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COUNTERPRODUCTIVE WORK BEHAVIORS, JUSTICE, AND AFFECT:
A META-ANALYSIS

by

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B.S. Florida State University, 2012

A thesis submitted in partial fulfillment of the requirements
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ABSTRACT

Counterproductive work behaviors (CWBs) are an expensive phenomenon for organizations, costing billions of dollars collectively each year. Recent research has focused on justice perceptions as predictors of CWBs, but little research has been conducted on the specific types of counterproductive work behaviors (i.e., sabotage, withdrawal, production deviance, abuse, and theft) that result from specific organizational justice perceptions (i.e., distributive, procedural, interpersonal, and informational) and the mediating effect of state affect. The current paper meta-analyzed the relationships between justice, CWB, and state affect and found that justice was negatively related to dimensions of CWB and state positive/negative affect were negatively/positively related to CWB dimensions, respectively. However, mediation of the relationship between justice and CWB by state affect was inconsistent across justice types and CWB dimensions. These findings suggests that, while managers should maintain an awareness of justice and state affect as individual predictors of CWBs, the current study does not necessarily support the claim that state affect explains the relationship between justice and counterproductive work behavior dimensions.

TABLE OF CONTENTS

LIST OF FIGURES	v
LIST OF TABLES	vi
CHAPTER 1	1
Introduction.....	1
Counterproductive Work Behaviors	3
Justice.....	5
Counterproductive Work Behaviors and Justice.....	8
Affect	10
The Relationship Between Affect, Justice, and Counterproductive Work Behaviors	14
CHAPTER 2	18
Method	18
CHAPTER 3	21
Results.....	21
Justice and Counterproductive Work Behaviors.....	21
Affect, Justice, and CWB.....	23
CHAPTER 4	33
Discussion	33
Findings.....	33
Limitations and Directions for Future Research.....	35
Implications.....	37
Conclusion	39

REFERENCES 40

LIST OF FIGURES

Figure 1- Mediation by Negative State Affect on Justice Dimensions and Five Dimensions of CWB	16
Figure 2- Mediation by Negative State Affect on Justice Dimensions and CWB-I/CWB-O.....	17
Figure 3- Mediation by Positive State Affect on Justice Dimensions and CWB-I/CWB-O	17
Figure 4- Results: Negative State Affect as a Mediator of the Relationship Between Justice and Five CWB Dimensions	30
Figure 5- Results: Negative State Affect as a Mediator of the Relationship Between Justice and CWB-I/CWB-O	31
Figure 6- Results: Positive State Affect as a Mediator of the Relationship Between Justice and CWB-I/CWB-O	32

LIST OF TABLES

Table 1- Justice, State Affect, and Counterproductive Work Behaviors	26
Table 2- Justice Dimensions and Negative State Affect with Five CWB Dimensions	27
Table 3- Tests for Mediation by Negative State Affect	28
Table 4- Tests for Mediation by Negative State Affect	28
Table 5- Tests for Mediation by Positive State Affect	28
Table 6- Meta-Analytic Relationships Among Five CWB Dimensions.....	29

CHAPTER 1

Introduction

Counterproductive work behaviors (CWBs) are an expensive phenomenon for an organization, costing over four billion dollars in addition to human-related costs such as low morale and turnover (Frost, 2007; Greenberg, 1998). Even inoffensive, low-intensity CWBs can have an effect on targets, including decreased job satisfaction, job withdrawal, and increased psychological distress (Cortina, Magley, Williams, Langhout, 2001). Both situational and individual differences can prelude counterproductive work behaviors, depending on the cognitive processing of the offender (Martinko, Gundlach, & Douglas, 2002). This meta-analysis evaluates justice as a situational antecedent of CWB, and affect as an individual difference that mediates the relationship between justice and counterproductive work behaviors.

Research examining affect and counterproductive work behaviors has been produced continuously throughout past decades, but there has been a particularly large volume of studies published since 2012 (Shockley, Ispas, Rossi, & Levine, 2012; Sakurai & Jex, 2012; Lemay, Overall, & Clark, 2012; Balducci, Cecchin, Fraccaroli, & Schaufeli 2012; Cohen, Panter, & Turan, 2012; Holtom, Burton, & Crossley, 2012). Primary studies have tended to focus on the correlations between positive affect and organizational citizenship behaviors, as well as negative affect and CWBs (Richards & Schat, 2011). Meanwhile, meta-analytic studies in this area have concentrated on predictors of job performance (Borman, Penner, Allen, & Motowidlo, 2001; Dalal, 2005; Kaplan, Bradley, Luchman, & Haynes, 2009; Lyubomirsky, King, & Diener, 2005; Organ & Ryan, 1995), but it was not until the work of Shockley et al., (2012) that a meta-

analysis had been conducted on emotions and counter-productive work behaviors. More recently, Colquitt et al., (2013) meta-analyzed the relationship between justice dimensions, counterproductive work behaviors (organizational and interpersonal) and state affect. However, to date, there has not been meta-analytic research examining state affect, justice in the workplace, and counterproductive work behaviors of samples containing only employed individuals (i.e., Colquitt et al., 2013 included samples of unemployed participants); and there has been no meta-analytic research of this type that has focused on the five subdimensions of counterproductive work behavior (i.e., sabotage, abuse, production deviance, withdrawal, theft; Spector et al., 2006). In the current paper, I meta-analyze the relationship between justice perceptions and counterproductive work behaviors, while also evaluating the mediating effects of state affect while including only primary studies that involved employed individuals in real work settings.

In my review, I combine research highlighting discrete emotions, state affect, various types of justice in the workplace, and counterproductive work behaviors, to include organization-targeted versus person-targeted CWB as well as the five subdimensions of CWB (i.e., sabotage, withdrawal, production deviance, abuse, and theft). I then focus on how positive affect and negative affect mediate the relationship between organizational justice perceptions and CWBs. Prior work has assessed predictors of counterproductive work behaviors including emotional exhaustion (Banks, Whelpley, Oh, & Shin, 2012), self control (Marcus & Schuler, 2004; Restubog, Garcia, Wang, & Cheng, 2010), tenure (Yang & Diefendorff, 2009), and Big Five personality traits (Berry, Ones, & Sackett, 2007) and this meta-analysis adds to this literature by contributing to the prediction of CWBs in real-world settings.

Counterproductive Work Behaviors

Counterproductive work behavior, also known as workplace deviance, is a component of job performance that has been defined by Fox and Spector (2005) as the spectrum of actions that harm employees or organizations. This is not to be confused with workplace incivility, or actions that diverge from any organizational norm (Bunk & Magley, 2013); it is instead a voluntary action that the employee performs with the objective of harming the organization (Conlon, Meyer, & Nowakowski, 2005; Fox & Spector, 1999; Robinson & Bennett, 1995). The voluntary nature of CWBs comes from employees lacking the motivation to conform to normative expectations of the organizations, and/or becoming motivated to violate these expectations (Kaplan, 1975). Fox and Spector (2005) note that this spectrum of deviant actions can range from severe, deliberate aggression to the ambiguous occurrences of intentional carelessness. Another way to organize counterproductive work behaviors is active (e.g., theft, aggression, sabotage, etc.) versus passive (e.g., withdrawal) as described by Buss (1961) and Conlon et al. (2005). The targets of these actions vary as well; the actions may be organization-targeted (CWB-O) or interpersonal (CWB-I) where the behavior is targeted toward others in the organization including supervisors and/or peers (Hershcovis, Turner, Barling, Inness, LeBlanc, Arnold, Dupre, & Sivanathan, 2007). A test performed by Bennett and Robinson (2000) supported this separation of dimensions into CWB-I and CWB-O and a meta-analysis conducted by Dalal et al. (2005) showed that CWB-I and CWB-O are related, $\rho = .70$.

While the CWB-I and CWB-O distinction is useful in describing the separate targets of counterproductive work behaviors, a more fine-grained distinction may allow us to gain a better understanding of why specific counterproductive behaviors are committed.

Specifically, Spector et al. (2006) proposed five primary categories of counterproductive work behaviors: sabotage (i.e., wasting materials/supplies, damaging equipment/property, destroying the atmosphere of the office); withdrawal (i.e., absenteeism, tardiness, leaving work early, taking excessive or long breaks); production deviance (i.e., doing work incorrectly or slowly, failing to follow instructions); abuse (i.e., making offensive comments, starting arguments or making rude gestures, threatening or harming others, disrespecting privacy); and theft (i.e., taking items from office or employees, incorrectly reporting hours worked). While some researchers have broken down the CWB categories to more than five dimensions, other taxonomies of CWB can be collapsed into Spector et al.'s (2006) five CWB dimensions. For example, the eleven-factor model proposed by Gruys and Sackett (2003) includes theft and related behavior, which match the *theft* category of the five-factor model; destruction of property, misuse of information, and misuse of time and resources, which are analogous to *sabotage* behaviors; unsafe behavior and poor quality work falling under *production deviance*; poor attendance, alcohol use, and drug use relating to *withdrawal* behaviors; and lastly inappropriate verbal actions and inappropriate physical actions comprising the fifth category of *abuse*. Therefore, in the current paper, I use Spector et al.'s (2006) five CWB dimensions.

This meta-analysis evaluates justice as a predictor of the dimensions related to CWB targets (i.e., CWB-I and CWB-O) as well as the five dimensions of CWBs and overall counterproductive work behaviors (to accommodate the research that continues to combine all CWBs despite the support for dimensionalizing; Douglas & Martinko, 2001; Hepworth & Towler, 2004). I do not include turnover intentions in this meta-analysis because, although it was included in Colquitt et al.'s study (2013) as a withdrawal behavior, turnover intentions are

conceptually closer to attitudes and do not reflect specific *behavior*, even though they may predict specific behaviors (Dong-Hwan Cho & Jung-Min Son, 2012).

Despite prior research on counterproductive work behaviors, meta-analytic work has ignored the five dimensional structure of CWBs and has tended to focus on broad CWB or the relationship between CWB-I and CWB-O. In this study, I examine the extent to which justice perceptions predict overall CWB, CWB-I, CWB-O, and the five dimensions of CWB. This contributes to the literature in the following ways: First, by evaluating the five dimensions of CWB, CWB-I and CWB-O, as well as overall CWB, I offer a comparative assessment of how justice types, state affect, and various CWB dimensions are related. Second, by conservatively meta-analyzing only primary studies involving employed individuals in real work settings, the findings can be more confidently generalized to organizational contexts. Third, because the five types of CWB have not been meta-analyzed in the past, I am conducting the first evaluation of how justice types and state affect relate to these dimensions of CWB I am also conducting the first meta-analysis of the relationships among the five CWBs. Fourth, I am determining whether these relationships between justice perceptions and counterproductive work behaviors are mediated by state affect.

Justice

Organizational justice is the overarching term for an employee's perception of whether an organization's actions are fair. Research suggests that perceptions of injustice are the most common cause of counterproductive work behaviors (Ambrose, Seabright, & Schminke, 2002; Felson & Steadman, 1983). Skarlicki et al. (1999) found that negative affect moderates the

relationship between perceived injustice and organizational retaliatory behavior. Further, justice perceptions have been shown to correlate with emotions (Cropanzano & Baron, 1991) and this relationship appears to be reciprocal; injustice perceptions may lead to negative emotional responses and conversely, negative affect may lead to higher likelihood of judging an event as unjust (Barsky & Kaplan, 2007; Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). Barsky and Kaplan (2007) also found that both state and trait negative affect increase injustice perceptions on all dimensions of the three types of justice: distributive, procedural, and interactional injustice.

Distributive injustice is perceived when there is not an equal distribution of outcomes and resources (Adams, 1965). For example, if a company is giving holiday bonuses, entry-level employees may perceive distributive injustice if the majority of bonus money is given to senior executives. Another angle of this example may show how justice perceptions are unique to the individual. One employee may assume that bonuses are calculated by a percentage of salary, thus allocating a larger amount for higher-paid executives; this employee would not likely perceive injustice. However, another individual in the same position may attribute the difference to greed and inequality. When distributive injustice is perceived, the individual may react by counterproductively reducing inputs, or by acting aggressively toward the person who appears to be the cause of the injustice (Cohen-Charash & Spector, 2001).

Procedural justice is perceived when there is fairness of the processes used to determine outcomes (Thibaut & Walker, 1975). This is often an issue when promotions are available in an organization. If two employees are competing for the promotion, a hard-working employee who consistently volunteers for projects and strives to communicate with fellow employees for team

effectiveness may perceive procedural injustice if his colleague, who is known for causing arguments and frequently running late on assignments, gets the offer. Procedural justice is related to implementation at the organizational level (Aquino, Lewis, & Bradfield, 1999) and therefore more likely to be related to counterproductive work behaviors that are directed toward the organization (Skarlicki & Folger, 1997).

The third dimension of organizational justice, interactional justice, is the perceived compatibility between the employee and another organization member (Boulding, 1963). There are two subcomponents of interactional justice (Greenberg, 1993). The first is interpersonal justice, which is perceived when organizational members treat the employee with respect and consideration (Greenberg, 1993). Interpersonal justice is arguably the most robust antecedent of CWB out of the four types of injustice (Aquino et al., 1999; Bies & Moag, 1986; Judge, Scott, & Illies, 2006; Miller, 2001; Robinson & Greenberg, 1998; Tripp, Bies, & Aquino, 2007). The second component of interactional justice is informational justice, which is determined by the amount and quality of information and disclosure entrusted to the employee (Greenberg, 1993). One common instance in which overall interactional injustice is likely to be perceived is when an organization is laying off employees. If management does not use discretion when dismissing employees, and if they do not provide explanation of the events underway, employees, even retained members, may perceive both interpersonal and informational injustice. Because this type of injustice is the result of two employees interacting, the subsequently elicited CWB is more commonly interpersonal in nature (Hershcovis, et al. 2007).

It is important to note that justice is not rigidly defined based on the actions of an organization. It is dependent on the perceptions of the individual witnessing these actions. Thus,

justice perceptions vary from one individual to the next. These perceptions are then used to determine behavior such as turnover, job seeking behaviors, and importantly, counterproductive work behaviors (Skarlicki & Folger, 1997; Folger, 1993; Greenberg, 1993; Jermier, Knights, & Nord, 1994). When an employee feels that there have been unfair decisions, regardless of whether there is actually bias or deliberate inequality, the employee is more likely to intentionally take actions that harm or go against the organization. The group value model of justice (Lind & Tyler, 1988) states that individuals find justice important because it portrays how the group views the person. When an individual feels they have been treated with fairness, they are more likely to feel respected and positive about the organization (Bies & Moag, 1986; Tyler, DeGoey, & Smith, 1996). However, if they feel unjustly treated, they are more likely to experience negative feelings of inferiority and worthlessness (Lind & Tyler, 1988).

Counterproductive Work Behaviors and Justice

The fairness heuristic theory states that individuals use cognitive shortcuts to ensure justice perception are easily available when making decisions about engaging in a cooperative fashion in organizational and social settings (Lind, 2001). This theory suggests that employees do not typically require a recent episode of injustice to partake in uncooperative actions such as counterproductive work behaviors. Instead, they store information about just and unjust events to create globalized justice perceptions (Priesemuth, Arnaud, & Schminke, 2013), which will be used at a later date, such as when the employee is contemplating whether to commit counterproductive work behaviors.

In addition, the social learning theory (Bandura, 1977) and the social information processing theory (Salancik & Pfeffer, 1978) state that an employee learns unjust behaviors and their cues, then he/she recalls and reacts to these cues at a future time by eliciting the corresponding behavior (Priesemuth et al., 2013). This would result in counterproductive work behaviors if the original action leading to perceived injustice were itself a counterproductive work behavior (e.g., aggressive actions). The employee would learn this behavior and its cues (e.g., a disagreement with clients) and may exhibit aggression in the future when prompted by interpersonal disagreements.

Also, the group value and group engagement models (Tyler, 1989; Tyler & Blader, 2000, 2001) suggest that when an employee is in a group that is treated fairly, the individual experiences feelings of pride and positivity; these high spirits lead to identification with the group and positive group-oriented behavior. Conversely, when the individual is part of a group that has been treated unfairly, there is less engagement with the group and the perceptions of injustice foster more self-serving behaviors, decreasing cohesion and attachment and leading to deviant behaviors such as withdrawal (Priesemuth et al., 2013).

The esteem threat framework (Baumeister, Smart, & Boden, 1996) is one of the dominant social psychological models that illustrate why one would engage in deviant behavior after experiencing an unjust situation (Ferris, Spence, Brown, & Heller, 2012). In cases where a person is subjected to a state of decreased self-esteem, CWBs are partly driven by the desire to validate one's sense of self (Aquino & Douglas, 2003; Bobocel & Zdaniuk, 2010; Fein & Spencer, 1997). As an explanation of one of the leading causes of CWBs (Baumeister, 1997), the esteem threat framework posits that the momentary drop in self-esteem (triggered by threats such

as organizational injustice) causes an individual to be more likely to engage in deviant behaviors. As explained by the group value model, when there is injustice, the individual feels that they are viewed negatively, and self esteem consequently decreases (Ferris et al, 2012).

Counterproductive work behaviors are then elicited for two reasons; one, the employee is motivated to retaliate or seek revenge and two, self-esteem threats reduce self-regulatory abilities (Smart Richman, & Leary, 2009). The current study examines whether meta-analytic evidence supports the relationship between CWB and justice that is implied by the esteem threat framework.

Prior meta-analytic results support the expected relationship between justice and CWB; Colquitt et al., 2013 found a corrected correlation of -.28 between procedural justice and CWB, -.26 between distributive justice and CWB, -.24 between interpersonal justice and CWB, and -.29 between informational justice and CWB.

Hypothesis 1a: Perceptions of organizational justice are negatively related to counterproductive work behaviors.

Affect

Affect is an overarching term for feelings, which encompass emotions, moods, and dispositions (Barsade & Gibson, 2007). The hierarchical taxonomic scheme, as proposed by Watson and Tellegen (1985), describes two broad, higher order dimensions of affect: the higher of the two defined by the *valence* of descriptors and the lower described by *content*. Within the first dimension of *valence*, there is negative affect consisting of distress, displeasure, and dissatisfaction; and also positive affect consisting of pleasurable engagements with the

environment (Finch, Baranik, Liu, & West, 2012). While some research describes positive and negative affect on a continuum, some research suggests the two are separate, unipolar entities that operate through different mechanisms (Watson, 2000). This is perhaps why research has shown that positive and negative affect do not have simple, opposite relationships with measures of job performance (Kaplan et al., 2009). The second group of affective subdimensions is characterized by *content* or distinctive qualities, and includes state affect which is the momentary fluctuation in mood and emotions; and also trait affect, the stable individual differences in affective level (Cohen, Doyle, Skoner, Fireman, Gwaltney, & Newsome, 1995; Skarlicki et al., 1999). Simply put, state affect is one's feeling at a specific point in time; trait affect is the person's predisposition to experience certain feelings across situations (Watson & Pennebaker, 1989).

One type of affect, emotions, are defined by Frijda (1993) as intense feelings directed at someone or something. Elliot (2008, p. 345) assesses the physical and mental properties scientifically associated with emotions and combines all previous descriptions, into the following definition: "syndromes of thoughts and feelings qualities; neural, chemical, and other physical responses in the brain and body; facial, vocal, postural, and related signals of state; action tendencies or readiness; and emotional motivations." Emotions are not to be confused with moods, which are less intense feelings than emotions that are, and often (though not always) lacking a contextual stimulus (Weiss & Croponzano, 1996).

Emotions are one representation of the momentary fluctuations an individual experiences (state affect), but are typically dependent on dispositional (trait) affect, which determines the type of emotions that an individual is prone to experiencing. Considering trait affect, it is

important to recognize that individuals can have specific mood dispositions or enduring characteristics similar to personality. Further, an individual may have high trait anger or high trait anxiety, meaning that they are more prone to this specific emotion. These traits closely parallel general negative trait affect, because they are relatively stable tendencies to perceive threatening or stressful situations negatively (Spector, Fox, & Katwyk, 1999); however trait anxiety is defined as the experience of arousal, tension, apprehension, nervousness, and worry (Spielberger & Sydeman, 1994). Likewise, trait anger is the tendency to perceive various situations as anger provoking (Spector, Fox, & Katwyk, 1999). LeRoy, Bastounis, & Poussard (2012) note that anger is associated with active CWBs because it motivates individuals to rectify a situation, achieve a desired goal, or punish someone else for an aversive situation (Shaver, Schwartz, Kirson, & O'Connor, 1987). Fear, on the other hand, has been shown to increase the likelihood of workplace deviance when the systems of punishment are seen as unfair (de Lara, 2006). Research shows that fear is associated with passive CWBs (Le Roy et al., 2012) because fear is an anticipation of aversive situations and results in an avoidance, or passive response (Lethem, Slade, Troup, & Bentley, 1983; Philips, 1987; Vlaeyen & Linton, 2000; Waddell, Newton, Henderson, Somerville, & Main, 1993).

Considering scientific theories on the construct of emotion, there is still much ambiguity and disagreement about the number and definitions of discrete emotions. The overlying definition of emotion is equally varied. As research is conducted on differing construct definitions of emotion, there is concern when analyzing results (Briner & Kiefer, 2005). Additionally, a seemingly endless number of emotions can be isolated. De Rivera (1977), for example, proposed 48 discrete emotions. Elliot (2008), looking at all previous literature on the

topic, suggested a list of 17 emotions: surprise, hope, fear, joy, relief, sadness, distress, frustration, disgust, love, dislike, anger, contempt, pride, regret, guilt, and shame. Because previous research has a reluctance to formally address a taxonomy of discrete emotions in the workplace (Muchinsky, 2000), there is a lack of articles that cover each of these discrete emotions and their relationships with types of counterproductive work behaviors (Brief & Weiss, 2002; Diefendorff & Mehta, 2007; Grandey, 2008; Spector & Fox, 2002).

There is a realm of research that disputes the dimensionalizing of emotions, claiming that they are unique, integrated entities with individual physiological foundations and behavioral and motivational consequences (Lazarus, 1991); however, much of the traditional focus in organizational research has been on positive and negative affect (Briner & Kiefer, 2005; Brief & Weiss, 2002) with the exceptions of some closely related emotions such as anger and anxiety (Ilie, Penney, Ispas & Iliescu, 2012; Mughal, Walsh & Wilding, 1996) and with this, there is more focus on trait affect than state affect. Positive and negative state and trait both influence counterproductive work behaviors through emotional reactions to justice perceptions (Judge & Ilies, 2004; Weiss & Cropanzano, 1996; Dalal, 2005). Although I evaluate specific types of affect, I maintain a focus on positive and negative state affect due to the lack of adequate primary studies for other types of affect. For example, some discrete emotions have been correlated to CWBs to including boredom, envy, and fear among others (Spector et al., 2006; Cohen-Charash & Mueller, 2007; de Lara, 2006) but there are not enough primary studies to assess via meta-analysis. While past research has not paid enough attention to discrete emotions (Brief & Weiss, 2002), these specific emotions do play a unique roll in the relationship between justice and counterproductive work behaviors and offer promising research opportunities. For example, one

discrete emotion that may be examined further is envy. Envy increases the likelihood of counterproductive work behaviors after an experience of injustice because the individual will seek to reduce the gap between the envious and the envied (Heider, 1958). Future research would benefit from focusing on discrete emotions such as this because emotions can later be aggregated into dimensions, but dimensions cannot be later divided into discrete emotions (Grandey, 2008, pg. 237).

The Relationship Between Affect, Justice, and Counterproductive Work Behaviors

The central theory that relates justice and CWB is the social exchange theory (Cropanzano & Mitchell, 2005; Homans, 1961), which explains that the employee expects to be rewarded in accordance with their inputs, and when they are not compensated accordingly, they adjust their behavior to minimize the discrepancy or unfairness. The cognitive-motivational-relational (CMR) theory of emotions (Lazarus, 1991; Lazarus, 2001; Smith & Lazarus, 1990) states that in an effort to make meaning of and adapt to events that occur in our lives, two intricately connected types of responses occur: cognitive response in the form of cognitive appraisal and an affective response in the form of discrete emotions. The affective event theory (AET) proposed by Weiss and Cropanzano (1996) states that affective reactions to work events are related to different types of work-related outcomes. When an event is experienced (e.g., organizational injustice), the employee makes an initial appraisal of the relevance and importance of the event and makes subsequent appraisals of associated consequences (Lam & Chen, 2012). These appraisals are influenced by the dispositional traits of the individual and ultimately result in the experience of discrete emotions such as anger or happiness (Weiss &

Cropanzano, 1996). These theories combined suggest that when a stressful event occurs (such as a perceived act of injustice at work) our behavioral outcomes rely on the cognitive and emotional evaluations of the event. Thus when an individual high on negative affect perceives injustice, they are more likely to experience negative emotions. Lazarus (1982) explains that positive and negative emotions are experienced dependent on whether the situation at hand enhances well-being or threatens it and these emotions then motivate an individual to engage in behaviors (Bies, Tripp, & Kramer, 1997). Lazarus (1995) explains that resultant behaviors are elicited with the intention to reduce negative state affect and enhance positive state affect.

The CMR theory explains how the cognitive appraisals of perceived injustice in the organization gives rise to the employee's negative state affect. Consequently, the employee will elicit actions to reduce negative affect, leading to counterproductive work behaviors. In this meta-analysis, I assess three models relating the subdimensions of justice to the subdimensions of CWB. (Unfortunately, there were not enough primary studies to assess a fourth model in which positive affect mediated the relationship between justice types and the five CWB dimensions.)

Prior meta-analytic results support the expected relationship between affect and CWB; Shockley et al. (2012) found a corrected correlation of .44 between negative state affect and CWB, and -.25 between positive state affect and CWB. Colquitt et al. (2013) found a corrected correlation of .55 between negative state affect and CWB, and -.14 between positive state affect and CWB. Colquitt et al.'s (2013) meta-analytic results support the expected mediation of state affect on the relationship between justice and CWB, with significant indirect effects for procedural justice (-.11), distributive justice (-.15), and interpersonal justice (-.08).

Hypothesis 2a: Negative state affect mediates the relationship between organizational justice and the five counterproductive work behaviors (sabotage, withdrawal, production deviance, abuse, and theft).

Hypothesis 2b: Negative state affect mediates the relationship between organizational justice and CWB-I/CWB-O.

Hypothesis 2c: Positive state affect mediates the relationship between organizational justice and CWB-I/CWB-O.

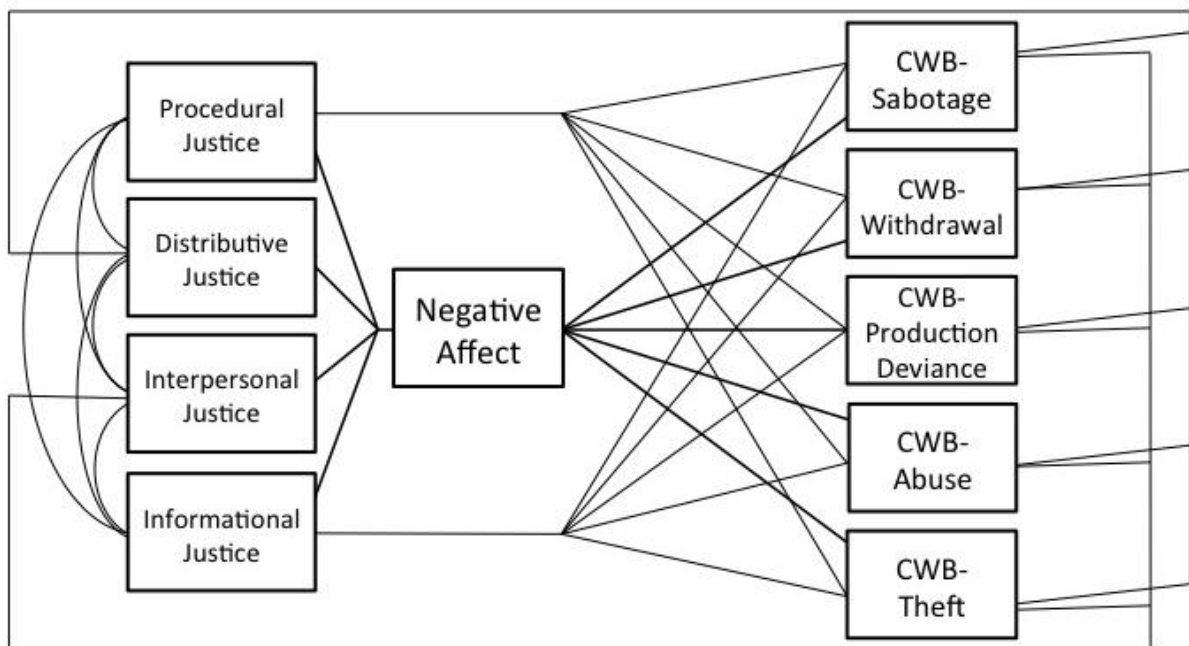


Figure 1- Mediation by Negative State Affect on Justice Dimensions and Five Dimensions of CWB

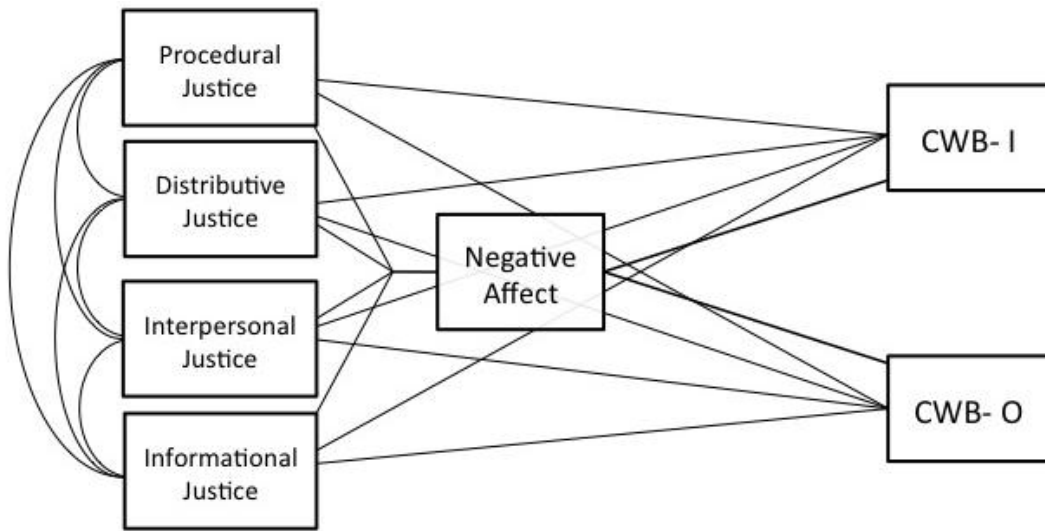


Figure 2- Mediation by Negative State Affect on Justice Dimensions and CWB-I/CWB-O

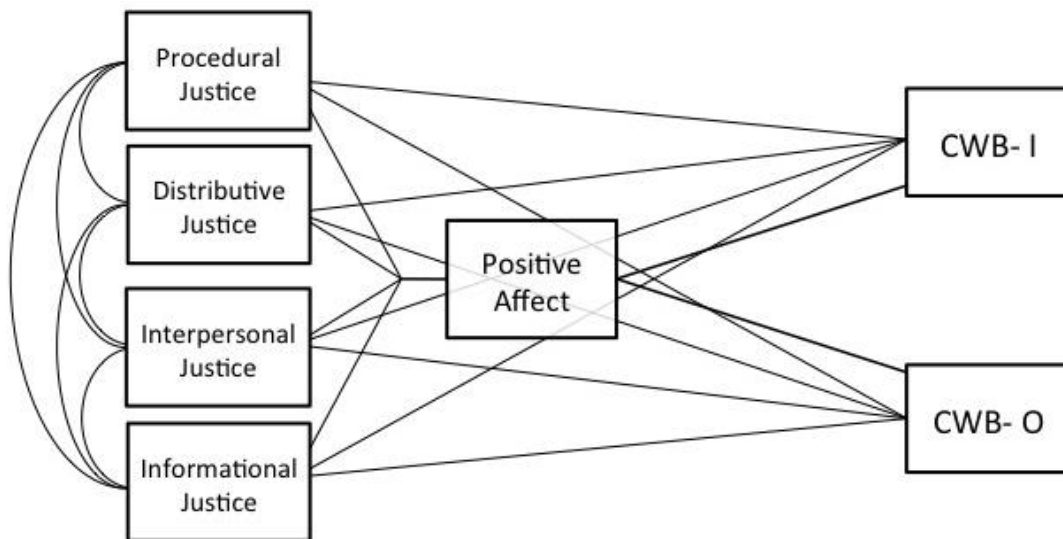


Figure 3- Mediation by Positive State Affect on Justice Dimensions and CWB-I/CWB-O

CHAPTER 2

Method

In order to estimate the meta-analytic relationships among justice (procedural, distributive, interpersonal, informational), positive and negative state affect, and counterproductive work behaviors, a keyword search was conducted in PsycInfo, Google Scholar, Dissertations Abstracts International (1861-2014), and OneSearch, an Ebsco host site that runs a search of a wide range of databases including full-text journal databases such as the American Psychological Association's PsycArticles (1894-2014) and PsycInfo (1887-2014), full-text ebooks, and university digital collections. Keywords used included *emotions*, *state affect*, *organizational justice*, and *counterproductive work behaviors*, as well as several variations and specific dimensions of these key terms. The search was not restricted to any date range. The references lists of related articles, such as those focusing on justice, affect, and CWBs together, were used to identify additional studies. For example, studies used in the meta-analysis conducted by Shockley et al. (2012) and Colquitt et al. (2013) were obtained from their reference lists.

The keyword search identified over 300 primary articles, which were narrowed down using the following inclusion criteria: (a) the study participants had to be currently employed; and (b) the study reported enough information to calculate correlations between some combination of justice perception, affect (as it relates to either justice episodes or CWB events), and/or counterproductive work behavior variables. These inclusion criteria yielded a total sample size of 28,328 from 101 independent samples.

Studies matching the inclusion criteria were coded for the effect size between the variables of interest, as well as other data such as sample size, reliability of measures, and participant characteristics. I only coded data that were specifically defined in relation to my variables of interest, and did not code measures of justice, CWB, or affect unless they were explicitly labeled as such in the primary study. For example, *turnover intentions* were not coded as *withdrawal* behaviors because they were not defined as such. In order to use independent sample effects, I used only one effect size for each article, averaging across non-independent correlations as necessary for articles using multiple, facet-level effect sizes. Correlations were corrected for attenuation in the predictor and criterion using the Hunter and Schmidt (2004) approach in which I corrected individual studies before calculating a weighted mean across studies.

In order to test the relationships between justice perceptions, affect, and counterproductive work behaviors, I followed the recommendations of Viswesvaran and Ones (1995) by constructing a meta-analytic correlation matrix of procedural justice, distributive justice, informational justice, informational justice, negative affect, positive affect, CWB-I, CWB-O, sabotage, abuse, production deviance, withdrawal, and theft. Meta-analytic intercorrelations among justice types were taken from Colquitt et al., (2013) and the meta-analytic intercorrelation between CWB-I and CWB-O were taken from Dalal et al. (2005). Original meta-analyses of the intercorrelations among the five dimensions of CWB were also estimated by searching all citations of Spector et al. (2006). In order to test the mediational models presented in Figures 1, 2, and 3 (note: positive affect could not be examined as a mediator of the relationship between justice and the 5 dimensions of CWB due to a lack of

primary studies investigating positive affect and the 5 dimensions of CWB), the model was estimated (with correlated errors among the CWB dimensions) and the significance of the indirect effect was determined by examining the 95% Monte Carlo confidence interval (Preacher & Selig, 2012). The sample size used to estimate all three models was the harmonic mean of the variables included in the model (Figure 1: $N = 706$; Figure 2: $N = 3,055$; Figure 3: $N = 1,879$).

CHAPTER 3

Results

Table 1 represents the meta-analytic relationships among justice (procedural, distributive, interpersonal, informational), positive and negative state affect, and counterproductive work behaviors (CWB, CWB-I, CWB-O). The effect sizes represented are described by the standards set by Cohen, Cohen, West, and Aiken's (2003), in which a .10 is weak, .30 is moderate, and .50 is strong. The relationships presented in Table 1 are moderate, with an average \hat{p} of .265. In the following paragraphs, I will summarize general findings of this meta-analysis.

Justice and Counterproductive Work Behaviors

Hypothesis 1a predicted that perceptions of justice would be negatively related to counterproductive work behaviors. Table 1 presents the results for these relationships. This table includes results for each type of justice perception and target orientation of CWBs, including an aggregate level of CWB.

The results for CWB were as follows: procedural justice ($\hat{p} = -.231$, $N = 9,823$, $k = 29$), distributive justice ($\hat{p} = -.165$, $N = 10,679$, $k = 32$), interpersonal justice ($\hat{p} = -.302$, $N = 2,804$, $k = 12$), and informational justice ($\hat{p} = -.254$, $N = 1,926$, $k = 7$). The CWB effect sizes were statistically significant on all justice measures (i.e., the confidence intervals excluded zero), supporting hypothesis 1a. In comparison, Colquitt et al. (2013) also found significant relationships between all justice types and CWB: procedural justice ($\hat{p} = -.28$, $N = 6,455$, $k = 30$), distributive justice ($\hat{p} = -$

.26, $N=5,122$, $k=24$), interpersonal justice ($\hat{\rho} = -.24$, $N=2,043$, $k= 10$), and informational justice ($\hat{\rho} = -.29$, $N=1,974$, $k= 9$).

The results for CWB-I were as follows: procedural justice ($\hat{\rho} = -.215$, $N= 6,547$, $k= 21$), distributive justice ($\hat{\rho} = -.127$, $N= 5,007$, $k=17$), interpersonal justice ($\hat{\rho} = -.309$, $N=1,983$, $k=7$), and informational justice ($\hat{\rho} = -.305$, $N=911$, $k= 3$). The CWB-I effect sizes were statistically significant for relationships with all justice types with the exception of informational justice (95% CI = $-.564$ to $.059$). Colquitt et al. (2013) found significant effect sizes for procedural justice ($\hat{\rho} = -.20$, $N= 1,703$, $k=6$), and informational justice ($\hat{\rho} = -.29$, $N= 531$, $k=2$). In contrast, Colquitt et al. (2013) did not find a significant effect size for CWB-I and distributive justice ($\hat{\rho} = -.15$, $N= 788$, $k=5$) or interpersonal justice ($\hat{\rho} = -.14$, $N= 231$, $k=1$).

The results for CWB-O were as follows: procedural justice ($\hat{\rho} = -.247$, $N= 5,217$, $k=16$), distributive justice ($\hat{\rho} = -.109$, $N=3,969$, $k=13$), interpersonal justice ($\hat{\rho} = -.272$, $N= 4,218$, $k=17$), and informational justice ($\hat{\rho} = -.192$, $N=765$, $k=2$). Similar to the results for CWB-I, the CWB-O effect sizes were statistically significant for relationships with all justice measures with the exception of informational justice (95% CI= $-.382$ to $.062$). Colquitt et al. (2013) found significant effect sizes for CWB-I for all justice types: procedural justice ($\hat{\rho} = -.28$, $N=6,455$, $k=30$), distributive justice ($\hat{\rho} = -.26$, $N=5,112$, $k=24$), interpersonal justice ($\hat{\rho} = -.24$, $N=2,043$, $k=10$), and informational justice ($\hat{\rho} = -.29$, $N=1,974$, $k=9$).

There was a negative relationship between justice and each of the five types of CWB (i.e., sabotage, withdrawal, production deviance, abuse, theft), though there were not enough studies to meta-analyze five of these relationships (i.e., the remaining five relationships had only been investigated in one primary study). Table 2 presents the results for these relationships. The

effect sizes were statistically significant for eight of the 25 pairs, which are reported as follows: procedural justice and sabotage ($\hat{p} = -.319$, $N=1,295$, $k=5$), distributive justice and sabotage ($\hat{p} = -.177$, $N=3,566$, $k=10$), distributive justice and withdrawal ($\hat{p} = -.113$, $N=3,274$, $k=9$), interpersonal justice and sabotage ($\hat{p} = -.247$, $N=1,766$, $k=6$), informational justice and sabotage ($\hat{p} = -.219$, $N=1,927$, $k=7$), informational justice and withdrawal ($\hat{p} = -.165$, $N=1,635$, $k=6$).

Affect, Justice, and CWB

The results for negative affect and justice were as follows: procedural justice ($\hat{p} = -.328$, $N= 8,229$, $k= 26$), distributive justice ($\hat{p} = -.346$, $N= 7,111$, $k= 18$), interpersonal justice ($\hat{p} = -.382$, $N= .2651$, $k= 9$), and informational justice ($\hat{p} = -.378$, $N= 674$, $k=3$). The negative affect effect sizes were statistically significant on all justice measures with the exception of informational justice (95% CI= $-.738$ to $.055$). Colquitt et al. (2013) found significant relationships between all justice measures and negative affect: procedural justice ($\hat{p} = -.35$, $N= 7,318$, $k= 35$) distributive justice ($\hat{p} = -.37$, $N= 5,447$, $k= 21$), interpersonal justice ($\hat{p} = -.30$, $N= 2,622$, $k= 8$), and informational justice ($\hat{p} = -.27$, $N= 1,734$, $k= 5$).

The results for positive affect and justice were as follows: procedural justice ($\hat{p} = .430$, $N= 1,709$, $k= 7$), distributive justice ($\hat{p} = .444$, $N= 1,493$, $k= 6$), interpersonal justice ($\hat{p} = .335$, $N= 441$, $k= 2$), and informational justice ($\hat{p} = .328$, $N= 465$, $k= 2$). The positive affect effect sizes were not statistically significant for interpersonal and informational justice with 95% CIs [$-.133$ to $.764$] and [$-.158$ to $.768$]. In comparison, Colquitt et al. (2013) found significant relationships between all justice measures and positive affect: procedural justice ($\hat{p} = .45$, $N= 2,943$, $k= 15$),

distributive justice ($\hat{p} = .39$, $N = 2,678$, $k = 11$), interpersonal justice ($\hat{p} = .32$, $N = 472$, $k = 2$), and informational justice ($\hat{p} = .36$, $N = 472$, $k = 2$).

The results for negative affect and CWB measures were as follows: CWB ($\hat{p} = .300$, $N = 11,818$, $k = 52$), CWB-I ($\hat{p} = .316$, $N = 7,917$, $k = 32$), CWB-O ($\hat{p} = .197$, $N = 7,572$, $k = 33$). The relationship between negative affect and each of these dimensions was significant. The results for positive affect and CWB measures were as follows: CWB ($\hat{p} = -.191$, $N = 3,590$, $k = 15$), CWB-I ($\hat{p} = -.120$, $N = 3,577$, $k = 12$), CWB-O ($\hat{p} = -.234$, $N = 1,903$, $k = 9$). The relationship between positive affect and the CWB-O dimension was not significant (95% CI = $-.414$ to $.001$).

In order to test mediation models, the meta-analytic relationships among the five CWB dimensions had to be estimated. The results of this assessment are shown in Table 6. The results of mediation tests are shown in Table 3, 4, and 5 (fit statistics for the models are not presented because all models were saturated and therefore, exhibited perfect fit). Hypothesis 2a-c predicted that the relationship between justice dimensions and counterproductive work behavior dimensions would be mediated by state affect. The results do not support hypothesis 2 consistently.

Figure 4 shows the relationships among justice types, negative affect, and five CWB dimensions. As can be seen in Table 3, the effects of justice dimensions on the five CWBs were varied, and indirect effects were mostly weak. Procedural, interpersonal, and informational justices had no indirect effects on CWBs. The only significant relationship was distributive justice, which had a weak indirect effect on production deviance ($-.034$).

Figure 5 shows the relationships among justice types, negative affect, and CWB-I/CWB-O. As can be seen in Table 4, there were significant, but weak, indirect effects between all

relationships except procedural justice and CWB-I. The significant relationships are listed as follows: procedural justice and CWB-O (-.002), distributive justice and CWB-I (-.044), distributive justice and CWB-O (-.023), interpersonal justice and CWB-I (-.048), interpersonal justice and CWB-O (-.025), informational justice and CWB-I (-.028), and informational justice and CWB-O (-.014).

Figure 6 shows the relationships among justice types, positive affect, and CWB-I/CWB-O. As can be seen in Table 5, there were significant, but weak, indirect effects between all relationships except procedural justice and CWB-I. The significant relationships are listed as follows: procedural justice and CWB-O (-.037), distributive justice and CWB-I (-.006), distributive justice and CWB-O (-.049), interpersonal justice and CWB-I (-.003), interpersonal justice and CWB-O (-.022), informational justice and CWB-I (.001), and informational justice and CWB-O (.122).

Table 1- Justice, State Affect, and Counterproductive Work Behaviors

	<i>k</i>	<i>N</i>	<i>r</i>	$\hat{\rho}$	<i>SD</i> ρ	95 % CI		80% CV		% variance
						LL	UL	LL	UL	
Procedural Justice										
Positive Affect	7	1709	.395	.430	.452	.088	.702	-.149	1.01	1.7
Negative Affect	26	8229	-.283	-.328	.361	-.406	-.161	-.789	.134	2.6
CWB	29	9823	-.198	-.231	.248	-.278	-.118	-.548	.086	5.6
CWB-I	21	6547	-.181	-.215	.219	-.264	-.097	-.494	.065	7.9
CWB-O	16	5217	-.211	-.247	.254	-.320	-.101	-.571	.078	5.6
Distributive Justice										
Positive Affect	6	1493	.410	.444	.457	.073	.747	-.141	1.029	1.6
Negative Affect	18	7111	-.295	-.346	.360	-.442	-.148	-.805	.118	2.1
CWB	32	10679	-.141	-.165	.214	-.207	-.075	-.438	.109	7.9
CWB-I	17	5007	-.109	-.127	.125	-.167	-.050	-.288	.033	2.2
CWB-O	13	3969	-.096	-.109	.129	-.163	-.028	-.274	.056	20.7
Interpersonal Justice										
Positive Affect	2	441	.315	.335	.336	-.133	.764	-.096	.766	3.5
Negative Affect	9	2651	-.340	-.382	.392	-.570	-.109	-.884	.120	2.1
CWB	12	2804	-.268	-.302	.331	-.436	-.100	-.726	.123	.042
CWB-I	7	1983	-.265	-.309	.386	-.516	-.014	-.803	.185	2.7
CWB-O	17	4218	-.237	-.272	.278	-.362	-.111	-.653	.109	5.1
Informational Justice										
Positive Affect	2	465	.305	.328	.365	-.158	.768	-.140	.795	3.2
Negative Affect	3	674	-.341	-.378	.389	-.738	.055	-.876	.120	2.8
CWB	7	1926	-.212	-.254	.257	-.379	-.046	-.583	.075	6.6
CWB-I	3	911	-.253	-.305	.315	-.564	.059	-.708	.099	3.8
CWB-O	2	765	-.16	-.192	.182	-.382	.062	-.426	.041	9.7
Positive Affect										
CWB	15	3590	-.156	-.191	.215	-.251	-.061	-.466	.084	11.4
CWB-I	12	3577	-.088	-.120	.125	-.153	-.024	-.280	.040	25.2
CWB-O	9	1903	-.207	-.234	.394	-.414	.001	-.739	.271	4.3
Negative Affect										
CWB	52	11818	.240	.300	.595	.107	.373	-.466	1.058	1.6
CWB-I	32	7917	.256	.316	.330	.159	.353	-.106	.739	4.5
CWB-O	33	7572	.175	.197	.512	.032	.318	-.459	.853	2.4

Note. *k* = number of studies; *N* = cumulative sample size; *r* = uncorrected population correlation; $\hat{\rho}$ = corrected population correlation; CI = confidence interval around uncorrected population correlation; CV = credibility interval around weighted corrected mean correlation; % variance = percent variance accounted for by sampling error.

Table 2- Justice Dimensions and Negative State Affect with Five CWB Dimensions

	<i>k</i>	<i>N</i>	<i>r</i>	\hat{p}	<i>SD</i> ρ	95 % CI		80% CV		% variance
						<i>LL</i>	<i>UL</i>	<i>LL</i>	<i>UL</i>	
Procedural Justice										
Sabotage	5	1295	-.242	-.319	.315	-.476	-.001	-.722	-.085	4.8
Withdrawal	5	1295	-.160	-.191	.244	-.343	.023	-.503	.121	8.5
Production Deviance	3	677	-.215	-.255	-.242	-.463	.032	-.565	-.045	8.5
Abuse	2	504	-.162	-.196	.184	-.387	.064	-.432	.039	14.3
Theft	1	167	-.540	-.566	--	-1.598	.518	--	--	--
Distributive Justice										
Sabotage	10	3566	-.142	-.177	.197	-.243	-.040	-.429	.075	10.1
Withdrawal	9	3274	-.089	-.113	.149	-.172	-.006	-.304	.078	16.8
Production Deviance	2	558	-.324	-.351	.389	-.807	.159	-.849	.147	2.4
Abuse	1	146	-.09	-.112	--	-.266	.086	--	--	--
Theft	2	457	-.209	-.244	.245	-.514	.095	-.558	.070	8.3
Interpersonal Justice										
Sabotage	6	1766	-.197	-.247	.271	-.380	-.013	-.380	-.013	6.0
Withdrawal	6	1766	-.105	-.129	.159	-.218	.008	-.332	.074	16.8
Production Deviance	2	235	-.111	-.134	.098	-.284	.061	-.259	-.008	53.9
Abuse	1	146	-.140	-.171	--	-.414	.134	--	--	--
Theft	1	147	-.048	-.054	--	-.142	.046	--	--	--
Informational Justice										
Sabotage	7	1927	-.189	-.219	.239	-.350	-.030	-.525	.088	7.3
Withdrawal	6	1635	-.140	-.165	.157	-.258	-.023	-.258	-.023	16.5
Production Deviance	2	454	-.175	-.194	.186	-.424	.074	-.432	-.433	12.9
Abuse	1	146	-.175	-.193	--	-.518	.168	--	--	--
Theft	3	526	-.232	-.263	.365	-.605	.142	-.731	.205	4.7
Negative Affect										
Sabotage	5	994	.125	.167	.147	.008	.243	-.021	.356	27.3
Withdrawal	9	2396	.162	.215	.233	.040	.285	-.083	.513	10.2
Production Deviance	6	1298	.227	.295	.332	.014	.441	-.129	.720	5.9
Abuse	1	818	.240	.309	--	-.230	.710	--	--	--
Theft	5	1018	.111	.144	.149	-.005	.226	-.046	.334	27.6

Note. Dashes indicate cells where the number of relevant studies is 1. *k*= number of studies; *N* = cumulative sample size; *r* = uncorrected population correlation; \hat{p} = corrected population correlation; CI = confidence interval around uncorrected population correlation; CV = credibility interval around weighted corrected mean correlation; % variance = percent variance accounted for by sampling error.

Table 3- Tests for Mediation by Negative State Affect

Justice Dimensions	Sabotage			Withdrawal			Production Deviance			Abuse			Theft		
	Total Effect	Indirect Effect	Direct Effect	Total Effect	Indirect Effect	Direct Effect	Total Effect	Indirect Effect	Direct Effect	Total Effect	Indirect Effect	Direct Effect	Total Effect	Indirect Effect	Direct Effect
Procedural	-.252	-.002	-.250	-.136	-.006	-.130	-.088	-.008	-.080	-.110	-.010	-.100	-.682	-.002	-.680
Distributive	.010	-.010	.020	.003*	-.027	.030	-.274*	-.034*	-.240	.017*	-.043	.060	.061	-.009	.070
Interpersonal	-.01	-.011	.100	.001*	-.029	.030	.054*	-.036	.090	-.045*	-.045	.000	.361	-.009	.370
Informational	.013	-.007	.020	-.079*	-.019	-.060	-.024*	-.024	.000	-.090*	-.030	-.060	-.106	-.006	-.100

Note. N=1,879. * $p < .05$.

Table 4- Tests for Mediation by Negative State Affect

Justice Dimensions	CWB-I			CWB-O		
	Total Effect	Indirect Effect	Direct Effect	Total Effect	Indirect Effect	Direct Effect
Procedural	-.025	-.005	-.020*	-.202*	-.002*	-.200
Distributive	.066*	-.044*	.110*	.077*	-.023*	.100*
Interpersonal	-.188*	-.048*	-.140*	-.245*	-.025*	-.220*
Informational	-.188*	-.028*	-.160*	.086*	-.014*	.100*

Note. N=706. * $p < .05$.

Table 5- Tests for Mediation by Positive State Affect

Justice Dimensions	CWB-I			CWB-O		
	Total Effect	Indirect Effect	Direct Effect	Total Effect	Indirect Effect	Direct Effect
Procedural	-.024	-.004	-.020	-.207*	-.037*	-.170*
Distributive	-.076	-.006*	.070*	.071*	-.049*	.120*
Interpersonal	-.183	-.003*	-.180*	-.252*	-.022*	-.230*
Informational	-.189	.001*	-.190*	.082*	.012*	.070*

Note. N=3,055. * $p < .05$.

Table 6- Meta-Analytic Relationships Among Five CWB Dimensions

	<i>k</i>	<i>N</i>	<i>r</i>	$\hat{\rho}$	SD ρ	95 % CI		80% CV		% variance
						<i>LL</i>	<i>UL</i>	<i>LL</i>	<i>UL</i>	
Sabotage										
Withdrawal	7	2916	.502	.750	.760	.101	.903	-.223	1.722	9.5
Production Deviance	7	2916	.601	.938	.915	.143	1.059	-.233	2.109	10.3
Abuse	5	2356	.584	.877	.824	.062	1.106	-.177	1.931	0.3
Theft	6	2554	.569	.917	.839	.104	1.034	-.157	1.990	0.3
Withdrawal										
Production Deviance	10	4076	.543	.761	.794	.194	.892	-.256	1.777	0.4
Abuse	7	3221	.548	.682	.707	.127	.970	-.222	1.586	0.3
Theft	7	2911	.545	.723	.711	.133	.956	-.187	1.633	0.4
Production Deviance										
Abuse	7	3221	.610	.723	.811	.144	1.075	-.256	1.821	0.2
Theft	7	2911	.600	.829	.853	.140	1.061	-.263	1.921	0.3
Abuse										
Theft	6	2713	.534	.664	.692	.089	.978	-.221	1.550	0.4

Note. *k* = number of studies; *N* = cumulative sample size; *r* = uncorrected population correlation; $\hat{\rho}$ = corrected population correlation; CI = confidence interval around uncorrected population correlation; CV = credibility interval around weighted corrected mean correlation; % variance = percent variance accounted for by sampling error.

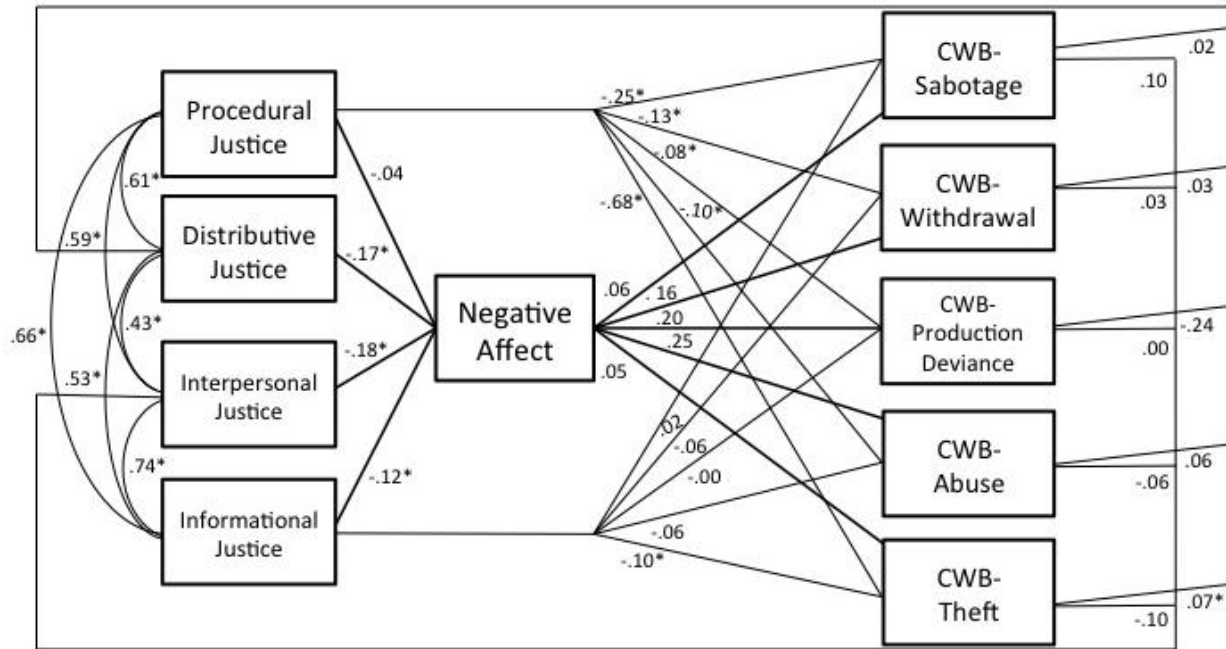


Figure 4- Results: Negative State Affect as a Mediator of the Relationship Between Justice and Five CWB Dimensions

Note. $N = 1,879$. Path estimates are standardized. Errors were allowed to correlate between the five dimensions of CWB. $*p < .05$

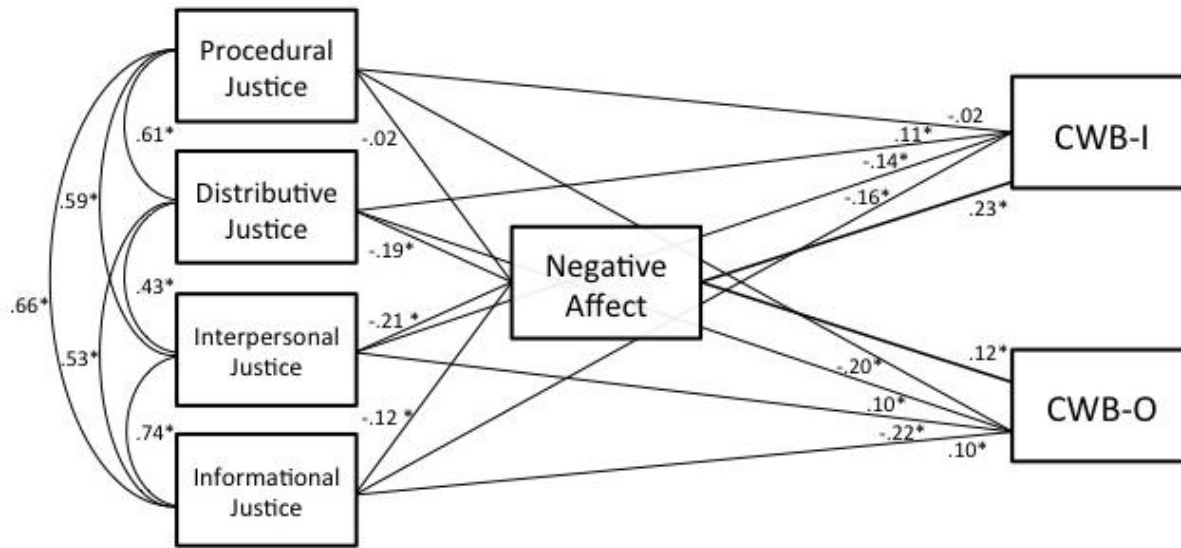


Figure 5- Results: Negative State Affect as a Mediator of the Relationship Between Justice and CWB-I/CWB-O

Note. $N = 706$. Path estimates are standardized. Errors were allowed to correlate between CWB-I and CWB-O. * $p < .05$

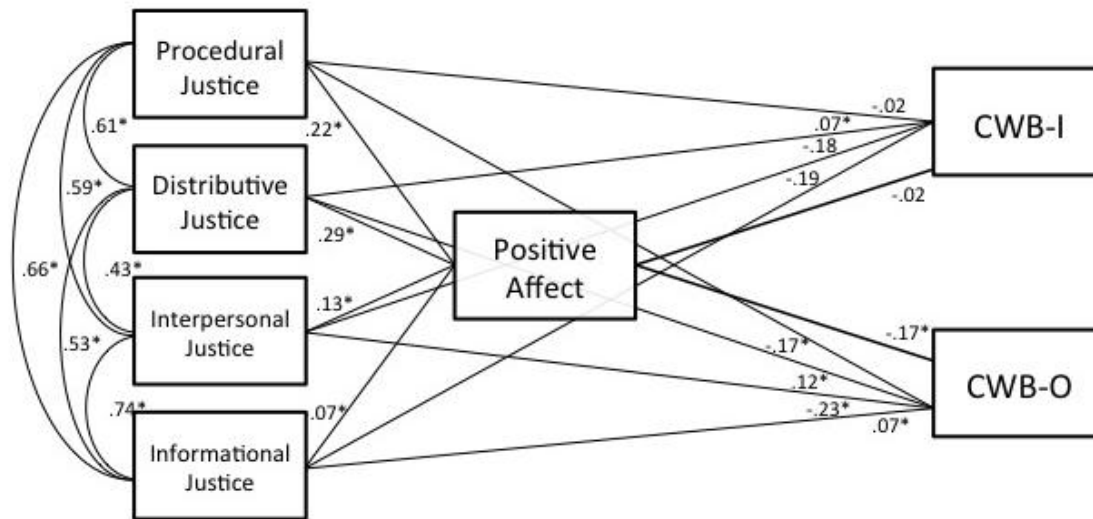


Figure 6- Results: Positive State Affect as a Mediator of the Relationship Between Justice and CWB-I/CWB-O

Note. $N = 3,055$. Path estimates are standardized. Errors were allowed to correlate between CWB-I and CWB-O. $*p < .05$

CHAPTER 4

Discussion

The purpose of this study was to evaluate the relationship among dimensions of justice and counterproductive work behavior dimensions, as mediated by state affect. Meta-analyses assessing these variables have been conducted in recent years (Shockley et al., 2012; Colquitt et al., 2013); however these meta-analyses included samples that were not exclusive to currently employed individuals and did not assess the specific relationships presented here. In this meta-analysis, I excluded samples of undergraduate students when they did not specify current employment status or contained unemployed individuals. I also excluded simulations of employment settings, and only meta-analyzed studies that assessed employed individuals' reactions to real-world work settings. Further, this meta-analysis included an examination of the five specific types of CWB (i.e., sabotage, withdrawal, production deviance, abuse, theft) as they relate to justice dimensions and state affect; this had not been meta-analyzed in previous research.

Findings

This meta-analysis showed a general negative relationship between justice dimensions and specific dimensions of counterproductive work behaviors, which offers partial support of the esteem threat framework (Baumeister, Smart, & Boden, 1996). This framework describes one's motivation to retaliate and seek revenge, and also one's reduction in self-regulatory abilities, following an unjust event (Smart, Richman, & Leary, 2009; Ferris et al., 2012). These results

also partially supported the group value model (Tyler, 1989; Tyler & Blader, 2000, 2001), which proposes that employees elicit self-serving behaviors when there is an event decreasing group cohesion, such as unfair actions (Priesemuth et al., 2013).

Further, results are consistent with Bennett and Robinson's (2000) support for dimensionalizing counterproductive work behaviors. Considering CWB-I and CWB-O, each showed significant relationship with the majority of justice dimensions, however, procedural justice consistently failed to have significant effects on affect or CWB. The five factors of CWB proposed by Spector et al. (2006) each showed a negative relationship with at least one of the justice dimensions as well, but maintained unique relationships, supporting the separation of CWB into these subdimensions.

In all of meta-analytic correlations estimated as part of the current paper, credibility intervals contained zero, meaning that moderators may exist (Whitener, 1990). This is to be expected, considering the vast amount of previous research assessing a variety of factors that relate to consequences of justice, antecedents of CWB, and other similar relationships (Borman et al., 2001; Dalal, 2005; Kaplan et al, 2009; Lyubomirsky et al, 2005; Organ & Ryan, 1995). Because credibility intervals frequently included zero, the weak zero-order correlations and mediation effects found in this study may be explained by the extent of existing moderators, and should be looked into in future research.

This study evaluated state affect as a mediator of the relationship between justice dimensions and CWB dimensions. The mediation by affect would support social exchange theory (Cropanzano & Mitchell, 2005; Homans, 1961); however, this mediation was not significant in most of the models and was generally weak. Additionally, because state affect did

not have significant direct relationships with both justice and CWB, it cannot be concluded that perceptions of injustice reliably predict increased negative affect (and decreased positive affect), or in turn lead to the employee eliciting CWBs to reduce negative feelings.

Limitations and Directions for Future Research

As with all meta-analyses, the results of this research assume the strength and validity of the primary studies, and the results maintain limitations of primary studies. Each study uses unique methods and constructs to arrive at estimates of each relationship. However a benefit of conducting meta-analysis is the averaging out of random errors. One consideration that was not accounted for in a majority of primary studies is the time of measures in reference to events of injustice, affect, or counterproductive work behaviors. Failing to control for time as a potential moderator of these illustrated relationships may impact results, particularly because emotions may be forgotten or recalled inaccurately (Wessel & Wright, 2004). Future research might consider evaluating such elements because measures of immediate cognitions and feelings may be substantially different from measures assessing memories or heuristics of such events.

This study aimed to assess the various relationships among justice, CWB and state affect. Although the variables such as general CWB and negative affect were heavily studied, giving us a large number of related samples to meta-analyze, there are other variables that have gone largely unstudied, particularly the five types of CWB. These missing evaluations may contain further details regarding the ways in which unjust settings and events may result in various cognitions, attitudes, and behaviors of employees and may have affected the results of this study. One specific area that should be considered in future research is positive affect in relation to

justice and CWBs. In this meta-analysis, all of the pairings pertaining to positive affect contain very small sample sizes. Past research has shown that positive affect is not simply an equal and opposite construct to negative affect (Watson, 2000) and should be considered as an individual variable.

There is also a lack of research for discrete emotions as they relate to justice and CWB. For those studies that do assess discrete emotions, there is a larger focus on specific negative emotions such as anger and anxiety than positive discrete emotions (Luthans, 2002; Myers, 2000). The assessment of any discrete emotions and their influence on the relationship between justice and CWB has received little attention (Shockley et al., 2012). There is a tendency to dimensionalize emotions despite research against doing so (Douglas & Martinko, 2001; Hepworth & Towler, 2004), and it will take quite some time working against this trend to generate a sufficient amount of studies to be used in evaluating the role of discrete emotions in the workplace. Making this transition away from general dimensions will provide insight into the unique role of each emotion when predicting employee behaviors and this should be considered in future research.

Finally, this meta-analysis has, in some areas, smaller samples and effect sizes than the study done by Colquitt et al. (2013); this is to be expected because of the exclusion of articles assessing unemployed individuals or simulated scenarios. As a result of such exclusion, this meta-analysis better highlights the predictive value of these relationships in real-world settings. As future research expands to encompass the five-subgroups of CWB and discrete emotions, the sample sizes for these relationships may increase and provide the opportunity for strong relationships with more stable data (Hunter & Schmidt, 1990; Spector & Levine, 1987).

Implications

The direct relationships presented in this article were mostly significant, and thus can translate into business strategies such as interventions to improve justice perceptions, training programs to support positive coping mechanisms, and identification of potential counterproductive actions.

The occurrence of negative affect and CWBs, as shown by the CMR theory and the group value model, may begin with the initial perception of injustice, and organizations should make an effort to ensure that consistent, accurate, ethical, and unbiased processes, outcomes, and interactions exist (Leventhal, Karuza, & Fry, 1980). Ownership and voice contribute largely to justice perceptions such that, when employees are given the opportunity to contribute to decisions and strategies, the overall opinion of fairness is enhanced (Greenberg & Folger, 1983; Brockner et al., 2001). In fact, giving employees the opportunity to contribute can be sufficient for improved justice perceptions, even if their ideas and opinions are not ultimately used in final decisions (LaTour, 1978; Lind, Walker, Kurtz, Musante, & Thibaut, 1980). An open communication between management and employees can be achieved by ensuring focus groups and surveys are used in company decisions, clear explanations for inevitable changes such as layoffs are provided, selection or promotion measures are developed with both content and face validity, and general climate of cohesiveness are supported. Further, the managers and supervisors in a company must ensure that their interactions with employees are more about transformational leadership than transactional leadership (Dai, Dai, Chen, & Wu, 2013). By selecting and training supervisors with conscientiousness, compassion, and empathy as well as

the ability to influence and motivate, a company facilitates perceptions of justice regarding organizational leaders and their actions (Bass & Riggio, 2008; Rupp & Aquino, 2009).

In select circumstances, preventative measures do not circumvent all negative events. During times of unexpected or inevitable injustice perceptions, it is important that employees are equipped with the ability to positively cope with resulting feelings. Stress and emotion regulation strategies training should be considered for organizations with a high potential for negative affect, such as layoff scenarios or high-stress industries; especially because negative affect alone can contribute to counterproductive work behaviors (as shown in this study), organizations should consider emotion regulation techniques not only in relation to organizational justice, but in general (Thory, 2013). Other incentives that have been shown to promote positive emotions and general well-being should be implemented in the workplace culture (Barsade & Gibson, 2010). This may include work-life balance and flexible schedules, exercise and nutrition programs that encourage healthy habits, constructive feedback and performance appraisal methods, and industry-specific intrinsic and extrinsic rewards (Sparks, Faragher, Cooper, 2001). Lastly, companies should assess whether emotional exhaustion is a factor for employees, especially in customer service settings because this exhaustion may lead to a reduced ability to regulate future negative emotion episodes (Ensey, 2013).

There are a vast number of antecedents to counterproductive work behaviors (Marcus and Schuler, 2004) and, therefore, there should be an active awareness of the activities and attitudes that are present in organizations. This can be accomplished through periodic engagement surveys assessing CWB intentions, regular performance appraisals that allow for supervisors to report specific actions, and a focus on training to encourage and assist supervisors in identifying

counterproductive work behaviors and their contexts, and then utilize such information in strategic interventions (Marcus and Schuler, 2004).

Conclusion

In summary, the results of the current study partially support the social exchange theory, the cognitive-motivational-relational model, and the group value model by considering the relationship between justice perceptions and counterproductive work behaviors, as well as mediation by state affect. This study goes further than previous meta-analytical research of this kind by providing an evaluation of these relationships gathered solely from employed individuals. It also considers the five-factor model of CWBs and the targets of CWBs (person and organization) to assess the relationships between each of these and the subdimensions of organizational justice, and also contributes the meta-analytic assessment of the relationships among the five CWBs. Because CWBs are a damaging phenomenon, it is important to understand the individual factors that may predict future occurrences. This study identified such relationships and suggested appropriate actions that can be taken to minimize injustice perceptions, manage negative emotion (and increase positive emotion), and strategically overcome resultant deviant actions.

REFERENCES

- Adams, J. S. (1965). Inequity in social exchange. *Advances in experimental social psychology*, 2(267-299).
- * Ambrose, M. L., & Schminke, M. (2009). The role of overall justice judgments in organizational justice research: a test of mediation. *Journal of Applied Psychology*, 94(2), 491.
- 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.
- Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes*, 90(1), 195-208.
- *Aquino, K., Lewis, M. U., & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organizational Behavior*, 20(7), 1073-1091.
- * Aquino, K., Tripp, T. M., & Bies, R. J. (2006). Getting even or moving on? Power, procedural justice, and types of offense as predictors of revenge, forgiveness, reconciliation, and avoidance in organizations. *Journal of Applied Psychology*, 91(3), 653.
- *Armstrong-Stassen, M. (1998). The effect of gender and organizational level on how survivors appraise and cope with organizational downsizing. *The Journal of Applied Behavioral Science*, 34(2), 125-142.
- *Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *The Journal of Applied Behavioral Science*, 44(1), 48-70.
- *Balducci, C., Cecchin, M., Fraccaroli, F., & Schaufeli, W. B. (2012). Exploring the relationship between workaholism and workplace aggressive behaviour: The role of job-related emotion. *Personality and Individual Differences*, 53(5), 629-634.

- *Balducci, C., Schaufeli, W. B., & Fraccaroli, F. (2011). The job demands–resources model and counterproductive work behaviour: The role of job-related affect. *European Journal of Work and Organizational Psychology*, 20(4), 467-496.
- *Ball, G. A., Trevino, L. K., & Sims, H. P. (1994). Just and unjust punishment: Influences on subordinate performance and citizenship. *Academy of Management Journal*, 37(2), 299-322.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Bandura, A. (1980). Gauging the relationship between self-efficacy judgment and action. *Cognitive Therapy and Research*, 4(2), 263-268.
- *Banks, G. C., Whelpley, C. E., Oh, I. S., & Shin, K. (2012). (How) are emotionally exhausted employees harmful?. *International Journal of Stress Management*, 19(3), 198.
- *Barclay, L. J., & Skarlicki, D. P. (2009). Healing the wounds of organizational injustice: examining the benefits of expressive writing. *Journal of Applied Psychology*, 94(2), 511.
- *Barclay, L. J., Skarlicki, D. P., & Pugh, S. D. (2005). Exploring the role of emotions in injustice perceptions and retaliation. *Journal of Applied Psychology*, 90(4), 629.
- *Barling, J., Rogers, A. G., & Kelloway, E. K. (2001). Behind closed doors: in-home workers' experience of sexual harassment and workplace violence. *Journal of Occupational Health Psychology*, 6(3), 255.
- Barsade, S. G., & Gibson, D. E. (2007). Why does affect matter in organizations?. *The Academy of Management Perspectives*, 21(1), 36-59.
- Barsade, S. G., & Gibson, D. E. (2010). Why does affect matter in organizations?. In J. Wagner, J. R. Hollenbeck (Eds.) , *Readings in organizational behavior* (pp. 168-196). New York, NY US: Routledge/Taylor & Francis Group.
- Barsky, A., & Kaplan, S. A. (2007). If you feel bad, it's unfair: a quantitative synthesis of affect and organizational justice perceptions. *Journal of Applied Psychology*, 92(1), 286.
- Bass, B. M. & Riggio, R. E. (2008). *Transformational Leadership*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

- Baumeister, R. F. (1997). Esteem threat, self-regulatory breakdown, and emotional distress as factors in self-defeating behavior. *Review of General Psychology*, 1(2), 145.
- Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: the dark side of high self-esteem. *Psychological review*, 103(1), 5.
- *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, N., Martin, C. L., Bies, R. J., & Brockner, J. (1995). Coping with a layoff: A longitudinal study of victims. *Journal of Management*, 21(6), 1025-1040.
- *Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology*, 85(3), 349.
- *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.
- *Bies, R. J., Martin, C. L., & Brockner, J. (1993). Just laid off, but still a “good citizen?” Only if the process is fair. *Employee Responsibilities and Rights Journal*, 6(3), 227-238.
- Bies, R. J., and Moag, J. S. (1986). Interactional justice: Communication criteria of fairness In Lewicki, R. J., Sheppard, B. H., and Bazerman, M. H. (eds.), *Research on Negotiation in Organizations*, JAI Press, Greenwich, CT., pp. 43-55.
- *Bies, R. J., Shapiro, D. L., & Cummings, L. L. (1988). Causal Accounts and Managing Organizational Conflict Is It Enough to Say It's Not My Fault?. *Communication Research*, 15(4), 381-399.
- Bies, R. J., Tripp, T. M., & Kramer, R. M. (1997). At the breaking point: cognitive and social dynamics of revenge in organizations. In R. A. Giacalone, & J. Greenberg (Eds.), *Antisocial behavior in organizations* (pp. 18-36).
- Bobocel, D. R., & Zdaniuk, A. (2010). Injustice and identity: How we respond to unjust treatment depends on how we perceive ourselves. In *The psychology of justice and legitimacy: The Ontario symposium* (Vol. 11, pp. 27-52).

- Borman, W. C., Penner, L. A., Allen, T. D., & Motowidlo, S. J. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment*, 9(1 - 2), 52-69.
- *Boswell, W. R., Olson-Buchanan, J. B., & LePine, M. A. (2004). Relations between stress and work outcomes: The role of felt challenge, job control, and psychological strain. *Journal of Vocational Behavior*, 64(1), 165-181.
- Boulding, K. (1963). *Conflict and defense*. New York: Harper Row.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. *Annual review of psychology*, 53(1), 279-307.
- Briner, R. B., & Kiefer, T. (2005). Psychological research into the experience of emotion at work: Definitely older, but are we any wiser?. *Research on Emotion in Organizations*, 1, 281-307.
- Brockner, J., Ackerman, G., Greenberg, J., Gelfand, M. J., Francesco, A., Chen, Z., & ... Shapiro, D. (2001). Culture and procedural justice: The influence of power distance on reactions to voice. *Journal Of Experimental Social Psychology*, 37(4), 300-315. doi:10.1006/jesp.2000.1451
- *Brotheridge, C. M. (2003). The Role of Fairness in Mediating the Effects of Voice and Justification on Stress and Other Outcomes in a Climate of Organizational Change. *International Journal of Stress Management*, 10(3), 253.
- *Bruk-Lee, V., & Spector, P. E. (2006). The social stressors-counterproductive work behaviors link: Are conflicts with supervisors and coworkers the same?. *Journal of occupational health psychology*, 11(2), 145.
- Bunk, J. A., & Magley, V. J. (2013). The role of appraisals and emotions in understanding experiences of workplace incivility. *Journal of occupational health psychology*, 18(1), 87.
- Buss, A. H. (1961). *The psychology of aggression*.
- * Chang, K., & Smithikrai, C. (2010). Counterproductive behaviour at work: an investigation into reduction strategies. *The International Journal of Human Resource Management*, 21(8), 1272-1288.
- *Cohen-Charash, Y., & Mueller, J. S. (2007). Does perceived unfairness exacerbate or mitigate interpersonal counterproductive work behaviors related to envy?. *Journal of Applied Psychology*, 92(3), 666.

- 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.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Routledge.
- Cohen, S., Doyle, W. J., Skoner, D. P., Fireman, P., Gwaltney Jr, J. M., & Newsom, J. T. (1995). State and trait negative affect as predictors of objective and subjective symptoms of respiratory viral infections. *Journal of personality and social psychology*, 68(1), 159.
- Cohen, T. R., Panter, A. T., & Turan, N. (2012). Guilt Proneness and moral character. *Current Directions in Psychological Science*, 21(5), 355-359.
- Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. *Journal Of Applied Psychology*, 98(2), 199-236. doi:10.1037/a0031757
- Conlon, D. E., Meyer, C. J., & Nowakowski, J. M. (2005). How does organizational justice affect performance, withdrawal, and counterproductive behavior?.
- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: incidence and impact. *Journal of occupational health psychology*, 6(1), 64.
- Cropanzano, R., & Baron, R. A. (1991). Injustice and organizational conflict: The moderating effect of power restoration. *International Journal of Conflict Management*, 2(1), 5-26.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Dai, Y., Dai, Y., Chen, K., & Wu, H. (2013). Transformational vs transactional leadership: Which is better?: A study on employees of international tourist hotels in Taipei City. *International Journal Of Contemporary Hospitality Management*, 25(5), 760-778. doi:10.1108/IJCHM-Dec-2011-0223
- 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.

- *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 Lara, P. Z. M. (2006). Fear in organizations: does intimidation by formal punishment mediate the relationship between interactional justice and workplace internet deviance?. *Journal of Managerial Psychology*, 21(6), 580-592.
- De Rivera, J. (1977). A structural theory of the emotions. *Psychological issues*.
- *Devonish, D., & Greenidge, D. (2010). The Effect of Organizational Justice on Contextual Performance, Counterproductive Work Behaviors, and Task Performance: Investigating the moderating role of ability - based emotional intelligence. *International Journal of Selection and Assessment*, 18(1), 75-86.
- Diefendorff, J. M., & Mehta, K. (2007). The relations of motivational traits with workplace deviance. *Journal of Applied Psychology*, 92, 967-977.
- *Dineen, B. R., Lewicki, R. J., & Tomlinson, E. C. (2006). Supervisory guidance and behavioral integrity: relationships with employee citizenship and deviant behavior. *Journal of Applied Psychology*, 91(3), 622.
- Dong-Hwan Cho, D. H. C., & Jung-Min Son, J. M. S. (2012). Job Embeddedness and Turnover Intentions: An Empirical Investigation of Construction IT Industries. *International Journal of Advanced Science and Technology*, 40, 101-110.
- 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.
- *Dupré, K. E., Barling, J., Turner, N., & Stride, C. B. (2010). Comparing perceived injustices from supervisors and romantic partners as predictors of aggression. *Journal of occupational health psychology*, 15(4), 359.
- *Ehlen, C. R., Magner, N. R., & Welker, R. B. (1999). Testing the interactive effects of outcome favourability and procedural fairness on members' reactions towards a voluntary professional organization. *Journal of Occupational and organizational Psychology*, 72(2), 147-161.
- Elliot, Andrew J. *Handbook of Approach and Avoidance Motivation*. New York: Psychology, 2008. Print.

- Ensey, C. A. (2013). Avoiding the slater slide: Examining the relationship between emotional labor and counterproductive work behaviors. *Dissertation Abstracts International*, 73,
- Fein, S., & Spencer, S. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73(1), 31.
- Felson, R. B., & Steadman, H. J. (1983). Situational factors in disputes leading to criminal violence. *Criminology*, 21(1), 59-74.
- *Ferris, D. L., Spence, J. R., Brown, D. J., & Heller, D. (2012). Interpersonal Injustice and Workplace Deviance The Role of Esteem Threat. *Journal of Management*, 38(6), 1788-1811.
- Finch, J. F., Baranik, L. E., Liu, Y., & West, S. G. (2012). Physical health, positive and negative affect, and personality: A longitudinal analysis. *Journal of Research in Personality*, 46(5), 537-545.
- *Findley, H. M., Giles, W. F., & Mossholder, K. W. (2000). Performance appraisal process and system facets: Relationships with contextual performance. *Journal of Applied Psychology*, 85(4), 634.
- *Fisher, C. D. (2002). Antecedents and consequences of real-time affective reactions at work. *Motivation and Emotion*, 26(1), 3-30.
- *Fisher, C. D., & Noble, C. S. (2004). A within-person examination of correlates of performance and emotions while working. *Human Performance*, 17(2), 145-168.
- Folger, R. (1993). Reactions to mistreatment at work. *Social psychology in organizations: Advances in theory and research*, 161, 183.
- *Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management journal*, 32(1), 115-130.
- 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. (Eds.). (2005). *Counterproductive work behavior: Investigations of actors and targets*. Washington^eDC DC: American Psychological Association.

- *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.
- *Fox, S., Spector, P. E., Goh, A., & Bruursema, K. (2007). Does your coworker know what you're doing? Convergence of self- and peer-reports of counterproductive work behavior. *International Journal of Stress Management*, 14(1), 41.
- Frijda, N. H. (1993). Moods, emotion episodes, and emotions.
- Frost, A. 2007, October. Ensure dishonesty doesn't pay. *Human Resources*, p. 71.
- * Gellatly, I. R. (1995). Individual and group determinants of employee absenteeism: Test of a causal model. *Journal of organizational behavior*, 16(5), 469-485.
- *George, J. M. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. *Journal of applied Psychology*, 76(2), 299.
- *Goh, A. (2006). An attributional analysis of counterproductive work behavior (CWB) in response to occupational stress (Doctoral dissertation, University of South Florida).
- Grandey, A. A. (2008). Emotions at work: A review and research agenda. *Handbook of organizational behavior*, 235-261.
- Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes*, 54(1), 81-103.
- Greenberg, J. (1998) The cognitive geometry of employee theft: negotiating 'the line' between taking and stealing. In R.W. Griffin, A. O'Leary-Kelly and J.M. Collins (eds) *Dysfunctional Behavior in Organizations: Violent and Deviant Behavior*. Stamford, CT: JAI Press.
- Greenberg, J., & Folger, R. (1983). Procedural justice, participation and the fair process effect in groups and organizations. In P. B. Paulus (Ed.) *Basic group processes* (pp. 235-256). New York: Springer-Verlag.
- *Greenberg, L., & Barling, J. (1999). Predicting employee aggression against coworkers, subordinates and supervisors: The roles of person behaviors and perceived workplace factors. *Journal of Organizational Behavior*, 20(6), 897-913.

- *Gruys, M. L., & Sackett, P. R. (2003). Investigating the dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment*, 11(1), 30-42.
- *Heacox, N. J., & Sorenson, R. C. (2007). Organizational frustration and aggressive behaviors. *Journal of emotional abuse*, 4(3-4), 95-118.
- Heider, F. *The psychology of interpersonal relations*. New York: Wiley, 1958.
- * Hendrix, W. H., Robbins, T., Miller, J., & Summers, T. P. (1998). Effects of procedural and distributive justice on factors predictive of turnover. *Journal of Social Behavior & Personality*.
- *Henle, C. A. (2005). Predicting Workplace Deviance from the Interaction between Organizational Justice and Personality. *Journal of Managerial Issues*, 17(2).
- Hepworth, W., & Towler, A. (2004). The effects of individual differences and charismatic leadership on workplace aggression. *Journal of Occupational Health Psychology*, 9(2), 176.
- *Hershcovis, M. S., Turner, N., Barling, J., Arnold, K. A., Dupré, K. E., Inness, M., ... & Sivanathan, N. (2007). Predicting workplace aggression: a meta-analysis. *Journal of applied Psychology*, 92(1), 228.
- *Holtom, B. C., Burton, J. P., & Crossley, C. D. (2012). How negative affectivity moderates the relationship between shocks, embeddedness and worker behaviors. *Journal of Vocational Behavior*, 80(2), 434-443.
- Homans, G. C. (1961). *Social behavior: Its elementary forms*.
- * Howard, L. W., & Cordes, C. L. (2010). Flight from unfairness: Effects of perceived injustice on emotional exhaustion and employee withdrawal. *Journal of Business and Psychology*, 25(3), 409-428.
- *Hung, T. K., Chi, N. W., & Lu, W. L. (2009). Exploring the relationships between perceived coworker loafing and counterproductive work behaviors: The mediating role of a revenge motive. *Journal of Business and Psychology*, 24(3), 257-270.
- Hunter, J. E., & Schmidt, F. L. (Eds.). (2004). *Methods of meta-analysis: Correcting error and bias in research findings*. Sage.

- Hunter, J. E., Schmidt, F. L., & Judiesch, M. K. (1990). Individual differences in output variability as a function of job complexity. *Journal of Applied Psychology*, 75(1), 28.
- *Ilie, A., Penney, L. M., Ispas, D., & Iliescu, D. (2012). The Role of Trait Anger in the Relationship between Stressors and Counterproductive Work Behaviors: Convergent Findings from Multiple Studies and Methodologies. *Applied Psychology*, 61(3), 415-436.
- *Inness, M., LeBlanc, M. M., & Barling, J. (2008). Psychosocial predictors of supervisor-, peer-, subordinate-, and service-provider-targeted aggression. *Journal of Applied Psychology*, 93(6), 1401.
- *Irving, P. G., Coleman, D. F., & Bobocel, D. R. (2005). The Moderating Effect of Negative Affectivity in the Procedural Justice-Job Satisfaction Relation. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 37(1), 20.
- *Janssen, O., Lam, C. K., & Huang, X. (2010). Emotional exhaustion and job performance: The moderating roles of distributive justice and positive affect. *Journal of Organizational Behavior*, 31(6), 787-809.
- *Jelinek, R., & Ahearne, M. (2006). The enemy within: Examining salesperson deviance and its determinants. *Journal of Personal Selling and Sales Management*, 26(4), 327-344.
- Jermier, J. M., Knights, D. E., & Nord, W. R. (1994). *Resistance and power in organizations*. Taylor & Frances/Routledge.
- *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 behavior. *Journal of Organizational Behavior*, 30, 525-542.
doi:10.1002/job.563
- Judge, T. A., & Ilies, R. (2004). Affect and job satisfaction: a study of their relationship at work and at home. *Journal of Applied Psychology*, 89(4), 661.
- *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.
- Kaplan, H. B. 1975. *Self-attitudes and deviant behavior*. Pacific Palisades, CA: Goodyear.

- *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.
- *Khan, A. K., Quratulain, S., & Crawshaw, J. R. (2013). The mediating role of discrete emotions in the relationship between injustice and counterproductive work behaviors: A study in Pakistan. *Journal of business and psychology*, 28(1), 49-61.
- *Krings, F., & Facchin, S. (2009). Organizational justice and men's likelihood to sexually harass: The moderating role of sexism and personality. *Journal of Applied Psychology*, 94(2), 501.
- *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.
- *Kwak, A. (2006). The relationships of organizational injustice with employee burnout and counterproductive work behaviors: equity sensitivity as a moderator (Doctoral dissertation, Central Michigan University).
- Lam, W., & Chen, Z. (2012). When I put on my service mask: Determinants and outcomes of emotional labor among hotel service providers according to affective event theory. *International Journal of Hospitality Management*, 31(1), 3-11.
- *Lam, S. S., Schaubroeck, J., & Aryee, S. (2002). Relationship between organizational justice and employee work outcomes: a cross - national study. *Journal of Organizational Behavior*, 23(1), 1-18.
- LaTour, S. 1978. Determinants of participant and observer satisfaction with adversary and inquisitorial modes of adjudication. *Journal of Personality and Social Psychology* 36. 1531-1545.
- Lazarus, R. S. (1982). Thoughts on the relations between emotion and cognition. *American Psychologist*, 37,1019–1024.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American psychologist*, 46(8), 819.
- Lazarus, R. S. (1995). Psychological stress in the workplace. In R. Crandall, & P. L. Perrewe' (Eds.), *Occupational stress* (pp. 3–14). Washington, DC: Taylor and Francis.
- Lazarus, R. S. (2001). Relational meaning and discrete emotions.
- *Le Roy, J., Bastounis, M., & Poussard, J. M. (2012). Interactional justice and counterproductive work behaviors: The mediating role of negative emotions. *Social Behavior and Personality: an international journal*, 40(8), 1341-1355.

- * Lee, K. (2000). Job affect as a predictor of organizational citizenship behaviour and workplace deviance. (Order No. NQ58144, The University of Western Ontario (Canada)). ProQuest Dissertations and Theses.
- *Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of Applied Psychology*, 87(1), 131.
- Lemay Jr, E. P., Overall, N. C., & Clark, M. S. (2012). Experiences and interpersonal consequences of hurt feelings and anger.
- Lethem, J., Slade, P. D., Troup, J. D. G., & Bentley, G. (1983). Outline of a fear-avoidance model of exaggerated pain perception—I. *Behaviour research and therapy*, 21(4), 401-408.
- Leventhal, G. S., Karuza, J., & Fry, W. R. (1980). Beyond fairness: A theory of allocation preferences. *Justice and social interaction*, 3, 167-218.
- *Levine, E. L., Xu, X., Yang, L. Q., Ispas, D., Pitariu, H. D., Bian, R., ... & Musat, S. (2011). Cross-national explorations of the impact of affect at work using the state-trait emotion measure: A coordinated series of studies in the United States, China, and Romania. *Human Performance*, 24(5), 405-442.
- Lind, E. A. (2001). Thinking critically about justice judgments. *Journal of Vocational Behavior*, 58(2), 220-226.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. Plenum Publishing Corporation.
- Lind, E., Walker, L., Kurtz, S., Musante, L., & Thibaut, J. W. (1980). Procedure and outcome effects on reactions to adjudicated resolution of conflicts of interest. *Journal Of Personality And Social Psychology*, 39(4), 643-653. doi:10.1037/0022-3514.39.4.643
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 6, 695–706.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success?. *Psychological bulletin*, 131(6), 803.
- *Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behavior at work: a general perspective. *Journal of Applied Psychology*, 89(4), 647.

- Martinko, M. J., Gundlach, M. J., & Douglas, S. C. (2002). Toward an integrative theory of counterproductive workplace behavior: A causal reasoning perspective. *International Journal of Selection and Assessment*, 10(1 - 2), 36-50.
- *Mayer, D. M., Thau, S., Workman, K. M., Dijke, M. V., & Cremer, D. D. (2012). Leader mistreatment, employee hostility, and deviant behaviors: Integrating self-uncertainty and thwarted needs perspectives on deviance. *Organizational Behavior and Human Decision Processes*, 117(1), 24-40.
- *Ménard, J., Brunet, L., & Savoie, A. (2011). Interpersonal workplace deviance: Why do offenders act out? A comparative look on personality and organisational variables. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 43(4), 309.
- *Miles, D. E., Borman, W. E., Spector, P. E., & Fox, S. (2002). Building an integrative model of extra role work behaviors: A comparison of counterproductive work behavior with organizational citizenship behavior. *International Journal of Selection and Assessment*, 10(1 - 2), 51-57.
- Miller, D. T. (2001). Disrespect and the experience of injustice. *Annual review of psychology*, 52(1), 527-553.
- *Miner, A. G. (2002). Experience sampling events, moods, behaviors, and performance at work (Doctoral dissertation, ProQuest Information & Learning).
- Muchinsky PM. Emotions in the workplace: The neglect of organizational behavior. *Journal of Organizational Behavior*. 2000;21:801-805.
- Mughal, S., Walsh, J., & Wilding, J. (1996). Stress and work performance: The role of trait anxiety. *Personality and Individual Differences*, 20(6), 685-691.
- Myers, D. (2000). The funds, friends and faith of happy people. *American Psychologist*, 55, 56–67.
- * Ogunfowora, B. (2013). When the abuse is unevenly distributed: The effects of abusive supervision variability on work attitudes and behaviors. *Journal of Organizational Behavior*, 34(8), 1105-1123.
- Ones, D. S., Viswesvaran, C., & Schmidt, F. L. (1993). Comprehensive meta-analysis of integrity test validities: Findings and implications for personnel selection and theories of job performance. *Journal of applied psychology*, 78(4), 679.

- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel psychology*, 48(4), 775-802.
- *Paterson, J. M., & Cary, J. (2002). Organizational justice, change anxiety, and acceptance of downsizing: Preliminary tests of an AET-based model. *Motivation and Emotion*, 26, 83–103.
- *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*, 26(7), 777-796.
- Philips, H. C. (1987). Avoidance behaviour and its role in sustaining chronic pain. *Behaviour research and therapy*, 25(4), 273-279.
- Preacher, K. J. & Selig, J. P. (2008). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software].
- Priesemuth, M., Arnaud, A., & Schminke, M. (2013). Bad Behavior in Groups The Impact of Overall Justice Climate and Functional Dependence on Counterproductive Work Behavior in Work Units. *Group & Organization Management*, 38(2), 230-257.
- *Reisel, W. D., Probst, T. M., Chia, S. L., Maloles, C. M., & König, C. J. (2010). The effects of job insecurity on job satisfaction, organizational citizenship behavior, deviant behavior, and negative emotions of employees. *International Studies of Management and Organization*, 40(1), 74-91.
- *Restubog, S. L. D., Garcia, P. R. J. M., Wang, L., & Cheng, D. (2010). It's all about control: The role of self-control in buffering the effects of negative reciprocity beliefs and trait anger on workplace deviance. *Journal of Research in Personality*, 44(5), 655-660.
- Richards, D. A., & Schat, A. C. (2011). Attachment at (not to) work: Applying attachment theory to explain individual behavior in organizations. *Journal of Applied Psychology*, 96(1), 169.
- Robbins, Stephen P., and Tim Judge. "Emotions and Moods." *Essentials of Organizational Behavior*. 11th ed. Upper Saddle River, NJ: Pearson Prentice Hall, 2012. 26-40. Print.

- 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.
- Robinson, S. L., & Greenberg, J. (1998). Employees behaving badly: Dimensions, determinants and dilemmas in the study of workplace deviance.
- *Rodell, J. B., & Judge, T. A. (2009). Can “good” stressors spark “bad” behaviors? The mediating role of emotions in links of challenge and hindrance stressors with citizenship and counterproductive behaviors. *Journal of Applied Psychology*, 94(6), 1438.
- Rupp, D. E., & Aquino, K. F. (2009). Nothing so practical as a good justice theory. *Industrial And Organizational Psychology: Perspectives On Science And Practice*, 2(2), 205-210. doi:10.1111/j.1754-9434.2009.01135.x
- *Sakurai, K., & Jex, S. M. (2012). Coworker incivility and incivility targets' work effort and counterproductive work behaviors: The moderating role of supervisor social support. *Journal of Occupational Health Psychology*, 17(2), 150.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative science quarterly*, 224-253.
- * Shapira-Lishchinsky, O., & Rosenblatt, Z. (2009). Perceptions of organizational ethics as predictors of work absence: A test of alternative absence measures. *Journal of business ethics*, 88(4), 717-734.
- Shaver, P., Schwartz, J., Kirson, D., & O'connor, C. (1987). Emotion knowledge: further exploration of a prototype approach. *Journal of personality and social psychology*, 52(6), 1061.
- Shockley, K. M., Ispas, D., Rossi, M. E., & Levine, E. L. (2012). A Meta-Analytic Investigation of the Relationship Between State Affect, Discrete Emotions, and Job Performance. *Human Performance*, 25(5), 377-411.
- *Skarlicki, D. P., Barclay, L. J., & Pugh, S. D. (2008). When explanations for layoffs are not enough: Employer's integrity as a moderator of the relationship between informational justice and retaliation. *Journal of Occupational and Organizational Psychology*, 81, 123–146.
- *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.

- Skarlicki, D. P., Folger, R., & Tesluk, P. (1999). Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal*, 42(1), 100-108.
- *Skarlicki, D. P., van Jaarsveld, D. D., & Walker, D. D. (2008). Getting even for customer mistreatment: The role of moral identity in the relationship between customer interpersonal injustice and employee sabotage. *Journal of Applied Psychology*, 93, 1335–1347.
- Smart Richman, L., & Leary, M. R. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: a multimotive model. *Psychological review*, 116(2), 365.
- Smith, C. A., & Lazarus, R. S. (1990). Emotion and adaptation.
- Sparks, K.; Faragher, B.; Cooper, C. L. (2001). Well-being and occupational health in the 21st century workplace. Well-being and occupational health in the 21st century workplace, *Journal of Occupational and Organizational Psychology*, 74, 489-509.
- *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(2), 269-292.
- *Spector, P. E., Dwyer, D. J., & Jex, S. M. (1988). Relation of job stressors to affective, health, and performance outcomes: a comparison of multiple data sources. *Journal of Applied Psychology*, 73(1), 11.
- Spector, P. E., Fox, S., & Katwyk, P. T. (1999). The role of negative affectivity in employee reactions to job characteristics: Bias effect or substantive effect?. *Journal of Occupational and Organizational Psychology*, 72(2), 205-218.
- *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., & Levine, E. L. (1987). Meta-analysis for integrating study outcomes: A Monte Carlo study of its susceptibility to Type I and Type II errors. *Journal of Applied Psychology*, 72(1), 3.
- *Spell, C. S., & Arnold, T. (2007). An appraisal perspective of justice, structure, and job control as antecedents of psychological distress. *Journal of Organizational Behavior*, 28(6), 729-751.

- Spielberger, C. D., & Sydeman, S. J. (1994). Anxiety Inventory and State-Trait Anger Expression Inventory. University of South Florida, 292-231.
- *Thau, S., & Mitchell, M. S. (2010). Self-gain or self-regulation impairment? Tests of competing explanations of the supervisor abuse and employee deviance relationship through perceptions of distributive justice. *Journal of Applied Psychology*, 95(6), 1009.
- Thibaut, J. W., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale: L. Erlbaum Associates.
- Thoresen, C. J., Kaplan, S. A., Barsky, A. P., Warren, C. R., & de Chermont, K. (2003, November). The affective underpinnings of job perceptions and attitudes: a meta-analytic review and integration. In 17th Annual Conference of the Society for Industrial and Organizational Psychology, Toronto, ON, Canada; An earlier version of this study was presented at the aforementioned conference. (Vol. 129, No. 6, p. 914). American Psychological Association.
- Thory, K. (2013). Teaching managers to regulate their emotions better: Insights from emotional intelligence training and work-based application. *Human Resource Development International*, 16(1), 4-21. doi:10.1080/13678868.2012.738473
- Tripp, T. M., Bies, R. J., & Aquino, K. (2007). A vigilante model of justice: Revenge, reconciliation, forgiveness, and avoidance. *Social Justice Research*, 20(1), 10-34.
- Tyler, T. R. (1989). The psychology of procedural justice: A test of the group-value model. *Journal of personality and social psychology*, 57(5), 830.
- Tyler, T. R., & Blader, S. L. (2001). Identity and cooperative behavior in groups. *Group Processes & Intergroup Relations*, 4(3), 207-226.
- Tyler, T. R., & Blader, S. L. (Eds.). (2000). *Cooperation in groups: Procedural justice, social identity, and behavioral engagement*. Psychology Press.
- Tyler, T., DeGoey, P., & Smith, H. (1996). Understanding why the justice of group procedures matters: A test of the psychological dynamics of the group-value model. *Journal of Personality and Social Psychology*, 70(5), 913.
- Viswesvaran, C., & Ones, D. S. (1995). Theory Testing: Combining Psychometric Meta - analysis and Structural Equations Modeling. *Personnel Psychology*, 48(4), 865-885.

- Vlaeyen, J. W., & Linton, S. J. (2000). Fear-avoidance and its consequences in chronic musculoskeletal pain: a state of the art. *Pain*, 85(3), 317-332.
- Waddell, G., Newton, M., Henderson, I., Somerville, D., & Main, C. J. (1993). A Fear-Avoidance Beliefs Questionnaire (FABQ) and the role of fear-avoidance beliefs in chronic low back pain and disability. *Pain*, 52(2), 157-168.
- *Wang, M., Liao, H., Zhan, Y., & Shi, J. (2011). Daily customer mistreatment and employee sabotage against customers: Examining emotion and resource perspectives. *Academy of Management Journal*, 54(2), 312-334.
- Watson, D. (2000). *Mood and temperament*. Guilford Press.
- Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress, and distress: exploring the central role of negative affectivity. *Psychological review*, 96(2), 234.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological bulletin*, 98(2), 219.
- Weiss, H. M., & Cropanzano, R. (1996). Affective Events Theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work.
- Wessel, I., & Wright, D. B. (2004). Emotional memory failures: On forgetting and reconstructing emotional experiences. *Cognition & Emotion*, 18(4), 449-455.
- Whitener, E. M. (1990). Confusion of confidence intervals and credibility intervals in meta-analysis. *Journal of Applied Psychology*, 75(3), 315.
- * Wilkin, C. L. (2011). The green-eyed monster strikes back: Moderators and mediators of the relationship between distributive justice and theft.
- * Wood, S., Braeken, J., & Niven, K. (2013). Discrimination and Well-Being in Organizations: Testing the Differential Power and Organizational Justice Theories of Workplace Aggression. *Journal of business ethics*, 115(3), 617-634.
- *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.