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An Investigation of OCB Demands and Workplace Behaviors

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by

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Abstract

The current study investigated the relationship between demands for organizational citizenship behaviors and future displays of organizational citizenship and counterproductive work behaviors. Such demands are conceptualized as workplace conditions that make it difficult for employees to complete their job (i.e., organizational constraints), performance failures of coworkers such as incomplete or incorrectly done tasks (i.e., coworker failure) and direct or indirect request from the supervisors to commit more organizational citizenship behaviors (i.e., supervisor pressure). Additionally, the effect of negative affectivity, hostile attribution bias, attributions of blame, and target specific scales of workplace behaviors were investigated. The design of the current study is prospective with a one week time lag between two self-report surveys. 464 employed U.S. residents were recruited through Amazon's M-Turk service. Of the initial 464 participants, 183 also completed the second survey a week later. New scales were created to assess coworker failure, supervisor pressure, attributions of blame, and target specific behaviors. The evidence from this study suggests that coworker failure and supervisor pressure are both antecedents to future displays of organizational citizenship behaviors and counterproductive work behaviors. Similarly, organizational citizenship behaviors preceded demands for organizational citizenship behaviors reported a week later. The results differed slightly when using target-specific scales of behavior. The hypotheses regarding individual differences and attributions of blame were not supported.

Chapter One: An Investigation of OCB Demands and Workplace Behaviors

Organizational Citizenship Behavior (OCB) and Counterproductive Work Behavior (CWB) are two facets of job performance (Sackett, 2002) that can significantly affect the functioning of an organization (Hollinger & Clark, 1983; Podsakoff, Ahearne, & MacKenzie, 1997). OCB consists of behaviors assumed to help the organization and its members whereas CWB consists of behaviors assumed to harm the organization and its members. Although both behaviors have traditionally been conceptualized as extra-task and voluntary, they were developed in relatively independent streams of literature. Over the past decade, studies incorporating both types of behavior have become more popular (e.g., Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Dalal, 2005; Spector & Fox, 2002). Most of these studies, both theoretical and empirical, report a moderate negative association between OCB and CWB (e.g., Berry, Ones, & Sackett, 2007; Lee & Allen, 2002). Across several investigations, OCB and CWB have also been oppositely related to potential antecedents they have in common (Cohen-Charash & Spector, 2001; Dalal, 2005; Miles, Borman, Spector, & Fox, 2002). Based on the results from these studies, employees that engage in one form of behavior are not expected to frequently engage in the other.

Although there is evidence to suggest that OCB and CWB are at opposite ends of the same continuum these results may be partly due to measurement artifacts (see Dalal, 2005; Spector, Bauer, & Fox, 2010). Furthermore, some researchers have discussed the

possibility that employees can frequently engage in both OCB and CWB (e.g., Duffy, Ganster, & Pagon, 2002). Indeed, a large portion of the variance associated with OCB and CWB is within person (Dalal, Lam, Weiss, Welch, & Hulin, 2009; Judge, Scott, & Ilies, 2006). Additionally, studies have reported a non-significant or positive relationship between OCB and CWB while looking within and between participants (e.g., Dalal et al., 2009; Spector, Bauer, & Fox, 2010; Vekatamari & Dalal, 2007). Thus, there is some evidence to suggest that OCB and CWB are relatively separate and independent constructs and that certain conditions may give rise to both OCB and CWB.

Little attention has been given to circumstances in which both OCB and CWB can co-occur. This may be due to the traditional treatment of OCB and CWB as opposite forms of behaviors. However, in light of the research discussed previously, it is possible that important information may be revealed by investigating situations that elicit both behaviors. For instance, some researchers have speculated that certain situational antecedents to OCB may also elicit CWB (Bolino, Turnley, Gilstrap, & Suazo, 2010; Spector & Fox, 2010a). Thus, a study that focuses exclusively on one type of behavior risks missing any influence that these variables may have on the other type of behavior.

Fortunately, researchers have identified circumstances that may energize employees to engage in both forms of OCB and CWB. More specifically, Spector and Fox (2010b) discuss the role of OCB demands. OCB demands are demands that can pressure an employee to commit OCB. An example OCB demand is the performance failure of a coworker. If tasks are interdependent, employees may feel the need to help coworkers in order to complete their own tasks. Situations where employees feel forced to do more work (OCB) may also result in negative outcomes such as negative emotions

and CWB (Bolino, Turnley, Gilstrap, & Suazo, 2010; Fox, Spector, Goh, Bruursema, & Kessler, 2011; Vigoda-Gadot, 2006). Thus, demands for OCB may motivate employees to engage in OCB as well as CWB.

The purpose of the current study is to investigate the link between OCB demands and displays of both OCB and CWB. Both the stressor-strain perspective and attribution theory are used to generate predictions regarding OCB demands and both behaviors. Some potential moderators (i.e., hostile attribution bias and negative affectivity) of these relationships are also explored. To conduct a thorough investigation, the current study adopts several features. First, this study implements a prospective design to investigate the direction of the observed relationships. The majority of studies on OCB and CWB have used cross-sectional designs that limit the conclusions that can be made about relationships among variables. Second, this study includes a measure of attribution. Research on these behaviors frequently acknowledge the importance of attributions, but rarely report any empirical evidence. Finally, this study attempts to link the target of extra-task behaviors to the perceived source of demand. Studies have investigated the target of both OCB and CWB (e.g., Robinson & Bennett, 1995; Williams & Anderson, 1991) but I add to these studies by taking a more microscopic approach and investigating several potential targets as opposed to focusing on behaviors directed interpersonally or directed towards the organization as a whole. Before moving on to a more thorough discussion of OCB demands, I will first briefly discuss how employees may decide where they direct OCB and CWB.

Assessing the Target of Workplace Behaviors

The majority of studies on OCB and CWB have made the distinction between organizational and interpersonally directed behaviors (e.g., Robinson & Bennett, 1995; Williams & Anderson, 1991). However, this is a global distinction and researchers have called for studies that investigate more specific targets of behavior such as supervisor directed behaviors (e.g., Herschovis et al., 2007; Jones, 2009; Lavelle, Rupp, & Brockner, 2007). Few studies on OCB and CWB have investigated potential targets of both behaviors. I will rely on social exchange theory and a spill-over model of behavior to make predictions regarding the targets of OCB and CWB.

Blau's (1964) social exchange theory states that people create relationships and exchange social benefits with their employers. Lavelle et al. (2007) expands on Blau (1964) by asserting that social exchange relationships can develop among all organizational members. When employees have social exchange relationships in the organization, they monitor these relationships to ensure that they are being treated fairly. If employees detect an inequality in a social relationship, they can respond behaviorally (i.e., OCB or CWB) towards the other member in the relationship. According to the social exchange theory (Blau, 1964), OCB and CWB are expected to be directed towards the perceived source of an event in order to maintain relationships. There is some support for this expectation (i.e., Jones, 2009). Such a process is also congruent with the notion that CWB is often directed towards the perceived cause of the mistreatment (Hershcovis et al., 2007; Robinson & Bennett, 1995). In regards to OCB demands, using a social exchange approach would lead to a prediction that employees would direct their OCB and CWB toward whomever they perceive as responsible for increasing the demand for OCB.

Although the social exchange theory may be useful in predicting the targets of behavior, committing CWB can be risky, especially when directed towards supervisors. Thus, employees may not direct CWB towards the original perceived source of a stressor if it will likely result in a negative outcomes such as the termination of employment. Instead, employees may direct CWB toward a less risky target. For instance, an employee may direct CWB towards a subordinate as a reaction to perceived injustice stemming from interactions with a supervisor. This phenomenon is termed displacement or spillover and there is evidence that it often influences the target of aggressive behaviors (Felps, Mitchell, & Byington, 2006; Marcus-Newhall, Shuler, Quell, & Humpfer, 2000). Based on the concepts of social exchange theory and behavioral displacement, I will predict the target (i.e., coworker, supervisor) of OCB and CWB when employees are exposed to OCB demands.

OCB Demands

OCB was originally defined as extra-role, discretionary behavior that helps other organizational members perform their jobs or that shows support for and conscientiousness toward the organization (Borman & Penner, 2001; Smith, Organ, & Near, 1983). Since then, researchers have suggested that OCB is not always extra-role or discretionary (Organ, 1997). Supervisors often consider OCBs when evaluating employees (Allen & Rush, 1998; Pond, Nacoste, Mohr, & Rodriguez, 1997). Additionally, Werner (2000) discusses how compensation may be a potential avenue for increasing the frequency of OCB. In line with such discussions, researchers have begun to conceptualize citizenship behavior as extra-task but not always extra-role (Borman & Motowidlo, 1993). Before moving on, it is important to note that there are differences

between behaviors that are considered OCB and those that are classified as task performance. Task related behaviors tend to vary across jobs and tend to require specific knowledge, skills, and abilities. However, the classifications of OCBs tend to not vary much across jobs and these behaviors tend to not require specific knowledge or skills. For instance, volunteering or cooperating is likely to be considered OCB at any job, and almost any employee is capable of engaging in such behaviors. Even though OCB is distinct from task performance, it may still be considered a part of an employee's job role. Thus, OCB is expected or even a requirement in some positions (Hanson & Borman, 2006).

OCB committed out of a perceived obligation is likely to benefit the organization but such pressure may also result in some undesirable behaviors (i.e., CWB). To understand how this pressure may be positively associated with both OCB and CWB, it is helpful to discuss the stressor-strain perspective (Spector & Fox, 2005). From this perspective, job stressors (i.e. demands) are conditions or situations at work that requires an adaptive response on the part of employee (Jex & Beehr, 1991). Having to adapt to such demands in the workplace takes a toll on the employee and may result in strain, which is a negative reaction to a stressor. These reactions can be physical, emotional, cognitive, or behavioral (e.g., CWB). More specifically, OCB that is viewed as mandatory by the employee will increase the amount of work an employee must complete. An increase in workload is associated with negative behavioral reactions (Balducci, Schaufeli, & Fraccaroli, 2011; Miles et al., 2002). Thus, situations that increase demands may also elicit negative behavioral reaction such as CWB (e.g., withdrawal behaviors).

OCB demands may also elicit CWB through complex cognitive processes such as justice perceptions. Blau's (1964) social exchange theory is based on the idea that employees develop norms of reciprocity within the organization. Based on social exchange theories, employees are expected to exercise discretion over whether or not to display OCB while monitoring their interactions with the organization and its members (Organ, 1990). For instance, if the organization is treating employees unjustly, the employees may refrain from future displays of OCB. However, employees are expected to perform more, not less, OCB if it is expected or required. A feasible alternative reaction may be to commit a low risk CWB in order to restore balance to the relationship between the employee and the organization. Indeed, poor treatment is often reciprocated with negative attitudes and behaviors (Mitchell & Ambrose, 2007). Thus, OCB demands are expected to motivate employees to engage in both sets of behaviors under certain conditions.

There are several avenues by which OCB demands may elicit OCB or CWB and cognitive processes are likely an integral component of each path. For instance, objectively increasing demands does not always elicit negative reactions. The employee must first perceive the new demand as a stressor. Then, an intricate process of attribution, appraisals, emotions, and coping mechanisms occurs with the purpose of determining a behavioral reaction (Lazarus & Folkman, 1984). Similarly, the link between justice perceptions and behavioral reactions is also quite complex. To create justice perceptions, employees can engage in counterfactual thinking and generate justice-related heuristics (Cropanzano, Rupp, Mohler, & Schminke, 2001; Lind, 2001). In order to explain cognitive processes that may occur between demands of OCB and subsequent behaviors;

I will briefly review the sense-making perspective of cognition (Weick, Sutcliffe, & Obstfeld, 2005). Sense-making is a process that can occur whenever a person perceives a disturbance or incongruence that they wish to understand (Weick, 1995). To do so, individuals will review all available information to try and create the most plausible explanation or story. In the organizational setting, an increase in the pressure to commit OCB will likely engage cognitive processes that can help the employee to understand the current situation. These processes are expected to guide an employee's reaction to increased OCB demands.

The paths to and from OCB and CWB are many. Example motivations include emotion regulation and instrumental outcomes (e.g., money or promotion). Since these behaviors can have several antecedents and consequences, it would be difficult to include them all in one overarching framework. However, Rudolph, Roesch, Greitemeyer, & Weiner's (2004) approach to explaining the cognitive processes involved in helping and harming (e.g., aggression) behaviors can be used to identify cognitive processes associated with displays of OCB and CWB. Rudolph et al. (2004) advocated using attribution theory (Weiner, 1985) as a "lens" with which we can investigate the motivation for displaying helping and harming behaviors. Attributions are causal ascriptions that are made towards an event (Weiner, 1985). They can be thought of as mechanisms that individuals use to try and understand the cause or reason for a given event. In this way, attributions are integral in making sense of our environment. Perrewé and Zellars (1999) linked attributions to the overall cognitive process of the transactional theory of stress (Lazarus & Folkman, 1984). They describe a process in which appraisals and attributions of the situation can influence emotional and behavioral reactions.

Support for the link between attributions and behavioral reactions can be found in Rudolph et al.'s meta-analysis (2004) that reported an association between judgments of responsibility and the display of either helping or harming behaviors.

There are several causal attributions that an individual can make about an event. They can occur both intrapersonally and interpersonally. Intrapersonal attributions are based on ourselves while interpersonal attributions are made about others. Interpersonal attributions are expected to be more useful in predicting helping and harming behaviors because these are directed at others. One interpersonal attribution that is given priority in our decision making process is the attribution of blame (Perrewé & Zellars, 1999; Wong & Weiner, 1981). The attribution of blame is an active search to identify the entity responsible for the perceived threat or event. For instance, the first thing an employee might do when faced with a stressor is determine if a coworker or a supervisor is responsible for their exposure to the stressful condition.

Attributions can be used to guide our expectations for when OCB and CWB will be displayed in response to demands for OCB. What are less clear are the specific situations that yield a demand for OCB. Spector and Fox (2010b) identified 3 situations that may increase the demand for OCB (e.g., organizational constraints, coworker failure, and supervisor pressure). The next sections will briefly discuss how these three situations can increase the demand for OCB and potentially motivate employees to commit CWB.

Organizational constraints. Organizational constraints are workplace situations that make it difficult or impossible to perform the necessary job tasks (Peters & O'Connor, 1980). Some examples are poor equipment or insufficient training. Several

studies have reported evidence that constraints are associated with both negative emotions and CWB (Chen & Spector, 1992; Hershcovis et al., 2007; Penney & Spector, 2005). Studies have found constraints to be positively associated with both OCB and CWB (Fox et al., 2011; Miles et al., 2002; Spector, Bauer, & Fox, 2010). To attenuate organizational constraints, employees may engage in OCB to remove obstacles preventing successful task completion (See Fox et al., 2011; Spector & Fox, 2010a; Spector & Fox, 2010b).

Hypothesis 1: Constraints will be positively associated with OCB.

Hypothesis 2: Constraints will be positively associated with CWB.

***Target of behavior in response to organizational constraints*.** Organizational constraints can arise from multiple sources within the organization. Job performance can be obstructed by coworkers, supervisors, or organizational policies. Many of the items included in the Organizational Constraints Scale (OCS; Spector & Jex, 1988) include items specifically directed toward a supervisor or coworker. Employees are expected to react with OCB and CWB directed towards several different entities because employees can perceive constraints as arising from multiple sources. For instance, OCB could be targeted at coworkers and at supervisors in order to attenuate constraints or to compensate for the inability to complete core job tasks. The target of CWB in response to organizational constraints will likely depend on the blame attributions made by the employee. One exception to this expectation is supervisor directed CWB. This type of CWB is highly risky and employees may displace CWB to other sources even though they blame the supervisor.

Hypothesis 3: Constraints will be positively associated with OCB directed toward both coworkers and supervisors.

Hypothesis 4: Constraints will be positively associated with CWB directed towards coworkers.

Hypothesis 5: Constraints and the blame attribution will interact to predict CWB directed at a coworkers, such that the association between constraints and the amount of CWB will be stronger when blame attributions are more frequently made toward a particular target.

Coworker performance failure. The failure of coworkers to perform assigned tasks can take many shapes. A coworker can perform tasks incorrectly, complete tasks haphazardly, or fail to initiate tasks at all. These performance failures can increase the workload of other employees. This is particularly true when the coworker is part of a workgroup or has tasks that are interdependent. Employee failure may arise from a lack of ability or a lack of motivation. Regardless of the underlying cause, employees might compensate for performance deficits by doing extra tasks that go beyond their own assignments (Felps et al. 2006; Liden et al., 2004; Zellars & Tepper, 2003). Thus coworker lack of performance would produce a demand for OCB because employees often require a coworker's task to be complete in order to successfully complete their own work. Committing such OCB may be perceived as additional work that becomes mandatory. In response to this perceived stressor, employees may initiate a sense-making process to form attributions about the coworker failure. Attributions toward the coworker are expected to elicit negative emotions (LePine & Dyne, 2001; Spector & Fox, 2010;

Taggar & Neubit 2004, Taggar & Neubit, 2008) and CWBs (Hung, Chi, & Lu, 2009), such as ostracizing or excluding the coworker responsible for the failure (LePine & Dyne, 2001). Therefore, coworker failure is another situation in which employees may react with both OCB and CWB.

Hypothesis 6: Coworker failure will be positively associated with OCB.

Hypothesis 7: Coworker failure will be positively associated with CWB.

Target of behavior in response to coworker failure. Employees are expected to react to coworker failure by engaging in helping behaviors directed toward the coworker. From the perspective of social exchange and appraisal theories (Blau, 1964; Weiner, 1985), employees are also expected to experience negative emotions if they hold the coworker responsible for failure. To attenuate these feelings, employees may commit CWB directed toward the coworker to cope (Spector & Fox, 2002), to punish (Felps et al. 2006), or to maintain an equal level of social exchange. Thus, blame attributions are again expected to moderate the relationship between coworker failure and CWB directed toward the coworker.

Hypothesis 8: Coworker failure will be positively associated with OCB directed toward coworkers.

Hypothesis 9: Coworker failure will be positively associated with CWB directed toward coworkers.

Hypothesis 10: Coworker failure and blame attributions will interact to predict CWB directed at coworkers, such that the association between constraints and the

amount of CWB will be stronger when blame attributions are frequently made towards a target than when they are not frequently made.

Supervisor pressure. There are a number of situations in which a supervisor may require an employee to engage in OCB. For instance, a workgroup supervisor may ask subordinates to work longer hours when the group is faced with urgent deadlines. Similarly, a supervisor may define the job role broadly and assume that OCBs are included in the subordinates' job definition. Regardless of the cause, employees pressured by supervisors to engage in OCB are expected to be motivated to comply with such demands because supervisors are a figure of authority. Pressure to commit OCB has been associated with higher rates of OCB (Bolino et al., 2010). Even though OCB can be beneficial to the organization, Vigoda-Gadot (2006) asserts that pressuring employees to commit behaviors that are, otherwise, considered discretionary can be considered a form of exploitation or abusive supervision. Determining the appropriateness of supervisor pressure is largely dependent on the situation, however, pressure from a supervisor may result in employee strain under certain conditions. For instance, pressure to commit OCB has also been associated with several negative outcomes such as burnout, job stress, and turnover intentions (Bolino et al., 2010; Vigoda-Gadot, 2006). Thus, supervisor pressure to commit OCB may promote displays of OCB but it may also be associated with negative employee reactions.

Additionally, Employees who perceive pressure to commit OCB may respond with CWB due to a mismatch between employee and supervisor conceptualization regarding job roles (Lam, Hui, & Law, 1999; Morrison, 1994). Lam et al. (1999) speculated that supervisors define job roles more broadly because they are concerned

with organizational effectiveness while employees are more concerned with the equity of exchanges. When supervisors require behaviors that employees view as discretionary, employees may perceive the additional demands as unjust and respond with CWB to compensate. Similarly, expectations for a particular role can differ from employee to supervisor. Role expectations are beliefs about what is required for successful role performance (Dierdorff, Rubin, & Backrach, 2010; Ilgen & Hollenbeck, 1991). Supervisors may have higher role expectations than employees because they are concerned with maintaining and exceeding performance levels while employees may be more focused on maintaining the status quo. Such a mismatch may result in supervisors requiring OCBs that are viewed by employees as not part of their form task requirements (e.g., helping a coworker finish work so they can leave early) and may motivate employees to also commit CWB.

Hypothesis 11: Supervisor pressure will be positively associated with OCB.

Hypothesis 12: Supervisor pressure will be positively associated with CWB.

Target of behavior in response to supervisor pressure. When faced with supervisor pressure for OCB, employees are expected to engage in OCB directed toward the supervisor. According to social exchange theory, employees that blame the supervisor for this pressure should also be motivated to display CWB directed towards the supervisor. Supervisor treatment (i.e., interpersonal injustice from the supervisor) has been associated with CWB directed towards the supervisor (Jones, 2009). However, pressure for OCB may not be as intense as interpersonal injustice. Additionally, CWB directed towards the supervisor is risky. In regards to OCB demands, employees have

more resources and motivation to regulate behaviors when faced with OCB demands then when faced with other stressors (e.g. interpersonal conflict). Thus, employees may be able to direct CWB toward other targets such as coworkers or the organization in general (See Marcus-Newhall et al., 2000; Spector & Fox, 2002). Supervisor pressure for OCBs are, therefore, expected to be associated with CWB directed towards other coworkers.

Hypothesis 13: Supervisor pressure will be positively associated with OCB directed toward the supervisor and the coworker.

Hypothesis 14: Supervisor demands will be positively associated with CWB directed toward coworkers.

Hypothesis 15: Supervisor demands and blame attributions will interact to predict CWB directed at coworkers, such that the association between constraints and the amount of CWB will be stronger when blame attributions are frequently made about the supervisor than when they are not frequently made.

The Role of Individual Differences. As I have already mentioned, the path from perception to subsequent behavior depends on several stages such as perceptions, attributions, appraisals, emotions, and coping mechanisms (Lazarus & Folkman, 1984). Both situational factors (e.g., job-related consequences) and dispositional factors (e.g., individual differences) can influence the overall process. For instance, an employee who wants to volunteer for extra work may not do so if it is against company policy (i.e., situational factor) or if the employee has low self-efficacy regarding the task (i.e., dispositional factor). Therefore, these factors may influence the behavioral reactions of employees who are experiencing OCB demands. Spector and Fox (2010b) conceptualized

demands for OCB (e.g., coworker failure, constraints, supervisor demands) as strong situational factors that can almost force employees to go beyond their assigned tasks. Cognitive and affective processes may not be as influential in eliciting OCB when employees are faced with these demands.

Although demands for OCB should create a strong situation for OCB, these demands are not necessarily expected to create a strong situation that pressures employees to avoid CWB. Thus, the cognitive-affective motivational process is expected to play a major role in predicting CWB when employees are exposed to OCB demands. However, the cognitive-affective motivational process preceding CWB may be influenced by dispositional factors. More specifically, the personality of an employee is expected to influence behavioral reactions (e.g. CWB) to negative emotions, perceptions, and attributions (Spector & Fox, 2005). In the following sections I will discuss how individual differences related to attributions (i.e., hostile attributions bias) and emotions (i.e., negative affectivity) can affect the relationships between demands for OCB and displays of CWB.

Hostile attribution bias. The attributions that we make regarding an event are often influenced by our own attributional styles. The hostile attribution bias (HAB) is an attributional style that can be described as a tendency to perceive ambiguous stimuli as threatening or hostile (Williams, Lochman, Phillips, & Barry, 2003, p. 568). Spector (2010b) identified HAB as a personality trait that influences our attributions to a stressful event. HAB is expected to promote negative behavioral reactions to workplace events because HAB can influence attributions that are made to an otherwise ambiguous event. There are several studies that have reported a link between HAB and negative reactions

such as the endorsement of hostile behaviors, as well as, the display of counterproductive and aggressive behaviors in and out of the workplace (Dill, Anderson, Anderson, & Deuser, 1997; Douglas & Martinko, 2001; Homant & Kennedy, 2003; O'Brien & Vandello, 2005).

Additionally, there is some evidence from cross-sectional studies that HAB moderates the relationships between a negative workplace event and CWB. Chiu and Peng (2008) reported evidence that HAB moderated the relationship between perceived psychological contract breach and CWB. Similarly, Hoobler and Brass (2006) reported evidence that HAB moderated the relationship between supervisor's perceptions of psychological contract violation and employee's perceptions of abusive supervision. The relationships between contract violations and CWB was stronger when HAB was high than when it was low in both cases. Thus, if employees perceive demands for OCB as a negative or stressful workplace event, I expect that HAB will moderate the relationship between OCB demands and displays of CWB.

Hypothesis 16: The association between demands for OCB and CWB will be moderated by HAB such that the association between demands for OCB and CWB will be stronger when HAB is high rather than low.

Negative affectivity. Negative affectivity (NA) is defined as a general tendency to experience negative emotions such as anxiety, depression, and hostility, across time and situations (Watson, Clark, Tellegen, 1988). Spector (2011) identified NA as an important individual difference that affects the affective component of the overall CWB process. NA is thought to contribute to displays of CWB because there is both theoretical

and empirical evidence that negative emotions can precede instances of CWB (i.e., Dalal et al., 2009; Judge, Scott, & Ilie, 2006; Spector & Fox, 2005). Employees that experience negative feelings more frequently are also expected to commit more CWB than employees that do not experience a frequent amount of negative feelings. Indeed, several studies have reported evidence of a positive relationship between NA and CWB (i.e., Dalal, 2005; Hershcovis et al., 2007; Spector & Fox, 2002).

NA can also influence the relationship between stressful events and displays of CWB. With a cross-sectional design, both Penney and Spector (2005) and Bowling and Eschleman (2010) found evidence that NA can moderate the relationships between job stressors and CWB. The relationship between job stressors and CWB was stronger when NA was high and weaker when NA was low. Assuming that demands for OCB will be perceived by employees as an organizational stressor, I also expect that NA will moderate the relationship between OCB demands and CWB.

Hypothesis 17: The association between demands for OCB and CWB will be moderated by NA such that the association between demands for OCB and CWB will be stronger when NA is high rather than low.

Current Study

The primary goal of the current study was to investigate the directions of the relationship between OCB demands (i.e., organizational constraints, coworker failure, and supervisor pressure) and both OCB and CWB. A secondary goal of the study was to determine if OCBs and CWBs targeted at specific sources (i.e., supervisors and coworkers) were influenced by the blame attributions that employees make regarding

OCB demands. Finally, the current study explored the role of hostile attribution bias and negative affectivity in influencing the relationships between OCB demands and CWBs. To this end, a prospective study design was implemented in which two surveys were administered with a one week time lag between administrations. Measure of coworker failure and supervisor pressure were developed along with measures of OCB demand related blame attributions and target specific OCB and CWB scales. Both surveys contained measures of OCB and CWB including target specific scales. Additionally, both surveys contained measures of OCB demands and attributions of blame. Finally, to assess the role of hostile attribution bias and negative affectivity, measures of both were included in the first survey.

Chapter Two: Method

Participants

Amazon.com's mechanical Turk (i.e., M-Turk) crowdsourcing tool was used to recruit employed U.S. citizens to complete two online surveys. In order to participant in the study, participants had to be registered members of the M-Turk labor force and have a success rate of 95% in completing other available assignments. There is some evidence that samples collected from M-turk are more representative than typical student samples (Barger, Behrend, Sharek, & Evan, 2011). Out of the 641 participants who began the study, 577 completed the first survey (90%) and 274 completed the second survey (43%). Due to missing data or related screening criteria, 113 cases were removed from the data set. Thus, the final number of participant was 464 for the first survey and 183 completed both surveys. Participants received 50 cents for completing the first study and 1 dollar for completing the second survey. The mean age of participants sampled was 33.4 years old (*SD* = 11.4). The majority of the sample was female (55.2%) and worked an average of 38.3 hours (*SD* = 11.3) a week. Information regarding the job titles of the participants was collected from 47 participants. The majority of participants worked in either administrative (24.4%), services (22.2%), or customer service positions (13.3%).

Procedure

The design of the study was prospective with a one week time lag between administrations of two separate surveys. Both surveys were only made available for three days a week (Friday through Sunday) to control the time frame in which responses was recorded. A one week time lag was chosen because base rates for behaviors and OCB

demands were expected to be low with a shorter time frame. Conversely, a longer time frame may make it difficult to correctly report appraisals of OCB demands and targets of OCB and CWB. To recruit participants, an advertisement was posted on M-Turk that included a description of the study, the requirements, and the compensations for successful completion.

To participate, individuals clicked a button that took them directly to the first survey that was hosted by an external service (i.e., surveymonkey.com). Participants then generated a code that they entered at the end of the first survey directly into their M-Turk account. This code was used to notify the experimenter when the participant was ready to be paid. In order, to recruit participants for completing the second survey, two items were included at the end of the survey. The first item assessed if the participants were interested in completing the second survey a week later. Participants were then given a link that would take them directly to the second survey which was also hosted on an external site (i.e., surveymonkey). The second item instructed them to enter an email address if they would like a reminder email sent to them that provided the times available and the link associated with the second survey. If they entered an email address, I sent them a reminder email the following Thursday concerning the second survey. After participants completed the second survey, I would manually assign them a one dollar bonus payment. In order to link the data from the first survey to the second survey, participants were required to enter their M-Turk worker identification number. This is a random number that is assigned to workers in order to protect their identity. The first survey contained measures of demographics, all three measures of OCB demands, appraisals of OCB demands, both behavioral scales, hostile attribution bias, and negative

affectivity. The second survey contained measures of OCB demands, appraisals of OCB demands, and both behavioral scales.

Measures

Demographics. Gender, Age, Tenure, interaction with supervisors, interaction with coworkers, and average weekly work hours were assessed with a single item. For gender, a value of one indicated male and a value of two indicated female. Tenure was assessed with an open ended item that assessed how many years employees have been at their current organization. Interaction with supervisors and coworkers was assessed with a single item each that asked how often employees interacted with either their coworkers or supervisors. The response options consisted of a five point likert scale that ranged from "Never" to "All the time."

Attributions of OCB demands. No previously established attribution scales have assessed specific sources of blame. Most scales ask respondents to indicate if the event is due to them or to some external entity. However, the current study is investigating different sources of external blame. To measure different sources of blame, I created six items to assess blame attributions. Participants were asked to what extent they held supervisors (two items), coworkers (two items), and the organization (two items) responsible for these events. A five point likert scale was provided that ranges from "not responsible" to "completely responsible." A sixth likert response option was also included that represented a "not applicable" option to accommodate participants that did not experience any demands for OCB. The coefficient alphas for all scales related to attributions of OCB demands were all above .90.

Since almost all of the OCB demand attribution scales are new, confirmatory factor analyses were conducted on time one data to investigate the underlying factor structure of these newly created scales. A three (OCB Demand) by three (source: coworker, supervisor, organization) nine factor model (X^2 (99, N = 460) = 329.9, p <.0001); RMSEA = .07; RMSR = .03; NFI = .97; GFI = .92) was compared with a three factor model (X^2 (132, N = 460) = 7412, p <.0001); RMSEA = .10; RMSR = .02; NFI = .99; GFI = .97) and a one factor model (X^2 (135, N = 460) = 7581, p <.0001); RMSEA = .35; RMSR = .43; NFI = .41; GFI = .35). The three factor model reflected attributions of blame towards the organization, coworkers, and supervisors across types of OCB demands. All of the latent variables were allowed to be correlated. Overall, the expected nine factor model fit the data well and was a better fit than either the single or three factor models. The X^2 difference tests between the nine factor and the three factor models (X^2 difference = 7084; p < .001)and between the nine factor and the single factor models (X^2 difference = 7251.45; p < .001) were both significant.

OCB and CWB. Similar to Spector, Fox, and Bauer (2010), a short 10-item version of the organizational citizenship behavior checklist (OCB-C; Fox et al., 2011) and the counterproductive work behavior checklist (CWB-C, Spector, Fox, Penney, Bruursema, Goh, & Kessler, 2006) was adapted for the current study to assess OCB and CWB. For the ten-item CWB measure, the same scale was used as the one in Spector, Fox, and Bauer (2010) but one item was substituted in order to cover a greater area of the content domain. More specifically, the item “How often have you insulted someone about their job performance” was replaced with “How often have you started or continued a harmful rumor” because another item in the scale already contained some measure of

verbal insult (i.e., how often have you insulted or made fun of someone at work). To determine which ten items to include for the OCB scale, a panel of subject matter experts, three industrial organizational psychology doctoral students, rated each item from the OCB-C on how likely they thought it would be for employees to be pressured to commit each behavior within an organizational setting. From the highest rated items, ten items were then selected that were believed to be relevant to the greatest number of occupations. For instance, items that referred to behaviors toward customers were avoided because not all jobs require customer interaction. Instructions and response options are tailored to assess behaviors over the previous work week. The items were also tailored to have an ambiguous target. Both scales have a five point response format ranging "none" to "7 or more times." Coefficient Alpha for the CWB scale was .78 at time one and .76 at time two. Coefficient Alpha for the OCB scale was .79 at time one and .81 at time two.

In order to create measures of target specific OCB and CWB scales, two follow-up questions were presented using question logic after each behavior that was considered interpersonally directed. This resulted in six items for the OCB measure and five items from the CWB measure that had question logic. If the participant reported any frequency of these behaviors, participants were asked "How many times was this behaviors directed towards a supervisor or a coworker." These two questions had a seven point likert scale ranging from "never" to "six times." The coefficient alpha for supervisor directed CWB was .81 at time one and .68 at time two. For coworker directed CWB, the coefficient alpha was .66 at time one and .67 at time two. The coefficient alpha for supervisor

directed OCB was .74 at time one and .71 at times two. For coworker directed OCB, the coefficient alpha was .66 at time one and .77 at time two.

Hostile attribution bias. Seven items of Bal & O'Brien (2010) Workplace Hostile Attribution Bias Survey (WHABS) were used to assess hostile attribution bias.. Participants are asked how much they agree with statements that reflect hostile attributions to common workplace scenarios. An example item is "if coworkers ignore me, it is because they are being rude." Participants then indicate there level of agreement on a six point likert scale that ranges from "strongly disagree" to "strongly agree." The coefficient alpha of this scale was .80.

Negative affectivity. The ten item subscale from Watson, Clark, and Tellegen's (1988) Positive and Negative Affect Schedule (PANAS) was included to assess negative affectivity. The scale presents adjectives that represent different negative emotions and asks participants to indicate the extent to which they generally experience each emotion. It has a five point response option that ranges from "very slightly or not at all" to "extremely." The coefficient alpha of this scale was .90.

OCB demands

Organizational constraints. The 11 item OCS (Spector & Jex, 1998) was used to assess constraints. The instructions and response options were modified to assess constraints over the previous work week. The likert response scale had five potential responses ranging from "less than once a week," to "7 or more times a week." The coefficient alpha for the scale was .88 at time one and .87 at time two.

Coworker failure. Nine items were used to assess coworker failure. Items five through nine are adapted from George's (1992) social loafing scale. These items were altered to address coworkers instead of group members. These items were also altered to reflect frequency response options. Items that referred to customer service were not included in the current scale. Since coworker failure may not always be perceived as loafing, I created four additional items that focused exclusively on coworker failure. The likert response scale had five potential responses ranging from "less than once a week," to "7 or more times a week." The coefficient alpha for this scale was .92 at time one and .92 at time two.

Supervisor pressure for OCB. Ten items were used to assess supervisor pressure for OCB. Items six through ten were adapted from Vigoda-Gadot's (2007) compulsory citizenship measure. These items were tailored to address only pressure from the supervisor. These items were also altered to reflect a frequency response format. Items one through five were adapted from the short version of the OCB checklist (Fox et al., 2011). Although these items originally assess self-report behavioral frequency, I altered them to assess the frequency with which supervisors pressured the subordinate to commit that particular behavior. The items request that the participant reports the frequency of times the supervisor expected such behaviors over the previous work week. The scale has a five point response format ranging "none" to "7 or more times." The coefficient alpha for this scale was .88 at time one and .80 at time two.

Factor Structure of OCB Demands: Since the coworker failure and supervisor demands for OCB scales were developed specifically for this study, a confirmatory factor analysis was conducted on time one data to investigate the factor structure of all three

measures together. All of the latent variables were allowed to be correlated. A three factor structure (X^2 (402, N = 460) = 1814, p <.0001); RMSEA = .09; RMSR = .05; NFI = .78; GFI = .79) was compared to a one factor structure (X^2 (17. 7, N = 460) = 3352. 20, p <.0001); RMSEA = .13; RMSR = .10; NFI = .59; GFI = .58). The X^2 difference tests between the single factor and the three factor models (X^2 difference = 1393.09; p < .001) was significant. Although neither model had values reflective of optimal fit, the three factor model fit the data better than the single factor model. An attempt was made to improve upon the three factor model by freeing paths according to the modification indices but the improvement to fit was negligible and the paths did not make sense theoretically.

Chapter Three: Results

Data Preparation and Cleaning

One issue that researchers must be particularly careful with when conducting research on M-Turk is determining the quality of the data. Since participants are being paid to participate in the study, some participants might be motivated to adopt strategies that maximize their monetary yield. It is possible that such a motivation can lead to multiple submissions from the same participant and frequent response sets such as careless responding.

Several measures were taken in the current study to prevent such issues from affecting the integrity of the data. First, each worker has a unique worker ID that I could use to eliminate redundant entries. Second, I followed the advice given by Mason and Suri's (2012) guide to collecting data on M-Turk. To investigate careful responding, I included some items that made sure they were reading the question. For instance, the item "Please select the letter B out of the responses below" was included toward the end of the survey. Similarly, I screened participants based on their response times. More specifically, if the participant took less than seven minutes to complete survey one, I exclude them from the data set. Although this cutoff is somewhat arbitrary, I made the decision based on the estimated completion time from subject matter experts (i.e., approximately 20 minutes) while taking into account that M-Turk participants tend to be more experienced and quicker than the general population due to their high frequency of participation in other surveys. Finally, I excluded a participant's responses if they failed to complete more than 90 percent or more of each survey. In total, 113 cases were

excluded and the final sample consisted of 464 cases for the first survey and 183 cases for the second survey.

Following the screening process, an a priori power analysis was conducted to ensure that a large enough sample was collected to generate enough power to detect significant interaction effects with the time two data. The SAS statistical program Proc Power was used to determine the sample size that would be needed to detect interaction effects assuming an alpha level of .05. The analysis indicated that about 180 cases would be needed to have enough power (i.e., .87) to detect interaction effects assuming six predictor variables, a model r-square of .10 and an r-square difference of .05 for the interaction term.

Hypothesis Testing

Means, Standard Deviations, and coefficient alphas for all measures are reported in tables 1 and 2. A list of each hypothesis can be found in Appendix A.

OCB and CWB were expected to be positively associated with all three demands for OCB based on hypotheses, 1, 2, 5,6,11, and 12. This set of hypotheses were fully supported. OCB and CWB at both time points were positively associated with all OCB demands (i.e., organizational constraints, coworker failure, and supervisor pressure) at both time points. See Table 3 for correlations among OCB demands and both OCB and CWB. Although OCB and CWB were positively associated with all three demands of OCB, the demands for OCB were also all highly interrelated within and across time points (Table 3).

Table 1. Measurement Information

Variables	N	Mean	SD	Items	Scale Type	Alpha
Tenure	461	4.94	5.78	1	-	-
Age	464	33.36	11.44	1	-	-
Hours Worked Per Week	463	38.28	11.27	1	-	-
Time 1 Variables						
CWB	464	1.33	.42	10	Established	.78
CWB directed toward Supervisors	464	.27	.62	5	New	.81
CWB directed toward Coworkers	464	.37	.66	5	New	.66
OCB	464	2.31	.64	10	Established	.79
OCB directed toward Supervisors	464	2.19	1.17	6	New	.74
OCB directed toward Coworkers	464	1.41	.99	6	New	.66
Organizational Constraints	464	1.51	.57	11	Established	.88
Coworker Failure	464	1.89	.79	9	New	.92
Supervisor Pressure	464	1.44	.55	10	New	.88
Negative Affectivity	464	1.62	.65	10	Established	.90
Hostile Attribution Bias	463	2.03	.86	7	Established	.80
Time 2 Variables						
CWB	183	1.25	.33	10	Established	.76
CWB directed toward Supervisors	183	.23	.47	5	New	.68
CWB directed toward Coworkers	183	.31	.58	5	New	.67
OCB	183	2.12	.62	10	Established	.81
OCB directed toward Supervisors	183	1.84	1.15	6	New	.71
OCB directed toward Coworkers	183	1.22	.87	6	New	.77
Organizational Constraints	183	1.44	.51	11	Established	.87
Coworker Failure	183	1.72	.72	9	New	.92
Supervisor Pressure	183	1.32	.42	10	New	.80

Table 2. Measurement Information for Attributions

Variables	N	Mean	SD	Items	Scale Type	Alpha
Time 1 Variables						
Organizational Constraints Attributed to Supervisors	463	2.41	1.51	2	New	.96
Organizational Constraints Attributed to Coworkers	463	2.29	1.48	2	New	.97
Organizational Constraints Attributed to the Organization	463	2.64	1.61	2	New	.98
Coworkers Failure Attributed to Supervisors	464	2.35	1.49	2	New	.95
Coworker Failure Attributed to Coworkers	464	2.93	1.53	2	New	.95
Coworker Failure Attributed to the Organization	464	2.43	1.56	2	New	.98
Supervisor Pressure Attributed to Supervisors	464	2.97	1.79	2	New	.97
Supervisor Pressure Attributed to Coworkers	464	2.39	1.78	2	New	.98
Supervisor Pressure Attributed to the Organization	464	2.65	1.82	2	New	.99
Time 2 Variables						
Organizational Constraints Attributed to Supervisors	183	2.53	1.64	2	New	.98
Organizational Constraints Attributed to Coworkers	183	2.28	1.58	2	New	.98
Organizational Constraints Attributed to the Organization	183	2.75	1.66	2	New	.98
Coworkers Failure Attributed to Supervisors	183	2.43	1.58	2	New	.97
Coworker Failure Attributed to Coworkers	183	2.91	1.60	2	New	.97
Coworker Failure Attributed to the Organization	183	2.41	1.64	2	New	.99
Supervisor Pressure Attributed to Supervisors	183	2.93	1.81	2	New	.97
Supervisor Pressure Attributed to Coworkers	183	2.44	1.83	2	New	.99
Supervisor Pressure Attributed to the Organization	183	2.66	1.89	2	New	.99

Table 3. Correlations Among Focal Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12
1. OCB	-											
2. CWB	.24**	-										
3. Organizational Constraints	.32**	.58**	-									
4. Coworker Failure	.46**	.41**	.60**	-								
5. Supervisor Pressure	.45**	.54**	.63**	.56**	-							
6. Negative Affectivity	.12**	.35**	.45**	.31**	.33**	-						
7. Hostile Attribution Bias	.06	.40**	.32**	.27**	.27**	.31**	-					
8. OCB 2	.73**	.25**	.39**	.50**	.48**	.10	.17*	-				
9. CWB 2	.15*	.74**	.50**	.43**	.37**	.26**	.40**	.27**	-			
10. Organizational Constraints 2	.42**	.41**	.69**	.56**	.55**	.34**	.37**	.53**	.51**	-		
11. Coworker Failure 2	.49**	.31**	.56**	.76**	.50**	.23**	.25**	.60**	.42**	.65**	-	
12.Supervisor Pressure 2	.37**	.29**	.37**	.47**	.65**	.31**	.23**	.54**	.32**	.66**	.54**	-

Note: N = 460 for time 1 variables, N = 183 for time 2 variables, * p <.05, ** p <.01

Hypotheses 3, 4, 8, 9, 13, and 14 are focused on the relationship between the three demands of OCB and the newly created target specific behavior. Before discussing the results, it is useful to first discuss the interrelationships among the different measures of OCB and CWB (Table 4). The three measures of OCB (OCB, OCB directed toward supervisors, and OCB directed toward coworkers) were all highly interrelated within time one and time two. Similarly, all three measure of CWB (CWB, CWB directed toward supervisors and CWB directed toward coworkers) were highly interrelated within time oneand time two. As expected, OCB and CWB are positively associated within and across time. (See table 4).

To test hypotheses 3, 4, 8, 9, 13, and 14, the associations between each demand for OCB (i.e., organizational constraints, coworker failure, and supervisor pressure) and each target specific scale of both OCB and CWB (i.e., OCB directed toward supervisors and coworkers; CWB directed toward supervisors and coworkers) were calculated (Table 5). Each OCB demand was positively associated with target specific scale of OCB and CWB within and across time. Thus, hypotheses 3, 4, 8, 9, 13, and 14 were all supported. Hypothesis 3 was fully supported. Organizational constraints were positively associated with OCB directed toward supervisors and coworkers. Hypothesis 4 was also supported. Organizational Constraints were positively associated with CWB directed toward both supervisors and coworkers. Hypothesis 8 was fully supported. Coworker failure was positively associated with OCB directed toward coworkers and supervisors. Hypothesis 9 was also supported. Coworker failure was positively associated with coworker and supervisor directed CWB. Finally, Hypothesis 13 and 14 were completely supported

Table 4. Correlations among OCB and CWB

	1	2	3	4	5	6	7	8	9	10	11	12
1. OCB	-											
2. OCB directed toward Supervisors	.84**	-										
3. OCB directed toward Coworkers	.69**	.74**	-									
4. CWB	.24**	.33**	.43**	-								
5. CWB directed toward Supervisors	.21**	.31**	.47**	.84**	-							
6. CWB directed toward Coworkers	.23**	.34**	.43**	.85**	.89**	-						
7. OCB 2	.73**	.70**	.54**	.25**	.20**	.23**	-					
8. OCB directed toward Supervisors 2	.64**	.73**	.45**	.26**	.20**	.27**	.88**	-				
9. OCB directed toward Coworkers 2	.52**	.54**	.74**	.39**	.43**	.38**	.70**	.65**	-			
10. CWB 2	.15*	.22**	.22**	.74**	.52**	.63**	.27**	.33**	.30**	-		
11. CWB directed toward Supervisors 2	.12	.15*	.27**	.62**	.60**	.59**	.19**	.22**	.31**	.79**	-	
12. CWB directed toward Coworkers 2	.13	.15*	.21**	.58**	.51**	.61**	.23**	.29**	.26**	.82**	.93**	-

Note: N = 460 for time 1 variables, N = 183 for time 2 variables, * p <.05, ** p <.01

Table 5. Correlations between Targeted Behaviors and OCB Demands

	Org. Const.	Cow. Failure	Sup. Press	Neg. Aff.	Hostile Attr.	Org Const. 2	Cow. Failure 2	Sup. Press 2
OCB at Supervisors	.34**	.50**	.50**	.11*	.18**	.40**	.50**	.37**
OCB at Coworkers	.32**	.37**	.57**	.14**	.18**	.39**	.32**	.36**
CWB at Supervisors	.48**	.32**	.54**	.26**	.32**	.30**	.24**	.23**
CWB at Coworkers	.50**	.40**	.50**	.27**	.38**	.36**	.31**	.24**
OCB at Supervisors 2	.43**	.54**	.48**	.14	.22**	.59**	.67**	.55**
OCB at Coworkers 2	.40**	.38**	.51**	.09	.18*	.48**	.40**	.48**
CWB at Supervisors 2	.43**	.33**	.33**	.14	.37**	.39**	.32**	.25**
CWB at Coworkers 2	.44**	.36**	.33**	.14	.40**	.42**	.39**	.26**

Note: N = 460 for time 1 variables, N = 183 for time 2 variables, * p <.05, ** p <.01

Supervisor pressure for OCB was associated with coworker and supervisor directed OCB. Similarly, Supervisor pressure was associated with coworker and supervisor directed CWB both within and across time.

Since the three factor structure of the OCB demands did not have optimal fit and since the demands were positively associated with all measures of OCB and CWB regardless of the direction of the behavior, a series of multiple regressions were conducted in order to have some comparison between the different types of demands for OCB. Each measure of time two OCB and CWB was regressed onto all three time one measures of OCB demands. These regressions controlled for organizational tenure and the corresponding time one measurement of behavior (Table 6). Supervisor pressure predicted unique variance in measures of OCB, OCB directed toward supervisors, and CWB. Although supervisor pressure appears to predict future displays of CWB, the beta value is negative (i.e., β = -.15, $p < .05$) while the correlation between supervisor pressure and CWB is positive (r = .37 to .45, $p < .01$). Thus, this might be evidence of what Cohen and Cohen (1988) termed net suppression. Coworker failure predicted unique variance in measures of OCB, CWB, and CWB directed toward supervisors. Organizational Constraints did not predict unique variance in any of the measures of behavior when compared to coworker failure and supervisor demands of OCB. Similarly, no measure of OCB demands predicted coworker directed OCB or CWB. Based on these regression analyses, there is some evidence to suggest that OCB demands can predict future display of OCB and CWB.

Table 6. Time 2 OCB and CWB Regressed onto Time 1 Demands of OCB

OCB Demands	OCB 2			OCB at Sup. 2			OCB Cow. 2			CWB 2			CWB Sup. 2			CWB Cow. 2		
	B	SE	b	B	SE	b	B	SE	b	B	SE	b	B	SE	b	B	SE	b
Tenure	0	.01	.03	.01	.01	.03	0	.01	0	.0	.0	.02	0	.01	0	0	.01	.01
Behavior 1	.60	.06	**.59***	.54	.06	**.55***	.60	.06	**.65***	.52	.05	**.69***	.39	.05	**.60***	.45	.06	**.55***
Org. Const. 1	-.03	.08	-.03	.12	.15	.06	.01	.11	0	.05	.05	.09.	.08	.08	.10	.11	.10	.11
Cow. Fail. 1	.11	.05	**.15***	.19	.10	.13	.06	.07	.05	.08	.03	**.19***	.10	.05	**.18***	.09	.06	.13
Sup. Press. 1	.18	.07	**.16***	.30	.14	**.13***	.19	.11	.12	-.10	.04	**-.15***	-.10	.07	-.12	-.11	.08	-.10
Model F			**46.11***			**46.37***			**45.68***			**47.18***			**22.70***			**22.74***
Model R^2			.58			.57			.57			.57			.39			.39

Note: N = 459 for time 1 variables, N = 182 for time 2 variables, * p <.05, ** p <.01

To further explore the direction of the relationship between OCB demands and both workplace behaviors, another series of regressions were conducted with time two demands for OCB regressed onto time one reports of OCB and CWB. Each time one measure of behavior was entered into the regression separately while controlling for organizational tenure and time one reports of OCB demands (Table 7). OCB predicted reports of organizational constraints, coworker failure, and supervisor pressure. Similarly, OCB directed towards supervisors predicted reports of organizational constraints but not coworker failure or supervisor pressure. OCB directed towards coworkers and CWB did not predict reports of any OCB demands. Similarly, CWB directed toward supervisors and coworkers did not predict any reports of OCB demands except supervisor pressure. However, the correlation between demands and target specific CWB measures was positive (r = .25 to .26, $p < .01$) while the beta values are negative (β = -.13 to -.14, $p < .05$). Thus, these negative beta values may also be evidence of net suppression.

Before addressing hypotheses 5, 10, and 15, it is useful to discuss the inter and intra relationships associated with the nine attributions of OCB demand scales that were created to assess blame. See tables 8 through 10 for correlations among attribution scales. All of the OCB demand attribution scales are associated with each other within and across time points. One exception was the relationship between time one organizational constraints attributed to coworkers and time two coworker failures attributed to supervisors. Another exception was the relationship between time one organizational constraints attributed to coworker failures and time two coworker failure attributed to the organization.

Table 7. Time 2 OCB Demands Regressed onto Time 1 OCB and CWB

OCB and CWB Behaviors	Org. Const. 2			Cow. Fail. 2			Sup. Press. 2		
	B	SE	b	B	SE	b	B	SE	b
Tenure	0	.01	.01	0	.01	.03	0	0	-.05
Relevant OCB Demand 1	.59	.05	**.63***	.60	.05	**.70***	.45	.05	**.60***
OCB 1	.18	.05	**.21***	.17	.06	**.15***	.08	.04	**.11***
Model F			**67.85***			**91.61***			**45.04***
Model R^2			.54			.61			.43
Tenure	0	.01	0	0	.01	.02	0	0	-.05
Relevant OCB Demand 1	.60	.05	**.64***	.62	.05	**.72***	.45	.05	**.60***
OCB at Sup.1	.07	.03	**.16***	.06	.04	.09	.04	.02	.10
Model F			**63.59**			**87.48***			**45.83***
Model R^2			.52			.60			.43
Tenure	0	.01	0	0	.01	.03	0	0	-.06
Relevant OCB Demand 1	.62	.06	**.66***	.65	.05	**.75***	.48	.05	**.65***
OCB at Cow. 2	.06	.03	.10	.04	.04	.05	0	.03	.01
Model F			**60.23***			**83.28***			**43.28***
Model R^2			.51			.59			.42
Tenure	0	.01	0	0	.01	.03	0	0	-.06
Relevant OCB Demand 1	.67	.06	**.70***	.66	.05	**.76***	.51	.05	**.68***
CWB 1	0	.08	0	.03	.09	.02	-.05	.06	-.06
Model F			**58.24***			**85.53***			**43.64***
Model R^2			.50			.59*			.43
Tenure	0	.01	0	0	.01	.03	0	0	-.05
Relevant OCB Demand 1	.72	.06	**.77***	.66	.04	**.76***	.54	.05	**.71***
CWB at Sup.2	-.09	.05	-.16	.03	.05	.03	-.08	.04	**-.13***
Model F			**60.46***			**83.63***			**45.51***
Model R^2			.51			.59			.44
Tenure	0	.01	0	0	.01	.03	0	0	-.05
Relevant OCB Demand 1	.72	.06	**.77***	.66	.05	**.76***	.54	.05	**.72***
CWB Cow. 2	-.08	.05	-.10	.02	.05	0	-.08	.04	**-.13***
Model F			**59.80***			**85.50***			**45.61***
Model R^2			.50			.59			.44

Note: N = 459 for time 1 variables, N = 182 for time 2 variables, * p <.05, ** p <.01

Table 8. Correlations among Time 1 Attributions

	1	2	3	4	5	6	7	8	9
1. Organizational Constraints Attributed to Supervisors	-								
2. Organizational Constraints Attributed to Coworkers	.65**	-							
3. Organizational Constraints Attr. to the Org.	.72**	.55**	-						
4. Coworker Failure Attributed to Supervisors	.53**	.36**	.47**	-					
5. Coworker Failure Attributed to Coworkers	.32**	.42**	.37**	.57**	-				
6. Coworker Failure Attributed to the Organization	.45**	.30**	.61**	.76**	.54**	-			
7. Supervisor Pressure Attributed to Supervisors	.52**	.40**	.46**	.57**	.47**	.51**	-		
8. Supervisor Pressure Attributed to Coworkers	.33**	.39**	.37**	.44**	.43**	.47**	.76**	-	
9. Supervisor Pressure Attributed to the Organization	.43**	.35**	.52**	.52**	.38**	.64**	.82**	.85**	-

Note: N = 460 for time 1 variables, N = 183 for time 2 variables, * p <.05, ** p <.01

Table 9. Correlation among Time 2 Attributions

	1	2	3	4	5	6	7	8	9
1. Organizational Constraints Attributed to Supervisors	-								
2. Organizational Constraints Attributed to Coworkers	.68**	-							
3. Organizational Constraints Attributed to the Organization	.79**	.63**	-						
4. Coworker Failure Attributed to Supervisors	.47**	.26**	.38**	-					
5. Coworker Failure Attributed to Coworkers	.33**	.39**	.37**	.63**	-				
6. Coworker Failure Attributed to the Organization	.36**	.30**	.49**	.78**	.64**	-			
7. Supervisor Pressure Attributed to Supervisors	.56**	.38**	.53**	.50**	.46**	.50**	-		
8. Supervisor Pressure Attributed to Coworkers	.45**	.43**	.45**	.48**	.50**	.52**	.76**	-	
9. Supervisor Pressure Attributed to the Organization	.48**	.42**	.59**	.51**	.47**	.66**	.78**	.85**	-

Note: N = 460 for time 1 variables, N = 183 for time 2 variables, * p <.05, ** p <.01

Table 10. Correlations among Time 1 & 2 Attributions

Time 1 Attributions	Time 2 Attributions								
	1	2	3	4	5	6	7	8	9
1. Organizational Constraints Attributed to Supervisors	.46**	.31**	.37**	.26**	.17*	.22**	.31**	.24**	.27**
2. Organizational Constraints Attributed to Coworkers	.30**	.45**	.27**	.12	.25**	.10	.19*	.20**	.15*
3. Organizational Constraints Attributed to the Organization	.35**	.31**	.49**	.29**	.20**	.39**	.31**	.27**	.40**
4. Coworker Failure Attributed to Supervisors	.29**	.17*	.24**	.43**	.24**	.34**	.22**	.19*	.23**
5. Coworker Failure Attributed to Coworkers	.17*	.23**	.21**	.18*	.37**	.18*	.26**	.20**	.22**
6. Coworker Failure Attributed to the Organization	.31**	.23**	.39**	.39**	.26**	.42**	.30**	.24**	.37**
7. Supervisor Pressure Attributed to Supervisors	.40**	.33**	.41**	.28**	.36**	.26**	.45**	.38**	.40**
8. Supervisor Pressure Attributed to Coworkers	.30**	.35**	.37**	.25**	.31**	.26**	.25**	.32**	.30**
9. Supervisor Pressure Attributed to the Organization	.37**	.33**	.46**	.31**	.33**	.37**	.32**	.30**	.42**

Note: N = 460 for time 1 variables, N = 183 for time 2 variables, * p <.05, ** p <.01

For a complete report of the relationships between all nine measures of attributes and all OCB and CWB scales, see tables 11 and 12. It is of particular note when discussing these relationships that time one organizational constraints attributed to the supervisor and time one coworker failure attributed to the supervisor were both positively associated with CWB and CWB directed towards supervisors but not CWB directed toward coworkers. Similarly, time one organizational constraints attributed to the organization and time one coworker failure attributed to the organization were both associated with the time two aggregated measure of CWB but none of the supervisor or coworker directed CWB measures. However, time one organizational constraints attributed to the coworker was associated with both time two CWB directed toward supervisors and coworkers. Thus, there is some evidence that the organizational constraints and coworker failure attribution scales of blaming supervisors and the organization were associated with the expected behavioral target of CWB. Additionally, the time one attribution scales related to supervisor pressure were not associated with the time two CWB measure but was negatively associated with several time two measures of OCB. Supervisor pressure attributed to supervisors was associated with all three measures of OCB. Supervisor pressure attributed to coworkers was again negatively associated with all three measure of OCB. Finally, supervisor pressure attributed to the organization was negatively associated only with the general OCB measure. Thus, attributions of organizational constraints and coworker failure appear to be related to future displays of CWB even though actual time one reports of organizational constraints and coworker failure are positively associated with time two measures of both OCB and CWB.

Table 11. Correlations between Workplace Behaviors and Time 1 Attributions

	OCB	OCB at Sup.	OCB at Cow.	CWB	CWB at Sup.	CWB at Cow.	OCB 2	OCB at Sup. 2	OCB at Cow. 2	CWB 2	CWB at Sup. 2	CWB at Cow. 2
Org. Const. Att. to Sup.	-.04	0	.07	**.16****	**.14****	**.10***	-.02	-.07	0	**.15***	**.17***	.14
Org. Const. Att. to Cow.	-.01	.03	.06	**.13****	**.14****	**.15****	.10	.04	.04	.09	**.15***	**.15***
Org. Const. Att. to Org.	.01	.04	.07	**.22****	**.11***	**.13****	.09	.06	.08	**.27****	0.14	.13
Cow. Fail. Att. to Sup.	.05	.08	**.09***	**.14****	**.12****	**.11***	.03	.01	.04	**.18***	**.19***	.14
Cow. Fail. Att. to Cow.	.05	.07	.02	**.10***	.05	.08	**.16***	.09	.03	.10	.09	.12
Cow. Fail. Att. to Org.	.04	.06	.09	**.19****	**.10***	**.10***	.09	.05	.06	**.21****	.12	.12
Sup. Press. Att.to Sup.	.01	.04	.02	.03	.05	.02	.02	0	-.06	.07	.05	.04
Sup. Press. Att. to Cow.	0	.03	.01	.01	.03	.02	.11	.05	0	.02	.01	.03
Sup. Press. Att. to Org.	.02	.04	.01	**.11***	.07	.05	.11	.09	0	.13	.03	.04

Note: N = 459 for time 1 variables, N = 182 for time 2 variables, * p <.05, ** p <.01

Table 12. Correlations between Workplace Behaviors and Time 2 Attributions

	OCB	OCB at Sup.	OCB at Cow.	CWB	CWB at Sup.	CWB at Cow.	OCB 2	OCB at Sup. 2	OCB at Cow. 2	CWB 2	CWB at Sup. 2	CWB at Cow. 2
Org. Const. Att. to Sup.	-.09	-.09	-.07	.04	.04	.05	-.10	-.09	-.11	.05	.03	.04
Org. Const. Att. to Cow.	-.04	-.06	-.08	.01	0	.06	-.04	-.02	-.08	.07	.06	.11
Org. Const. Att. to Org.	-.01	-.04	-.03	.01	-.03	.02	0	-.03	-.03	.10	.02	.05
Cow. Fail. Att. to Sup.	-.10	-.05	.02	.14	.12	0.14	-.14	-.11	-.06	.08	.11	.07
Cow. Fail. Att. to Cow.	-.04	.03	-.08	.04	.01	.03	-.04	-.01	-.09	.05	.02	.05
Cow. Fail. Att. to Org.	-.02	0	.05	.13	.07	.09	-.05	-.06	-.01	.12	.08	.05
Sup. Press. Att.to Sup.	**-.18***	**-.16***	**-.16***	-.10	-.04	-.07	**-.20****	**-.19***	**-.19****	-.05	-.05	-.03
Sup. Press. Att. to Cow.	**-.20****	**-.19***	**-.15***	-.04	.01	-.01	**-.22****	**-.20****	**-.16***	0	-.03	-.01
Sup. Press. Att. to Org.	**-.15***	-.14	-.13	.01	.01	0	**-.16***	-.11	-.13	.08	-.02	0

Note: N = 460 for time 1 variables, N = 183 for time 2 variables, * p <.05, ** p <.01

Similarly, attributions of supervisor pressure appears to be associated with a decrease in OCBs the following week even though time one reports of supervisor demands are positively associated with time two measures of both OCB and CWB.

To determine if blame attributions moderated the relationship between OCB demands and CWB directed at coworkers, hypotheses 5, 10, and 15 were tested with a series of regressions. Time two CWB towards coworker measure was regressed onto each time one OCB demand and attribution scales (i.e., supervisor attributions, coworker attributions, and organizational attributions). Both predictors were centered and an additional interaction term was created. Tenure was entered as a control. Also, the amount of interaction that participants reported having with either supervisors or coworkers was also controlled for. Hypotheses 5 and 10 were not supported. None of the attribution measures interacted with organizational constraints (hypothesis 5) or coworker failure (hypothesis 10) to predict coworker directed CWB. Hypothesis 15 was partially supported. Coworker attributions and organizational attributions failed to interact with supervisor pressure to predict coworker targeted CWB. However, supervisor attributions did interact with supervisor pressure to predict coworker directed CWB ($\beta = -.18$, $p < .05$). See table 13 and figure 1. The interaction was such that more CWB was directed toward coworkers when employees reported more supervisor pressure and fewer attributions toward supervisors. Conversely, less CWB was directed toward coworkers when employees reported more supervisor pressure and frequent attributions toward supervisors. Thus, the interaction was in the opposite direction of what was predicted in hypothesis 15.

Table 13. Interaction between Supervisor Pressure and Attributions in predicting time 2 Coworker Directed CWB.

OCB Demands	Coworker Directed CWB		
	B	SE	b
Tenure	0	.01	.02
Coworker Directed CWB 1	.48	.06	**.57***
Coworker Interaction 1	.07	.04	.09
Supervisor Pressure 1	.11	.09	.11
Supervisor Pressure Attributed to Supervisors 2	-.02	.02	-.06
Interaction between Demands and Attributions	-.13	.06	**-.18***
Model F			**19.05***
Model R^2			.40*

Note: N = 459 for time 1 variables, N = 182 for time 2 variables, * p <.05

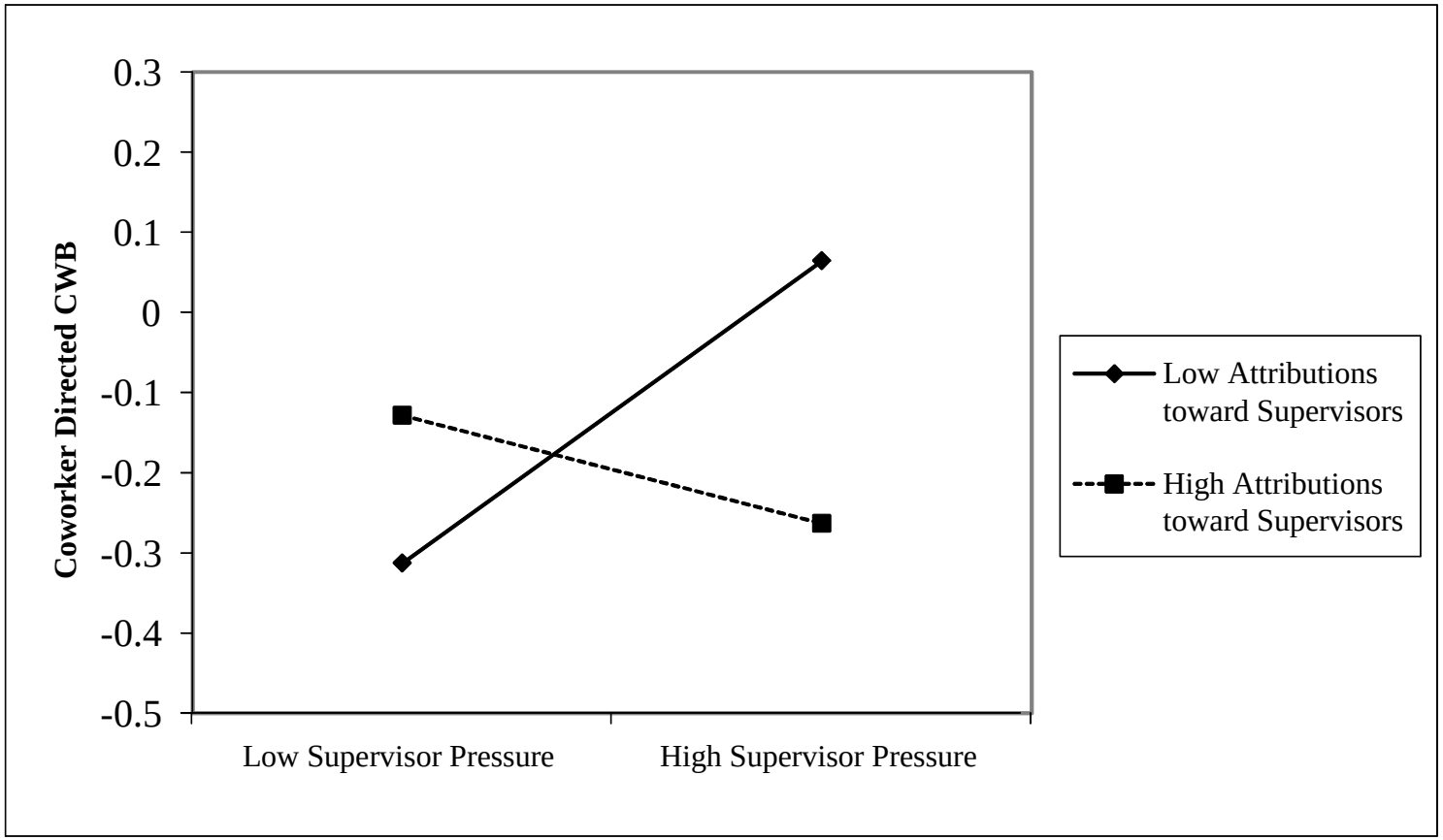

Figure 1. The Interaction between Supervisor Pressure and Blame Attributions associated with Supervisor Pressure Predicting Coworker Directed CWB.

Hypotheses 16 and 17 stated that HAB and NA would moderate the relationship between the three demands for OCB and subsequent displays of CWB. Regressions were conducted to test hypotheses 16 and 17. Time two CWB was regressed onto time one demands for OCB and individual differences. Both time one variables were centered and an interaction term was created. CWB at time one and tenure were added as controls. Hypothesis 16 was not supported. Hostile attribution bias did not interact with organizational constraints, coworker failure, or supervisor pressure to predict CWB (Table 14). Hypothesis 17 was also not supported. Negative affectivity did not interact with organizational constraints, coworker failure, or supervisor pressure to predict CWB (Table 15).

All regressions in this study were conducted a second time without any controls. This resulted in the same patterns of significance and negligible changes to effect sizes. It should be noted that five participants reported either having no contact with their supervisor or coworkers. Of those five, only one participant completed both surveys. For the regression analyses, this participant was removed because it is not likely that this participant had the ability to direct behaviors toward entities that were not in contact with the participant. Removing this participant resulted in only one change in the patterns of significance. More specifically, time one OCB directed towards supervisors was not a significant predictor of coworker failure at time two. The Beta value dropped from .14 ($p < .05$) to .09 (p = n.s.) after removing this participant.

Table 14. Negative Affectivity Interactions Predicting CWB 2

OCB Demands	CWB 2		
Tenure	0	0	.01
CWB 1	.50	.05	**.66***
Organizational Constraints 1	.06	.04	.10
Negative Affectivity	.05	.03	.08
Constraints X NA	-.01	.06	-.01
Model F			**43.74***
Model R^2			.56
Tenure	0	0	.02
CWB 1	.51	.04	**.66***
Coworker Failure 1	.06	.02	**.14***
Negative Affectivity	.04	.03	.06
Failure X NA	0	.04	0
Model F			**45.52***
Model R^2			.57*
Tenure	0	0	.01
CWB 1	.56	.05	**.73***
Supervisor Pressure	-.02	.04	-.03
Negative Affectivity	.06	.03	**.10***
Pressure X NA	0	.05	.01
Model F			**43.00***
Model R^2			.55

Note: N = 459 for time 1 variables, N = 182 for time 2 variables, * p <.05

Table 15. Hostile Attribution Bias Interactions Predicting CWB 2

OCB Demands	CWB 2		
Tenure	0	0	.02
CWB 1	.48	.05	**.63***
Organizational Constraints 1	.06	.04	.10
Hostile Attribution Bias	.05	.02	**.12***
Constraints X HAB	.01	.04	.01
Model F			**45.14***
Model R^2			.56
Tenure	0	0	.03
CWB 1	.48	.04	**.64***
Coworker Failure 1	.06	.02	**.14***
Hostile Attribution Bias	.05	.02	**.11***
Failure X HAB	0	.02	.01
Model F			**46.74***
Model R^2			.57*
Tenure	0	0	.02
CWB 1	.53	.05	**.70***
Supervisor Pressure 1	-.02	.04	-.03
Hostile Attribution Bias	.06	.02	**.14***
Pressure X HAB	0	.04	0
Model F			**44.04***
Model R^2			.56

Note: N = 459 for time 1 variables, N = 182 for time 2 variables, * p <.05

Discussion

The goal of the current study was to investigate potential situations that may elicit displays of both OCB and CWB. The results presented here suggest that OCB demands are positively associated with reports of both OCB and CWB reported a week later. Not only is this congruent with previous research that has been focused on the relationship between OCB and CWB but it expands upon this research by empirically demonstrating that certain demands for OCB are antecedents to subsequent behaviors in some cases. Additionally, the results from the current study suggest that committing more OCB is associated with reporting more frequent demands for OCB the following week. Thus, the relationship between OCB demands and both OCB may not be unidirectional. This study is one of the first to empirically investigate the role of demands for OCB in regards to both forms of behavior simultaneously.

Although it was expected that OCB demands would precede OCB and CWB, it was not expected that committing more OCB would precede more frequent reports of OCB demands in the future. The reason for this finding is unclear but there are a few potential explanations. First, those that commit OCB may be perceived as generally helpful or, at least, more self-reliant than other coworkers. Such assumptions may lead to greater constraints and demands once supervisors and colleagues realize they can depend on the employee to be helpful. An alternative explanation is that committing OCB may change employee's perceptions of the workplace. If an employee works hard to go above

their perceived job role, they might expect to see a significant change in the workplace. Thus, there expectations for support and organizational functioning may be higher than it would be if they chose not to help the organization. This could alter employees reporting patterns on the second survey. Finally, it is possible that employee committed OCB may not actually be that helpful in attenuating the presence of demands for OCB.

Although the evidence regarding the relationship between OCB demands and both OCB and CWB was largely congruent with my expectations, the evidence regarding the target specific behavioral scales was not. Supervisor pressure did predict unique variance in the time two reports of supervisor directed OCB but coworker failure failed to predict any unique variance in time two coworker directed behaviors. Additionally, coworker failure did predict unique variance in time two directed CWB directed at the supervisor. One potential explanation for these findings is that using the social exchange model and the spillover model is not useful in predicting target specific behaviors. Other theories related to instrumental motivation might do a better job of generating accurate predictions. Alternatively, the unexpected results might be due to the fact that the three factor model of OCB demands (organizational constraints, coworker failure, and supervisor demands) did not fit the data well. Without clear distinctions among the factors, it is possible that the observed relationships may be misleading. Regardless, all time one demands for OCB were positively associated with time two reports of target specific scales and the patterns of prediction did differ across demands for OCB and future displays of target specific OCB and CWB. Thus, there is some utility in assessing different targets of OCB and CWB when investigating the role of OCB demands.

Although the three factor structure did not fit the data well, I attempted to distinguish among the different demands for OCB by entering them all into a regression simultaneously. The results from these analyses revealed that coworker failure predicted unique variance in time two OCB and CWB and supervisor pressure predicted unique variance in time two OCB. Thus, both demands appear to be important in predicting future displays of OCB and CWB. However, organizational constraints did not predict unique variance in any behaviors and this may be due to the amount of shared variance it has with the other two demands of OCB. This large amount of shared variance might be what is causing poor fit among the three factor model. It should be noted that none of demands for OCB predicted unique variance in coworker directed behaviors despite all three demands for OCB being positively correlated with coworker directed behavior. The reason for these unexpected finding is unclear but it is likely due to the OCB demands having a large amount of shared variance that might have overlapped with the time one measures of coworker directed behaviors.

Another set of unexpected fining was that blame attribution, for the most part, did not moderate the relationship between OCB demands and target directed behaviors. The only significant interaction was between time one supervisor pressure for OCB and time one supervisor pressure attributed to the supervisor to predict coworker directed OCB. However, this interaction term was in the opposite direction of what was hypothesized. Furthermore, the correlations between the blame attribution and both OCB and CWB were sometimes opposite of what we would expect given the relationship between OCB demands and both behaviors. For instance, supervisor pressure was positively associated with time two reports of OCB. Conversely, supervisor pressure attributed to any source

was negatively associated with OCB. This pattern of results suggests that employees reporting frequent pressure for OCB from the supervisor will respond with more OCB. However, if they blame the supervisor for such demands, they will commit less OCB. Thus, it is unclear why blame attributions did not moderate the relationship between OCB demands and future behavioral displays, but blame regarding demands for OCB appears to play an important role in predicting behavior given its association with time two OCB and CWB.

Finally, individual differences (i.e., hostile attribution bias and negative affectivity) did not moderate the relationship between OCB demands and workplace behaviors. It is also unexpected that negative affectivity was positively related to both time onemeasures of OCB and CWB. A negative correlation is typically reported between OCB and negative affectivity. Furthermore, a positive relationship is observed time one hostile attribution bias and time two OCB directed towards coworkers and supervisors. A potential explanation of these unexpected findings may be that there was some careless responding by participants on the individual difference scales since they were located towards the end of the first survey.

Limitations and Future Directions

There were several limitations to the current study. First, the three factor structure of OCB demands did not fit the data well. This may have influenced some of the reported results. Future research should include OCB demand measures that are more distinct from one another. Careful attention should be paid to how much organizational

constraints overlap with other similar demands such as coworker failure or supervisor demands.

Another limitation of the current study was that I omitted some demographic questions that may have revealed important information about the sample used in the current study. For instance, I was unable to determine if employees were nested within the same organization. By asking more detailed questions regarding the employee's job, it would be possible to determine if there were important controls that I could use to make the results more generalizable. Another example of this issue is the lack of detail regarding the job titles of the employees. Not only did I only get partial responses for self-reported job-titles, but those job titles were often too ambiguous to determine the nature of the job. For instance, some employees reported that they were self-employed. Since they were taking the survey for money, they may be considered completing online surveys as a job. However, other employees that report being self-employed may be referring to their start up business that requires a full time commitment. Although there is some preliminary evidence that M-Turk samples are comparable to typical samples obtained in the organizational literature (Barger, Behrend, Sharek, & Evan, 2011), future research should include an in depth investigation into the differences between an M-Turk sample and other samples, such as non-student employed samples, in regards to demands for OCB and both OCB and CWB. To adequately investigate the differences among the sample it is essential to include several more job-related demographic questions.

The self-report measures used in the current study are also a limitation. The results of this study would be more convincing if similar results were observed among supervisor or coworker reports of employee OCB demands and displays of OCB.

However, self-report measures are likely to be the most accurate measure for some of the variables (i.e., CWB, blame attributions, and individual differences). Future research should determine if the same pattern of associations are observed across different organizational members.

Another limitation of this study is the newly created blame attribution scales. Although theses scales fit the data well, they assessed how employees make attributions in general. The attributions were referencing demands that were perceived over the previous work week. However, how employees make attributions in general to weekly perceptions may be more closely related to attribution styles conceptualized as an individual difference. This would be incongruent with the theoretical framework discussed previously which largely conceptualized attributions as a response to a specific event. Similarly, measuring attribution a week later might be inappropriate because they may be more susceptible to coping mechanisms and any cognitive reappraisal processes that might occur. This may explain why the results regarding the blame attribution were not expected. Future research should use an experience sampling methodology to investigate how attributions that are formed immediately after some workplace events influence the relationships between OCB demand and future displays of OCB and CWB. Additionally, future research should investigate target specific measures of CWB and OCB that maintain the distinction between different organizational entities. In the current study, I aggregated all coworker and supervisor directed behavior into a more global measure. However, it is possible for an employee to aggress against one coworker while helping another coworker. By adopting an experienced sample procedure, it would be

possible to tap more specific information regarding the manifestation of behaviors within the workplace.

A final limitation was the size of the sample in the current study. The power analysis indicated that there should be enough power to detect interaction terms with effect sizes at least as large as .10. However, interaction terms often do not have such large effect sizes (Aquinis, Beaty, Boik, & Pierce, 2005). This may explain the lack of results regarding attributions, NA, and WHAB. Future research should obtain a larger sample when investigating potential moderation.

Conclusion

The current study was the first to investigate how OCB demands were associated with future displays of OCB and CWB. The study was unique in that it adopted a prospective design and highlighted the importance of taking into account attributions and target specific measures of behavior. OCB demands were found to predict future displays of OCB and CWB. Conversely, committing OCB was associated with future reports of OCB demands. Thus, the relationships between demands for OCB and OCB is likely not unidirectional. Finally, this study created new measures to assess some demands for OCB (i.e., coworker failure and supervisor demands of OCB) as well as general blame attributions. Overall, the findings of this study indicate that OCB demands are an important precursor and a potential outcome of OCB and CWB. Additionally, this study underscores the potential importance of including target specific measures of OCB and CWB when investigating both behaviors.

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Appendices

Appendix A: Hypotheses

Table A1. List of Hypotheses and Analyses

Hypothesis	Analyses
1. Constraints will be positively associated with OCB.	Correlations
2. Constraints will be positively associated with CWB.	Correlations
3. Constraints will be positively associated with OCB directed toward supervisors and coworkers.	Correlations
4. Constraints will be positively associated with CWB directed towards coworkers.	Correlations
5. Constraints, and blame attributions will interact to predict CWB directed at coworkers.	Moderated Regressions
6. Coworker failure will be positively associated with OCB.	Correlations
7. Coworker failure will be positively associated with CWB.	Correlations
8. Coworker failure will be positively associated with OCB directed toward coworkers	Correlations
9. Coworker failure will be positively associated with CWB directed toward coworkers	Correlations
10. Coworker failure and blame attributions will interact to predict CWB directed at coworkers.	Moderated Regressions
11. Supervisor pressure will be positively associated with OCB.	Correlations
12. Supervisor pressure will be positively associated with CWB.	Correlations
13. Supervisor pressure will be positively associated with OCB directed toward the supervisors and coworkers	Correlations
14. Supervisor pressure will be positively associated with CWB directed toward supervisors and coworkers	Correlations
15. Supervisor pressure, and blame attributions will interact to predict CWB directed at coworkers	Moderated Regressions
16. The association between demands for OCB and CWB will be moderated by HAB such that the association between demands for OCB and CWB will be stronger when HAB is high rather than low.	Moderated Regressions
17. The association between demands for OCB and CWB will be moderated by NA such that the association between demands for OCB and CWB will be stronger when NA is high rather than low.	Moderated Regressions