

**DO CREATIVE EMPLOYEES ENGAGE IN MORE CITIZENSHIP AND
COUNTERPRODUCTIVE WORK BEHAVIORS?**

A Dissertation

by

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ABSTRACT

Since the turn of the century, research examining the creative process and its predictors has blossomed in organizational research. However, despite the widely accepted notion that creativity is good and leads to great advances in the business world, the outcomes of organizational creativity are relatively unknown and unexplored. While research has started to tackle this gap by examining creativity's positive role in task performance, creativity's potential relationship with non-task performance is relatively unknown. The purpose of the present study was to investigate the potential relationships between creativity, organizational citizenship behavior (OCB), and counterproductive work behavior (CWB). It was hypothesized that creativity would be positively related to both OCB and CWB (and their facets) based on its non-predefined and divergent nature. Further, organizational constraints were examined as a potential moderator of the creativity-non-task performance relationship.

Amazon's Mechanical Turk (MTurk) crowdsourcing internet marketplace was used to recruit working adults throughout the United States. Participants ($N = 300$) completed 2 online surveys containing measures of creativity (subjective and objective), OCB, CWB, organizational constraints, and general demographics. Results from separate path analytic models found support for a positive relationship between creativity and OCB. The more creative an individual was, the more they performed OCBs. Although creativity was significantly related to all facets of OCB, its prediction of engagement in change-oriented OCB was significantly stronger than prediction of

OCBs targeting specific individuals or the organization. In contrast, creativity had a significant, but negative, relationship with CWB. This negative relationship significantly differed between dimensions of CWB, where creativity only predicted (negatively) engagement in CWB-O, theft, production deviance, and withdrawal. Additionally, the current study demonstrated how the work environment (e.g., organizational constraints) could impact creative employees and their behaviors. As organizational constraints (e.g., lack of resources) increased in the workplace, the positive creativity-OCB relationship weakened while the negative creativity-CWB relationship strengthened, indicating organizational constraints might reduce the beneficial behaviors of creative employees in the workplace, but will not increase their negative behaviors.

DEDICATION

This dissertation is dedicated to my family members who are not here to celebrate and enjoy this time with me. To my grandparents, Marian Beltz and Herbert & Edith Barratt, I hope I have made you proud and surpassed what you thought was possible for us.

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CHAPTER I

INTRODUCTION AND LITERATURE REVIEW

Without progress and change, no organization can survive. As technology advances and the global market expands, organizations continually seek means to remain competitive and to meet the challenges of ever-changing internal and external conditions. To do so, many contend that individual and organizational success have come to rest more than ever on creativity and innovation (Amabile, 1996; James, Clark, & Cropanzano, 1999; Kanter, 1988; Greenwood & Hinings, 1996). In fact, in 2009, José Manuel Barroso, President of the European Commission, identified creativity as “essential for collective and individual well-being, long and sustainable economic growth, and answers to the current financial, economic, and social crisis” (Cropley, 2010, p. 3).

While creativity is being heralded as the key to social and economic well-being, the role it plays in individual and organizational performance is only beginning to be unraveled. Since the turn of the century, research examining the creative process and its predictors has blossomed (Amabile, Barsade, Mueller, & Staw, 2005; James et al., 1999; Puccio & Cabra, 2010; Shalley, Zhou, & Oldham, 2004; Zhou & Shalley, 2010). In fact, in 2008 the first Handbook of Organizational Creativity was published. However, despite the widely accepted notion that creativity is good and leads to great advances, the outcomes of organizational creativity are relatively unknown and unexplored. What is creativity’s impact on individual and organizational performance?

Emerging research is starting to tackle this gap; scholars are finding positive relationships between creativity and grades (Chamorro-Premuzic, 2006), test scores (Powers & Kaufman, 2004), and sales (Gong, Huang, & Farh, 2009; Oldham & Cummings, 1996), all forms of task performance. But overall job performance is more than just task performance; it is a combination of task performance, citizenship behavior (extra-role behaviors that promote organizational functioning; Organ, 1988), and counterproductive work behavior (extra-role behaviors that harm organizational functioning; Robinson & Bennett, 1995). While research has shown creativity to positively enhance task performance, its relationship with non-task performance (i.e., citizenship and counterproductivity) is relatively unknown.

The purpose of the current study is to investigate the relationship between creativity and non-task performance components of job performance. While creativity is thought to positively impact task performance, it may in fact have a stronger relationship with non-task performance. After all, creativity breaks many norms, and as such, its relationship with job performance may be stronger with behaviors that are not predefined. Similar to creativity, citizenship and counterproductive work behaviors are discretionary and divergent (i.e., going against the norm), and therefore may be more fruitful to examine. It is hypothesized that creativity will be positively related to non-task performance (good and bad) where the more creative an employee is, the more he or she will perform non-task behaviors. It is important to understand these relationships due to the push from researchers and organizations alike to use creativity tests in the selection process (Burch, Pavelis, & Port, 2008; Hunter, Cushenbery, & Friedrich, 2012;

Wellman, 2010). Before creativity tests are used in high-stakes testing such as college admissions and employee selection, it is important to fully understand its role and impact in the workplace.

General Creativity

Creativity is generally thought of as a universally beneficial ability that aids not only individual rewards and outcomes, but also culture and society through developing or enhancing technology, tools or products, communication, and knowledge. As such, it has been a construct of interest to multiple domains for decades, although a majority of creativity research is rooted in psychology.

Defining and measuring creativity. Creativity has been historically conceptualized as “something observable, some product of creation” (Rogers, 1961, p. 349). As such, creativity is commonly conceived as an outcome or product that is novel or unique compared to other ideas currently available and in use (Shalley & Zhou, 2008). Although novelty is a key component to the definition of creativity, many scholars believe a secondary characteristic--usefulness--is also valuable to the definition and measurement of creative products (Amabile et al., 2005; Mumford & Gustafson, 1988). According to these scholars, creative products are those that are different from all other products that also have the potential to add value in the short term or long term.

It is not surprising that creativity has been historically defined as a product; creative products have the distinct advantage of being physical entities which allow for objective measurement. While product-based approaches help scholars to identify creative products, and therefore, creative individuals, it rarely tells much about the

individual(s) who did or did not create the product. In other words, how did the individual(s) come up with the creative product? Is this individual normally creative or was this a fluke? What enabled this individual to develop the creative product while others did not? Further, product-based approaches to creativity do not apply well to children and non-professionals and they do not make any claims about the underlying mechanisms involved in the creative process. For instance, an individual may be highly creative but constraints or lack of opportunity might inhibit their ability to develop a creative product, resulting in never being identified under the product-based approach to creativity. As a result, there has been a push to understand “everyday creativity” utilized by all and the mechanisms that are involved throughout the creative process (Runco & Richards, 1998).

Recognizing a gap in the research literature, some scholars are taking a process perspective of creativity, where the underlying thought process is examined rather than the physical outcome. In today’s world, ideas can be just as valuable as physical products, and ideas can be generated by everyone, expanding the creativity literature to everyday creativity. As a result, many have contended that ideas can be treated as products of creative thinking alongside physical products, and behaviors can act as indicators of the underlying process (Runco, Plucker, & Lim, 2001). In fact, ideas and behaviors (i.e., performance) can be quantified in virtually the same manner as other products. For example, behavioral measures attempt to measure, on average, how frequently or intensely individuals display creative behaviors, traits, and ideas across a variety of problems (George & Zhou, 2001; Runco et al., 2001; Tierney, Farmer, &

Graen, 1999). Through divergent thinking tests and behavioral surveys, the performance approach to creativity allows scholars to examine the creative potential of individuals, how creative potential varies across individuals, and how those individual differences in creativity impact various outcomes.

No matter which approach to measuring creativity is taken, it is vital that scholars do not confuse creativity with innovation. Although defined similarly and sometimes used interchangeably, it is important to stress the distinction between the two. Whereas creativity refers to the generation of ideas, processes, and products, innovation refers to the implementation of these ideas, processes, and products by individuals and/or the organization (Bledow, Frese, Anderson, Erez, & Farr, 2009). In other words, creativity involves generation whereas innovation involves implementation. As such, creativity is a necessary but not sufficient prerequisite for innovation. Because I am interested in the impact of the availability of creative ideas and divergent thought (i.e., creative potential), and not the implementation of such ideas, on non-task performance, the present study focuses on creativity rather than innovation.

Individual differences in creativity. Several models of creative thought have been proposed since Wallas's (1926) classic model. Although these models contain varying numbers of stages and stage names, they all have similarities in regards to the overall creative thought process. All of the models include the identification of a problem or opportunity, gathering information about the problem, generating ideas to address the problem, and finally evaluation of these ideas. While engaging in the creative process does not always lead to a creative outcome, at times it does result in the

conceptualization or development of creative ideas, processes, and products. As discussed earlier, however, work still needs to be performed examining the effect of individual differences in creativity. While creativity or creative potential is known not to be a dichotomous construct, each model is presented as “individuals who are creative do this.” Therefore, what the current models of creativity lack are an attempt to explain how individual differences in creativity impact creative performance and other outcomes of interest. Although scholars believe creative products, processes, and ideas can be generated by anyone, individuals vary in their ability to do so. Therefore, individual differences in creativity refers to, on average, how frequently and/or intensely individuals engage in (or have the ability to engage in) the creative process across a variety of problems (George & Zhou, 2001; Runco et al., 2001; Tierney et al., 1999).

The present study aims to begin the process of filling this gap by examining the effect of individual differences in creativity on non-task performance. There is much that we still do not know about the overall creative thought process and how individual differences in creativity influence the process and its outcomes. Despite this gap in knowledge, the last several decades have made great strides in increasing interest in and understanding of creativity and how it impacts the broader world. While not all agree on how to measure creativity (i.e., product versus process), scholars do agree that creativity should be defined as something that is novel and useful (Shalley & Zhou, 2008). Further, they agree that every individual has the ability to be creative to some extent, and whether or not they engage in the process is influenced by individual motivation and external influences such as the environment and state of the problem.

If every individual contains the ability to be creative, how is that ability used in the workplace? This is an important question to answer given many are heralding creativity as “a necessary requirement for organizational effectiveness” (Basadur, Taggar, & Pringle, 1999, p. 75) where “employee creativity and organizational innovation have emerged as prime factors in accomplishing company goals and, ultimately, in maintaining a profitable business” (Scott, 1995, p. 65). Despite such bold statements, creativity’s impact on individual and organizational outcomes is still not fully understood and remains a topic of organizational behavior research interest. How do individual differences in creativity affect individual and organizational performance? If there is a positive effect, how can an organization identify creative individuals in the selection process or foster a supportive work environment for creativity? Such questions have, and continue to be, explored in the organizational creativity research domain.

Organizational Creativity

Reflecting the importance of developing new organizational ideas, processes, and products, work on creativity in organizational contexts has proliferated over the past few decades (George, 2007; Shalley et al., 2004). After all, it is pivotal for organizational success to understand how individual employees and groups use their knowledge, skills, abilities, and experiences to respond creatively to the ever-changing demands of the work environment and economy. This is especially important in that although there are individual differences in creative potential, scholars believe creativity can be exerted by all employees in virtually all jobs and at all levels of the organization ultimately impacting organizational performance and survival (Amabile, 1996; Kanter, 1988;

Nystrom, 1990; Oldham & Cummings, 1996; Woodman, Sawyer, & Griffin, 1993). The commonly accepted definition of organizational creativity is the “creation of a valuable, useful new product, service, idea, procedure, or process by individuals working together in a complex social system” (Woodman et al., 1993, p. 293). From an individual differences perspective, employees vary in their willingness and ability to generate new and useful products, services, processes, and ideas to problems and/or opportunities in the workplace. Further, employees also vary in their ability to identify such needs and opportunity. Organizational creativity results from the complex, dynamic interactions between individuals and situations at all levels of the social organization where organizational factors can influence individual creativity or individual creativity can act as the building block of organizational creativity. Although research to date has focused on creativity’s relationship with mandated job performance (i.e., task performance) and overall organizational performance, research has not explored creativity’s relationship with non-task performance (i.e., citizenship and counterproductivity). While the focus of the present dissertation is to begin filling this gap by examining the effect individual differences in creativity has on non-task performance, I will briefly summarize what is known about organizational creativity and its effect on task performance below. It is important to review this work as it not only shows the immense interest and breadth of research being conducted in this domain, but it also highlights creativity’s impact in the workplace that has led to such strong desire amongst organizational leaders to increase its presence.

Predictors of organizational creativity. In an attempt to attract, promote, and retain a creative workforce, research on organizational creativity has focused on examining the individual and organizational factors that influence creativity in the workplace. Because novel and useful ideas, processes, and products are ultimately generated by an individual or group of individuals, many scholars have investigated what individual differences allow one individual to have more creative potential than another. Some scholars proposed cognitive capacities held the key to identifying and unlocking creative potential, others have explored personality, while still others look to the organizational context. Together, organizational research over the past few decades has shed significant light on both individual and organizational factors that influence creative thought and performance in the workplace.

Individual predictors. Extensive work has explored what makes one individual have more creative potential than others, with most studies focusing on creative cognition and the last decade witnessing extensive progress in understanding creative thought, or how individuals generate new ideas (Ward, Smith, & Finke, 1999). Evidence indicates that creative thought may involve two key cognitive capacities: conceptual combination (the ability to conceptually combine information allowing for new understanding) and idea generation (Ward & Kolomyts, 2010; Ward et al., 1999). However, for such processes to occur, an individual must first contain a sufficient amount of existing knowledge and properly identify and evaluate the problem (Cropley, 1999; Feldhusen, 1995; Jay & Perkins, 1997). In other words, the quality of creative

thought will be influenced by the extent of a person's knowledge and the manner in which it is accessed and combined.

Beyond exploring the underlying cognitive process, other scholars have explored personality's role in creativity. Feist (1998, 1999) proposed that a constellation of personality traits influence creativity by lowering behavioral thresholds. Although the specific traits that encompass the "creative personality" have not been solidified, extensive research has explored the relationship between creativity and the Five Factor Model of personality, also known as the Big 5. Of the Big 5 traits (i.e., agreeableness, conscientiousness, emotional stability, extraversion, openness), openness has shown the strongest relationship with creativity (John, Naumann, & Soto, 2008). Individuals high in openness are imaginative, curious, more flexible in absorbing and combining information and ideas, and have a higher need to seek out new experiences and perspectives which makes them prone to using creativity (Burch, Hemsley, Pavelis, & Corr, 2006; Dollinger, Urban, & James, 2004; Furnham, 1999; George & Zhou, 2001).

Beyond the Big 5, creativity scholars have also investigated creative self-efficacy, and more broadly self-confidence, as a component of the creative personality. Creative self-efficacy, or the extent to which employees believe they have the ability to produce creative work, is positively associated with creativity (Tierney & Farmer, 2002). When individuals are more self-confident and efficacious, they are more tolerant of ambiguity which also helps to enhance creative performance (Oldham & Cummings, 1996; Zhou & Oldham, 2001). Further, when individuals view themselves as creative (i.e., creative role identity), are high in positive affect (extent to which an individual

experiences positive moods), and are learning goal oriented (desire to develop the self), they engaged in higher levels of creativity (Amabile et al., 2005; Davis, 2009; Farmer, Tierney, & Kung-McIntyre, 2003; Hirst, van Knippenberg, & Zhou, 2009; VandeWalle, 1997).

Environmental predictors. Creative individuals are not creative in all work environments, however, indicating that creative performance is a product of more than just creative ability and personality. While the work environment cannot create a creative individual, it can influence the nature, motivation to engage in, and success of creative efforts. The workplace is a function of both the work context (e.g., job characteristics, physical environment) and the social environment (e.g., leadership, coworkers). After all, creativity is highest when an individual is engaged in complex, ambiguous, and not well-defined tasks, which place lower situational and operational constraints on creative performance (Amabile & Gryskiewicz, 1989; George & Zhou, 2001; Mumford, 2003; Oldham & Cummings, 1996; Tierney & Farmer, 2004). Evaluations and feedback can also influence an individual's creative performance. Controlling or judgmental evaluations and feedback tend to restrict creativity (Amabile, Goldfarb, & Brackfield, 1990; Syzmanski & Harkins, 1992; Zhou, 1998), whereas informational and developmental feedback facilitates creativity (Shalley, 1995; Zhou, 1998; Zhou & Oldham, 2001). This is not surprising given that creative individuals are high in learning goal orientation, and therefore seek information and development.

While the nature of the job can have a large impact on creative performance, the social environment also has an impact. Leadership style has a significant impact on

creative performance, where controlling leader behaviors reduce intrinsic motivation thereby reducing creativity. Transformational leadership behaviors, however, increase intrinsic motivation and are positively related to creativity (Shin & Zhou, 2003). The types of goals that top management teams assign also impact creativity. Naturally, when do-your-best or creativity goals are assigned, creativity tends to increase; when difficult or productivity goals are assigned, creativity tends to decrease (Shalley, 1991). Shalley argued that creativity goals help individuals focus and get motivated without the felt pressure of productivity goals. In fact, the presence of creative workers positively impacts others' creativity by gaining strategies and approaches that enable them to also be more creative (Shalley & Perry-Smith, 2001; Zhou, 2003).

Outcomes of organizational creativity. Because organizational creativity rarely examines individual differences in creative potential, most organizational creativity research examines creativity as an outcome rather than an antecedent. This is partly based on the difficulty in linking individual acts of creativity to broader organizational performance measures, along with the common assumption that all creative acts lead to positive outcomes and therefore it need not be empirically tested. Despite this, there is emerging research that has attempted to explore the individual and organizational outcomes of creativity. Similar to the predictors of organizational creativity, its outcomes or impact on individual and organizational performance have been examined.

Individual outcomes. Although research examining organizational creativity's outcomes has grown in the last decade, little known work to date has examined individual-level outcomes. Of the studies that can be found in the literature examining

individual performance outcomes, most examine creativity or creative performance in the educational sector. For example, some scholars have explored the relationship between creativity and academic performance. Measuring creativity through an Alternate Uses Test (i.e., divergent thinking test; Christensen, Guilford, Merrifield, & Wilson, 1960), Chamorro-Premuzic (2006) found a significant and positive relationship between creativity and student finals grades, even after personality was controlled for. Powers and Kaufman (2004) assessed creative personality utilizing the creativity scale from the International Personality Item Pool and found a positive relationship between creative personality and performance on the Graduate Record Examination (GRE). Beyond academic settings, Oldham and Cummings (1996) found supervisor-rated creativity was related to overall performance ratings based on work quantity, work quality, and amount of effort (Oldham & Cummings, 1996). Self-reported creativity is also not only positively related to performance ratings, but also individual insurance sales performance (Gong et al., 2009).

Individual-level creativity studies have also examined the affective outcomes (e.g., job satisfaction, stress) an individual may experience. Research has indicated that employees experience higher levels of job satisfaction, along with lower stress levels and turnover intentions when their creative ability was a good fit with an organization's demands for creativity (Gong et al., 2009; Livingstone, Nelson, & Barr, 1997; Nicholson & West, 1988; Shalley, Gilson, & Blum, 2000). For example, the creative activity of teachers, defined and measured as interests, hobbies, and activities in culturally valued areas such as art, music, and writing, is significantly related to teacher job satisfaction

(Milgram & Feldman, 1979). Further, self-reported creative behavior has even been positively linked to perceptions of inclusion and insider status (Kim, Hon, & Crant, 2009). While it is thought that such research findings might generalize to also include higher levels of job commitment, engagement, positive affect, and organizational citizenship behaviors, such relationships have yet to be tested (Gilson, 2008).

Organizational outcomes. Exploring the potential relationship between creativity and organizational-level outcomes is vital in making the argument that creativity is an important component of organizational success. Measuring the direct impact a creative idea, product, or process has on bottom-line earnings and overall performance is quite hard, however. To date, only one known study has successfully empirically examined the relationship between creativity and organizational performance. Tapping into the comic book industry, Taylor and Greve (2006) examined the relationship between individual and team innovation and subsequent commercially recognized value in comic books (organizational performance outcome). They found innovative comics with more commercial value were developed by multimember teams and teams with prior experience working together. Individual creators, however, were better at combining diverse knowledge in the creative process. While this study marks the first step in examining the direct impact of creative effort on organizational performance it is limited in two ways. First, the commercial value of a comic book was used as both a measure of a comic's innovativeness as well as a measure of organizational performance leading to concerns of contamination. While a list of the top 50 most innovative comic books generated by industry experts converged well with the price data, the innovativeness of

individual comic books was never measured. Second, Taylor and Greve examined innovation and not creativity. By limiting the study to innovation, or the implementation of a creative idea, there is no acknowledgement or examination of the underlying creative process or creative ideas that were never implemented.

Due to the challenge in linking creativity to broad organizational performance measures, some scholars have found success in linking creativity with other various forms of organizational success. For example, West and Anderson (1996) aimed to explore the extent to which group characteristics and processes predicted the creativity of multidisciplinary top management teams in hospitals. Based on lists provided by the management teams, meeting minutes, and meeting recordings, the ideas implemented and rejected by the teams were rated by experts on dimensions of magnitude, radicalness, and novelty. All ideas were also rated on their potential to impact administrative efficiency, patient care, and staff well-being. West and Anderson found a positive relationship between overall creativity and administrative efficiency. Gilson, Mathieu, Shalley, and Ruddy (2005) found a similar relationship between creativity and customer satisfaction. Gilson and colleagues examined the relationships between creativity, the use of standardized work practices, and effectiveness (measured as both performance and customer satisfaction). Measuring team creativity as the aggregate self-reported creative team environment in service technicians, they found creativity to be positively related to both team performance (aggregate construct of archival measures of machine reliability, response time, and parts expense) and customer satisfaction (as measured through customer satisfaction surveys for customers who had service

technicians visit). Creativity's significant effect on performance disappeared, however, when standardized work practices were high.

Despite these cases of success, however, far more research examining individual, group, and organizational outcomes of creativity is needed to better understand creativity's role and impact on organizational performance. Increased and impactful performance is, at the end of the day, one of the, if not the, most important goals of organizational leaders. But job performance is not a single unified construct; rather it is an overall summation of task performance and non-task performance (i.e., citizenship and counterproductive performance). While research examining the relationship between creativity and task performance is emerging and indicating a positive relationship, research examining the relationship between creativity and non-task performance is relatively non-existent. To truly get a complete picture of creativity's impact in the workplace, it is important to examine creativity's relationship with citizenship and counterproductive behavior.

Job Performance

The understanding of job performance is critically important to organizational effectiveness, and as such, has been a topic of immense research interest since the emergence of Industrial/Organizational Psychology as a field. In fact, in recent years it is widely agreed upon that job performance is not one large unitary construct, but rather multidimensional in nature (Campbell, 1990; Murphy, 1989; Rotundo & Sackett, 2002; Viswesvaran & Ones, 2000). While varying models of the performance criterion domain exist proposing varying numbers of dimensions, three distinct groups of behaviors often

emerge: task performance, citizenship performance, and counterproductive performance (Rotundo & Sackett, 2002). The most commonly researched and measured of the three, task performance, is defined as the accomplishment of tasks (i.e., responsibilities and duties) associated with a given job and job description (Campbell, 1990; Murphy, 1989). While research in this area has added great knowledge to the criterion domain and organizational practices (e.g., cognitive ability is the strongest predictor of task performance; Schmidt & Hunter, 1998, 2004), there has been a push in recent years to explore the multitude of organizational behaviors that do not fall into this definition - citizenship and counterproductive performance.

Citizenship performance. Although researchers have always been interested in examining formally prescribed job performance, increasing research attention has been paid to prosocial behaviors, or behaviors that are more spontaneous and volitional than task performance (Bateman & Organ, 1983; Organ & Konovsky, 1989; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Since their initial appearance in research and organizational theory, these voluntary behaviors have been labeled and defined in numerous different ways. For instance, these behaviors have been labeled as prosocial organizational behavior (Brief & Motowidlo, 1986), extra-role behavior (Van Dyne & LePine, 1998), contextual performance (Borman & Motowidlo, 1993), and organizational citizenship behavior (OCB; Organ, 1988). Although they go by different construct names, they all describe and encompass very similar workplace behaviors. Due to their similarity in definition and research findings, from this point on these prosocial work behaviors will be referred to as OCBs.

Organ (1988) proposed the construct OCB to encompass these “beyond role behaviors” and defined it as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promotes effective functioning of the organization” (p. 4). The boundary between extra-role and in-role behavior is often blurry and not clearly defined, however, so almost a decade later, Organ (1997) refined his original definition of OCB to “the performance that supports the social and psychological environment in which task performance takes place” (p. 95) to acknowledge that OCBs can be formally rewarded by the organization and therefore may not be entirely voluntary. Borman (2004) took a similar perspective

and defined OCB as “behaviors that go beyond task performance and technical proficiency, instead supporting the organizational, social, and psychological context that serves as the critical catalyst for tasks to be accomplished” (p. 238).

Dimensions of OCB. Similar to the broader job performance domain it falls under, OCB is also thought of as a multi-dimensional construct. While its multi-dimensionality is widely accepted, how many dimensions exist is still debated. In fact, Podsakoff and colleagues (2000) identified more than 30 different dimensions throughout the research literature domain. One of the more commonly cited models of OCB is Organ’s (1988, 1994) five dimensions containing altruism, courtesy, sportsmanship, conscientiousness, and civic virtue. Organ (1997) later proposed combining altruism and courtesy into one dimension he labeled helping behavior. He truly felt helping behavior, along with civic virtue, sportsmanship, and conscientiousness were what kept the social system running smoothly.

Not everyone agrees with Organ’s five dimensions, however. Smith, Organ, and Near (1983) proposed two dimensions (altruism and general compliance), Graham (1989) proposed four dimensions (interpersonal helping, individual initiative, personal industry, and loyal boosterism), Van Dyne, Graham, and Dienesch (1994) proposed three (loyalty, obedience, and participation), and most recently Podsakoff and colleagues (2000) identified seven dimensions (helping, sportsmanship, organizational loyalty, compliance, civic virtue, self-development, and individual initiative).

Due to mixed research findings, a general consensus of which model is preferable or more fitting to the OCB performance domain has not been reached.

Although these models contain varying numbers of dimensions and names, they all have similarities in regards to the overall types of behaviors that the construct encompasses: prosocial and proactive. In line with Organ's (1997) definition of OCB as "contributions to the maintenance and enhancement of the social and psychological context that supports task performance" (p. 91), prosocial and proactive behaviors individually represent the maintenance and enhancement of the work context. Prosocial (i.e., helping or compliant) behaviors are promotive and affiliative behaviors designed to improve task performance by *maintaining* the social context at work (Choi, 2007). Such behaviors include helping a coworker meet a deadline or volunteering for a task team. Proactive, or change-oriented behaviors, are promotive but challenging behaviors designed to make constructive changes in the work and task environment that *enhance* performance. These behaviors are likely to disrupt social relationships, however, by challenging the status quo of the workplace (Choi, 2007; LePine & Van Dyne, 1998). Such behaviors include voice, task revision, and making suggestions.

While the division of OCB into prosocial and proactive categories is helpful in describing citizenship behavior as a whole, measures of OCB are based on varying models and dimensions. To avoid confusion between OCB measures and models, Williams and Anderson (1991) recommended that researchers focus on the target of citizenship behavior rather than the specific dimension or type. As such, they proposed that prosocial behaviors could be broken down into behaviors that are targeted at helping the organization (OCB-O; e.g., compliance) or individuals (OCB-I; e.g., helping) within the organization. Organizational OCB includes behaviors such as maintaining order,

following informal rules, and promoting the organization; OCB-I includes behaviors that are interpersonal in nature such as helping others meet task deadlines and taking personal interest in other employees. Change-oriented OCB (OCB-CH) has been proposed as a third target category since the behaviors are targeted at creating change rather than specifically helping the organization or an individual working in it, although both may benefit from the change (LePine & Van Dyne, 2001; Morrison & Phelps, 1999). Research has found OCB-I, OCB-O, and OCB-CH to be correlated but distinct factors, all three of which are empirically distinct from task performance (Borman & Motowidlo, 1997; Chiaburu, Oh, Berry, Li, & Gardner, 2011; Williams & Anderson, 1991).

Outcomes and predictors of OCB. Available research supports the logical assumption that prosocial and proactive behaviors are beneficial to an organization and those working in it. OCB has been linked to reward recommendations, reward allocations, and job performance ratings (Podsakoff, Whiting, Podsakoff, & Blume, 2009), accounting for up to 42.90% of the variance in managerial performance evaluations (Podsakoff et al., 2000). Further, OCB has been shown to contribute to creating a positive work environment, helping to coordinate and stabilize performance while decreasing individual withdrawal behaviors (Podsakoff & MacKenzie, 1997; Podsakoff et al., 2000; Podsakoff et al., 2009). Based on such findings, it is not surprising that organizational leaders are interested in increasing OCB in the workplace. As a result, a large portion of OCB research has been devoted to identifying the individual and organizational predictors of OCB.

Scholars have identified both environmental and individual predictors of OCB. Environmental factors such as organizational justice or fairness (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Hoffman, Blair, Meriac, & Woehr, 2007; Organ & Ryan, 1995), supportive leadership (LePine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Podsakoff et al., 2000), and leader-member exchange (Graen & Uhl-Bien, 1995; Hackett, Farh, Song, & Lapierre, 2003; Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Wang, Law, Hackett, Wang, & Chen, 2005) have all been found to positively predict engagement in OCB. Employees also bring unique individual differences to the workplace that also influence their willingness and ability to engage in OCB. Conscientiousness, openness, and agreeableness are the strongest personality correlates

of OCB (Chiaburu et al., 2011; Ilies, Fulmer, Spitzmuller, & Johnson, 2009; LePine et al., 2002; Organ & Ryan, 1995). Beyond personality, positive affect (Dalal, 2005; Kaplan, Bradley, Luchman, & Haynes, 2009, Organ & Ryan, 1995) and job satisfaction (Hoffman et al., 2007; LePine et al., 2002; Organ & Ryan, 1995) have also been identified as positive predictors of OCB.

While this list is not exhaustive of all individual and environmental predictors of OCB examined in the literature, it is a brief summary of the most commonly measured and widely accepted predictors in the domain. Many have long proposed since OCB's initial theoretical and empirical development that individuals who are most likely to engage in OCB are those who are generally happy, hard-working, caring, satisfied, and working in a supportive and fair environment. While such findings have been very helpful in adding to the understanding of OCB, one potentially influential predictor that has gone unnoticed is that of creativity. Just as organizations are increasingly looking to gauge applicants' willingness to engage in OCB in the selection process, they are also looking to identify creative applicants as well. While creativity and OCB are two unique variables, they share commonalities and as such, it may be possible that creativity is another unique predictor of OCB.

Creativity and OCB. To date organizational creativity research has focused on creativity's relationship with task performance, but there is reason to believe that creativity may also be related to citizenship performance. As previously stated, openness is the strongest personality correlate of creativity. This is not surprising given openness reflects distinctive patterns of perception and thinking that aid creativity (Bellah, Bellah,

& Johnson, 2003; McCrae & Costa, 1997). In other words, individuals differing in openness differ in their ability to generate ideas that are potentially applicable to any given problem or situation or even detect opportunities for creative success (Amabile, 1996; Runco, 1991). Openness is also one of the strongest personality correlates of OCB (Chiaburu et al., 2011). Individuals high in openness are broad-minded, flexible, and seek new experiences, characteristics that may make them more inclined to step outside of their prescribed work role and engage in prosocial and proactive behaviors that benefit the organization or an individual in it (OCB). Therefore, it may be that individuals high in openness may in part be relying on creativity to seek out new experiences and to both absorb and combine ideas in order to find and engage in citizenship behaviors.

Second, Runco (2010) argues that creativity is merely a tool that can be applied in various ways. Amabile (1996) proposed that an organizationally creative individual possesses domain-relevant skills (e.g., technical knowledge, skills, and expertise), creativity-relevant processes (i.e., openness, risk-taking, divergent thinking), and intrinsic task motivation. Therefore, domain-relevant skills, creativity-relevant processes, and intrinsic motivation all encompass an overall creativity toolbox that an individual possesses that they can choose to use in a variety of ways, regardless of its final effect or value. The general creative process (or toolbox) involves the identification of a problem or opportunity, gathering information about the problem, generating ideas to address the problem, and finally evaluation of these ideas. Therefore, it may be possible that the more creative an individual is, the better able they are to engage in the

creative process. Further, this ability is not limited to task performance; the creative process allows individuals to generate ideas that can be used in the way the individual chooses, which might include citizenship behavior. A creative employee may see more problems or opportunity for OCB, gather more important information about the problem, develop more ideas on how they can help, and evaluate their ideas better in comparison to a less creative employee.

Last, creativity is inherently behavior that deviates from the norm. In other words, “Creativity is always original, and originality requires novelty, uniqueness, unusualness, or (statistically speaking) deviance” (Runco, 2010, p. 17). Citizenship behavior is also deviant in nature in that it requires an individual to engage in behavior that is not part of their prescribed task performance. As such, a sense of risk-taking or challenge underlies engagement in both creativity and OCB (Amabile, 1996; Choi, 2007; LePine & Van Dyne, 1998). Engaging in behavior that is “outside the box” or outside one’s prescribed role is risky in that its outcomes and rewards are unknown. Thus, there is indirect evidence suggesting there may be a relationship between creativity and OCB; therefore I propose the following:

Hypothesis 1: Creativity will be positively related to OCB such that individuals high in creativity will also engage in more OCB.

Based on creativity’s proactive nature, it may be possible for its relationship with OCB to vary amongst the three OCB dimensions. As mentioned earlier, OCB can either be prosocial (e.g., helping and compliance; OCB-I and OCB-O) or proactive (e.g., challenging; OCB-CH) in nature. Change-oriented OCBs are promotive but challenging

behaviors, intended to make constructive changes in the work and task environment that *enhance* performance (Choi, 2007; LePine & Van Dyne, 1998). In other words, similar to creativity, OCB-CH is inherently risky and challenging, whereas prosocial OCBs are less so. Further, the creative process is often referenced in many definitions of OCB-CH. For example, scholars have labeled OCB-CH as innovative behavior (Scott & Bruce, 1994), whereas Podsakoff and colleagues (2000) defined OCB-CH as “voluntary acts of creativity and innovation designed to improve one’s task or the organization’s performance” (p. 524). Based on similar processes and definitions, it is plausible that of the three dimensions of OCB, creativity is more strongly related to proactive OCBs than prosocial OCBs. Therefore, the following is proposed:

Hypothesis 2: Creativity will have a stronger positive relationship with OCB-CH than OCB-I or OCB-O.

Counterproductive work behavior. Although citizenship behaviors are prosocial behaviors that benefit the organization, not all non-task work behaviors can be said to enhance organizational functioning; it should be recognized that this creative effort could also be used for selfish or negative means (James et al., 1999). As researchers make a push for the use of creativity measures in high stakes selection (e.g., college admittance, employee selection; Burch et al., 2008; Hunter et al., 2012; Wellman, 2010) it is important to address the potential dark side to creativity in the workplace.

Just as creativity may be used for engaging in more citizenship behaviors, creative employees may also use their creativity to engage in counterproductive

behaviors. Whether it is due to an increase in visibility (e.g., media coverage of workplace violence) or more subtle economic influences (e.g., seeking justice in times of uncertainty and downsizing), negative workplace behavior has become an increasingly popular research topic among organizational researchers (Bowling & Gruys, 2010; Penney & Spector, 2005). Since its initial appearance in research and organizational theory, however, these negative behaviors have been given a multitude of different names. For example, the broad factor covering the range of negative workplace behaviors has been labeled counterproductive work behavior (Fox, Spector, & Miles, 2001), workplace deviance (Berry, Ones, & Sackett, 2007; Robinson & Bennett, 1995), and organizational delinquency (Hogan & Hogan, 1989), whereas specific forms of negative behavior have been labeled organization-motivated aggression (O’Leary-Kelly, Griffin, & Glew, 1996), retaliation (Skarlicki & Folger, 1997), bullying (Adams & Crawford, 1992), incivility (Andersson & Pearson, 1999), aggression (Neuman & Baron, 1996, 2005), mobbing (Leymann, 1990), antisocial behavior (Giacalone & Greenberg, 1997), abusive supervision (Tepper, 2000), and social undermining (Duffy, Ganster, & Pagon, 2002). Unfortunately this proliferation of terms has led to some confusion in the literature, sometimes leading to fragmented and disjointed streams of research. Rather than focus on one specific type, the present paper aims to explore engagement in a broad range of negative work behaviors and thus from this point on will refer to these negative behaviors as counterproductive work behaviors (CWBs).

CWB is commonly defined as “voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its

members, or both” (Robinson & Bennett, 1995, p. 556). Spector and Fox (2005), however, felt the definition should be clarified to emphasize the outcomes of behavior where CWBs are “volitional acts that *harm* or are *intended to harm* organizations or people in organizations” (emphasis added, p. 151). Thus, according to Spector and Fox, CWB results from willful employee choices intending to create harm. While scholars still disagree whether or not outcomes should be included in the definition of CWB, what they do agree upon is that CWB is voluntary and intentional.

With such a broad definition, a wide variety of behaviors fall under the CWB umbrella term ranging from abusive and uncivil treatment of others to property damage and theft. Due to the stark differences in CWB, many scholars have focused their research on individual types of deviant behavior. Others note, however, the organizational need for understanding the broader CWB construct (e.g., personnel selection) and have focused their work on such. While both lines of research have been fruitful, it is beneficial to understand how they fit together for a more comprehensive understanding of CWB.

Dimensions of CWB. In an attempt to understand how the various lines of CWB research fit together, many scholars have examined the dimensionality of CWB, proposing various factorial structures. Robinson and Bennett (1995) utilized a multidimensional scaling (MDS) technique. Based on a list of deviant workplace behaviors developed by a separate sample, participants rated how similar or different each deviant behavior was from a target behavior. Robinson and Bennett then utilized Torgeson’s (1952) metric MDS analysis to create visual configurations of the statements

based on their perceived differences. A two-dimensional configuration was found to be the most accurate description of the data where multiple regression analyses suggested the relationships between the attributes and behaviors were best labeled (a) interpersonal versus organizational and (b) minor versus serious. Crossing the two dimensions yields four quadrants: production deviance (minor behaviors targeting the organization; e.g., wasting resources, leaving early), property deviance (serious behaviors targeted at the organization, e.g., theft, sabotage), political deviance (minor interpersonal behaviors, e.g., gossiping, favoritism), and personal aggression (serious interpersonal behaviors, e.g., sexual harassment, verbal abuse, Robinson & Bennett, 1995). Noting the severity dimension (i.e., minor versus serious) was a more quantitative distinction rather than a qualitative one and therefore did not reflect two different types of CWB, Bennett and Robinson (2000) proposed a two-factor model of workplace deviance which encompassed interpersonal CWB (CWB-I) and organizational CWB (CWB-O), both of which include the minor and serious forms of deviant behaviors. The importance of making the distinction between person and organization targets of CWB has been supported by research suggesting that certain predictors may be more useful in predicting CWB directed at one target over the other (Berry et al., 2007).

The person versus organization target distinction has become popular in the CWB literature based on its intuitive appeal and the development, validation, and publication of a self-report CWB measure with separate CWB-I and CWB-O factors (Bennett & Robinson, 2000). Spector and colleagues (2006) question the use of this distinction, however, arguing that such a simple distinction may obscure CWB's

relationships with other variables and underlying motivational systems since drastically different behaviors are lumped together. A factor analysis of the Counterproductive Work Behavior Checklist revealed five factors: (a) abuse (e.g., making threats, undermining others' work), (b) production deviance (e.g., purposely performing work tasks ineffectively), (c) sabotage (e.g., destroying property), (d) theft, and (e) withdrawal (e.g., arriving late, absenteeism; Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006). These five factors can also be further mapped onto CWB-I and CWB-O if target of the behaviors is relevant as well. As such, several CWB scholars have proposed a hierarchical model of CWB with a general counterproductivity factor at the top, group factors (e.g., CWB-I versus CWB-O) below this general factor, and specific behavior domains (e.g., theft, abuse) below the group factors (Carpenter & Berry, in press; Sackett, 2002). This broader hierarchical understanding allows researchers and practitioners alike to focus at different levels for a broader and deeper understanding of CWB's antecedents and outcomes.

Outcomes and predictors of CWB. It is estimated that 33 to 75 percent of all employees engage in CWB at some point in their career (Robinson & Bennett, 1995). In the United States alone, it is estimated that 2.8 million productive workdays are lost due to absenteeism (Ones & Dilchert, 2013) and theft and fraud cost businesses up to \$50 billion annually (Coffin, 2003). CWBs do not just affect the organization; being a target of CWB has been linked to reduced psychological health and well-being (e.g., stress, depression, burnout; Chang & Lyons, 2012; Duffy, Ganster, Shaw, Johnson, & Pagon, 2006; Lim & Lee, 2011; Robinson, Wang, & Kiewitz, 2014; Sliter, Pui, Sliter, & Jex,

2011), decreased job satisfaction and commitment (Duffy et al., 2006; LeBlanc & Kelloway, 2002; Miner-Rubino & Cortina, 2007), and increased turnover intentions (Duffy et al., 2006; Lim & Lee, 2011).

With CWBs proving to be a relatively large cost to organizations, it is not surprising that many scholars have focused their energies on identifying predictors of CWB. Environmental factors such as organizational justice or fairness (Berry et al., 2007; Berry, Carpenter, & Barratt, 2012; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Dalal, 2005), interpersonal conflict (Andersson & Pearson, 1999; Spector & Jex, 1998), and organizational constraints (Spector & Jex, 1998) have all been significantly linked to engagement in CWB. Individual differences in personality (i.e., conscientiousness, agreeableness, neuroticism, narcissism; Berry et al., 2012; Berry et al., 2007; Bolton, Becker, & Barber, 2010; Hershcovis et al., 2007; Penney & Spector, 2002), negative affectivity (Berry et al., 2012; Dalal, 2005; Hershcovis et al., 2007), and job satisfaction (Dalal, 2005) have also been identified as significant predictors.

While this list is not exhaustive of all individual and environmental predictors of CWB examined in the literature, it is a brief summary of the most commonly measured and widely accepted predictors in the domain. Since its first conception, many have intuitively believed that individuals most likely to engage in CWB are those that are generally angry, unhappy, and egocentric. Meta-analytic work has supported these general notions where individuals with a general negative personality and affect, combined with low levels of job satisfaction, are those most likely to engage in negative workplace behaviors of varying form and intensity. But “bad” employees are not the

only individuals to perform CWBs; the everyday worker can also be influenced by and react to varying environmental influences to engage in negative behavior. In fact, the creative employee might be the most equipped to do so, warranting research to examine the relationship between creativity and CWB.

Creativity and CWB. When one examines creativity as an outcome, it is not intuitive to conclude that creativity should have any relationship with CWB. After all, the definition of creativity is the generation of ideas about products, processes, services or procedures that are novel and potentially useful to the organization (Amabile, 1996; Shalley et al., 2004). Therefore, if an idea is creative it must not only be novel, it must also be useful. This definition runs counter to the definition of CWB – CWB is performed with the intention of harming the organization or individuals working in it which is anything but useful. However, the term useful is a subjective one. What is useful to one individual can be either useless or even harmful to another (e.g., another employee, the organization; James & Taylor, 2010). For example, an employee who devises a new way of stealing from a company that will go undetected is very beneficial to that creative employee but not the broader organization. Therefore, if engaging in a CWB requires relatively novel means and is useful (or desirable) to the actor, then an act of CWB can meet the defining criteria of creativity.

When viewed as a process or tool, creativity itself is not inherently good or bad, but it can be used for good and bad intentions (Runco, 2007, 2010) making it more plausible that a relationship may exist between creativity and CWB. In other words, a creative individual could use their creative ability for bad intentions (CWB) just as

equally as they could good intentions (OCB). Although related, OCB and CWB are two distinct constructs rather than behaviors on a single continuum (Sackett, Berry, Wiemann, & Laczó, 2006; Dalal, 2005); therefore, an individual is able to engage in both OCB and CWB allowing for a potential relationship between creativity and CWB to exist separate from the potential relationship between creativity and OCB. Because creative thinking and ideas can lead to negative ideas, if these negative ideas are pursued and implemented in organizations, the resulting behaviors and products can be described as negative workplace behaviors, or CWB. After all, just like creativity and OCB (Runco, 2010), CWBs are active and volitional behaviors that deviate from the norm (Spector & Fox, 2010), requiring an individual to engage in risk-taking behavior that is beyond task performance and organizational norms (i.e., risk-taking; Henle, 2005). Therefore, what makes a creative outcome good or bad depends on the underlying goal of the actor.

Although the relationship between creativity and CWB has not been explored, theoretical and empirical work examining creativity's potential negative side and social impact has grown. For instance, scholars have theorized how malevolent creativity (creativity intended to harm others) may be used in breaking the law and terrorism (Cropley & Cropley, 2011; Cropley, Kaufman, & Cropley, 2008). After all, the most successful criminals and terrorists are "resourceful offenders" (Ekblom & Tilley, 2000, p. 376) and share several characteristics with creative artists including the ability to scan the environment and spot and exploit a favorable situation, use divergent thinking, use risky strategies, willingly challenge the status quo, and believe they can succeed in their

goals (Cropley & Cropley, 2011; Julius, 2002). Thankfully the average population does not consist of criminals and terrorists, but creativity can result in negative outcomes regardless of whether harm was intended or not. For example, employees stealing from the company may only wish to benefit themselves rather than harm the organization, yet their actions do hurt the organization (Cropley et al., 2008). Therefore, is there a hidden cost of creativity in the general population?

While research is still emerging, the current empirical work suggests that creativity might produce negative effects by leading creative individuals to engage in more dishonest behavior (Gino & Ariely, 2012). More specifically, Gino and Ariely placed participants (both students and working adults) in ethical dilemmas where they had the opportunity to cheat by overstating their performance on various problem-solving tasks (and therefore earn more money). Their analyses revealed that the more creative an individual was (measured via a self-report creative personality scale), the more dishonest they were. These results held consistent even when the researchers temporarily activated a creative mindset through a scrambled sentence test. Further, they provided evidence that creativity (whether dispositional or primed) increased dishonesty by increasing an individual's ability to generate reasons to justify their unethical behavior (i.e., increased moral flexibility; Gino & Ariely, 2012). As a result, the authors warn that being able to generate several original justifications for one's unethical actions via creativity and divergent thinking may lead people to feel licensed to lie and cheat.

Just because creativity may increase an individual's dishonesty and moral flexibility, does it mean creative employees will be more dishonest at work? In other

words, do Gino and Ariely's results generalize to organizational settings and organizational behavior? To date, no empirical work has examined this question. However, James and colleagues (1999) did theorize and develop a model that summarized their views of creativity's influences and outcomes in organizational settings. They theorized that creativity resulted in positive impact on task performance and affective and health outcomes when the underlying goal of the actor was positive. However, they went beyond previous research and hypothesized that creativity could also lead to increased theft, sabotage, social attacks and exploitation, and undermining of goals and policies when the actors goals were negative. While the authors did not explicitly tie their model to CWBs, all of the negative outcomes of creativity they proposed are examples of behaviors that fall under the umbrella definition of CWB. Therefore, creativity may be positively related to CWB.

Beyond James and colleagues' (1999) hypothesized model of organizational outcomes of creativity, there are other reasons to believe creativity may be related to CWB. Just as creativity and OCB share common personality correlates, so do creativity and CWB. Numerous meta-analyses have found the Big Five personality factors of openness and conscientiousness to have the strongest relationship with creativity (Feist, 1998); conscientiousness has also been found to be a strong personality correlate of CWB as well (Berry et al., 2007; Colbert, Mount, Harter, Witt, & Barrick, 2004; Dalal, 2005; Hershcovis et al., 2007). Individuals high in conscientiousness are organized, adhere to rules, and control their impulses, which logically explain why it is negatively correlated with both creativity and CWB. Further, initial research by Bolton and

colleagues (2010) reveals there may be a relationship between openness and various types of counterproductive behavior. More specifically, they found openness to experience to be a significant predictor of sabotage behavior. This relationship is highly plausible since individuals high in openness are broad-minded, flexible, and seek new experiences, which are characteristics that may make them more inclined to deviate from the norm and engage in deviant behavior (e.g., creativity, CWB). After all, deviant behavior requires an individual to take risks and sometimes break the rules. It may even be possible that individuals high in openness may be relying on creativity to seek out opportunities to engage in CWB. Based on such indirect evidence suggesting a relationship between creativity and CWB, I propose the following:

Hypothesis 3: Creativity will be positively related to CWB such that individuals high in creativity will also engage in more CWB.

Although disagreement exists regarding how CWB should be conceptualized and examined (i.e., one construct, divided by target, or divided by behavioral dimensions), researchers do agree that CWB is typically covert due to its unethical and often illegal nature. In fact, in an attempt to maximize a CWB's harmful effect while minimizing the potential of punishment for such behavior, research has shown individuals are more likely to engage in passive forms of CWB than active and direct CWB (Baron & Neuman, 1996; Bjorkqvist, Osterman, & Lagerspetz, 1994; Fox et al., 2001). While research has shown the CWB rates vary based on its type and intended target, does creativity's hypothesized relationship with CWB also vary according to type and target?

As previously mentioned, many scholars divide CWB according to whether it is targeted at the organization or an individual(s) in the organization (Robinson & Bennett, 1995; Bennett & Robinson, 2000). Berry et al.'s (2007) meta-analysis found agreeableness was more predictive of CWB-I while conscientiousness was more predictive of CWB-O. In other words, individuals low in agreeableness engage in more CWB targeted at individuals, and individuals low in conscientiousness engage in more CWB targeted at the organization. Conscientiousness is also one of the strongest personality correlates of creativity (Feist, 1998). Due to conscientiousness's negative correlation with both creativity and CWB (and more specifically CWB-O), it may be possible that individuals low in conscientiousness (and therefore more impulsive and less bound by organizational rules and norms) engage in more creativity targeted at achieving CWB-O.

Beyond similar correlations with conscientiousness, it is logical to presume creativity will have a stronger relationship with CWB-O due to its more secretive nature (Berry et al., 2012; Oh, Charlier, Mount, & Berry, 2014). Individuals typically engage in CWB in order to maximize benefits/rewards for themselves while minimizing threats of punishment. Because CWB-I is targeted at individuals, it is more detectable than organizationally targeted behaviors, resulting in an increase risk for punishment. Therefore, the following is proposed:

Hypothesis 4: Creativity will have a stronger positive relationship with CWB-O than CWB-I.

Although some scholars make the distinction between individually- and organizationally-targeted CWB, others propose to examine CWB according to varying types or groups of similar behaviors. Bolton and colleagues' (2010) examined the relationship between the Big Five personality traits and Spector and colleagues' (2006) five dimensions of CWB (abuse, production deviance, sabotage, theft, and withdrawal). Their study found that all five personality traits were significantly related to at least one behavioral dimension of CWB, where openness was significantly correlated to sabotage and conscientiousness was significantly correlated with sabotage and theft. Therefore, if creativity and CWB are related, due to their common personality correlates of openness and conscientiousness, the relationship may differ based on the type of CWB examined. This makes sense in that most individuals seek to maximize their gains and minimize their losses. Therefore, CWB is typically covert in nature so as to avoid getting caught and face potential punishment or termination and it would be most beneficial for creative individuals to channel their creative energy into developing creative, covert negative behaviors that have maximum personal gains. To this effect, of the five types of CWB identified by Spector and colleagues (2006), sabotage (defacing or destroying physical property belonging to the organization) and theft (stealing money or property) tend to be the most covert with less of a trail back to the actor. Therefore, I propose the following:

Hypothesis 5: Creativity will have a stronger positive relationship with (a) sabotage and (b) theft than abuse, production deviance, and withdrawal.

Environmental Influences on Creativity's Relationship with Non-task Performance

Research in organizational behavior has made substantial progress in accounting for performance variance in terms of ability and motivational variables. Despite such progress, there is still performance variance unaccounted for. By specifying and measuring additional variables that directly or indirectly affect performance, one can create a more complete understanding of performance in the workplace. While the focus of this dissertation so far has been on creativity's influence on non-task performance variance, one must not overlook the immediate work environment and its influence on the translation of creativity into non-task performance. After all, the environmental context provides "situational opportunities and constraints that affect the occurrence and meaning of organizational behavior as well as functional relationships between variables" (Johns, 2006, p. 386).

Organizational constraints. Although numerous researchers noted the importance of examining situational influences on employee behavior, it was not until Campbell, Dunnette, Lawler, and Weick's (1970) model of job performance that organizational constraints were incorporated in theoretical conceptualizations of employee behavior and performance. In many work situations, employees who are willing and able to successfully accomplish a task are inhibited or prevented from doing so due to situational characteristics beyond their control, otherwise known as organizational constraints (Peters & O'Connor, 1980; Peters, O'Connor, & Eulberg, 1985). Situational characteristics refer to a "set of circumstances that is likely to influence the behavior of at least some individuals, and that is likely to reoccur

repeatedly in essentially the same form” (Frederiksen, Jensen, & Beaton, 1972, p. 22). Further, constraints are regarded as *work factors* that inhibit performance and not *persons*. In other words, organizational constraints focus on the situation rather than the agent responsible for the presence of that situation. It is assumed that performance is inhibited by the failure to obtain a needed task-relevant resource regardless of who is responsible for the resource’s availability (Peters et al., 1985).

Although recognized as having an impact in models of performance, no noticeable progress was made in developing taxonomies of organizational constraints for close to a decade; instead, possible constraints were often chosen based on their availability and perceived relevance rather than on theory (Villanova & Roman, 1993). Recognizing this gap in the literature, Peters and O’Connor (1980) presented the first conceptual framework of organizational constraints. They asked 62 working adults in a variety of jobs to provide accounts of bad performance caused by situational factors. Their responses were then content analyzed which identified eight resource variables necessary for task accomplishment across jobs and work settings: job-related information, tools and equipment, materials and supplies, budgetary support, required service and help from others, task preparation, time availability, and work environment. Villanova and Roman’s (1993) meta-analysis on organizational constraints introduced three more necessary resources frequently examined: scheduling of activities, transportation, and job-relevant authority. Because these eleven resources are necessary for task accomplishment, when they are not present, inadequate in quantity, or inadequate in quality, they represent organizational constraints. Since the initial

taxonomy was proposed, these eleven resources have emerged as the most widely accepted representation of organizational constraints in the workplace (Villanova & Roman, 1993), and are the basis of the most commonly used organizational constraint scale (Spector & Jex, 1998).

As research interest in organizational constraints has grown, several hypotheses have been proposed attempting to explain how constraints impact behavior in the workplace. First, as made clear in their definition, organizational constraints are hypothesized to reduce task performance by hindering the use of one's abilities and motivation (Peters & O'Connor, 1980). Although early studies were inconclusive, a recent meta-analysis including a far greater number of studies has supported the negative relationship where organizational constraints were found to have a moderate mean correlation with task performance ($r = -.24$; Gilboa, Shirom, Fried, & Cooper, 2008).

Based on organizational constraints' negative impact on observed task performance, the observed variance in employee performance is also hypothesized to be more restricted in high-constraint work settings than low-constraint work settings (Peters et al., 1985). Because constraints are thought to lower the level of performance possible, they should reduce the performance of individuals high in ability and motivation more than individuals low in ability and motivation (Schneider, 1975, 1978). In other words, employees who lack ability or motivation are not as affected by organizational constraints because their level of performance might not have ever exceeded the ceiling created by the constraints. High ability individuals, however, are restricted in their observed performance, lowering the ceiling of performance. Low-constraint work

settings do not present the same challenges so employees high in ability and motivation should be able to perform up to their capabilities resulting in no restriction in performance variance.

This restriction in performance variance is of great concern not only because of its direct impact on observed performance, but also because it may attenuate or change the direction of the correlation between observed task performance and other variables believed to correlate with individual performance (e.g., satisfaction, abilities; Peters & O'Connor, 1980). In other words, organizational constraints are believed to interact with relevant individual differences in ability and motivation to indirectly impact task performance (Peters et al., 1985). For example, because constraints are thought to impact high performers more than low performers, it is hypothesized that task performance is better predicted by task-relevant individual differences in low-constraint work settings than high-constraint work settings. In high-constraint work settings, severe constraints act to interfere with the translation of abilities into performance. Such hypothesized interaction effects have been supported by laboratory, experimental simulation, and field studies (Best, Stapleton, & Downey, 2005; Jex, Adams, Bachrach, & Sorenson, 2003; O'Connor, Peters, & Segovis, 1983; Peters, Chassie, Lindholm, O'Connor, & Kline, 1982).

However, organizational constraints impact more than just task performance; constraints also negatively impact affective responses (Peters & O'Connor, 1980; Peters et al., 1985). Psychological research has historically shown that people experience dissatisfaction and frustration when they are prevented from attaining desired goals.

Successful task performance is seen as a goal for many employees, or at least as a means for attaining desired outcomes, so any obstacle in attaining performance goals is likely to increase dissatisfaction at work. Even though severe organizational constraints are more dissatisfying and frustrating to individuals, even weak constraints were hypothesized to increase negative affective outcomes because the mere presence of obstacles increases the personal “costs” associated with personal goal attainment (Spector, 1978). Research has shown that constraints not only negatively impact affective outcomes, but they also interact with relevant individual differences to indirectly impact affective outcomes (Peters, O’Connor, & Rudolf, 1980). In other words, relevant individual differences better predict affective outcomes in low-constraint work settings where organizational constraints do not have as strong of an impact on goal attainment.

Employees likely cannot emotionally, mentally, or physically sustain extended periods of time feeling dissatisfied and frustrated at work, however. Instead, individuals might seek means of eliminating these negative affective reactions by either withdrawing from the situation, or, if possible, by changing it. Due to affective reactions’ known impact on withdrawal intentions and behavior (Mobley, Griffeth, Hand, & Meglino, 1979), initial organizational constraint work focused on its direct and indirect (through interactions with relevant individual differences) impact on withdrawal (Peters et al., 1985). Similar to task performance, organizational constraints were hypothesized to increase withdrawal intentions and behavior. Further, constraints were posited as having a stronger impact on employees higher in task-relevant abilities and motivation than those lower in ability and motivation (Peters et al., 1985). Research has supported both

the direct effect (Spector & Jex, 1998) and indirect effect (O'Connor et al., 1984) of organizational constraints on withdrawal intentions and behaviors.

As mentioned above, however, not all individuals withdraw from the situation when dissatisfied and frustrated by organizational constraints; some individuals engage in active behavior targeted at changing the situation. One such behavior is CWB which may be the response to job stressors (Fox et al., 2001; Chen & Spector, 1992; Spector, 1975; Spector, 1998). Individuals continually monitor and appraise events in their work environment (Lazarus, 1991), and when these events are perceived as threatening in nature they become job stressors that produce negative reactions such as anxiety and anger. Because organizational constraints inhibit the attainment of successful performance or desired goals, they are perceived as threatening and induce psychological, physical, or behavioral outcomes such as CWB (Fox et al., 2001).

Due to extensive research examining CWB as an emotion-based reaction to workplace stressors, organizational constraints have been recognized in several meta-analyses as a significant predictor of CWB (Berry et al., 2012; Hershcovis et al., 2007). As previously mentioned, however, organizational constraints interact with task-relevant individual differences to impact employee behavior. If, as hypothesized, creativity is significantly related to engagement in CWB, creativity may be a task-relevant individual difference that interacts with organizational constraints to influence CWB. Creativity is an individual difference that enables highly creative employees to not only discover new ways of thinking and behaving in their tasks, role, and organization, but it might also enable them to work around organizational constraints. Individuals low in creativity,

however, do not have this ability and may be more impacted by organizational constraints. In other words, the behavior of low creativity employees may be more constrained by increased organizational constraints, causing low creativity employees to be more stressed by the constraints and more likely to respond with CWB; thus, decreasing the relationship between creativity and CWB. Therefore, I propose the following:

Hypothesis 6: Organizational constraints will moderate the relationship between creativity and CWB such that the relationship between creativity and CWB will become weaker as organizational constraints increase.

As you will recall, however, CWB can be targeted at the organization or individuals. Because organizational constraints are, by definition, a function of the work environment rather than an individual employee(s), organizational constraints should have a stronger relationship with CWB-O than CWB-I. In support of this hypothesis, Fox and colleagues (2001) found constraints to have a stronger relationship with CWB-O than CWB-I, and Hershcovis and colleagues' (2007) workplace aggression meta-analysis found similar results with constraints and organizational and individual aggression. While there is evidence that organizational constraints have a stronger relationship with CWB-O than CWB-I, the present dissertation also hypothesized that creativity will have a stronger relationship with CWB-O than CWB-I based on its less detectable nature. If this hypothesis is supported, it may be possible that organizational constraints will have a stronger moderating effect on the relationship between creativity and CWB-O. Therefore, the following is proposed:

Hypothesis 7: Organizational constraints will have a stronger moderating effect on the relationship between creativity and CWB-O than between creativity and CWB-I.

However, not all individuals will react with CWB when faced with organizational constraints' restrictions on goal attainment. Spector and Fox (2010) proposed that there are certain antecedent situations such as organizational constraints that could lead to both CWB and OCB; which behavioral responses individuals choose may depend on the attributions they make as to the causes of the constraint. Rather than only responding with CWB, some individuals may engage in extra-role behavior in order to compensate for the restrictions and remain productive on the job. For example, when faced with performance barriers, an individual may seek new skills or take on tasks that are not a part of the job in order to get around the barriers and do the job (e.g., organizing co-workers). When these behaviors are beyond one's job or assigned tasks, they can be considered OCB. Again, while it may seem contradictory that when faced with organizational constraints an employee may engage in CWB or OCB, there is evidence supporting a positive relationship between both constraints and OCB (Fox, Spector, Goh, & Bruursema, 2007; Miles, Borman, Spector, & Fox, 2002; Spector, Bauer, & Fox, 2010) and constraints and CWB (Fox et al., 2001; Hershcovis et al., 2007). When employees are high in creativity, they may have better ability to engage in CWB (as previously hypothesized) and OCB because they are able to develop and create new ideas and methods for circumventing the constraints. Therefore, I propose

Hypothesis 8: Organizational constraints will moderate the relationship between creativity and OCB such that the relationship between creativity and OCB will become weaker as organizational constraints increase.

Further, because organizational constraints are organizationally derived, creative ability may interact with constraints to impact OCB-O more than OCB-I. Therefore, I propose the following.

Hypothesis 9: Organizational constraints will have a stronger moderating effect on the relationship between creativity and OCB-O than between creativity and OCB-I.

CHAPTER II

METHOD

Participants, Design, and Procedure

Participants in this study were working adults employed in the United States. Four hundred and eight participants responded to the initial recruitment on Amazon.com's Mechanical Turk (www.MTurk.com) to participate in an online survey study concerning "Creative Behavior in the Workplace," of which 300 returned for the second survey.

Participants' ages ranged from 18 to 66 ($M = 34.20$, $SD = 9.43$). One hundred and sixty-three participants were male (54.30%) and one hundred and thirty-seven were female (45.70%). The majority of participants were Caucasian (78.00%), followed by Hispanic (7.30%), Asian (6.70%), and African American (6.00%). Close to half of the sample had a bachelor's degree (44.80%), although many also reported only having some college (21.10%), a 2-year degree (13.70%), a high school diploma/GED (10.70%), or master's degree (8.70%). The participants had been employed in their current position from 6 months to 32 years ($M = 5.47$, $SD = 4.91$). A majority of participants worked in management or professional occupations (33.00%), followed by sales and office (27.70%), service (16.00%), and government (6.70%), where 36.70% were currently employed in a management role.

A cross-sectional design was used in the present study. Due to the length of the survey, however, it was separated and administered in two, 20-minute surveys in an effort to reduce participant fatigue to maintain participants' attention and thoughtful

responses. The short time lag between administrations (3-5 days) was chosen to ensure the return of as many participants as possible.

To recruit participants, an advertisement was posted on MTurk that included a description of the study, the requirements for participation, and the compensations for completion. Upon successful completion of the first survey, participants were messaged the link and access code to the second survey. Participation and successful completion of the second survey did not affect payment for the first. The first survey contained measures of demographics, OCB, CWB, and a creativity task. The second survey contained a self-report creativity measure along with measures of personality and organizational constraints.

Measures

Creativity. A 13-item self-report behavioral scale (Zhou & George, 2001) was used to assess participants' perceptions of their creative behavior at work. Participants were asked to indicate how often they engaged in each statement on a 5-point Likert scale (1 = *Never*, 5 = *Every day*). Sample statements were "Suggests new ways to achieve goals or objectives" and "Are not afraid to take risks." Zhou and George's creativity scale was designed for organizational research and has shown adequate reliability (Zhou & Shalley, 2010). The full measure can be found in the Appendix.

For an objective measure of creativity, participants were also given an abbreviated version of the Remote Associates Test (RAT). Items for the current study were taken from the original form devised by Mednick (1962, 1968). Twenty triads of words were presented where participants had to generate one word that related to all

three. For example, given a triad of Falling, Actor, and Dust, a correct answer would be Star. Participants were given 8 minutes to solve the 20 RAT items. Based on the instructions developed by Mednick (1962), creative ability scores were calculated by counting the number of correct responses. All 20 RAT items used in the present study can be found in the Appendix.

Mednick (1962) developed the RAT as a means of measuring creative thought without requiring knowledge specific to any field. Each item consists of three words that can be associated with a solution word in a number of ways. Thus, reaching a solution requires “creative thought” because the first, most related information retrieved in solution attempts is often incorrect. Rather, participants must think of more distantly related information in order to connect the three words. Although RAT items are not as complex as classic insight problems, they exhibit the same three properties that distinguish insight problems from noninsight problems: (1) they misdirect or fail to direct retrieval properties, (2) participants often cannot report the processing that led them to the solution, and (3) participants often have the “Aha!” experience (Ben-Zur, 1989; Bowden & Jung-Beeman, 2003). Success on items in the original RAT reliably correlates with success on classic insight problems (Schooler & Melcher, 1995), and the RAT has been used in the study of problem solving and creative thinking (e.g., Ansburg, 2000; Ansburg & Hill, 2003; Bowden & Jung-Beeman, 2003; Schooler & Melcher, 1995; Smith & Blankenship, 1989).

OCB. Overall OCB, OCB-I, and OCB-O were assessed using Fox, Spector, Goh, Bruursema, & Kessler’s (2012) 20-item OCB-checklist. Participants were asked to

indicate how often they engaged in each behavioral statement on a 5-point Likert scale (1 = *Not at all*, 5 = *Every day*). Sample statements were “Helped a co-worker who had too much to do” and “Said good things about your employer in front of others.” The statements that targeted individuals were summed to get an OCB-I score whereas statements targeting the organization were summed to get an OCB-O score.

A 10-item survey (Morrison & Phelps, 1999) was used to assess participants’ change-oriented OCB. Participants were asked to indicate the extent to which they agreed with each statement on a 5-point Likert scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*). Sample statements were “I often try to bring about improved procedures for the work unit or department” and “I often try to adopt improved procedures for doing my job.” All OCB items can be found in the Appendix.

CWB. The 32-item Counterproductive Work Behavior Checklist (CWB-C; Spector et al., 2006) was used to assess engagement in CWB. Participants were asked to indicate how often they engaged in each behavioral statement on a 5-point Likert scale (1 = *Not at all*, 5 = *Every day*). Sample statements were “Been nasty or rude to a client or customer,” “Purposely did your work incorrectly,” and “Put in to be paid for more hours than you worked.” The CWB-C can be further divided into interpersonal CWB and organizational CWB as well as into the five behavioral dimensions (i.e., abuse, production deviance, sabotage, theft, and withdrawal). Scores for each dimension were calculated by summing the individual responses to the corresponding items representing each dimension. The full CWB-C can be found in the Appendix.

Organizational constraints. The 11-item Organizational Constraints Scale (Spector & Jex, 1998) was used to assess participants’ perceptions of organizational constraints present in their jobs where each of the 11 items corresponds to an individual constraint identified by Peters and O’Connor (1980). Participants were asked to report the frequency with which they encountered these barriers to job performance in their job (e.g., interruption, inadequate training, availability of resources) on a 5-point Likert scale (1 = *Never*, 5 = *Every day*). The 11 scale items can be found in the Appendix.

Control variables. Because similar personality variables underlie creativity, OCB, and CWB, I controlled for personality in my analyses to ensure any significant relationships were not being purely driven by personality. The Big Five personality traits (i.e., agreeableness, conscientiousness, openness, extraversion, and neuroticism) were measured using the 20-item International Personality Item Pool (IPIP; Goldberg, 1992)

where participants were asked to indicate the extent to which each statement accurately described them on a 5-point Likert scale (1 = *Very Inaccurate*, 5 = *Very Accurate*).

Sample statements were “Am interested in people,” “Pay attention to details,” and “Have difficulty in understanding abstract ideas.”

Previous research has shown engagement in OCB and CWB are affected by demographics (e.g., age, tenure, etc.; Berry et al., 2012; Du, Choi, & Hashem, 2012; Organ & Ryan, 1995). Therefore, gender, age, race, education level, tenure, and organizational role were also assessed and controlled for with a single item each.

Careless responding. Three attention check items were included in each of the two surveys to ensure participants were paying attention and submitting thoughtful responses. The six items were embedded within other measures. Attention check items for each survey were “Please mark 2 for this item,” “Please mark Strongly Agree for this item,” and “Please leave this item blank.”

CHAPTER III

RESULTS

Before running my analyses, the final dataset was examined for quality. First, the careless responding items were checked; as mentioned above, three careless responding items were included in each of the two surveys to ensure that participants were paying attention and reading the questions. Although the goal was to identify participants that were not paying attention, I did not want to also throw out data from participants who simply made an error. Therefore, to remain in the final sample, participants had to get 2 of the 3 careless responding items correct in each survey. Seven participants missed more than two of the six careless responding items (in fact, they missed between 4 and 6 items), and therefore, their responses were thrown out.

Second, response time to finish each survey was calculated to ensure participants were paying attention and providing thoughtful responses. Each survey was estimated to take between 15-20 minutes, for a total survey length of 30-40 minutes. On average, participants took a little over 29 minutes to complete both surveys ($M = 29.34$, $SD = 11.36$, $Min = 10.40$, $Max = 97.80$). Four participants' survey responses were dropped for completing both surveys in less than 13 minutes combined ($M = 12.11$, $SD = 1.16$), which is one and a half standard deviations below the mean of rest of the sample. And last, three participants provided patterns of answers that did not make sense on the main variables of interest (e.g., answered with all 2's or 4's across all measures, despite reverse-coded items). Dropping their data resulted in the final dataset of 300 participants.

All of the variables of interest were also examined for outliers using the outlier labeling rule (Hoaglin & Iglewicz, 1987). Thirteen outliers were identified for CWB who reported engaging in significantly more CWBs than the rest of the sample. Although these thirteen participants might be distorting the relationship between creativity and non-task performance outcomes, there is no theoretical justification for throwing their responses out for being more unethical in the workplace than others. Therefore, all analyses will be examined with the outliers (N=300) and without the outliers (N=287) in the sample, and the results for the sample without outliers will be reported when different from the full sample.

Further, convergence (i.e., a significant correlation) was not found between self-reported and task-based ratings of creativity (i.e., RAT; $r = -.10, p > .05$), so analyses were performed separately for both measures of creativity to test for the potential relationships they might each have with OCB and CWB. Unfortunately, task-based creativity did not show significant correlations with any of the other 21 variables in the present study (except for two very small, but statistically significant, correlations between $r = .12-.14$). Those two significant correlations were for OCB and OCB-I (which is a subscale of OCB and contributes to the score on OCB), meaning the correlations with OCB and OCB-I were not independent. Thus, in essence, one out of twenty correlations the creativity task had with other variables in the present study was statistically significant; the exact percentage that would be expected just due to chance, given the alpha level of .05. This lack of convergent or criterion-related validity suggests that the creativity task did not work as intended in the present study. Therefore, results

for task-based creativity were not explored in the path analyses and will not be discussed in the text of the results¹. I will discuss the potential reasons for the lack of results for the task-based creativity measure in the discussion section.

Descriptive statistics for the measures are presented in Table 1 and intercorrelations are presented in Table 2 (scale reliabilities are displayed in the diagonal). All measures displayed adequate internal consistency with reliabilities ranging from .66 to .94. The distribution of scores on each of the measures appeared to be symmetrical, with the exception of openness, agreeableness, organizational constraints, and CWB. Openness and agreeableness were both negatively skewed, whereas CWB and organizational constraints were positively skewed.

Tests of Hypotheses

To test the hypotheses, separate path analytic models were run in AMOS 21 (Arbuckle, 2012) using directly observed variables. Three measures of model fit were calculated: χ^2 , CFI, and RMSEA. A non-significant χ^2 indicates good model fit; however, χ^2 is sensitive to sample size. A CFI value of .95 or higher and a RMSEA value of .08 or lower is indicative of good model fit (Hu & Bentler, 1999).

Previous research has shown engagement in OCB and CWB are affected by both demographics (e.g., age, tenure, etc.) and personality. To control for these potential effects, demographics and personality were also included as control variables in the path analyses. The models were set so that the control variables were predictors of creativity

¹ In an earlier version of this dissertation, multiple regression analyses similar to the path analyses were carried out using the task-based measure of creativity, and these regression results were also null.

Table 1

Descriptive Statistics for Measures

	Mean	SD	Min.	Max.
Agreeableness	3.83	0.80	1.25	5.00
Conscientiousness	3.78	0.80	1.75	5.00
Extraversion	2.69	1.05	1.00	5.00
Neuroticism	2.37	0.92	1.00	5.00
Openness	3.96	0.80	1.25	5.00
Creativity – Self-report	3.33	0.78	1.00	5.00
Creativity – Task	9.07	5.68	0.00	20.00
Organizational constraints	21.70	7.59	11.00	50.00
OCB Total	61.07	14.65	20.00	94.00
OCB-I	29.82	7.70	10.00	46.00
OCB-O	31.24	7.56	10.00	50.00
OCB-CH	3.61	0.78	1.00	5.00
CWB Total	39.56	7.52	32.00	74.00
CWB-I	19.96	4.03	16.00	40.00
CWB-O	18.31	4.38	14.00	42.00
CWB – Abuse	20.22	4.30	17.00	42.00
CWB – Deviance	3.51	1.11	3.00	10.00
CWB – Sabotage	3.34	0.88	3.00	9.00
CWB – Theft	5.55	1.45	5.00	16.00
CWB – Withdrawal	20.22	4.30	4.00	15.00

Table 2

Correlations Among Variables

	1	2	3	4	5	6	7	8	9	10	11
1. Age	--	.51**	.08	.12	.05	-.20**	.02	-.02	-.06	-.00	.03
2. Tenure	.51**	--	-.01	.07	.11	-.15*	.02	.08	-.05	-.05	.17**
3. Agreeableness	.11	.01	(.88)	.19**	.30**	-.21**	.32**	.21**	-.00	-.07	.33**
4. Conscientiousness	.13*	.06	.17**	(.78)	.19**	-.29**	.13*	.23**	.05	-.07	.19**
5. Extraversion	.06	.12*	.32**	.17**	(.91)	-.36**	.30**	.44**	-.04	-.09	.40**
6. Neuroticism	-.21**	-.15**	-.22**	-.27**	-.35**	(.85)	-.21**	-.27**	-.07	.23**	-.24**
7. Openness	.01	.03	.28**	.12*	.28**	-.18**	(.82)	.47**	.02	.00	.24**
8. Creativity - Self	-.02	.08	.21**	.21**	.44**	-.25**	.44**	(.92)	-.11	.00	.58**
9. Creativity - Task	-.05	-.04	.01	.07	-.04	-.08	.05	-.10	--	-.07	-.15*
10. Org. Constraints	-.02	-.04	-.07	-.12*	-.07	.23**	.02	.01	-.09	(.89)	.06
11. OCB-Total	.04	.17**	.35**	.15*	.41**	-.23**	.21**	.58**	-.12*	.08	(.94)
12. OCB-I	.03	.18**	.35**	.13*	.36**	-.21**	.18**	.50**	-.14*	.11	.96**
13. OCB-O	.05	.15*	.32**	.16**	.43**	-.23**	.23**	.63**	-.10	.04	.96**
14. OCB-CH	.05	.09	.34**	.15**	.40**	-.26**	.37**	.71**	-.01	-.03	.55**
15. CWB-Total	-.15*	-.01	-.26**	-.23**	-.08	.21**	-.08	-.10	.00	.37**	-.01
16. CWB-I	-.10	.03	-.22**	-.13*	.03	.15**	-.01	-.01	-.03	.31**	.08
17. CWB-O	-.16**	-.05	-.22**	-.26**	-.15**	.20**	-.11	-.16**	.04	.33**	-.11
18. CWB-Abuse	-.09	.04	-.23**	-.14*	.03	.15**	-.03	-.01	-.03	.31**	.09
19. CWB-Deviance	-.21**	-.16**	-.21**	-.20**	-.15*	.16**	-.03	-.10	.03	.34**	-.05
20. CWB-Sabotage	-.18**	-.07	-.15*	-.17**	-.08	.06	-.04	-.05	-.01	.29**	-.03
21. CWB-Theft	-.05	.04	-.21**	-.20**	-.12*	.13*	-.12*	-.16**	-.04	.13*	-.10
22. CWB-Withdrawal	-.11	-.02	-.12*	-.20**	-.10	.18**	-.09	-.13*	.07	.26**	-.11

Note. Correlations below the diagonal are for the entire sample ($N = 299-300$); correlations above the diagonal are for the sample with outliers removed ($N = 286-287$). Scale reliabilities are along the diagonal. Org. Constraints = organizational constraints.

* $p < .05$. ** $p < .01$.

Table 2 (cont'd)

Correlations Among Variables

	12	13	14	15	16	17	18	19	20	21	22
1. Age	.02	.04	.01	-.08	-.02	-.12*	-.01	-.16**	-.17**	.03	-.09
2. Tenure	.18**	.14*	.07	.03	.07	-.03	.08	-.16**	-.07	.11	-.02
3. Agreeableness	.34**	.30**	.27**	-.24**	-.16**	-.22**	-.17**	-.15*	-.17**	-.23**	-.12*
4. Conscientiousness	.16**	.20**	.20**	-.17**	-.08	-.20**	-.09	-.13*	-.07	-.13*	-.16**
5. Extraversion	.35**	.42**	.38**	-.03	.10	-.14*	.09	-.13*	-.06	-.09	-.10
6. Neuroticism	-.21**	-.25**	-.26**	.22**	.12*	.23**	.13*	.13*	.10	.13*	.21**
7. Openness	.20**	.25**	.41**	-.11	-.03	-.13*	-.05	-.04	-.05	-.13*	-.11
8. Creativity – Self	.48**	.62**	.74**	-.15*	-.03	-.21**	-.03	-.17**	-.04	-.21**	-.15*
9. Creativity - Task	-.17**	-.11	-.05	.05	-.01	.08	-.01	.12	.04	.02	.06
10. Org. Constraints	.10	.01	-.04	.36**	.30**	.30**	.30**	.30**	.23**	.09	.24**
11. OCB-Total	.96**	.96**	.52**	-.04	.10	-.16**	.10	-.09	-.03	-.13*	-.14*
12. OCB-I	(.89)	.84**	.41**	-.00	.11	-.12*	.12*	-.07	.01	-.12*	-.11
13. OCB-O	.84**	(.89)	.58**	-.07	.07	-.19**	.08	-.10	-.07	-.13*	-.17**
14. OCB-CH	.46**	.60**	(.93)	-.24**	-.09	-.30**	-.08	-.19**	-.10	-.27**	-.24**
15. CWB-Total	.01	-.04	-.23**	(.92)	.82**	.83**	.82**	.58**	.41**	.49**	.70**
16. CWB-I	.09	.06	-.14*	.86**	(.90)	.36**	.99**	.34**	.20**	.21**	.27**
17. CWB-O	-.08	-.13*	-.25**	.86**	.49**	(.87)	.35**	.64**	.48**	.60**	.87**
18. CWB – Abuse	.11	.06	-.14*	.85**	.99**	.47**	(.66)	.31**	.18**	.19**	.27**
19. CWB – Deviance	-.04	-.06	-.20**	.69**	.49**	.71**	.46**	(.87)	.43**	.39**	.32**
20. CWB – Sabotage	.01	-.06	-.09	.57**	.35**	.64**	.31**	.52**	(.80)	.29**	.18**
21. CWB – Theft	-.09	-.10	-.26**	.65**	.40**	.72**	.36**	.57**	.50**	(.90)	.27**
22. CWB – Withdrawal	-.07	-.13*	-.19**	.66**	.31**	.82**	.30**	.33**	.29**	.31**	(.76)

Note. Correlations below the diagonal are for the entire sample ($N = 299-300$); correlations above the diagonal are for the sample with outliers removed ($N = 286-287$). Scale reliabilities are along the diagonal. Org. Constraints = organizational constraints.

* $p < .05$. ** $p < .01$.

(all control variables were treated as exogenous variables and were all set free to correlate with one another), and creativity was a predictor of the criteria of interest (OCB, CWB, or their facets). Separate path models were used for the following criteria of interest: (1) OCB and CWB, (2) OCB facets (i.e., OCB-I, OCB-O, OCB-CH), (3) CWB facets based on target of behavior (i.e., CWB-I, CWB-O), and (4) CWB facets based on behaviors (i.e., sabotage, theft, abuse, production deviance, withdrawal). Prior to calculating estimates, a mean centered product interaction term between creativity and organizational constraints was created and included in the models to test Hypotheses 6-9.

The first hypothesis predicted that creativity would be positively related to OCB. Hypothesis 1 was supported; self-reported creativity had a significant positive correlation with OCB ($r = 0.58, p < .01$). Although creativity was found to predict overall OCB in the path analysis, $\beta = 0.56, p < .001$ (see Table 3), the overall model examining the main effects of creativity on non-task performance had poor fit, $\chi^2(44, n = 300) = 147.03, p < .001, CFI = 0.85, RMSEA = 0.09$.

Hypothesis 2 stated that creativity's proposed positive relationship with OCB would be stronger for OCB-CH than OCB-I or OCB-O. Similar to overall OCB, self-reported creativity had significant, positive correlations with OCB-CH ($r = 0.71, p < .01$), OCB-I ($r = 0.50, p < .01$), and OCB-O ($r = 0.63, p < .01$). The overall model examining the main effect of creativity on OCB-CH, OCB-I, and OCB-O also had adequate fit, $\chi^2(55, n = 300) = 135.71, p < .001, CFI = 0.94, RMSEA = 0.07$. Within the model, creativity was found to predict OCB-CH ($\beta = 0.71, p < .001$), OCB-I ($\beta = 0.47, p < .001$), and OCB-O ($\beta = 0.61, p < .001$) above and beyond the control variables (see

Table 3

Standardized Path Analytic Estimates Predicting OCB and CWB from Creativity and Organizational Constraints

	Creativity	OCB	CWB
Creativity	--	0.56***	-0.12*
Organizational Constraints		0.08	0.38***
Creativity x Organizational Constraints		-0.13**	-0.10
Age	-0.09		
Sex	-0.06		
Race	-0.02		
Education	0.07		
Tenure	0.04		
Occupation	-0.11*		
Agreeableness	0.02		
Conscientiousness	0.11*		
Extraversion	0.27***		
Neuroticism	-0.09		
Openness	0.30***		

Note. N = 300. Blank cells note a non-estimated path.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4). To test whether the beta value for OCB-CH was significantly larger than the beta values for OCB-I or OCB-O, the path coefficients being compared were constrained to equality to examine whether overall model fit declined. When the paths between self-reported creativity and OCB-CH and OCB-I were constrained to equality, the model fit declined, $\chi^2(56, n = 300) = 194.67, p < .001, CFI = 0.89, RMSEA = 0.09$. To test if the models statistically differed, a chi-square difference test was performed; constraining the paths between creativity and OCB-CH and OCB-I to equality significantly increased the chi-square statistic, $\Delta\chi^2 = 58.96, p < .05 (\chi^2_{crit} = 3.84)$. When the paths between self-reported creativity and OCB-CH and OCB-O were constrained to equality, the model fit again declined, $\chi^2(56, n = 300) = 254.29, p < .001, CFI = 0.84, RMSEA = 0.11$. Constraining the paths between creativity and OCB-CH and OCB-O to equality significantly increased the chi-square statistic, $\Delta\chi^2 = 118.58, p < .05$. Therefore, creativity's relationship with OCB-CH was significantly larger than its relationship with OCB-I or OCB-O; Hypothesis 2 was supported.

Hypothesis 3 proposed that creativity would be positively related to CWB. Self-reported creativity was not significantly correlated with CWB ($r = -0.10, p > .05$), and although the overall model examining creativity's direct relationship with CWB had poor fit, creativity significantly predicted overall CWB above and beyond the control variables, $\beta = -0.12, p < .05$ (see Table 3), although negatively. If the outliers are removed, however, self-reported creativity's correlation becomes significant ($r = -0.15, p < .05$), and again, self-reported creativity predicted engagement in CWB above and beyond the control variables in the model, $\beta = -0.17, p < .01, \chi^2(44, n = 287) = 148.19,$

Table 4

Standardized Path Analytic Estimates Predicting OCB-CH, OCB-I, and OCB-O from Creativity and Organizational Constraints

	Creativity	OCB-CH	OCB-I	OCB-O
Creativity	--	0.71***	0.47***	0.61***
Organizational Constraints		-0.04	0.12*	0.04
Creativity x Organizational Constraints		0.02	-0.16**	-0.09*
Age	-0.09			
Sex	-0.06			
Race	-0.02			
Education	0.07			
Tenure	0.04			
Occupation	-0.11*			
Agreeableness	0.02			
Conscientiousness	0.11*			
Extraversion	0.27***			
Neuroticism	-0.09			
Openness	0.30***			

Note. N = 300. Blank cells note a non-estimated path.

* $p < .05$. ** $p < .01$. *** $p < .001$.

$p < .001$, CFI = 0.84, RMSEA = 0.09 (see Table 5). However, despite the significant relationship, it is not in the hypothesized positive direction; therefore, Hypothesis 3 is not supported.

Hypothesis 4 proposed that creativity would have a stronger positive relationship with CWB-O than CWB-I due to CWB-O's more discrete nature. Although self-reported creativity was not significantly correlated with CWB-I ($r = -0.01$, $p > .05$), it was significantly correlated with CWB-O ($r = -0.16$, $p < .05$). The model examining creativity's prediction of CWB-I and CWB-O had poor fit, $\chi^2(44, n = 300) = 100.12$, $p < .001$, CFI = 0.90, RMSEA = 0.07. Within the model, self-reported creativity was only a significant predictor of CWB-O ($\beta = -0.18$, $p < .001$) and not CWB-I ($\beta = -0.02$, $p > .05$; see Table 6). When the paths between self-reported creativity and CWB-O and CWB-I were constrained to equality, the model fit declined significantly, $\chi^2(45, n = 287) = 108.20$, $p < .001$, CFI = 0.89, RMSEA = 0.07, $\Delta\chi^2 = 8.08$, $p < .05$. Therefore, creativity's relationship with CWB-O was significantly larger than its relationship with CWB-I. Regardless, the relationships were not in the hypothesized positive direction and therefore, Hypothesis 4 was not supported.

Hypothesis 5 proposed that creativity would have a stronger positive relationship with sabotage and theft than abuse, production deviance, or withdrawal. Looking at the correlations first, sabotage was not found to have a significant correlation with self-reported creativity ($r = -0.05$, $p > .05$), but theft did ($r = -0.16$, $p < .01$). Further, self-reported creativity had a significant correlation with withdrawal ($r = -0.13$, $p < .05$), but not abuse ($r = -0.01$, $p > .05$) or production deviance ($r = -0.10$, $p > .05$). The overall

Table 5

Standardized Path Analytic Estimates Predicting OCB and CWB from Creativity and Organizational Constraints with Outliers Removed

	Creativity	OCB	CWB
Creativity	--	0.55***	-0.17**
Organizational Constraints		0.07	0.38***
Creativity x Organizational Constraints		-0.13**	-0.13*
Age	-0.08		
Sex	-0.06		
Race	-0.04		
Education	0.08		
Tenure	0.04		
Occupation	-0.10		
Agreeableness	0.01		
Conscientiousness	0.12*		
Extraversion	0.26***		
Neuroticism	-0.07		
Openness	0.33***		

Note. N = 287. Blank cells note a non-estimated path.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6

Standardized Path Analytic Estimates Predicting CWB-I and CWB-O from Creativity and Organizational Constraints

	Creativity	CWB-I	CWB-O
Creativity	--	-0.02	-0.18***
Organizational Constraints		0.32***	0.34***
Creativity x Organizational Constraints		-0.07	-0.10
Age	-0.09		
Sex	-0.06		
Race	-0.02		
Education	0.07		
Tenure	0.04		
Occupation	-0.11*		
Agreeableness	0.02		
Conscientiousness	0.11*		
Extraversion	0.27***		
Neuroticism	-0.09		
Openness	0.30***		

Note. N = 300. Blank cells note a non-estimated path.

* $p < .05$. ** $p < .01$. *** $p < .001$.

model examining creativity's prediction of sabotage, theft, abuse, production deviance, and withdrawal had poor fit, $\chi^2(77, n = 300) = 171.19, p < .001, CFI = 0.90, RMSEA = 0.06$. Within the model, self-reported creativity significantly predicted engagement in theft ($\beta = -0.16, p < .01$; see Table 7), production deviance ($\beta = -0.13, p < .05$), and withdrawal ($\beta = -0.15, p < .05$). However, self-reported creativity did not significantly predict sabotage ($\beta = -0.06, p > .05$) or abuse ($\beta = -0.02, p > .05$). Therefore, because creativity did not significantly predict engagement in sabotage, creativity did not have a stronger positive relationship with sabotage than abuse, production deviance, or withdrawal. To examine whether the beta weight for theft was significantly larger than abuse, production deviance, and withdrawal, again, the paths were constrained to equality. When the paths to theft and abuse were constrained to equality, the model fit declined, $\chi^2(78, n = 300) = 171.55, p < .001, CFI = 0.90, RMSEA = 0.06$, but not significantly, $\Delta\chi^2 = 0.36, p > .05$. When the paths to theft and production deviance were constrained to equality, the model fit did not significantly change, $\Delta\chi^2 = 1.79, p > .05, \chi^2(78, n = 300) = 172.98, p < .001, CFI = 0.90, RMSEA = 0.06$. And last, the model fit did not significantly decline when the paths to theft and withdrawal were constrained to equality, $\Delta\chi^2 = 0.91, p > .05, \chi^2(78, n = 300) = 172.10, p < .001, CFI = 0.90, RMSEA = 0.06$. Therefore, Hypothesis 5 was not supported.

Creativity was hypothesized to have more than significant main effects on OCB and CWB; organizational constraints were also hypothesized to interact with creativity to impact engagement in OCB and CWB. Hypothesis 6 proposed that organizational constraints would moderate the relationship between creativity and CWB such that the

Table 7

Standardized Path Analytic Estimates Predicting CWB Behavioral Facets from Creativity and Organizational Constraints

	Creativity	Sab.	Theft	Abuse	Deviance	With.
Creativity	--	-0.06	-0.16**	-0.02	-0.13*	-0.15**
Organizational Constraints		0.30***	0.14*	0.31***	0.36***	0.27***
Creativity x Organizational Constraints		-0.09	-0.03	-0.07	-0.12*	-0.07
Age	-0.09					
Sex	-0.06					
Race	-0.02					
Education	0.07					
Tenure	0.04					
Occupation	-0.11*					
Agreeableness	0.02					
Conscientiousness	0.11*					
Extraversion	0.27***					
Neuroticism	-0.09					
Openness	0.30***					

Note. N = 300. Blank cells note a non-estimated path. Sab. = Sabotage. With. = Withdrawal.

* $p < .05$. ** $p < .01$. *** $p < .001$.

relationship would be stronger for individuals with fewer organizational constraints. As stated before, the overall model examining the main effect of creativity on CWB and organizational constraints moderating effect on the relationship had poor fit, $\chi^2(44, n = 300) = 147.03, p < .001, CFI = 0.85, RMSEA = 0.09$, where organizational constraints did not have a significant moderating effect ($\beta = -0.10, p > .05$; see Table 3) on the non-significant relationship between creativity and CWB. However, once the CWB outliers were removed from the sample, the interaction between creativity and organizational constraints significantly predicted engagement in CWB, $\beta = -0.13, p < .05, \chi^2(44, n = 287) = 148.19, p < .001, CFI = 0.84, RMSEA = 0.09$ (see Table 5). Counter to prediction, the negative relationship between creativity and CWB became stronger as organizational constraints increased (see Figure 1). Hypothesis 6 was not supported.

Hypothesis 7 proposed that organizational constraint's moderating effect would be stronger for CWB-O than CWB-I. Creativity's interaction with organizational constraints did not significantly predict engagement in CWB-O ($\beta = -0.10, p > .05$) or CWB-I ($\beta = -0.07, p > .05$), $\chi^2(44, n = 300) = 100.12, p < .001, CFI = 0.90, RMSEA = 0.07$ (see Table 6). However, the interaction term was significant for CWB-O ($\beta = -0.12, p < .05$) once the CWB outliers were removed, $\chi^2(44, n = 287) = 104.37, p < .001, CFI = 0.89, RMSEA = 0.07$ (see Table 8). As organizational constraints increased, the negative relationship between creativity and CWB-O strengthened (see Figure 2). To test whether organizational constraints moderated the relationship between creativity and CWB-O significantly more than CWB-I, the paths were constrained to equivalence. The model fit did not significantly decline, $\Delta\chi^2 = 0.21, p > .05, \chi^2(45, n = 287) = 104.58, p < .001, CFI$

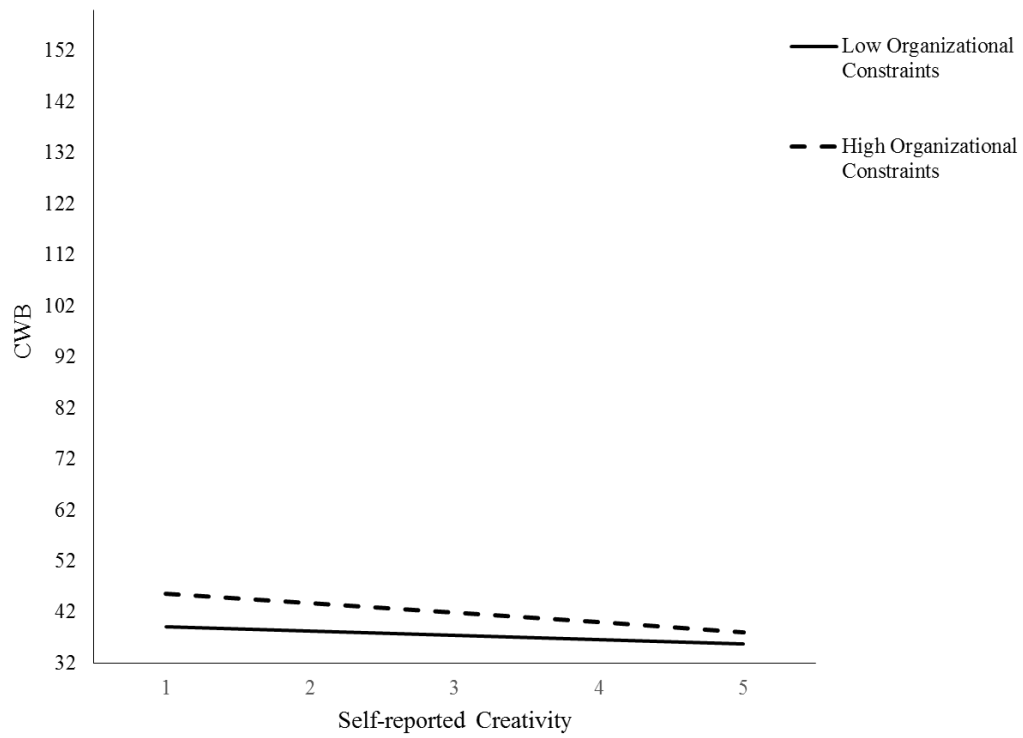


Figure 1
Interaction between creativity and organizational constraints on counterproductive work behavior

Table 8

Standardized Path Analytic Estimates Predicting CWB-I and CWB-O from Creativity and Organizational Constraints with Outliers Removed

	Creativity	CWB-I	CWB-O
Creativity	--	-0.05	-0.23***
Organizational Constraints		0.31***	0.31***
Creativity x Organizational Constraints		-0.09	-0.12*
Age	-0.08		
Sex	-0.06		
Race	-0.04		
Education	0.08		
Tenure	0.04		
Occupation	-0.10		
Agreeableness	0.01		
Conscientiousness	0.12*		
Extraversion	0.26***		
Neuroticism	-0.07		
Openness	0.33***		

Note. N = 300. Blank cells note a non-estimated path.

* $p < .05$. ** $p < .01$. *** $p < .001$.

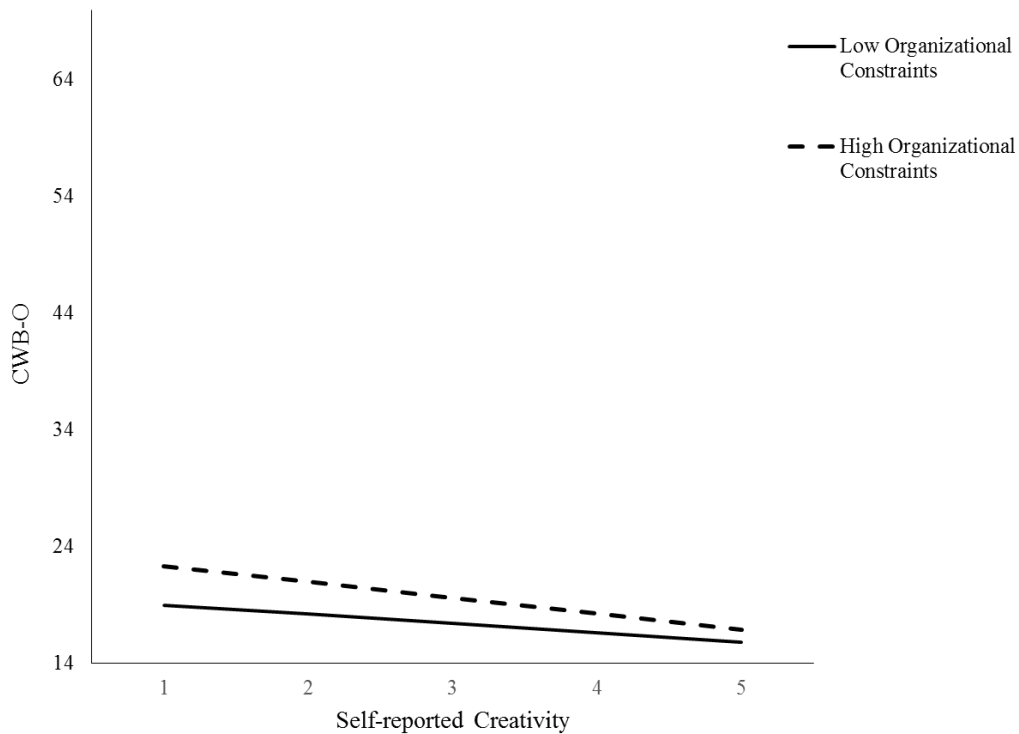


Figure 2
Interaction between creativity and organizational constraints on counterproductive work behavior targeted toward the organization

= 0.89, $p < .001$, CFI = 0.89, RMSEA = 0.07. Although organizational constraints significantly moderated the relationship between creativity and CWB-O, organizational constraint's moderating effect was not significantly stronger for CWB-O than CWB-I; Hypothesis 7 was not supported.

Hypothesis 8 proposed that organizational constraints would moderate the relationship between creativity and OCB such that the relationship would become weaker as organizational constraints increased. Organizational constraints significantly moderated the relationship between creativity and OCB ($\beta = -0.13$, $p < .05$; see Table 3),

$\chi^2(44, n = 300) = 147.03, p < .001, CFI = 0.85, RMSEA = 0.09$. As predicted, as organizational constraints increased, the relationship between creativity and OCB decreased (see Figure 3). Therefore, Hypothesis 8 was supported.

Lastly, Hypothesis 9 proposed that organizational constraints would have a stronger moderating effect on the relationship between creativity and OCB-O than between creativity and OCB-I. Again, the overall model examining creativity's main effect on the OCB facets and organizational constraint's moderating effects had poor fit,

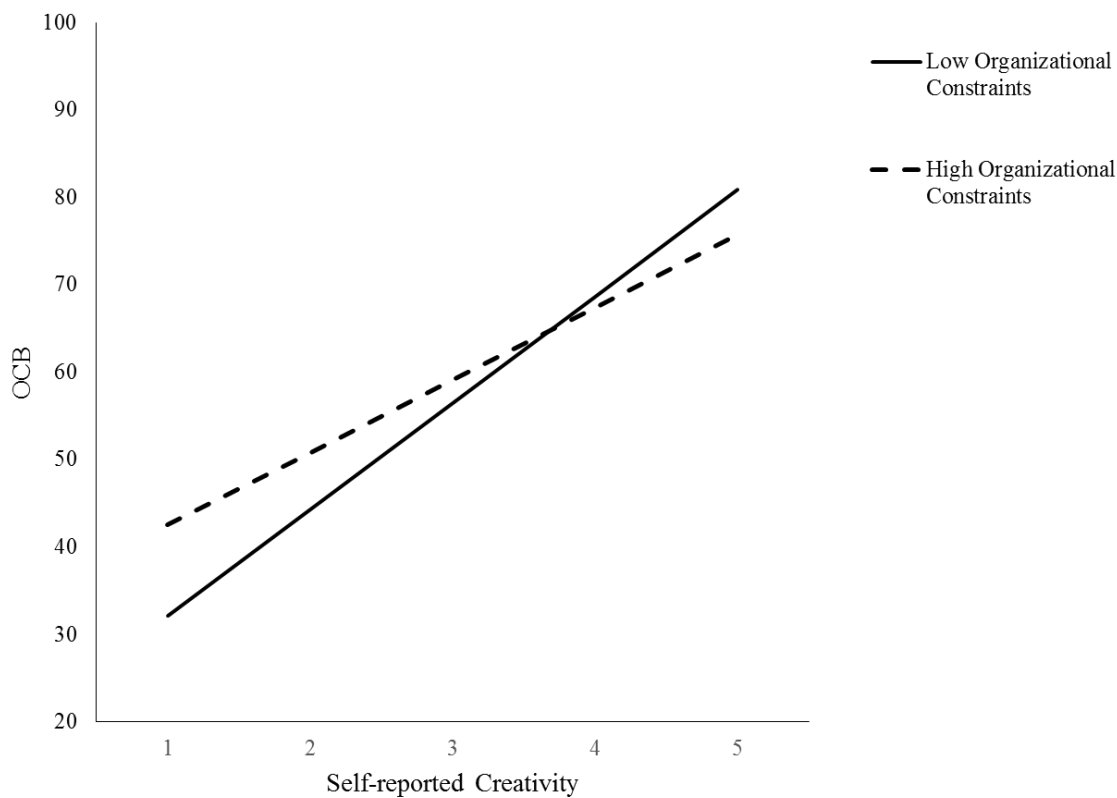


Figure 3
Interaction between creativity and organizational constraints on organizational citizenship behavior

organizational constraints significantly moderated creativity's relationship with OCB-O ($\beta = -0.09, p < .05$; see Figure 4) and OCB-I ($\beta = -0.16, p < .01$; see Figure 5). As organizational constraints increased, the relationships between creativity and OCB-O and between creativity and OCB-I decreased. When the path between the interaction term and OCB-O was constrained to equality with the path to OCB-I, the change in model fit significantly declined, $\Delta\chi^2 = 4.02, p < .05, \chi^2(56, n = 300) = 139.73, p < .001, CFI = 0.93, RMSEA = 0.07$. Despite this significant difference, organizational constraints did not moderate creativity's relationship with OCB-O significantly more than creativity's relationship with OCB-I (rather the reverse); therefore, Hypothesis 9 was not supported.

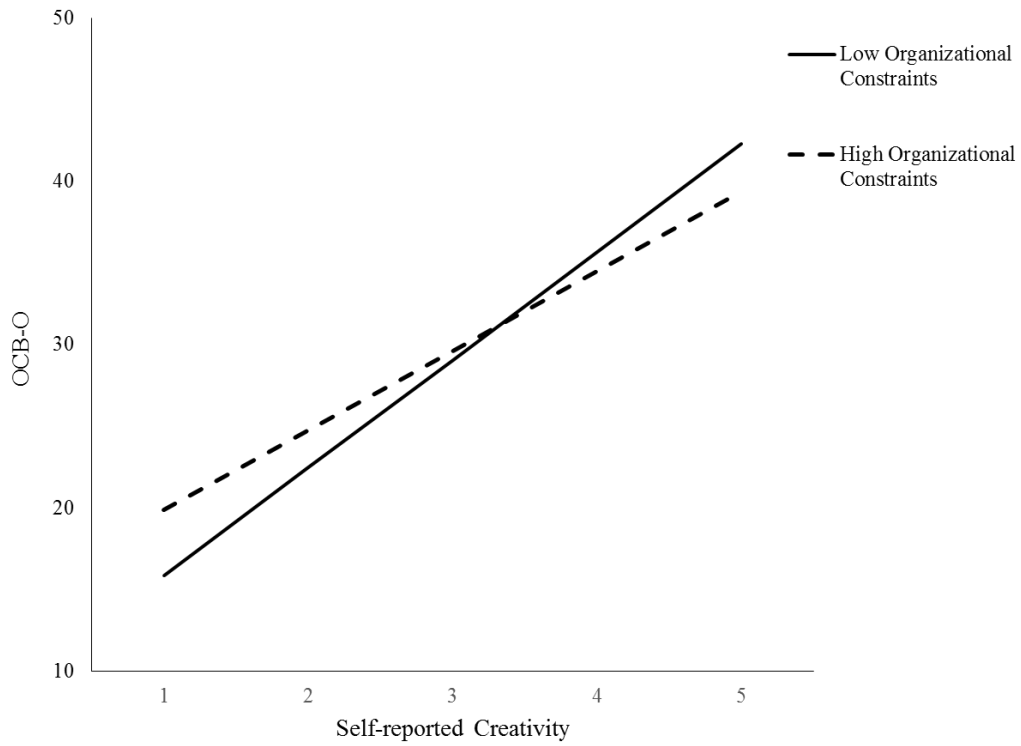


Figure 4
Interaction between creativity and organizational constraints on organizational citizenship behavior targeted at the organization

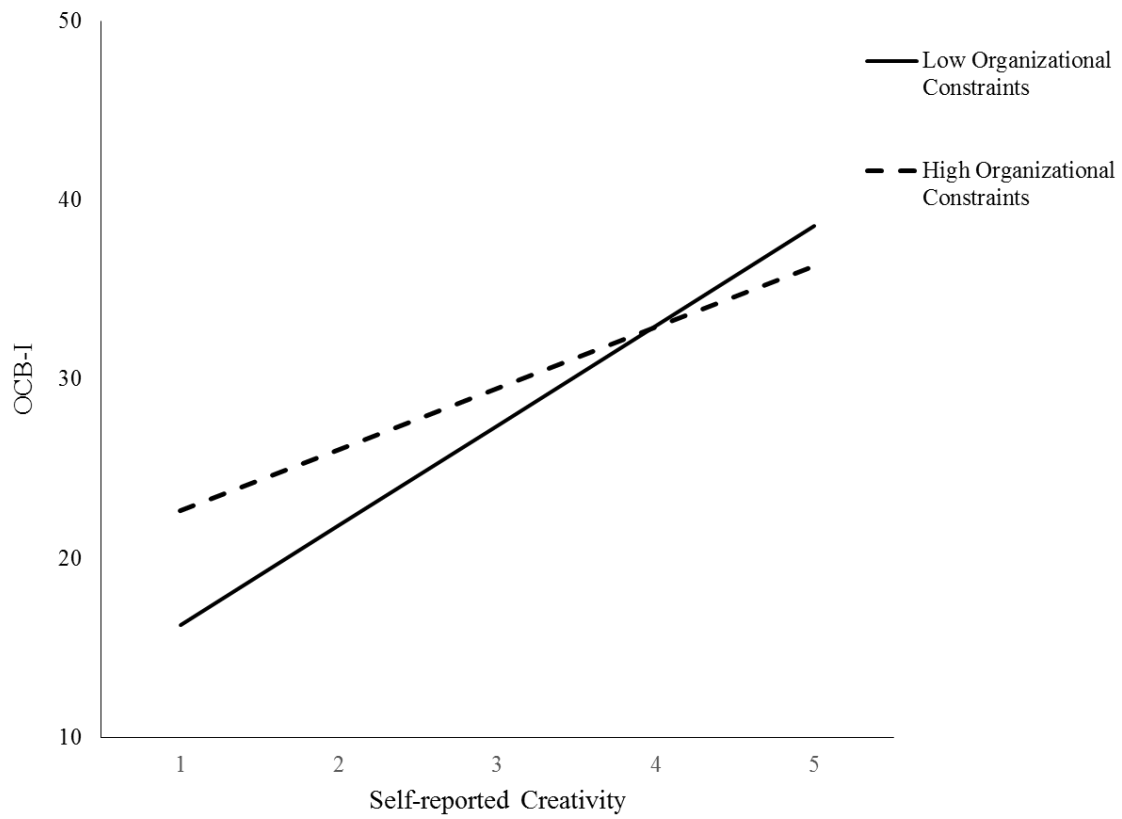


Figure 5
Interaction between creativity and organizational constraints on organizational citizenship behavior targeted at individuals

CHAPTER IV

DISCUSSION AND CONCLUSIONS

Since the turn of the century, research examining the creative process and its predictors has blossomed (Amabile et al., 2005; James et al., 1999; Puccio & Cabra, 2010; Shalley et al., 2004; Zhou & Shalley, 2010). However, despite the widely accepted notion that creativity is good and leads to great advances in the business world, the outcomes of organizational creativity are relatively unknown and unexplored. While research has started to tackle this gap by examining creativity's positive role in task performance, creativity's potential relationship with non-task performance, OCB and CWB, is relatively unknown. The purpose of the present study was to investigate the potential relationships between creativity, OCB, and CWB. It was hypothesized that creativity would be positively related to both OCB and CWB based on its non-predefined and divergent nature. Further, organizational constraints were examined as a potential moderator of the creativity-non-task performance relationship. Although the results were generally supportive of creativity's positive relationship with OCB, they were not supportive of a positive relationship between creativity and CWB. Additionally, the current study demonstrated how the work environment (e.g., organizational constraints) could impact creative employees and their behaviors.

OCB

The present study hypothesized creativity to be positively related to OCB. In the workplace, creative employees may see more problems or opportunity for OCB, gather more important information about the problem, develop more ideas on how they can

help, and evaluate their ideas better in comparison to a less creative employee.

Additionally, it was predicted that creativity would have a stronger positive relationship with OCB-CH than OCB-I or OCB-O based on their similar proactive nature. Consistent with predictions, creativity was positively related to overall OCB where the more creative an individual is, the more they reported engaging in OCB. Similarly, although creativity was predictive of all types of OCB (i.e., OCB-CH, OCB-I, and OCB-O), it was significantly more predictive of OCB-CH. In other words, while creative employees are more likely to engage in all forms of OCB, the relationship is strongest with OCB-CH.

These results further support the commonly held notion that creativity is an asset in the workplace that can help organizations grow and compete in the ever-changing market. When individuals are highly creative, they are likely better able and equipped to identify problems and opportunity, gather pertinent information, generate ideas to address the problem, and evaluate these ideas. Based on this creative toolbox to work from, there are fewer limits or boundaries to the ideas that creative employees can generate. Therefore, it makes sense that their ideas might expand beyond task performance to OCBs. After all, creative ideas are by definition *useful*; creative employees may generate ideas on how to engage in prosocial behaviors (OCB-I, OCB-O) or proactive behaviors (OCB-CH) that benefit the broader good of the organization. Further, because creative ideas must also be *novel*, they are inherently creating change in the workplace which logically would result in more OCB-CH than OCB-I or OCB-O, as was found in the present study.

Creativity's positive relationship with OCB was also hypothesized to become weaker as organizational constraints increased in the workplace. Further, this moderating effect was hypothesized to be stronger for OCB-O than OCB-I since the constraints are originating from the work environment and not individuals. Consistent with prediction, organizational constraints significantly moderated the relationship between creativity and overall OCB; as organizational constraints increased, the relationship between creativity and OCB decreased. Organizational constraints not only had a significant moderating effect for overall OCB, but OCB-O and OCB-I as well. Despite the significant moderating effects, the present results did not find organizational constraints to have a stronger moderating effect on the creativity-OCB-O relationship. Therefore, creative employees engage in more OCB-Os and OCB-Is than less creative employees; however, when organizational constraints are present, the relationships decrease indicating creativity predicts engagement in OCB-O and OCB-I less strongly in workplace settings fraught with constraints or barriers.

Organizational constraints' moderating effect on the relationship between creativity and OCB is not surprising. Psychologists have generally recognized that individual behavior is a function of both individual differences and situations (Hough & Oswald, 2008; Meyer, Dalal, & Hermida, 2010). Situations exert influence over behavior through situational strength, or the "implicit or explicit cues provided by external entities regarding the desirability of potential behaviors" (Meyer et al., 2010). Strong situations exert a lot of influence on a person's behavior, leaving little room for individual differences to exert an influence. Organizational constraints are often

operationalized as a facet of situational strength, and therefore as organizational constraints increase in the workplace, the influence of individual differences on behavior decreases. When organizational constraints are low, however, individual differences such as creativity shine through and exert a lot of influence on a person's behavior.

What was surprising, however, was that organizational constraints' moderation of creativity's relationship with OCB-O did not significantly differ from that of OCB-I's. In other words, as organizational constraints increased in the workplace, the relationship between creativity and OCB-O *and* the relationship between creativity and OCB-I decreased. When organizational constraints are high, creativity's prediction of citizenship behavior is weakened, regardless of whether the helpful behaviors target individuals or the organization. This is important for organizational leaders to note; organizations benefit from both creativity and OCBs, yet may be unknowingly hindering such behavior by the presence of workplace barriers and constraints. It is increasingly noted in the OCB literature that OCBs are both formally and informally rewarded in the workplace, and creative employees may be better equipped to see the opportunity and engage in OCB to obtain the rewards. When organizational constraints are high, however, an employee is likely restricted in how many "extra" behaviors they can engage in, causing organizations to miss out on some of the benefits creative employees bring to the workplace. As mentioned before, however, organizational constraints originate from the workplace rather than individuals, so it is surprising that engagement in OCB-O was not impacted significantly more than OCB-I; future research should aim

at testing whether these results can be replicated, and if so, whether different organizational constraints impact engagement in OCB-O and OCB-I differentially.

CWB

When viewed as a toolbox from which employees can draw from, creativity itself is not good or bad, it is simply the generation of novel and useful ideas. However, a creative employee can use these ideas for good and bad intentions making it plausible that creativity may have a relationship with positive and negative non-task behaviors. Therefore, the present study hypothesized that creativity would be positively related to not only OCBs, but CWBs as well. Counter to predictions, creativity had a negative relationship with overall CWB which was only strengthened by removing the CWB outliers. In other words, engagement in CWBs decreased as creativity increased.

Before interpreting the meaning of the negative relationship found between creativity and CWB in the present study, it should be noted that these results run counter to the published experimental work examining creativity's relationship with unethical behavior. Lab studies conducted with university students have previously shown dispositional creativity to be positively related to unethical behavior (e.g., cheating; Beaussart, Andrews, & Kaufman, 2013; Gino & Ariely, 2012), and that engagement in unethical behavior can lead individuals to be more creative (Gino & Wiltermuth, 2014). Such findings challenge the prevailing belief that creativity is a benevolent construct. Yet the current study found the opposite. Whereas the contradiction in findings could be due to differences in the samples (i.e., university students versus working adults) or study design (i.e., lab experiment versus online self-report surveys), the negative

relationship between creativity and CWB was strengthened after removing the CWB outliers. In other words, the pattern of results suggests that the relationship between creativity and CWB is negative for most employees, but the effect was being masked by the handful of employees who admit to engaging in excessive CWB in the sample. Perhaps there is a positive relationship between creativity and CWB, but only for the few employees in the sample that were unethical enough to engage in lots of CWB and creative enough to keep getting away with it.

To test this notion, small, exploratory, post-hoc analyses were performed to examine (1) the relationship between creativity and CWB for just the outliers, and (2) whether the CWB outliers had higher mean creativity scores than non-outliers. Although there was a significant negative correlation between creativity and CWB ($r = -0.15, p < .05$), the correlation between creativity and CWB was positive ($r = 0.28, p = .36$) for the CWB outliers. Further, the CWB outliers had a higher (although not significant) mean self-reported creativity score ($M = 3.46, SD = 0.59$) than did non-outliers ($M = 3.33, SD = 0.78$), $t(298) = -0.45, p = .66$. Although neither of the exploratory analyses were significant, they were based off a sample of 13 employees and were not expected to reach significance, but rather to provide a line of evidence for a potential positive relationship between creativity and CWB for unethical employees. Future research needs to re-examine the relationship between creativity and CWB to help provide clarity on the contradictory findings between the present study and university lab studies. Do the unethical behaviors found in experimental lab studies (i.e., lying, cheating) generalize to CWB performed by employees in organizational settings? Does the relationship between

creativity and CWB differ for individuals who willingly admit to engaging in excessive CWB in comparison to the everyday employee?

Although the research questions above could shed light on creativity's full impact in the workplace and should be pursued, the rest of the discussion will focus on the results found for the average, non-outlier sample of employees. While it was hypothesized that creativity would be positively related to CWB because creative employees could theoretically choose to use their creative ideas for harmful intentions, the current data did not support this. Instead, the current study indicates that creative individuals are especially beneficial because they not only engage in more OCBs, but they also engage in fewer CWBs. Creativity was originally hypothesized to be positively related to CWB based on emerging research that found the more creative individuals were, the more dishonest they were, and the better able they were to justify their immoral actions (i.e., increased moral flexibility; Gino & Ariely, 2012). While the present results are not consistent with Gino and Ariely's findings, it may simply be that dishonesty in the general public is very different from engaging in negative behavior in high-stakes situations such as one's job. Just because creativity and divergent thinking may lead individuals to lie, does not mean that they translate this to harmful behaviors such as theft, sabotage, or abuse. Rather, engagement in CWB is probably more commonly engaged in as a reaction to the work environment (e.g., justice) or a function of one's personality characteristics (e.g., neuroticism) rather than a methodical, planned out use of creative ideas. Therefore, creativity may not come into play until after a CWB has been performed, at which point it could be used to help cover one's tracks or justify

one's behavior to oneself or others. In other words, creativity may not predict CWB, but rather be used as a means of easing one's guilt or justifying it once a CWB has been performed. Perhaps even more fundamentally, creativity may simply run counter to CWB. Creative individuals are driven to create change and improvements all around them, excluding intentional harm.

Creativity was also hypothesized to have stronger positive relationships with CWB focused on harming the organization than CWB focused on harming individuals. After all, individuals are more likely to engage in more discreet forms of CWB in an attempt to maximize a CWB's harmful effect while minimizing the potential for getting caught and punished. Therefore, it was hypothesized that creativity would have a stronger positive relationship with behaviors targeting the organization (i.e., CWB-O) than behaviors targeting individuals (i.e., CWB-I), and when examining specific behavioral dimensions, creativity would have a stronger positive relationship with sabotage and theft than abuse, production deviance, and withdrawal. In the overall sample, creativity was not only found to significantly predict CWB-O, but creativity's relationship with CWB-O was significantly stronger than creativity's relationship with CWB-I. Counter to my hypothesis, creativity had a significant *negative* relationship with CWB-O, where the more creative an individual was, the fewer CWBs targeting the organization they engaged in. Further, creativity also significantly predicted (negatively) engagement in theft, production deviance, and withdrawal behaviors (although creativity's relationship did not significantly differ between them).

While these findings are counter to what was hypothesized, if CWB truly is in opposition to the creative mindset as proposed above (i.e., the creative toolbox is used for generating new and useful ideas for the greater good or mass benefit in the workplace, not just the individual employee), then this study found results that fall in line with this notion. If this were true, creativity would not simply have a non-significant relationship with CWB, it should have a significant negative correlation where creative employees actively avoid engaging in CWB, especially those that are most harmful to the organization and the individual engaging in them (more detectable resulting in increased potential for punishment; theft, production deviance, withdrawal).

What was surprising, however, was creativity's differential prediction of CWB-O and CWB-I. It was hypothesized that creative individuals would engage in significantly *more* CWB-Os than CWB-Is due to their increased benefit to the acting individual at a lower chance of detection and punishment (CWB-Os are generally more discreet). The current results found the exact opposite; creative employees are significantly *less* likely to engage in CWB-Os than CWB-Is. In fact, according to the present study, creativity is unrelated to engagement in CWB-Is. What might account for this? If creativity is truly about generating new and useful ideas to benefit the workplace, creative employees may focus their attention and efforts on behaviors that benefit the organization such as task performance and OCBs while avoiding behaviors that harm it (CWB-Os). CWB-Is, on the other hand, are more interpersonal and based on relationships with others in the workplace for which an individual difference such as creativity has no impact on.

Organizational constraints were also hypothesized to moderate the proposed positive relationship between creativity and CWB where the relationship would become weaker as organizational constraints increased in the workplace. Further, this moderating effect was hypothesized to be stronger for CWB-O than CWB-I since the constraints are originating from the work environment and not individuals. Although the study found organizational constraints did moderate the relationship between creativity and overall CWB, the negative relationship *strengthened* as organizational constraints increased rather than weakened. Further, although constraints moderated the relationship between creativity and CWB-O, but not CWB-I, again, the negative relationship between creativity and CWB-O strengthened as organizational constraints increased. Therefore, according to the present results, creative individuals engage in less CWB and CWB-O as organizational constraints increase in the workplace.

As previously mentioned, strong situations exert a lot of influence on a person's behavior, leaving little room for individual differences to exert an influence (Hough & Oswald, 2008; Meyer et al., 2010). Therefore, as organizational constraints increase in the workplace constraining individuals' behavior and interfering with their goals, frustration and aggression should also increase, potentially released in the form of CWB. Yet the current results found the opposite; as organizational constraints increased, creative individuals engaged in less CWB, especially CWB aimed at harming the organization (the originating source of the organizational constraints). Although counter to my hypotheses, creative individuals may be better equipped to navigate the constraints and maintain successful performance, reducing their need to release frustration in the

form of CWB. Less creative individuals, however, do not have the ability to overcome or get around the constraints and may be more inclined to engage in CWB when overwhelmed by constraints, especially CWB-O aimed at harming the originating source of the constraints. However, this is all speculation and research needs to be performed examining the relationship between creativity and CWB to see if the present results are replicated, and if so, what are the underlying reasons creative employees do not utilize their ideas for harm, and further, why environments fraught with organizational constraints do not amplify this.

Theoretical and Applied Implications

Creativity is commonly believed to be inherently good, paving the path to great innovations in all realms of life. Due to such beliefs, leaders in the organizational world are seeking creative employees to achieve organizational success and remain competitive in the ever-changing global market. Although creative employees are a source of creative ideas, processes, and products for an organization, these ideas, processes, and products may not be limited to just task performance, and the present study hypothesized that creative employees would engage in more OCBs and CWBs than the average, non-creative employee. The results of this study indicated that creative employees engage in more OCB, especially change-oriented OCB. Further, creative employees engage in more organizationally targeted OCB than non-creative employees even when organizational constraints are high. Contrary to my hypotheses, however, creative employees were not found to engage in more CWB; in fact, creative employees

were found to engage in significantly *less* CWB than less creative employees, especially in regards to theft, production deviance, and withdrawal behaviors.

This is great news for organizational leaders – creativity may not only enhance positive workplace behaviors (task performance and OCB), but also decrease negative workplace behaviors (CWB). Therefore, the push to increase creativity in the workplace may be a very beneficial one. As organizations have sought to increase creativity in the workplace, creativity measures are increasingly recommended in high stakes testing such as job and college applications (Sternberg & The Rainbow Project Collaborators, 2006). The current results provide evidence that there is no cause for worry for including such measures. In fact, they may be potentially very useful in helping organizations to identify applicants who can not only help drive the business forward, but applicants who also add to the overall performance by engaging in OCB and avoiding CWB. While we typically think of large and innovative outcomes of creativity, such outcomes are typically rare and infrequent. OCBs, on the other hand, are everyday behaviors that can subtly enhance the organization and are not limited to large organizational needs for change. So while creativity is vital for meeting large creative problems and needs as they arise, on a day-to-day basis creativity might be used for seeking and engaging in OCB, which may be as beneficial to an organization in the long run. Whether creativity is increased through hiring more creative employees, or whether it is through creating an open and supportive climate for creativity, the potential for positive gains may be worth the investment.

Further, the results raise an important theoretical implication for creativity in the workplace. Why do creative employees engage in OCB and not CWB? If divergent thinking enables highly creative individuals to see connections and develop ideas in all directions, both positive and negative, why do creative employees choose to pursue the positive ones and engage in OCB? Is it that creative individuals are only interested in creating positive change and the negative ideas are eliminated in the evaluation stage of the creative process? Or if creative employees are interested in personal enhancement as well as the greater good, perhaps they see OCB as a better means of being recognized and having a long-term effect on their career. Or even more simply, creative employees might be better able to generate numerous options which allows them to meet their needs while avoiding CWB and the potential implications and punishment that might follow. Further research needs to examine decision-making within the creative process to shed some light on this question.

Limitations and Directions for Future Research

This study, like any other, has certain limitations. First, although all employees are thought to be creative to an extent, not all employees have the ability to engage in creativity within their workplace. Therefore, a task-based measure of creative ability was included in the study alongside self-reported creativity. The hope was to be able to not only measure how much creative behavior was typically engaged in (self-report), but to also get an objective measure of creative ability, regardless of whether it is enacted upon in the workplace or not (task-based). Unfortunately, in the present sample, the self-reported creative behavior and task-based creative ability measures were negatively,

although not significantly, correlated ($r = -.10, p > .05$). Further, for the most part, the task-based creativity measure was not only a non-significant correlate of OCB and CWB measures, but it also did not correlate with any other measures in the creativity nomological network (e.g., openness). While creative ability may in fact be unrelated to OCB and CWB, it is more likely creative ability as measured by the RAT in the present study did not function as intended. Although it is impossible to know why it did not measure creative ability as intended, fault might lie partly in the design of the study. The entire study was conducted online, and therefore there was no means of monitoring the participants' behavior. To keep participants focused on the activity and limit their ability to seek the answers online, participants were forced to spend at least 3 minutes on the RAT, but were forced to move to the next survey after 8 minutes. Such time restrictions might have undermined or blocked the creative process through a feeling of evaluation or external rewards from linking the RAT to the broader survey payment (Amabile, Conti, Coon, Lazenby, & Herron, 1996). Future research needs to re-examine task-based creative ability's relationship with OCB and CWB using a different format that excludes any environmental factors that block motivation to engage in creativity.

The study's design also had limitations in that it utilized an Amazon MTurk sample. While I was able to gather data on the participants' occupations, data was not collected on what organizations these individuals work for and how open or supportive their organizations are to creativity. Future research should see if the present results could be replicated in employees varying in their level of creativity within the same organization and therefore somewhat controlling for the environmental influences.

Further, individual differences in creativity and its relationship with non-task performance should be examined across organizations and occupations that vary in the level of required or needed creativity to determine if a creative context also has a significant impact on the relationship. Further, the relationship between creativity, OCB, and CWB should be examined longitudinally. While the current study collected data at two different time points, the design was cross-sectional in nature and could not examine the relationship between creativity and non-task performance over time. Because the need for creativity within organizations fluctuates over time, which behaviors creative employees choose to engage in might also fluctuate. Will engagement in OCB increase and CWB decrease in times of creative need and opportunity, but once resolved, change? Environmental influences might also influence the creativity-non-task performance relationship over time.

Beyond the design of the study, it is important to caution over-interpretation of the findings. While significant relationships were found amongst the variables of interest, all path models in the present study had poor fit. Future work should carefully choose which variables to include in the model based on theory and previous research rather than control for all possible confounds (e.g., control for known common correlates such as openness rather than all five personality traits).

Further, it is prudent to explore other factors that might impact the relationship between creativity, OCB, and CWB. Although the present study found interesting results regarding creativity's relationship with non-task performance using the self-reported creativity scale, it is important to get an outside perspective on an individual's creative

behavior in the workplace such as a supervisor or coworker. Because the significant results in this study were all found with self-report measures, there is concern of common method bias and social desirability. Collecting a supervisor's or coworker's ratings of a participant's creative behavior in the workplace would allow us to determine whether there is high or low levels of agreement about the behaviors displayed on the job. It is also important to study other situational factors beyond organizational constraints that might impact performance of OCB and CWB, and their various dimensions. Situational factors that might be of interest due to their known relationship with OCB and CWB might be organizational justice, interpersonal conflict, perceived organizational support, and organizational support for creativity. Not only might these variables provide further insight into the work environment's moderating role on creativity and non-task performance, but they might also shed light on what factors motivate an employee to target an individual or the organization with their OCB and CWB.

In conclusion, the current study finds some initial information about the relationship between creativity and non-task performance (i.e., OCB and CWB). The results indicated that creative employees not only engaged in more OCB than less-creative employees, but that they also engaged in less CWB, especially theft and production deviance behaviors. Additionally, organizational constraints moderated the relationship between creativity and OCB such that when organizational constraints were high in the workplace, the relationship between creativity and OCB decreased, especially for OCB-I. Although organizational constraints did moderate the relationship between

creativity and CWB, it was not in the hypothesized direction. When organizational constraints were high in the workplace, the negative relationship between creativity and CWB strengthened. These findings merit further investigation of the relationship between creativity and non-task performance, especially examining when and why creative employees engage in, or do not engage in, such behaviors.

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APPENDIX

FULL MEASURES USED IN DISSERTATION

Demographics

What is your gender?

- 1 = Male
- 2 = Female

How old are you? [open response]

What is your race?

- 1 = White/Caucasian
- 2 = African American
- 3 = Hispanic
- 4 = Asian
- 5 = Native American
- 6 = Pacific Islander
- 7 = Other

What is the highest level of education you have completed?

- 1 = Less than high school
- 2 = High school diploma/GED
- 3 = Some college
- 4 = 2-year College Degree
- 5 = 4-year College Degree
- 6 = Masters Degree
- 7 = Doctoral Degree
- 8 = Professional Degree (JD, MD)

How long have you worked for your present company? [open response]

Are you currently in a management role?

- 1 = No
- 2 = Yes

Workplace Creativity

1. Suggests new ways to achieve goals or objectives.
2. Comes up with new and practical ideas to improve performance.
3. Searches out new technologies, processes, techniques, and/or product ideas.
4. Suggests new ways to increase quality.
5. Is a good source of creative ideas.
6. Is not afraid to take risks.
7. Promotes and champions ideas to others.
8. Exhibits creativity on the job when given the opportunity to.
9. Develops adequate plans and schedules for the implementation of new ideas.
10. Often has new and innovative ideas.
11. Comes up with creative solutions to problems.
12. Often has a fresh approach to problems.
13. Suggests new ways of performing work tasks.

Remote Associates Test (RAT)

1. Dew/Comb/Bee (Honey)
2. Cream/Skate/Water (Ice)
3. Loser/Throat/Spot (Sore)
4. Preserve/Ranger/Tropical (Forest)
5. Fountain/Baking/Pop (Soda)
6. Dream/Break/Light (Day)
7. Piece/Mind/Dating (Game)
8. Flower/Friend/Scout (Girl)
9. Opera/Hand/Dish (Soap)
10. Light/Birthday/Stick (Candle)
11. Right/Cat/Carbon (Copy)
12. Dress/Dial/Flower (Sun)
13. Mouse/Bear/Sand (Trap)
14. Fence/Card/Master (Post)
15. Dive/Light/Rocket (Sky)
16. Man/Glue/Star (Super)
17. Tooth/Potato/Heart (Sweet)
18. Wise/Work/Tower (Clock)
19. Back/Step/Screen (Door)
20. Pea/Shell/Chest (Nut)

Organizational Citizenship Behavior Checklist

1. Picked up meals for others at work.
2. Took time to advise, coach, or mentor a co-worker.
3. Helped co-worker learn new skills or shared job knowledge.
4. Helped new employees get oriented to the job.
5. Lent a compassionate ear when someone had a work problem.
6. Lent a compassionate ear when someone has a personal problem.
7. Changed vacation schedule, workdays, or shifts to accommodate co-worker's needs.
8. Offered suggestions to improve how work is done.
9. Offered suggestions for improving the work environment.
10. Finished something for co-worker who had to leave early.
11. Helped a less capable co-worker lift a heavy box or other object.
12. Helped a co-worker who had too much to do.
13. Volunteered for extra work assignments.
14. Took phone messages for absent or busy co-worker.
15. Said good things about your employer in front of others.
16. Gave up meal and other breaks to complete work.
17. Volunteered to help a co-worker deal with a difficult customer, vendor, or co-worker.
18. Went out of the way to give co-worker encouragement or express appreciation.
19. Decorated, straightened up, or otherwise beautified common work space.
20. Defended a co-worker who was being "put-down" or spoken ill of by other co-workers or supervisor.

Change-Oriented OCBs

1. I often try to adopt improved procedures for doing my job.
2. I often try to change how my job is executed in order to be more effective.
3. I often try to bring about improved procedures for the work unit or department.
4. I often try to institute new work methods that are more effective for the company.
5. I often try to change organizational rules or policies that are nonproductive or counterproductive.
6. I often make constructive suggestions for improving how things operate within the organization.
7. I often try to correct a faulty procedure or practice.
8. I often try to eliminate redundant or unnecessary procedures.
9. I often try to implement solutions to pressing organizational problems.
10. I often try to introduce new structures, technologies, or approaches to improve efficiency.

Counterproductive Work Behavior Checklist

1. Purposely wasted your employer's materials/supplies.
2. Purposely damaged a piece of equipment or property.
3. Purposely dirtied or littered your place of work.
4. Came to work late without permission.
5. Stayed home from work and said you were sick when you were not.
6. Taken a longer break than you were allowed to take.
7. Left work earlier than you were allowed to.
8. Purposely did your work incorrectly.
9. Purposely worked slowly when things needed to get done.
10. Purposely failed to follow instructions.
11. Stolen something belonging to your employer.
12. Took supplies or tools home without permission.
13. Put in to be paid for more hours than you worked.
14. Took money from your employer without permission.
15. Stole something belonging to someone at work.
16. Started or continued a damaging or harmful rumor at work.
17. Been nasty or rude to a client or customer.
18. Insulted someone about their job performance.
19. Made fun of someone's personal life.
20. Ignored someone at work.
21. Blamed someone at work for error you made.
22. Started an argument with someone at work.
23. Verbally abused someone at work.
24. Made an obscene gesture (the finger) to someone at work.
25. Threatened someone at work with violence.
26. Threatened someone at work, but not physically.
27. Said something obscene to someone at work to make them feel bad.
28. Did something to make someone at work look bad.
29. Played a mean prank to embarrass someone at work.
30. Looked at someone at work's private mail/property without permission.
31. Hit or pushed someone at work.
32. Insulted or made fun of someone at work.

Organizational Constraints Scale

1. Poor equipment or supplies.
2. Organizational rules and procedures.
3. Other employees.
4. Your supervisor.
5. Lack of equipment or supplies.
6. Inadequate training.
7. Interruptions by other people.
8. Lack of necessary information about what to do or how to do it.
9. Conflicting job demands.
10. Inadequate help from others.
11. Incorrect instructions.

Mini-IPIP

1. Am the life of the party.
2. Don't talk a lot.
3. Am relaxed most of the time.
4. Have difficulty understanding abstract ideas.
5. Have a vivid imagination.
6. Keep in the background.
7. Sympathize with others' feelings.
8. Make a mess of things.
9. Seldom feel blue.
10. Am not interested in abstract ideas.
11. Am not interested in other people's problems.
12. Get chores done right away.
13. Often forget to put things back in their proper place.
14. Get upset easily.
15. Do not have a good imagination.
16. Talk to a lot of different people at parties.
17. Am not really interested in others.
18. Like order.
19. Have frequent mood swings.
20. Feel others' emotions.