52	-.30	1.93	-.17	-.58	.59	4.09	.38	4.65

Note. N = 291-445. Reliability coefficients are displayed on the diagonal. Org. tenure = organizational tenure (in months), Soc Des = social desirability;
Exhaust = exhaustion; PA = positive affect; NA = negative affect; TNA = trait negative affect; SC = trait self-control; Con = perceived consequences;
With L = low severity Withdrawal; With H = high severity Withdrawal. * *p* < .05, ** *p* < .01.

Table E9

Regression Analyses (Withdrawal)

	Cross-sectional				Time-lagged			
	Withdrawal (low severity)		Withdrawal (high severity)		Withdrawal (low severity)		Withdrawal (high severity)	
Variable	B	SE	B	SE	B	SE	B	SE
Positive affect	0.04	0.05	0.06[+]	0.04	0.02	0.06	0.08[+]	0.04
Social desirability	-0.20**	0.05	-0.05	0.04	-0.16**	0.06	-0.09*	0.05
Exhaustion	0.03	0.03	0.01	0.03	0.08[+]	0.04	0.05	0.03
Negative affect	0.09	0.06	0.11*	0.05	-0.05	0.08	0.02	0.06
Self-Control	-0.22**	0.06	-0.19**	0.04	-0.25**	0.08	-0.16**	0.05
NA*SC	0.04	0.05	-0.04	0.04	0.05	0.07	0.01	0.05
Consequences	-0.05*	0.02	-0.03	0.02	-0.04	0.03	-0.02	0.02
NA*Con	0.01	0.03	<-0.01	0.02	0.01	0.03	<-0.01	0.03
SC*Con	0.03	0.03	0.02	0.02	0.06	0.04	0.02	0.03
NA*SC*Con	-0.02	0.03	<0.01	0.04	0.01	0.04	-0.02	0.03
R^2	.23**		.15**		.18**		.15**	

Note. N = 290-443. Cross-sectional indicates predictors and CWB data collected at Time 1; Time-Lagged indicates predictors collected at Time 1 and CWB data collected at Time 2. [+] $p < .10$, * $p < .05$, ** $p < .01$.

Table E10
Relative Weights Analysis: Predictors of Minor & Severe Withdrawal

| | Cross-sectional | | | | Time-lagged | | | |
| | Withdrawal (low severity) | | Withdrawal (high severity) | | Withdrawal (low severity) | | Withdrawal (high severity) | |
Variable	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2
PA	.003	1.4%	.003	2.2%	.002	1.3%	.005	3.4%
Soc D	.088*	39.1%	.032*	21.6%	.062*	37.0%	.049*	35.0%
Ex	.014	6.15%	.008*	5.5%	.016	9.3%	.012	8.3%
NA	.016*	6.90%	.021*	13.7%	.006	3.4%	.007	4.7%
TNA	.018*	7.9%	.011*	7.1%	.013	7.7%	.008	5.4%
SC	.078*	34.7%	.067*	44.8%	.066*	39.1%	.058*	41.7%
Con	.008	3.8%	.008	5.1%	.004	2.2%	.002	1.4%
Total R^2	.23		.15		.17		.14	

Note. N = 301-446. Cross-sectional is time 1 predictors of time 1 CWBs; Time-lagged is time 1 predictors of time 2 CWBs. significance indicated by confidence intervals that exclude zero derived from bias-corrected bootstrapping. pairwise deletion was used. PA = positive affect; Soc D = social desirability; Ex = exhaustion; NA = negative affect; TNA = trait negative affect; SC = self-control; Con = perceived consequences. * $p < .05$.

Table E11
Descriptive Statistics (Theft)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age														
2. Gender	.05													
3. Tenure	.42**	.02												
4. Soc Des	.08	.01	.01	(.82)										
5. Exhaust	-.13**	.01	-.01	-.32**	(.91)									
6. PA	-.02	.07	.00	.24**	-.29**	(.94)								
7. NA	-.06	-.04	.05	-.36**	.50**	-.64**	(.90)							
8. TNA	-.14**	.00	-.07	-.44**	.52**	-.35**	.65**	(.91)						
9. SC	.11*	.13**	.06	.67**	-.32**	.22**	-.33**	-.47**	(.88)					
10. Con	.08	.12*	.05	.09	.04	.06	-.07	-.04	.06	(.92)				
Time 1														
11. Theft L	-.09	-.15**	-.01	-.36**	.16**	-.06	.16**	.17**	-.34**	-.05	(.74)			
12. Theft H	-.06	-.14**	-.04	-.06	.04	.01	.08	.09	-.14**	-.04	.50**	(.82)		
Time 2														
13. Theft L	-.20**	-.12	-.07	-.38**	.17**	.02	.14*	.16**	-.31**	-.09	.75**	.39**	(.78)	
14. Theft H	-.10	-.12*	.01	-.20**	.03	.04	.09	.12*	-.16**	-.12	.40**	.48**	.56**	(.89)
M	33.60	.51	56.04	4.26	2.32	3.19	2.29	1.74	3.57	4.83	1.28	1.05	1.30	1.05
SD	9.81	.50	58.50	.88	1.08	.87	.77	.68	.74	1.60	.43	.23	.48	.30
skew/	1.00/	-.02/	1.97/	.30/	.64/	.01/	.55/	1.31/	-.27/	-.62/	2.06/	7.13/	2.17/	9.01/
kurtosis	.76	-2.01	4.39	.06	.42	-.52	-.30	1.93	-.17	-.58	4.79	60.25	5.11	92.22

Note. N = 290-444. Reliability coefficients are displayed on the diagonal. Org. tenure = organizational tenure (in months); Soc Des = social desirability;
Exhaust = exhaustion; PA = positive affect; NA = negative affect; TNA = trait negative affect; SC = trait self-control; Con = perceived consequences;
Theft L = low severity Theft; Theft H = high severity Theft. * $p < .05$, ** $p < .01$.

Table E12
Regression Analyses (Theft)

| Predictor | Cross-sectional | | | | Time-lagged | | | |
| | Theft (low severity) | | Theft (high severity) | | Theft (low severity) | | Theft (high severity) | |
	B	SE	*B*	SE	*B*	SE	*B*	SE
Positive affect	0.04	0.03	0.03	0.02	0.10	0.04	0.03*	0.01
Social desirability	-0.12**	0.03	0.02	0.02	-0.15	0.04	-0.02+	0.01
Exhaustion	0.01	0.02	<-0.01	0.01	0.04	0.03	-0.01	0.01
Negative affect	0.03	0.04	0.04+	0.02	0.02	0.05	0.03	0.02
Self-Control	-0.11**	0.04	-0.06**	0.02	-0.09+	0.04	-0.02	0.02
NA*SC	-0.02	0.03	<0.01	0.02	-0.01	0.04	0.01	0.01
Consequences	0.01	0.01	-0.01	0.01	-0.03+	0.02	-0.01*	0.01
NA*Con	0.03	0.02	0.01	0.01	0.03	0.02	<0.01	0.01
SC*Con	0.01	0.02	0.01	0.01	0.03	0.02	0.01	0.01
NA*SC*Con	-0.03+	0.02	-0.01	0.01	-0.01	0.02	-0.01	0.01
R^2	.17**		.03		.19**		.08**	

Note. N = 290-443. Cross-sectional indicates predictors and CWB data collected at Time 1; Time-Lagged indicates predictors collected at Time 1 and CWB data collected at Time 2. $^+p < .10$, $^* p < .05$, $^{**} p < .01$.

Table E13

Relative Weights Analysis: Predictors of Minor & Severe Theft

	Cross-sectional				Time-lagged			
	Theft (low severity)		Theft (high severity)		Theft (low severity)		Theft (high severity)	
Variable	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2	Raw Weight	% of R^2
PA	.002	1.3%	.003	9.6%	.011	6.3%	.010	13.7%
Soc D	.072*	46.3%	.002	7.2%	.088*	49.2%	.024*	35.2%
Ex	.008	5.3%	.001	2.4%	.012	6.8%	.002	2.4%
NA	.007	4.8%	.005	17.0%	.009	5.2%	.007	10.4%
TNA	.007	4.4%	.003	10.6%	.007	3.7%	.006	9.0%
SC	.058*	37.0%	.015*	49.3%	.046*	25.5%	.011	16.5%
Con	.001	0.9%	.001	4.0%	.006	3.3%	.009	12.8%
Total R^2	.16		.03		.18		.07	

Note. N = 301-446. Cross-sectional is time 1 predictors of time 1 CWBs; Time-lagged is time 1 predictors of time 2 CWBs. significance indicated by confidence intervals that exclude zero derived from bias-corrected bootstrapping. pairwise deletion was used; PA = positive affect; Soc D = social desirability; Ex = exhaustion; NA = negative affect; TNA = trait negative affect; SC = self-control; Con = perceived consequences. * $p < .05$.

APPENDIX F: IRB LETTER

Institutional Review Board
FWA00000351
IRB00001138
Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

UNIVERSITY OF CENTRAL FLORIDA

EXEMPTION DETERMINATION

February 5, 2019

Dear Katherine Ciarlante:

On 2/5/2019, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Initial Study, Category 2(i)
Title:	A Study of Worker Characteristics and Behavior
Investigator:	Katherine Ciarlante
IRB ID:	STUDY00000073
Funding:	None
Grant ID:	None

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Renea Carver
Designated Reviewer

LIST OF REFERENCES

Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.

Ambrose, M. L., Seabright, M. A., & Schminke, M. (2002). Sabotage in the workplace: The role of organizational injustice. Organizational Behavior and Human Decision Processes, 89(1), 947-965.

Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. Academy of Management Review, 24(3), 452-471.

Baron, R. A., & Neuman, J. H. (1996). Workplace violence and workplace aggression: Evidence on their relative frequency and potential causes. Aggressive Behavior: Official Journal of the International Society for Research on Aggression, 22(3), 161-173.

Bauer, J. A., & Spector, P. E. (2015). Discrete negative emotions and counterproductive work behavior. Human Performance, 28(4), 307-331.

Baumeister, R. F. (1984). Choking under pressure: self-consciousness and paradoxical effects of incentives on skillful performance. Journal of Personality and Social Psychology, 46(3), 610-620.

Bechtoldt, M. N., Welk, C., Zapf, D., & Hartig, J. (2007). Main and moderating effects of self-control, organizational justice, and emotional labour on counterproductive behaviour at work. European Journal of Work and Organizational Psychology, 16(4), 479-500.

Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. Journal of Applied Psychology, 85(3), 349-360.

Berry, C. M., Carpenter, N. C., & Barratt, C. L. (2012). Do other-reports of counterproductive work behavior provide an incremental contribution over self-reports? A meta-analytic comparison. Journal of Applied Psychology, 97(3), 613-636.

Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. Journal of Applied Psychology, 92(2), 410-424.

Bies, R. J., & Tripp, T. (1995). Beyond distrust: "Getting even" and the need for revenge. In R. Kramer & T. R. Tyler (Eds.), *Trust in organizations* (pp. 246-260). Newbury Park, CA: Sage.

Blackwell, B. S., & Piquero, A. R. (2005). On the relationships between gender, power control, self-control, and. Journal of Criminal Justice, 33(1), 1-17.

Bolin, A., & Heatherly, L. (2001). Predictors of employee deviance: The relationship between bad attitudes and bad behavior. Journal of business and psychology, 15(3), 405-418.

Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. Psychological Bulletin, 110(2), 305-314.

Bolton, L. R., Harvey, R. D., Grawitch, M. J., & Barber, L. K. (2012). Counterproductive work behaviors in response to emotional exhaustion: A moderated mediational approach. Stress and Health, 28(3), 222-233.

Boye, M. W., & Slora, K. B. (1993). The severity and prevalence of deviant employee activity within supermarkets. Journal of Business and Psychology, 8(2), 245-253.

Bowling, N. A., & Gruys, M. L. (2010). Overlooked issues in the conceptualization and

    measurement of counterproductive work behavior. Human Resource Management

    Review, 20(1), 54-61.

Cassematis, P. G., & Wortley, R. (2013). Prediction of whistleblowing or non-reporting

    observation: The role of personal and situational factors. Journal of business ethics,

    117(3), 615-634.

Chen, P. Y., & Spector, P. E. (1992). Relationships of work stressors with aggression,

    withdrawal, theft and substance use: An exploratory study. Journal of Occupational and

    Organizational Psychology, 65(3), 177-184.

Chiaburu, D. S., & Harrison, D. A. (2008). Do peers make the place? Conceptual synthesis and

    meta-analysis of coworker effects on perceptions, attitudes, OCBs, and performance.

    Journal of Applied Psychology, 93(5), 1082-1103.

Coffin, B. (2003). Breaking the silence on white collar crime. Risk Management, 50(9), 8.

Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-

    analysis. Organizational Behavior and Human Decision Processes, 86(2), 278-321.

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of

    a measure. Journal of Applied Psychology, 86(3), 386-400.

Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship

    behavior and counterproductive work behavior. Journal of Applied Psychology, 90(6),

    1241-1255.

Dalal, R. S., Baysinger, M., Brummel, B. J., & LeBreton, J. M. (2012). The relative importance of employee engagement, other job attitudes, and trait affect as predictors of job performance. Journal of Applied Social Psychology, 42, E295-E325.

Dalal, D. K., & Hakel, M. D. (2016). Experimental comparisons of methods for reducing deliberate distortions to self-report measures of sensitive constructs. Organizational Research Methods, 19(3), 475-505.

Dalal, R. S., Lam, H., Weiss, H. M., Welch, E. R., & Hulin, C. L. (2009). A within-person approach to work behavior and performance: Concurrent and lagged citizenship-counterproductivity associations, and dynamic relationships with affect and overall job performance. Academy of Management Journal, 52(5), 1051-1066.

de Boer, B. J., Van Hooft, E. A., & Bakker, A. B. (2015). Self-control at work: its relationship with contextual performance. Journal of Managerial Psychology, 30(4), 406-421.

DeWall, C. N., Baumeister, R. F., Stillman, T. F., & Gailliot, M. T. (2007). Violence restrained: Effects of self-regulation and its depletion on aggression. Journal of Experimental Social Psychology, 43(1), 62-76.

Detert, J. R., Treviño, L. K., Burris, E. R., & Andiappan, M. (2007). Managerial modes of influence and counterproductivity in organizations: A longitudinal business-unit-level investigation. Journal of Applied Psychology, 92(4), 993-1005.

Douglas, S. C., & Martinko, M. J. (2001). Exploring the role of individual differences in the prediction of workplace aggression. Journal of Applied Psychology, 86(4), 547-559.

Dunlop, P. D., & Lee, K. (2004). Workplace deviance, organizational citizenship behavior, and business unit performance: The bad apples do spoil the whole barrel. Journal of

Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 25(1), 67-80.

Edwards, J. R., & Bagozzi, R. P. (2000). On the nature and direction of relationships between constructs and measures. Psychological Methods, 5(2), 155-174.

Einarsen, S. (1999). The nature and causes of bullying at work. International Journal of Manpower, 20(1/2), 16-27.

Escartín, J., Rodríguez-Carballeira, A., Zapf, D., Porrúa, C., & Martín-Peña, J. (2009). Perceived severity of various bullying behaviours at work and the relevance of exposure to bullying. Work & Stress, 23(3), 191-205.

Fida, R., Paciello, M., Tramontano, C., Fontaine, R. G., Barbaranelli, C., & Farnese, M. L. (2015). An integrative approach to understanding counterproductive work behavior: The roles of stressors, negative emotions, and moral disengagement. Journal of Business Ethics, 130(1), 131-144.

Fox, S., & Spector, P. E. (1999). A model of work frustration–aggression. Journal of Organizational Behavior, 20(6), 915-931.

Fox, S., & Spector, P. E. (2006). The many roles of control in a stressor-emotion theory of counterproductive work behavior. In Employee Health, Coping and Methodologies (pp. 171-201). Emerald Group Publishing Limited.

Fox, S., & Spector, P. E. (2010). Instrumental counterproductive work behavior and the theory of planned behavior: A "cold cognitive" approach to complement "hot affective" theories of CWB. In C. A. Schriesheim & L. L. Neider (Eds.), The dark side: New directions in management theory and research (pp. 93–114). Charlotte, NC: Information Age.

Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. Journal of Vocational Behavior, 59(3), 291-309.

Galić, Z., & Ružojčić, M. (2017). Interaction between implicit aggression and dispositional self-control in explaining counterproductive work behaviors. Personality and Individual Differences, 104, 111-117.

Gailliot, M. T., Schmeichel, B. J., & Baumeister, R. F. (2006). Self-regulatory processes defend against the threat of death: Effects of self-control depletion and trait self-control on thoughts and fears of dying. Journal of Personality and Social Psychology, 91(1), 49-62.

Geen, R. G. (1990). Human Aggression. Pacific Grove, CA: Brooks/Cole.

Gilman, H. (1982). The hidden epidemic: Nurses and narcotics. Boston Magazine, 110-115.

Gino, F., Ayal, S., & Ariely, D. (2013). Self-serving altruism? The lure of unethical actions that benefit others. Journal of Economic Behavior & Organization, 93, 285-292.

Gino, F., Schweitzer, M. E., Mead, N. L., & Ariely, D. (2011). Unable to resist temptation: How self-control depletion promotes unethical behavior. Organizational Behavior and Human Decision Processes, 115(2), 191-203.

Gottfredson, M. R., & Hirschi, T. (1990). A general theory of crime. Stanford University Press.

Greenberg, J. (1990). Organizational justice: Yesterday, today, and tomorrow. Journal of Management, 16(2), 399-432.

Greenberg, J. (1997). A social influence model of employee theft: Beyond the fraud triangle. In R. J. Lewicki, R. J. Bies, B. H. Sheppard, R. J. Lewicki, R. J. Bies, B. H. Sheppard

(Eds.), Research on Negotiation in Organizations, Vol. 6 (pp. 29-51). US: Elsevier
    Science/JAI Press.

Gruys, M. L., & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive
    work behavior. International Journal of Selection and Assessment, 11(1), 30-42.

Hart, C. M., Ritchie, T. D., Hepper, E. G., & Gebauer, J. E. (2015). The Balanced Inventory of
    Desirable Responding Short Form (BIDR-16). SAGE Open, 5(4), 1–9.

Hayes, A. F. (2017). Introduction to mediation, moderation, and conditional process analysis: A
    regression-based approach. Guilford Publications.

Hershcovis, M. S. (2011). "Incivility, social undermining, bullying… oh my!": A call to
    reconcile constructs within workplace aggression research. Journal of Organizational
    Behavior, 32(3), 499-519.

Hershcovis, M. S., & Barling, J. (2010). Comparing victim attributions and outcomes for
    workplace aggression and sexual harassment. Journal of Applied Psychology, 95(5), 874-
    888.

Hollinger, R. C., & Clark, J. P. (1983). Theft by employees (Vol. 126). Lexington, MA:
    Lexington Books.

Hollinger, R. C., & Langton, L. (2006). 2005 National retail security survey: Final report.
    Gainesville: University of Florida.

Johnson, J. W. (2001). The relative importance of task and contextual performance dimensions
    to supervisor judgments of overall performance. Journal of Applied Psychology, 86(5),
    984-996.

Jones, D. A. (2009). Getting even with one's supervisor and one's organization: Relationships
among types of injustice, desires for revenge, and counterproductive work behaviors.
Journal of Organizational Behavior: The International Journal of Industrial, Occupational
and Organizational Psychology and Behavior, 30(4), 525-542.

Judge, T. A., Scott, B. A., & Ilies, R. (2006). Hostility, job attitudes, and workplace deviance:
test of a multilevel model. Journal of Applied Psychology, 91(1), 126-138.

Kaplan, S., Bradley, J. C., Luchman, J. N., & Haynes, D. (2009). On the role of positive and
negative affectivity in job performance: A meta-analytic investigation. Journal of
Applied Psychology, 94(1), 162–176.

Karelaia, N., & Keck, S. (2013). When deviant leaders are punished more than non-leaders: The
role of deviance severity. Journal of Experimental Social Psychology, 49(5), 783-796.

Kelloway, E. K., Francis, L., Prosser, M., & Cameron, J. E. (2010). Counterproductive work
behavior as protest. Human Resource Management Review, 20(1), 18-25.

Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad
barrels: Meta-analytic evidence about sources of unethical decisions at work. Journal of
Applied Psychology, 95(1), 1-31.

Krischer, M. M., Penney, L. M., & Hunter, E. M. (2010). Can counterproductive work behaviors
be productive? CWB as emotion-focused coping. Journal of Occupational Health
Psychology, 15(2), 154-166.

Langton, L., Piquero, N. L., & Hollinger, R. C. (2006). An empirical test of the relationship
between employee theft and low self-control. Deviant Behavior, 27(5), 537-565.

Lawrence, T. B., & Robinson, S. L. (2007). Ain't misbehavin: Workplace deviance as

    organizational resistance. Journal of Management, 33(3), 378-394.

Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion.

    American Psychologist, 46(8), 819-834.

Lazarus, R. S., & Folkman, S. (1984). Coping and adaptation. In W. D. Gentry (Ed.). The

    Handbook of Behavioral Medicine (pp. 282-325). New York: Guilford.

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.

Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behavior at work: A general

    perspective. Journal of Applied Psychology, 89(4), 647-660.

Marcus, B., Taylor, O. A., Hastings, S. E., Sturm, A., & Weigelt, O. (2016). The structure of

    counterproductive work behavior: A review, a structural meta-analysis, and a primary

    study. Journal of Management, 42(1), 203-233.

Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-

    concept maintenance. Journal of Marketing Research, 45(6), 633-644.

Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data.

    Psychological Methods, 17(3), 1-19.

Merhi, M. I., & Ahluwalia, P. (2019). Examining the impact of deterrence factors and norms on

    resistance to Information Systems Security. *Computers in Human Behavior*, *92*, 37-46.

McLean Parks, J., Kidder, D. L., & Gallagher, D. G. (1998). Fitting square pegs into round

    holes: Mapping the domain of contingent work arrangements onto the psychological

contract. Journal of Organizational Behavior: The International Journal of Industrial,

Occupational and Organizational Psychology and Behavior, 19(S1), 697-730.McNair, D.

M., Lorr, M., & Droppleman, L. F. (1992). BITS manual for the Profile of Mood States.

San Diego, CA: Educational and Industrial Testing Service.

McNair, D. M., Lorr, M., & Droppleman, L. F. (1992). BITS manual for the Profile of Mood

States. San Diego, CA: Educational and Industrial Testing Service.

Meier, L. L., & Spector, P. E. (2013). Reciprocal effects of work stressors and counterproductive

work behavior: A five-wave longitudinal study. Journal of Applied Psychology, 98(3),

529-539.

Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources:

Does self-control resemble a muscle?. Psychological bulletin, 126(2), 247-259.

Muraven, M., Pogarsky, G., & Shmueli, D. (2006). Self-control depletion and the general theory

of crime. Journal of Quantitative Criminology, 22(3), 263-277.

Muthén, L. K., & Muthén, B. O. 1998-2019. Mplus user's guide (Eighth ed). Los Angeles:

Muthén & Muthén.

Ones, D. S., Viswesvaran, C., & Reiss, A. D. (1996). Role of social desirability in personality

testing for personnel selection: The red herring. Journal of Applied Psychology, 81(6),

660-679.

Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R.

Shaver, & L. S. Wrightsman (Eds.), Measures of social psychological attitudes, Vol. 1.

Measures of personality and social psychological attitudes (pp. 17-59). San Diego, CA,

US: Academic Press.

Penney, L. M., & Spector, P. E. (2005). Job stress, incivility, and counterproductive work

    behavior (CWB): The moderating role of negative affectivity. Journal of Organizational

    Behavior: The International Journal of Industrial, Occupational and Organizational

    Psychology and Behavior, 26(7), 777-796.

Penney, L. M., & Spector, P. E. (2007). Emotions and counterproductive work behavior. In N.

    M. Ashkanasy & C. L. Cooper (Eds.), Research companion to emotion in organizations

    (pp. 183–196). Northampton, MA: Edward Elgar Publishing.

Piquero, A. R., MacDonald, J., Dobrin, A., Daigle, L. E., & Cullen, F. T. (2005). Self-control,

    violent offending, and homicide victimization: Assessing the general theory of crime.

    Journal of Quantitative Criminology, 21(1), 55-71.

Reeve, B. B., Hays, R. D., Bjorner, J. B., Cook, K. F., Crane, P. K., Teresi, J. A., & Liu, H.

    (2007). Psychometric evaluation and calibration of health-related quality of life item

    banks: plans for the Patient-Reported Outcomes Measurement Information System

    (PROMIS). Medical Care, 45(5), S22-S31.

Reynolds, K. L., & Harris, L. C. (2009). Dysfunctional customer behavior severity: An empirical

    examination. Journal of Retailing, 85(3), 321-335.

Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A

    multidimensional scaling study. Academy of Management Journal, 38(2), 555-572.

Rosse, J. G., & Miller, H. E. (1984). Relationship between absenteeism and other employee

    behaviors. Absenteeism, 1, 194-228.

Sackett, P. R. (2002). The structure of counterproductive work behaviors: Dimensionality and

    relationships with facets of job performance. International Journal of Selection and

    Assessment, 10, 5–11.

Sackett, P. R., & DeVore, C. J. (2001). Counterproductive behaviors at work. In N. Anderson, D.

    Ones, H. Sinangil, & C. Viswesvaran (Eds.), Handbook of Industrial, Work, and

    Organizational Psychology (Vol. 1, pp. 145–164). London: Sage.

Shoss, M. K., Jundt, D. K., Reynolds, C., & Kobler, A. (2016, February). Best Served Cold?

    Anger and Instrumental Calculations Regarding Retaliation. Paper presented at the 2016

    Behavioral Ethics Conference, Orlando, FL.

Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive,

    procedural, and interactional justice. Journal of Applied Psychology, 82(3), 434-443.

Spector, P. E. (1998). A control theory of the job stress process. In C. L. Cooper (Ed.), Theories

    of Organizational Stress (pp. 153–169). Oxford, UK: Oxford Univ. Press.

Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some

    parallels between counterproductive work behavior and organizational citizenship

    behavior. Human Resource Management Review, 12, 269–292.

Spector, P. E., & Fox, S. (2005). The stressor-emotion model of counterproductive work

    behavior. In S. Fox, & P. E. Spector (Eds), Counterproductive behavior. Investigations of

    actors and targets. Washington, DC: American Psychological Association.

Spector, P. E., & Fox, S. (2010). Counterproductive work behavior and organizational

    citizenship behavior: Are they opposite forms of active behavior?. Applied Psychology,

    59(1), 21-39.

Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The

    dimensionality of counterproductivity: Are all counterproductive behaviors created

    equal?. Journal of Vocational Behavior, 68(3), 446-460.

Spector, P. E., & Jex, S. M. (1998). Development of four self-report measures of job stressors

    and strain: interpersonal conflict at work scale, organizational constraints scale,

    quantitative workload inventory, and physical symptoms inventory. Journal of

    Occupational Health Psychology, 3(4), 356-367.

Stewart, S. M., Bing, M. N., Davison, H. K., Woehr, D. J., & McIntyre, M. D. (2009). In the

    eyes of the beholder: A non-self-report measure of workplace deviance. Journal of

    Applied Psychology, 94(1), 207-215.

Tangney, J. P., Boone, A. L., & Baumeister, R. F. (2018). High self-control predicts good

    adjustment, less pathology, better grades, and interpersonal success. In Self-Regulation

    and Self-Control (pp. 181-220). Routledge.

Tonidandel, S., & LeBreton, J. M. (2011). Relative importance analysis: A useful supplement to

    regression analysis. Journal of Business and Psychology, 26(1), 1-9.

Vardi, Y., & Weiner, Y. (1996). Misbehaviors in organizations: A motivational framework.

    Organization Science, 7, 151-165.

Vardi, Y., & Weitz, E. (2004). Misbehavior in organizations: Theory, Research, and

    Management. Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Van Katwyk, P. T., Fox, S., Spector, P. E., & Kelloway, E. K. (2000). Using the Job-related

    Affective Well-being Scale (JAWS) to investigate affective responses to work stressors.

    Journal of Occupational Health Psychology, 5, 219-230.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. Journal of Personality and Social Psychology, 54(6), 1063-1070.

Weiss, H. M. & Cropanzano (1996). Affective events theory: a theoretical discussion of the structure, causes and consequences or affective experiences at work. Research in Organizational Behavior, 18, 1-74.

Yang, J., & Diefendorff, J. M. (2009). The relations of daily counterproductive workplace behavior with emotions, situational antecedents, and personality moderators: A diary study in Hong Kong. Personnel Psychology, 62(2), 259-295.

Zerbe, W. J., & Paulhus, D. L. (1987). Socially desirable responding in organizational behavior: A reconception. Academy of Management Review, 12(2), 250-264.