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OCBs and Strain: The Moderating Role of Control

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OCBs and Strain: The Moderating Role of Control

by

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of the requirements for the degree of
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Abstract

Organizational citizenship behaviors (OCBs) are typically assumed to be beneficial to employees and organizations. However, research has recently questioned this assumption. This study seeks to identify when OCBs are related to various strains and are detrimental to the employee or the organization. Specifically, using a stressor-strain model, it is hypothesized that in general, OCBs will be related to work effort; however, when employees feel pressured to perform OCBs, and thereby feel less control, OCBs will be more related to various strains. The hypotheses were partially supported: under all conditions, OCBs were related to effort, but under conditions of feeling forced, OCBs were more related to job dissatisfaction and counterproductive work behaviors. The latter portion was only found when OCBs were rated by a co-worker, suggesting that this effect may only hold for OCBs that are more visible, thus likely to be noticed by a co-worker. This further contributes to the growing literature that finds OCBs may have a dark side.

Introduction

Organizational citizenship behaviors (OCBs) have been an important and widely studied area in the industrial/organizational psychology literature. OCBs are behaviors that support the performance of task activities by influencing the psychological, organizational, and social context of work (e.g., “Helped new employees get oriented to the job” or “Offered suggestions to improve how work is done”; Borman & Motowidlo, 1993; Fox et al., 2012). Implicit in this definition is that OCBs are positive for the organization and thus should be encouraged by employers. Until recently, researchers have not questioned this assumed beneficial nature of OCBs; this study seeks to contribute to the growing “dark” side literature of OCBs by identifying situations in which OCBs may be detrimental. Specifically, the purpose of this study is to integrate the OCB literature and the stress literature: I will examine situations under which strains may be related to the performance of OCBs.

There has been considerable research attempting to identify the antecedents and consequences of the various facets and conceptualizations of OCBs. However, the purpose of this review is not to delve deeply into these findings to report a detailed comparison and contrast of the literature, but rather to give a broad overview. This is to provide the appropriate context of the construct to understand the “typical” positive connotation of OCBs.

Beginning with antecedents, a significant amount of research has examined “attitudes” as a potential predictor of OCBs (Organ, Podsakoff, & MacKenzie, 2006; Podsakoff, Mackenzie, Paine, & Bachrach, 2000). Typically, job attitudes equate to job satisfaction, and recent meta-analyses have found that job satisfaction was positively related to OCBs (Fassina, Jones, &

Uggerslev, 2008; Whitman, Van Rooy, & Viswesvaran, 2010). Fassina et al.'s (2008) meta-analysis found that both job satisfaction and organizational fairness accounted for unique variance in predicting OCBs. Whitman et al.'s (2010) meta-analysis focused on the constructs at the group level, as opposed to the traditional individual level perspective, and found a positive link between the two constructs. In fact, their results seemed to suggest the relationship at the unit level was stronger than the relationship at the individual level. Other authors have conceptualized "job attitudes" as a broader construct than just job satisfaction. Organ et al. (2006) and Podsakoff et al. (2000) utilized an underlying construct of morale to represent job attitudes. Job satisfaction, perceptions of fairness, organizational commitment, and perceptions of leadership consideration/supportiveness all served as indicators of this underlying construct of morale. According to their findings, all of these indicator variables were positively related to OCBs.

Research has also examined dispositional attributes of OCBs. Certain researchers concluded that, with the exception of conscientiousness, there was a fairly weak relationship between personality and OCBs (Organ et al., 2006; Podsakoff et al., 2000). However, other researchers have found more support for the relationship between personality and citizenship (or contextual) performance, a construct that is often used synonymously with OCBs. Borman, Penner, Allen, and Motowidlo (2001) conducted a review and similarly found support for conscientiousness as a predictor of OCBs, but also found that agreeableness and positive affectivity related to specific facets of citizenship performance. Furthermore, Borman et al. examined other personality variables such as personal initiative and dimensions of a prosocial personality composite and found that they were good predictors of OCBs. It appears that personality can be related to OCBs, but it depends on how personality is operationalized and

what facets of OCBs are examined (Borman et al., 2001; Borman & Penner, 2001; Hogan, Rybicki, Motowidlo, & Borman, 1998; Motowidlo & Van Scotter, 1994). Having said this, the literature does seem to agree on the robustness of the relationship between conscientiousness and OCBs (Lapierre & Hackett, 2007).

Leadership styles and behaviors have also been empirically related to OCBs. As leaders have the ability to influence subordinates and the work environment, the relationship is not surprising (Organ et al., 2006; Podsakoff et al., 2000). To begin with, behaviors related to path-goal theory have been theorized to be predictors of OCBs. Specifically, (1) instrumental leadership behaviors that clarify an employee's goals and how to accomplish them and (2) supportive leadership behaviors demonstrating that a leader cares about the well-being of subordinates have been hypothesized to be antecedents of OCBs. A meta-analysis by Podsakoff, MacKenzie, and Bommer (1996a) found that these behaviors were indeed positively related to OCBs. In addition to the concepts espoused by path-goal theory, the transactional perspective, or the manner in which leaders reward and punish behaviors, offers some insight into the prediction of subordinate performance of OCBs. Specifically, giving rewards on a contingent basis related positively to OCBs; in contrast, administering punishments on a noncontingent basis related negatively to OCBs (Podsakoff et al., 1996a). Transformational leadership is usually contrasted with transactional leadership, and this too has been examined as a potential antecedent of OCBs. Transformational leadership is a leadership style that fosters intrinsic motivation within subordinates and causes them to internalize the leader's goals. Not surprisingly, transformational leadership has been found to be positively related to OCBs (MacKenzie, Podsakoff, & Rich, 2001; Podsakoff, MacKenzie, & Bommer 1996b). The final theory that will be discussed in relation to antecedents of OCBs, leader-member exchange

(LMX) theory, is slightly different than the other leadership theories as it does not focus solely on the behaviors of the supervisor, but also considers the subordinate. LMX specifically examines the reciprocating trust, loyalty, and support in the dyad, and a recent meta-analysis has found that a positive relationship existed between LMX and OCBs (Ilies, Nahrgang, & Morgeson, 2007).

Moving from leadership characteristics, researchers have also examined task and organizational characteristics as antecedents of OCBs (Organ et al., 2006; Podsakoff et al., 2000). With regard to task characteristics, task feedback and intrinsically satisfying tasks were positively related to OCBs (Podsakoff et al., 1996a). A potential explanation of this relationship is that intrinsically satisfying tasks and feedback, via greater opportunities to improve performance, both may increase job satisfaction, which is usually related to performance of OCBs (Podsakoff et al., 2000). Although there is support for job satisfaction mediating the relationship, researchers also found direct effects of task feedback and intrinsically satisfying tasks on OCBs.

Moving onto the next task characteristic, task routinization has been found to be negatively related to OCBs. According to Hackman and Oldham (1976), variety (the opposite of routinization), identity, and significance increase an employee's perception of the meaningfulness of his/her work. By increasing routinization, an employee may derive less meaning from work, and this may affect job satisfaction, ultimately decreasing OCBs. In fact, research has found a direct negative effect of routinization on OCBs (Podsakoff et al., 2000). Perhaps the explanation of this direct effect is that routinization defines a more concrete role for the employee, and this decreases the opportunities to perform OCBs.

With regard to organizational characteristics, researchers have found that group cohesiveness and perceived organizational support were positively related to OCBs (Podsakoff et al., 2000). The authors hypothesized a variety of reasons why group cohesiveness may increase OCBs: members in a cohesive group likely get along well and therefore may be more willing to perform OCBs for each other; a cohesive group is more likely to have a strong identity and the members may be more willing to stick together, which may lead to more OCBs; there is likely a desire to stay in the group, which may increase certain forms of OCBs such as sportsmanship and loyalty; and finally, cohesiveness may affect OCBs via job satisfaction if employees are more satisfied in a cohesive group. Finally, as stated before, perceived organizational support has been linked to OCBs. The theory behind this relationship is that an employee who perceives support from the organization may reciprocate by performing OCBs.

As identified in this review, the most studied antecedents of OCBs have a positive connotation. The research supports the notion that employees who are satisfied and committed to their jobs, who are conscientious and have prosocial tendencies, who have leaders that guide, reward, and inspire them, who perform tasks that are intrinsically satisfying, and who work in an organization that supports them, are more likely to perform OCBs. Having established the variables that theoretically lead to OCBs, this review will move onto detailing the consequences of OCBs; as will be seen, these consequences similarly carry a positive connotation.

Past research has found that performance of OCBs was positively related to managerial evaluations of performance (Barksdale & Werner, 2001; MacKenzie, Podsakoff, & Fetter, 1991; MacKenzie, Podsakoff, & Fetter, 1993; Organ et al., 2006; Podsakoff et al., 2000). Not only that, but it appears that OCBs tended to be weighted as heavily as both objective and subjective measures of task performance with regard to managerial evaluations. In other words, managers

assigned as much importance to OCBs as task performance (objective and subjective) when making overall performance evaluations. In addition to affecting performance evaluations, it appears that OCBs also positively affected reward allocation: performance of OCBs was related to more rewards such as recommendations for promotions, salary, and training (Allen & Rush, 1998; Organ et al., 2006; Podsakoff et al., 2000; Van Scotter, Motowidlo, & Cross, 2000). Nielsen, Hrivnak, and Shaw (2009) and Whitman et al. (2010) examined the OCB and job performance relationship at the group level, and both meta-analyses found that group level OCBs were positively related to group level performance.

Finally, a fundamental tenant of OCBs is that they ultimately contribute to organizational effectiveness. According to the past literature, OCBs appear to be positively related to organizational effectiveness relative to quantity, quality, efficiency, reduced costs, and customer service/satisfaction, while being negatively related to unit-level turnover (Organ et al., 2006; Podsakoff et al., 2000; Podsakoff, Ahearne, & Mackenzie, 1997; Podsakoff & MacKenzie, 1994; Podsakoff, Whiting, Podsakoff, & Blume, 2009; Walz & Niehoff, 2000). Taken together, performance of OCBs appears to result in positive consequences for the organization.

Much of the past research on OCBs has focused on the beneficial and positive nature, but a growing subset of literature is exploring the darker side of OCBs. Although these studies do not fall strictly within specified categories, certain broad themes do appear to emerge from the dark side literature, namely OCBs that are forced, OCBs motivated by self-serving motives, and traditionally positive OCBs that result in negative consequences. As this is the major underlying theme to the study, the dark side literature will be reviewed in more detail than the broad overview.

Vigoda-Gadot (2006), Vigoda-Gadot (2007), and Bolino, Turnley, Gilstrap, and Suazo (2010) theorized that OCBs may not always possess that voluntary “flavor” that exemplifies the traditional ideas of OCBs. Specifically, Vigoda-Gadot (2006) theorized a construct known as “compulsory OCBs” (CCBs). CCBs are based on the idea that if management places pressure on employees to perform tasks outside of his/her formal job duties, tasks the employee would not have otherwise performed, employees will perform these tasks even if not rewarded. This aspect of managerial pressure contradicts the typical voluntary nature of OCBs. Vigoda-Gadot (2006) hypothesized harmful effects for individuals, groups, and organizations if CCBs are forced on employees. In a follow up study, Vigoda-Gadot (2007) demonstrated that employees did indeed frequently feel pressured to perform OCBs, supporting the existence of CCBs, and that these CCBs were related to various negative outcomes. Specifically, the author found that CCBs were positively correlated with job stress, burnout, turnover intentions, organizational politics, negligent behaviors (e.g. reducing effort/interest at work), and negatively correlated to job satisfaction and innovation.

Bolino et al. (2010) also theorized a construct that taps into the “forced” nature of certain OCBs. Specifically, the authors proposed and defined Citizenship pressure as “a specific job demand in which an employee feels pressured to perform OCBs” (Bolino et al., 2010, p. 844). According to the authors’ theory, this pressure acts as a potential antecedent to the performance of OCBs, which contradicts the positive connotation typically associated with OCBs. Testing this empirically, the authors found evidence that citizenship pressure was associated with negative outcomes, such as work/family conflict, work/leisure conflict, job stress and increased turnover. Clearly, these results are not aligned with the typical positive connotation of OCBs.

The next line of research returns the discretionary aspect of OCBs back to the construct, but hypothesizes a more devious and self-serving motive for performance of OCBs. The first category of literature links impression management to OCBs. Bolino (1999) proposed that impression management, a process that people use to influence others' perception of them (Rosenfeld, Giacalone, & Riordan, 1995), may be an antecedent of OCBs in some situations. Bolino supports the idea of this relationship by highlighting the overlap between the behavioral manifestations of impression management and the behaviors typically associated with OCBs. For example, impression management tactics can be split into five categories: ingratiation, exemplification, intimidation, self-promotion, and supplications (Jones & Pittman, 1982). Typical OCBs such as volunteering to help a supervisor with a task, helping out a co-worker with their work, or staying late when another employee cannot, can be categorized into the impression management categories of ingratiation, self-promotion, and intimidation, respectively. Specifically, Bolino theorized that impression management will serve as an antecedent to OCBs if a) employees consider the performance of OCBs as instrumental in appearing to be a good organizational citizen, b) employees place a high value on appearing to be a good organizational citizen, and c) there is a discrepancy between the desired and current image of the employee. Furthermore, Bolino emphasized the importance of identifying the motive of OCBs, impression management versus traditional altruistic/prosocial reasons, as impression management motivated OCBs may attenuate or nullify the benefits associated with traditional OCBs.

Various studies have supported the idea that impression management is indeed a potential antecedent to organizational citizenship behaviors. Rioux and Penner (2001) compiled an extensive list of motives for engaging in OCBs, and a factor analysis revealed three major

themes: organizational concern, prosocial values, and impression management. This last category of motives dealt mainly with attempting to maintain a positive image and avoiding the creation of a negative image. Finkelstein and Penner (2004) and Finkelstein (2006) continued with the next logical step and linked the impression management motive to performance of actual OCBs. Although they did find a link between IM motives and OCBs, their results indicated that IM motives typically only related to performance of OCBs directed towards the individual, as opposed to the organization. Grant and Mayer (2009) took a slightly different theoretical approach to linking impression management to performance of OCBs. Instead of thinking of impression management motives as independent of prosocial motives, they theorized that the two motives interact. Indeed, they found that prosocial values predicted affiliative OCBs more strongly when impression management was simultaneously high. Ultimately, this study also supports the idea that impression management is an important antecedent of OCBs.

As previous literature has found that impression management was a motive for OCBs and that that these IM motives were positively related to performance of certain OCBs, the next logical step was to link IM tactics to positive benefits for the employee engaging in these tactics. Bolino, Varela, Bande, and Turnley (2006) found support for this; specifically, they found that performance of IM tactics did indeed appear to lead to the desired effect for the employee. Impression management tactics aimed at the supervisor increased the supervisor's perception of employee's performance of OCBs, which in turn was related positively to supervisor's liking and performance ratings of the employee.

Although Bolino et al. (2006) found benefits for employees who engaged in IM tactics, this is presumably only an effective strategy when others do not perceive the IM motives. Banki (2010) theorized how peers will act if they perceive that their fellow employees are performing

IM motivated OCBs. Under the traditional idea of OCBs, an employee who performs an OCB for a co-worker will likely receive an OCB back from that co-worker due to the social exchange perspective. However, Banki hypothesized that if the recipient perceives that the OCBs are motivated by IM, the recipient will be unlikely to reciprocate. Furthermore, the author theorized that when an employee perceives a peer performing IM motivated OCBs, this will cause detrimental effects, as the employee will likely conclude that the peer is performing the OCB to impress his/her supervisor. This may cause the employee to feel threatened, ultimately decreasing trust, cooperation, communication, and cohesiveness within the group. Finally, Banki drew a parallel between IM motivated OCBs and organizational politics, a construct that has been related to higher stress and strain and decreased morale (Vigoda-Gadot, 2000). Assuming this comparison is accurate, perceived IM motivated OCBs may be related to strain and decreased morale, ultimately leading to decreased performance. Although these hypotheses were not empirically tested, it does highlight the potential importance of motives behind OCBs.

Although Banki (2010) theorized how peers perceive OCB motives, Halbesleben et al. (2010) examined what occurs when supervisors perceive IM motivated OCBs. The authors empirically linked a supervisors' attribution of subordinates' OCB motive to supervisors' emotional reaction, which in turn was related to ratings of employee performance. They identified three factors which contributed to whether a supervisor attributed OCBs to impression management, prosocial, or organizational concern motives: locus, controllability, and stability. If a supervisor perceived an employee's OCB to be influenced by external forces (locus), perceived that an employee was performing an OCB because the employee had high control over the behavior itself (e.g. timing the volunteering of a task so that a supervisor observes the OCB) and the personal rewards, or perceived that an employee changed his/her OCB behavior

drastically (unstable), then the supervisor was more likely to attribute IM motives to the OCB. The authors then linked the perception of IM motives to the supervisor's emotional reaction: perceived IM motives were associated with anger from the supervisor. This emotional response was then linked to lower performance evaluations for the employee.

Finally, Becker and O'Hair (2007) also contributed to the literature linking IM to OCBs by identifying a potential dispositional antecedent of IM motives. They examined Machiavellianism, a predisposition to ignore social norms and manipulate others for personal gain, as an antecedent to OCB motives and OCB performance. The authors theorized that Machiavellians (or Machs) will only engage in OCBs if they can benefit from the act; in other words, they are unlikely to perform OCBs for altruistic or prosocial reasons. Indeed, Becker and O'Hair found that high levels of Machiavellianism were related to high levels of IM motives, as rated by the employee, co-worker, and supervisor. In contrast, Machiavellianism was negatively related to both prosocial motives and organizational concern. Furthermore, when Machs performed OCBs, they tended to direct them toward individuals as opposed to the organization. The authors hypothesized that OCBs directed toward an individual are more likely to be beneficial to the Mach as the OCBs will likely be reciprocated back toward the Mach. In contrast, organizational OCBs are less likely to be noticed and potentially less likely to be rewarded. This study identified another negative antecedent of OCBs.

Similar to the studies reviewed above that link IM to OCBs, Bolino, Turnley, and Niehoff (2004) and Tepper, Duffy, Hoobler, and Ensley (2004) hypothesized self-serving motives for OCBs, although they did not specifically identify IM as the motive. Bolino et al. (2004) theorized that employees may perform OCBs as a means to receive better performance ratings; this self-serving motive contradicts the typical altruistic nature of OCBs. Alternatively, OCBs

can be used in a more deviously fashion: performing OCBs excessively can make other employees look like they are doing too little work, relative to the employee performing the OCBs. OCBs can also be used as an excuse to avoid formal job duties, thereby decreasing organizational effectiveness. Tepper et al. (2004) discovered that when an employee performed OCBs in an environment with abusive supervision, co-workers were likely to attribute self-serving motives to the employee who performed the OCB. Interestingly, this perception of self-serving OCBs was related to decreased job satisfaction in the employee's co-workers. Both of these research papers highlight situations where self-serving OCBs may result in negative consequences for an organization.

Up to this point, the studies reviewed in the dark side literature attribute some "negative" driving force (pressure or self-serving motives) for performing OCBs, which is contrary to the traditional idea of OCBs. The next portion of the dark side review involves studies that do not assume some negative driving force behind the OCBs. In other words, although the authors may not specifically identify the OCBs as voluntary or altruistic, it is assumed that because they do not specifically call out negative antecedents, the OCBs that are measured/theorized more closely align with the typical positive connotation of OCBs.

Bergeron (2007) hypothesized a potential inverse relationship between task performance and OCBs under certain circumstances. A finite amount of resources at work means that devoting resources to performing OCBs may cause a degradation of task performance. This in turn may result in worse performance ratings, decreased rewards, and slower career advancements. Bergeron hypothesized various moderators of this phenomenon. Organizations that have very clear reward structures or have low role ambiguity (i.e., organizations that specifically do not reward OCBs) will likely yield this negative effect if resources are diverted

from rewarded behaviors to unrewarded OCBs. Similarly, if resources devoted to formal job duties are reallocated to OCBs that are not very visible, and thereby less likely to be recognized and rewarded, negative outcomes are likely for the employee. Finally, consistent performance of OCBs may cause others to believe that the OCBs are simply part of one's job. These hypotheses were not empirically tested, but it does provide examples of how OCBs can theoretically result in negative consequences for the employee.

Bolino et al. (2004) provided additional potential negative aspects of OCBs. Specifically, they questioned the assumption that employees want to work in an organization that fosters OCBs. Even if the OCBs are done voluntary and altruistically, the performance appraisal system of such an organization would likely be less transparent, and role ambiguity would be increased. Furthermore, an organization with high levels of OCBs may accidentally foster conflict among employees. For example, unwanted help that is forced on an employee may increase resentment, especially if the employee perceives the forced help as a sign that others do not have confidence in his/her abilities. Finally, prolonged performance of OCBs may create the perception that the performed OCBs are formally required tasks of the job (escalating citizenship), instead of behaviors that are, for the most part, voluntary. This expansion of roles may result in work overload for employees.

Bolino and Turnley (2005) empirically examined negative consequences of OCBs. Specifically, they examined the personal cost of individual initiative, a particular type of OCB. Individual initiative is defined as when employees “engage in task-related behaviors at a level that is so far beyond minimally required or generally expected levels that it takes on a voluntary flavor” (Podsakoff et al., 2000, p. 524); the authors found that individual initiative was positively associated with role overload, work-family conflict, and job stress. The authors theorized that in

order to perform OCBs, resources must be expended. If the resources to perform these OCBs come from the job holder role, then role overload occurs. If the resources come from the nonwork role (family or spousal roles), then work-family conflict occurs. Finally, the increased amount of work associated with performing OCBs increases stress.

Similar to Bolino and Turnley's (2005) finding that individual initiative OCBs were related to work-family conflict, Halbesleben, Harvey, and Bolino (2009) found that interpersonal OCBs were also related to work-family conflict (WFC). Halbesleben et al. framed the study in terms of the dark side of engagement: engagement leads to WFC, with OCBs as the behavioral manifestation of state engagement. In other words, when an employee experiences engagement, the employee will be more likely to perform OCBs, which in turn will increase WFC. However, results from their study also support the idea that OCBs may have a dark side. Specifically, they found that OCBs directed toward the individual were related to increased time based WFC (time from work takes away from time with the family), strain based WFC (strains at work carry over to family life and make fulfilling the family role more difficult), and behavior based WFC (behaviors at work make fulfilling the family role more difficult). The theorized reason is that it takes resources to complete these OCBs, and since a person only possesses a finite amount of resources, these resources are taken from the family domain. The authors argued that it is easier to justify the use of resources on work, as opposed to family, as work roles result in material support for the family.

As discussed above, there is a growing set of literature examining the potential "dark-side" of OCBs. Although this literature stretches the conceptualization of OCBs and shifts the perspective from a positive view to a more negative view, it is unlikely that any of these researchers believe that OCBs are inherently bad. Instead, this new focus simply questions the

assumption that OCBs are always beneficial; OCBs may be driven by self-serving intentions and OCBs may lead to negative outcomes for employees and organizations. Research should make this distinction between OCBs originating from self-serving intentions as opposed to good intentions as the literature has theorized and found support for the idea that these self-serving OCBs may ultimately harm the organization. Even with OCBs that originate from good intentions, there needs to be a distinction of when OCBs lead to positive benefits rather than negative consequences as well. Unfortunately, previous research has not thoroughly explored these distinctions.

As far as this author knows, although OCBs have been related to the variable of “stress” (Bolino & Turnley, 2005; Bolino et al., 2010; Vigoda-Gadot, 2007) or variables commonly studied in the stress literature such as burnout (Loo, 2010; Vigoda-Gadot, 2007), work-family conflict (Bolino & Turnley, 2005; Bolino et al., 2010, Halbesleben et al., 2009), work-leisure conflict (Bolino et al., 2010), and role overload (Bolino & Turnley, 2005; Loo, Ottinot, & Taing, 2011), no literature has specifically tried to integrate OCBs into a stress framework. As there has been empirical evidence suggesting that OCBs are related to stress, this seems like a logical direction, and it could potentially shed light on when OCBs lead to negative consequences as opposed to the typically assumed positive benefits.

Although OCBs have been related to stress (Bolino & Turnley, 2005; Bolino et al., 2010; Vigoda-Gadot, 2007), this may not be the ideal approach as even within the stress literature, providing a definition to stress has proven difficult (Jex & Beehr, 1991). Specifically, some researchers have conceptualized stress as a negative stimulus or force that acts on employees (e.g. “Bob has had his share of stress at work during the past year”; Jex & Britt, 2008, p. 202), whereas others have defined stress in terms of the employee’s reaction to stressful conditions

(e.g. “Barbara is feeling a lot of stress because of her upcoming performance review”; Jex & Britt, 2008, p. 203). Indeed, some researchers have given up on the attempt to operationalize the term stress itself, but rather view stress as an overarching process by which employees are negatively influenced by the work environment. This is known as the stressor-strain framework: Stressors are some aspect within the job, organization, or work environment that potentially requires the employee to adaptively respond, whereas strains are negative reactions or outcomes an employee experiences due to the stressor. I theorize that viewing OCBs from a stressor-strain framework will offer insight to better understanding both OCBs and stress. As the stressor-strain framework will serve as a fundamental backdrop to the study, a brief overview of the commonly studied stressors and strains is provided.

The most commonly studied stressors are the role stressors (Jex & Britt, 2008). Roles are basically a set of prototypical behaviors of a person in a specific role (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). The construct of roles not only provides predictability in others’ behaviors, but it also acts as a guide for the role holder as to what he or she is supposed to be doing in that specific role. Two important aspects of role theory are that a single person can hold multiple roles simultaneously (e.g. a person can be an employee, while being a student) and that the incoming information regarding role definition comes from multiple sources. When the role information that is being communicated to the role holder is imprecise, role ambiguity occurs. This is where the role holder is confused about how to properly serve in a specific role. Most pertinent to the organizational literature is when an employee is confused about what his/her job entails or what constitutes good performance. Alternatively, the role messages might be clear, but a role holder might receive conflicting communications from different sources. This is known as role conflict. For example, most employees have a formal job description, an

immediate supervisor, and co-workers. Information regarding a job role can come from all of these sources; if one source (a co-worker) communicates a demand that conflicts with or makes another source's (the supervisor) demand more difficult, the employee will experience role conflict. Finally, a person with multiple roles may be receiving clear, non-conflicting messages regarding role expectations, but if the roles demand more resources than the employee possesses, then role overload may occur. The demands may be beyond the skill and ability of the employee (qualitative role overload) or it may just be the sheer volume of demands (quantitative role overload).

Of the role stressors, role ambiguity and role conflict have been the most studied. Researchers have found that role ambiguity and role conflict were negatively related to job satisfaction, organizational commitment, job performance, and job involvement and were positively related to tension/anxiety, emotional exhaustion, physical symptoms, and turnover intentions (Fried, Shirom, Gilboa, & Cooper, 2008; Gilboa, Shirom, Fried, & Cooper, 2008; Jackson & Schuler, 1985; Nixon, Mazzola, Bauer, Krueger, & Spector, 2011). Role overload, although being less studied than the other two, has still been related to emotional exhaustion, tension, propensity to quit, depersonalization, and decreased organizational commitment and job performance (Gilboa, Shirom, Fried, & Cooper, 2008; Örtqvist & Wincent, 2006).

Another commonly studied stressor is workload: this is typically described as how much work an employee is expected to complete given a time frame (Jex & Britt, 2008). The construct becomes more complicated, and like role overload, workload can be split into quantitative (volume) and qualitative (skills/abilities) work overload. Furthermore, another consideration a researcher should take into account is if the construct of interest is an objective measure of workload versus a perception of workload.

Workload has been linked to various psychological strains: Spector and Jex (1998) found that workload was related to increased anxiety, frustration, and turnover intentions, and decreased job satisfaction, while Narayanan, Menon, and Spector, (1999) found that it was linked to depression as well. Interestingly, Spector and Jex (1998) found that workload was related to at least one positive outcome: job performance. Workload has also been related to a number of physical symptoms, such as backaches, headaches, eye strain, sleep disturbances, dizziness, fatigue, appetite loss, and gastrointestinal problems (Nixon et al., 2011). Taking it a step further, workload has been linked to health problems such as increased likelihood of death by coronary heart disease in males (Buell & Breslow, 1960), increased catecholamine secretions potentially related to illnesses if elevated over an extended amount of time (Frankenhaeuser, 1979), and increased blood pressure (Rau, 2004).

Organizational or situational constraints are another category of popularly studied workplace stressors. Peters and O'Connor (1980) offered a fairly comprehensive list of potential situational constraints: (1) job-related information, (2) tools and equipment, (3) materials and supplies, (4) budgetary support, (5) required services and help from others, (6) task preparation, (7) time availability, and (8) work environment. Each of these constraints can be lacking in terms of quality, inadequacy, unavailability, or a combination of the above. Situational constraints have been linked to frustration, anxiety, dissatisfaction, absenteeism, backaches, headaches, eye strain, sleep disturbances, dizziness, fatigue, appetite loss, gastrointestinal problems, and turnover intentions (Gupta & Beehr, 1979; Nixon et al., 2011; O'Connor et al., 1984; O'Conner, Peters, Rudolf, & Pooyan, 1982; Spector, Dwyer, & Jex, 1988; Spector & Jex, 1998; Villanova & Roman, 1993).

Researchers have also examined interpersonal conflict as a workplace stressor. As defined by Keenan and Newton (1985), interpersonal conflicts are negative encounters with others. Some examples of interpersonal conflict are angry exchanges, verbal aggression, hostility, or verbal disputes. Interpersonal conflicts may stem from a variety of situations: competition among employees, rude or abrasive personalities, threats and coercion among employees, free-riding behaviors, leadership styles, or other factors (Cooper, Dewe, & Driscoll, 2001; Jex & Britt, 2008). Spector and Jex (1998) performed a meta-analysis and found that interpersonal conflicts were related to the strains of anxiety, frustration, job dissatisfaction, and intentions to quit. More recently, Nixon et al. (2011) linked interpersonal conflict to a variety of physical symptoms such as backaches, headaches, eye strain, sleep disturbances, dizziness, fatigue, appetite loss, and gastrointestinal problems.

Although this review has examined a number of commonly studied stressors, this is by no means a comprehensive review. Given the definition of stressors, many variables could potentially qualify as a stressor. In fact, research has conceptualized noise, vibration/temperature, work hours, new technology, exposure to risks and hazards, responsibility, job insecurity/layoffs, promotions/career advancement, work-family conflict, shiftwork, organizational politics, self-efficacy, mergers/acquisitions, organizational justice, workplace safety, and emotional labor as potential stressors (Barling, Kelloway, & Frone, 2005, Cooper et al., 2001; Jex & Beehr, 1991; Jex & Britt, 2008).

As stated before, strains are the negative reactions or outcomes stemming from the stressors an employee experiences. Within the stressor-strain literature, strains have been primarily classified into three categories: psychological/emotional, physiological/physical, and behavioral (Cooper et al., 2001; Jex & Beehr, 1991; Jex & Crossley, 2005). Each of these three

categories can be further split into strains that primarily affect the individual and strains that primarily affect the organization (Jex & Crossley, 2005). The strains relevant to the individual do not necessarily affect organizational well-being (at least not directly) and can occur outside the context of work. In contrast, the strains relevant to the organization do typically affect the organizational well-being and tend to occur within the context of work. A review of popular strains will be conducted, although it may not represent a completely comprehensive list.

Psychological and emotional strains tend to be the most studied strains within the psychological work stress literature (Jex & Beehr, 1991); this does not necessarily imply that these are the most important strains with regards to stress, but is simply an indicator of the primary emphasis and nature of our field. According to Cooper et al. (2001), Jex and Beehr, (1991), and Jex and Crossley (2005), examples of individually relevant psychological/emotional strains include anxiety/tension, depression, general well-being, burnout, frustration, hostility, and life dissatisfaction. The organizationally relevant strains include job dissatisfaction (general satisfaction and facets of satisfaction), low organizational commitment, low job involvement, job frustration, turnover intentions, job alienation, dissatisfaction of workload, and job boredom.

Physical strains have also been an important part of the stressor-strain literature. With regard to the individually relevant physical strains, there have been three major categories (Jex & Beehr, 1991). The first category is self-reported psychosomatic complaints. Specific strains include diarrhea, chest pains, sleep loss, stomach aches, fevers, headaches, eye strain, loss of appetite, backache, skin rashes, shortness of breath, acid indigestion/heartburn, stomach cramps, constipation, heart pounding, infections, or tiredness/fatigue (Jex & Beehr, 1991; Jex & Crossley, 2005; Spector & Jex, 1998). The next classification of individually relevant physical strains includes changes in a person's physiology that are typical predictors of disease

conditions: gastrointestinal symptoms, biochemical symptoms, and cardiovascular symptoms. Specific strains include peptic ulcers, cortisol, catecholamines, uric acid, serum cholesterol level, blood pressure, and heart rate (Fried, Rowland, & Ferris, 1984). The final category within the individually relevant physical strains involves actual disease conditions: cancer, cardiovascular disease, chronic obstructive lung disease, diabetes, influenza, liver cirrhosis, pneumonia, and stroke (Jex & Beehr, 1991). All of the physical strains listed above have been most relevant to the individual. According to Jex and Crossley (2005), organizationally relevant physical strains include health care utilization, sick day usage, and worker compensation claims.

Behavioral strains compose the final category of strains, which tends to be the least studied group, but potentially the most important (Jex & Beehr, 1991). From the individual perspective, potential strains include use of alcohol, smoking, use of substances, suicide, marital difficulties, friendship problems, decreased exercising, less sleep, risk taking, and other destructive behaviors (Jex & Beehr, 1991; Jex & Crossley, 2005; Kahn & Byosiére, 1992). With regard to organizationally relevant strains, potential behavioral strains include decreased job performance, absenteeism, turnover, decreased sales/profit, errors/accidents, early retirement, strikes, vandalism, stealing, rumor spreading, counterproductive work behaviors, aggression, and theft (Jackson & Schuler, 1985; Jex & Beehr, 1991; Jex & Crossley, 2005; Kahn & Byosiére, 1992).

Although there are likely many potential moderators of the stressor-strain relationship, Cooper et al. (2001) conveniently categorized the major moderators into three categories: personality/disposition, situational, and social variables. Personality/disposition moderators that have been studied in the past include Type A behavior pattern, negative affectivity, hardiness, self-esteem, self-efficacy, optimism, and locus of control. Each of these personality

variables have been theorized or empirically tested as a moderator of a stressor-strain relationship by increasing a person's exposure to stressors, affecting a person's reaction to stressors, or both (Bolger & Zuckerman, 1995).

With regard to situational moderators, perceived autonomy or control over the work environment typically receives the most attention. Much of this literature builds upon Karasek's (1979) job demands-control model: employees who face excessive demands are more likely to experience strains, but this relationship is attenuated if the employee has autonomy or control of the work environment. The empirical evidence for control as a moderator of the stressor-strain relationship has received mixed support (Cooper et al., 2001). Sargent and Terry (1998) offered a potential explanation of the lack of consistent evidence. Much of the past literature has operationalized control as a global and encompassing perception of control over the work environment. This generalized level of control may not map well onto the specific demands that are being tested in the stressor-strain relationship. In other words, in order for control to moderate the relationship between stressor and strain, the operationalized control must have some influence or be related to the specific demand or stressor. Indeed, Sargent and Terry found that when the specific work control matched the work demand, it was more likely to moderate the demand-strain relationship. Specifically, the authors found that task-relevant control tended to act as buffer between demands (e.g., role ambiguity) and strain (e.g., job dissatisfaction) whereas a more generalized control variable that did not focus solely on task control, was less likely to be a moderator of the demand-strain relationship. Besides control, incivility has also been examined as a situational moderator (Oore et al., 2010). The authors found that incivility in the work place exacerbated the relationship between stressors and strains.

Finally, social support is the last largely studied category of potential moderators in the stressor-strain relationship (Cooper et al., 2001). Like personality and dispositions, there are various theorized mechanisms for how social support moderates stressors and strains. Social support may affect exposure to stressors, perception of stressors, or ability to cope with the associated demands of the stressors. Like the two other categories of moderators, social support has not received completely consistent evidence as a moderator of the stressor-strain relationship.

Using this framework of stressors and strains will provide a solid foundation to start examining OCBs from a stress perspective: the framework will act as a guide and aid in the theory of why certain strains may be related to OCBs. Furthermore, the stress literature may provide additional avenues of research if the initial findings are supportive of the theory.

As this study will be adopting a stressor-strain framework, naturally OCBs should fall into one of the two key categories. Conceptually, based on the definitions provided above for stressors and strains, OCBs should be the stressor rather than the strain. Although the stress literature has not often envisioned a “behavior” as a stressor, the broad definition lends itself to almost unlimited conceptualizations (Jex & Beehr, 1991). Performing a behavior that helps shape the context for task activities should theoretically place demands on an employee, requiring some sort of adaptive response from the employee. Empirically, the past literature also supports this conceptualization. As stated before, OCBs have been related to role overload (Bolino & Turnley, 2005; Loo, Ottinot, & Taing, 2011), a very commonly studied stressor. Bolino and Turnley (2005) theorized that employees who perform OCBs are taking resources from their job holder role in order to perform these behaviors, resulting in role overload. From this perspective, the act of performing OCBs results in some negative outcome or reaction from

the employee, which identifies OCBs as a stressor. Similarly, Chu, Lee, and Hsu (2006) found that OCBs were positively related to work load, another popular stressor. Although the focal purpose of their study was not to link OCBs to work overload, the data seemed to indicate that performance of OCBs led to negative reactions from the employee. Finally, OCBs have been linked to work-family conflict, a “modern” stressor of the workplace (Bolino & Turnley, 2005; Bolino et al., 2010; Halbesleben et al., 2009). Authors have theorized that in order to perform OCBs, employees must pull resources from their family role, resulting in WFC. Again, OCBs can result in negative outcomes. Interestingly, even though role overload, workload, and WFC are typically considered stressors, OCBs may be theorized as a more distal stressor, effectively reconceptualizing those variables (e.g., WFC) as strains. Although this may deviate slightly with the popular conceptualizations, it is the author’s opinion that these broad labels were meant to help the field summarize the literature, and were not meant to act as a constraint in the uses and potential theories regarding different variables.

The fundamental thesis of this study is that OCBs can be related to strains for the employee performing the behaviors. However, it is unlikely that this occurs all the time, or even a majority of the time. One must keep in mind that although this study is focused on the dark side of OCBs, the bulk of the literature has provided both theoretical and empirical evidence that OCBs result in positive outcomes for the employee and the organization. As such, although I hypothesize that OCBs are related to strains, the dark side of OCBs probably only manifests itself under certain conditions or situations. In order to create hypotheses of the specific strains that are related to OCBs, one should first consider which situations are likely to elicit negative reactions from the employees. The identification of these potential situations will then lead us to theory driven hypotheses of the experienced strains.

Although the broad overview indicates that personality and social support are potential moderators of the stressor-strain relationship, perceived control will be examined in more detail for this study as it seems like a promising candidate for moderating the relationship between OCBs and strains. Frankenhaeuser and Johansson (1986) offered a model of stressors, control, and strains that may be adapted to the OCB literature to serve as a theoretical foundation. The authors theorized that work stressors can result in strains, but the potential strain experienced is dependent on the amount of personal control an employee possesses over the task at hand. If a person has high control, stressors will lead to effort, but not distress (a variable that can be classified as a strain). However, if a person has low control, stressors will lead to both effort and distress. The authors provided empirical support for this model with a laboratory study. In the study, participants performed a vigilance task, with either high levels of control or low levels of control. The authors examined the effect of control on participants in terms of effort and distress from both a psychological and psychobiological perspective. In the high control conditions, participants reported higher levels of self-reported effort and adrenaline, a neuroendocrine secretion related to effort, accompanied by a lower level of self-reported distress and depressed levels of cortisol, a neuroendocrine secretion related to distress. In contrast, when control was low, participants reported high levels of self-reported effort and distress and elevated levels of adrenaline and cortisol. Although this particular study employed a stressor of under-stimulation, it still provides support to the overarching model of stressors and strains being moderated by control, which can then be applied to examining the relationships between OCBs and strains.

This model provides a foundation for relating OCBs to a more narrowly defined set of strains. Using Frankenhaeuser and Johansson's (1986) model, I hypothesize that OCBs are related to both effort and distress. However, as the model suggests, the way in which OCBs

relate to effort and distress is likely dependent on the employee's perceived control over the stressor. In order to hypothesize more specific relationships, the constructs of effort and distress need to be more defined. Although Frankenhaeuser and Johansson (1986) provide a useful framework, their precise definitions of effort and distress may not be appropriate. Their study focused on under-stimulation as the stressor in a vigilance task, with the control construct dealing with ability to influence the stimuli presentation rate. As such, the authors defined effort as tenseness, concentration, and lack of relaxation, and defined distress as boredom, impatience, tiredness, irritation, and lack of interest. Because this study has a different stressor (OCBs) and will use a different operationalization of control, the constructs of effort and distress should similarly be tailored to this study. Specifically, effort will be defined as time commitment and work intensity, and distress will be defined as negative emotions (especially frustration and anxiety), job dissatisfaction, job interference (the extent to which a person's job interferes with his/her non-work life), negative physical symptoms, and counterproductive work behaviors.

In order to incorporate the suggestions provided by Sargent and Terry (1998) regarding the parallel between the operationalization of the variable of "control" and the demands (in this study's case, OCBs), a shift back to the OCB literature is needed. As this study conceptualizes OCBs as the stressor, and therefore a demand placed on the employee, in order to optimize the relationship between OCBs and control, the operationalization of control should involve a direct influence over performance of OCBs. Although at first glance, considering the idea of control over OCBs seems counterintuitive as OCBs typically possess a voluntary flavor, two constructs in the dark literature emerge as potential control variables: compulsory OCBs and citizenship pressure. Both of these constructs involve some sort of perceived pressure to perform OCBs; this pressure to perform OCBs likely results in employees who feel as if they lack control over

when they should be performing OCBs. The compulsory OCB construct directly taps into this idea of lack of control by including items that explore the extent to which employees feel forced to perform OCBs. In contrast, the Citizenship Pressure construct only measures perceived pressure to perform OCBs, and does not make that next leap into the construct of control. In order to leverage previous research, and to more accurately measure the proposed moderator construct, the strategy that will be used to measure Citizenship Pressure will be modified to focus in on the control aspect of OCBs (i.e., the term “Citizenship Control” will be used in lieu of “Citizenship Pressure” in the context of this study). Compulsory OCBs and citizenship control will both be explored as potential control moderators of OCB-strain relationships.

To date, the constructs of compulsory OCBs and citizenship pressure have not received much empirical scrutiny; indeed, one might infer from the dearth of research that perhaps the phenomena are not important or prevalent in organizations. By logical extension, the conceptualization of a key variable with one of these two constructs would appear to detrimentally impact the utility of this study. However, this author would argue that the constructs of compulsory OCBs and citizenship pressure are in their infancy and will increase in importance as time progresses. Both Vigoda-Gadot (2007) and Bolino et al. (2010) found that their respective constructs did occur in their samples. Furthermore, it appears that the amount of work employees are expected to perform is increasing (Brett & Stroh, 2003; Conlin, 2002; Feldman, 2002; Major, Klein, & Ehrhart, 2002). Not only are employees expected to work longer hours, but they are also expected to play a larger role in helping others and supporting the organization, behaviors which fall in the OCB domain. Similarly, research on contextual performance (Borman, 2004; Borman & Motowidlo, 1997; Borman & Penner, 2001) has consistently espoused the rising importance of contextual performance due to increased global

competition, team-based organizations, downsizing, and customer service/satisfaction emphasis. This emphasis on the importance of OCBs and contextual performance is most likely coupled with pressure from management to perform these behaviors. If these trends continue, CCBs and citizenship pressure are important issues about which managers and organizations should be concerned.

Using the stressor-strain framework as the overarching model of this study, I theorize that OCBs may act as a stressor for employees, potentially resulting in strains. However, this relationship to strains primarily manifests itself under certain circumstances. Using Frankenhaeuser and Johansson's (1986) results as a model, I hypothesize that control over the stressor may act as the pivotal situational constraint: depending on whether a person perceives control over OCBs, he/she may feel effort or a combination of distress and effort when performing OCBs. Specifically, if a person perceives control over the performance of OCBs and is performing the behaviors voluntarily, this will lead to effort. However, if a person perceives a lack of control over the performance of OCBs and feels pressured to perform OCBs, OCBs will lead to distress and effort.

According to the application of Frankenhaeuser and Johansson's (1986) model to this study, regardless of whether or not the employee perceives control over the performance of OCBs, performance of OCBs will be related to exertion of effort. OCBs are behaviors that place additional demands on an employee on top of task demands, and as such, when OCBs are performed voluntarily or involuntarily, the extra demands will likely be related to increased effort from the employee. Specifically, in order to accomplish these extra demands, an employee will likely increase his/her time commitment to work and work at a higher intensity.

Hypothesis 1: OCBs will be positively correlated to time commitment.

Hypothesis 2: OCBs will be positively correlated to work intensity.

The primary focus of this study is what occurs when an employee performs OCBs because he/she feels pressured or forced to do OCBs. In this situation, I hypothesize that OCBs will ultimately lead to distress, in addition to effort. Under the situation of feeling forced to do OCBs, the performance of OCBs will most likely elicit negative reactions from the employee. The most immediate reaction from the employee will likely be a negative emotional response. Although a general negative emotion scale should be able to capture this strain, employees may especially feel the emotions of frustration and anxiety.

Hypothesis 3: The relationship between OCBs and employees' negative emotional reaction to their jobs will be moderated by control. There will be a stronger positive relationship as control decreases.

Hypothesis 4: The relationship between OCBs and frustration will be moderated by control. There will a stronger positive relationship as control decreases.

Hypothesis 5: The relationship between OCBs and anxiety will be moderated by control. There will be a stronger positive relationship as control decreases.

In addition to negative emotions toward work, if an employee feels pressured to perform OCBs, this will likely affect their overall job satisfaction as well. Specifically, OCBs will likely be related to the strain of job dissatisfaction under the conditions of feeling forced to do OCBs, or at least less positively related to job satisfaction as previous literature has indicated (Organ et al., 2006). This is aligned with Vigoda-Gadot's (2007) finding that compulsory OCBs are negatively related to job satisfaction. This study differentiates itself from Vigoda-Gadot's study in that Vigoda-Gadot only related CCB to job satisfaction, with this operationalization of CCB typically referring to the overall pressure in the organization to perform OCBs (e.g. "The management in this organization puts pressure on employees to engage in extra-role work activities beyond their formal job tasks"; Vigoda-Gadot, 2007, p. 387) as opposed to actual

performance of forced OCBs. In other words, most of Vigoda-Gadot's items refer to a more general atmosphere of the organization, and the employee may or may not have actually performed the OCBs. This study will link actual self-reported performance of OCBs to job satisfaction, examining if perceived control affects this relationship. In accordance with the past literature, under unforced conditions, OCBs should be positively related to job satisfaction (Organ et al., 2006).

Hypothesis 6: The relationship between OCBs and job satisfaction will be moderated by control. There will be a stronger negative relationship as control decreases.

In previous research, OCBs have been positively related to Work-Family Conflict (Bolino & Turnley, 2005; Bolino et al., 2010; Halbesleben et al., 2009). As discussed above, a potential explanation is that employees have to pull resources from another role, specifically, his/her family role, in order to perform OCBs. Generalizing these findings to a broader context, an employee may pull from his/her general non-work role in order to accomplish these fundamentally work-related behaviors (i.e., OCBs). Using the proposed model, I hypothesize that under forced conditions, OCBs will result in increased perceptions of job interfering with non-work.

Hypothesis 7: The relationship between OCBs and job interference will be moderated by control. There will be a stronger positive relationship as control decreases.

Thus far, the hypotheses have dealt with psychological or emotional strains. However, the potential negative consequences of OCBs under forced conditions are unlikely to be limited to psychological/emotional strains. Feeling forced to perform OCBs may ultimately lead to strains that manifest themselves physically. Specifically, performing OCBs under forced conditions may cause an employee to be more prone to a variety of physical symptoms such as upset stomachs, troubles sleeping, headaches, acid indigestion, eye strain, diarrhea, stomach

cramps, constipation, loss of appetite, or dizziness; these physical strains are thought to be physical manifestations of psychological distress (Spector & Jex, 1998). Although the relationship between OCBs and physical strains will most likely be more difficult to detect, it is a very important area to explore, as it involves potentially serious consequences for the employee and the organization.

Hypothesis 8: The relationship between OCBs and negative physical symptoms will be moderated by control. There will be a stronger positive relationship as control decreases.

Finally, the last category of strains that has yet to be discussed involves behavioral strains. If there is support for the above hypotheses that performing OCBs under forced conditions relates to negative emotions and affect, it is likely that this pressure will also yield some behavioral reactions as well. An interesting area of research has been examining the relationship between OCBs and counterproductive work behaviors (CWBs), which are defined as intentional behaviors done by an employee that are contrary to an organization's interests (Sackett, 2002). Typically, past literature has conceptualized these two constructs as opposites with a large negative correlation; at first glance, it makes logical sense that "good" employees perform OCBs and "bad" employees perform CWBs. However, a subset of the literature has theorized that the relationship between OCBs and CWBs is more complicated. Specifically, some researchers have theorized that under certain circumstances, an employee may actually perform both OCBs and CWBs (Spector & Fox, 2010a; Spector & Fox, 2010b). One such situation that is described by Spector and Fox (2010b) is when supervisors place a demand on employees to perform tasks that are usually considered OCBs. The authors hypothesized that under these conditions, OCBs may actually be followed by CWBs. The supervisory demands tie directly into this paper's idea of pressure to perform OCBs. As such, under conditions of feeling

forced, I hypothesize that employees performing OCBs may retaliate against the organization by performing CWBs.

Hypothesis 9: The relationship between OCBs and CWBs will be moderated by control. There will be a stronger positive relationship as control decreases.

Method

Survey data were collected from 263 (80% female) employed participants (at least, on average, 20 hours a week) enrolled in a psychology course at a large university in the Southeast U.S. Students (the “target employee”) signed up online and came into the lab to complete the self-report portion of the study on a computer (target survey). At the beginning of the session, participants were given a unique code to put on the target survey. At the end of the session, they received a sheet of paper with a link to a survey to provide to a co-worker to complete (peer survey). This sheet also contained the participant’s unique code, and the co-worker had to input the code as part of the survey. This was used to link the two surveys together. The co-worker survey assessed the co-worker’s perception of the target employee’s work behaviors. Average age of the participants was 23.73 years old ($SD = 6.16$), and 58% were Caucasian, 16% African American, and 15% Hispanic. Average tenure of employment was 2.89 years ($SD = 2.84$), they worked an average of 29.60 hours per week ($SD = 8.48$), and they were employed predominantly in retail/service (54%). All of the measures and associated items for the self-report and co-worker surveys are listed in Appendix A and Appendix B, respectively.

Citizenship behavior was measured using 20 items from an OCB checklist (Fox et al., 2012), which is divided into OCBP (personal OCB: “Went out of the way to give co-worker encouragement or express appreciation”; $\alpha = .78$) and OCBO (organizational OCB: “Said good things about your employer in front of others”; $\alpha = .78$). Employees and co-workers (rating the behavior of the target employee) responded to this measure on a five-point Likert-type scale with anchors 1 = Never and 5 = Everyday. This particular scale was used as it was designed to have a

minimal amount of overlap with traditional counterproductive work behaviors scales, a common limitation among other OCB scales (Dalal, 2005).

Control was measured using modified versions of Compulsory OCBs and Citizenship Pressure. Both were used as the constructs are fairly new, and there is not a consensus as to which operationalization is better.

Compulsory OCBs were measured using a slightly modified version of Vigoda-Gadot's (2007) 5-item Compulsory Citizenship Behavior scale ("The management in this organization puts pressure on employees to engage in extra-role work activities beyond their formal job tasks"; $\alpha = .84$). One item specifically referenced the occupation of "teachers", which was not likely to apply universally to the sample that was collected; the word was replaced with "employees". Employees responded to this scale on a five-point Likert-type scale with anchors 1 = Never and 5 = Always.

Citizenship control was measured using a modified version of Bolino et al.'s (2010) strategy for measuring citizenship pressure. Bolino et al. compiled a list of OCBs they were interested in and asked respondents to indicate how often they felt pressured to perform each of the OCBs. As this study used the OCB checklist (Fox et al., 2012), citizenship control was measured by having a secondary scale for each OCB item asking about the degree to which they felt a lack of control in performing each OCB behavior due to pressures placed on them. This change in the instruction's focus (i.e., from pressure, which was Bolino et al.'s focus, to control) was done to more accurately measure the construct of control. As with OCBs, this was split into citizenship control for personal OCBs (CPP: $\alpha = .84$) and organizational OCBs (CPO: $\alpha = .81$). Participants responded to the items on a five-point Likert-type scale with anchors 1 = Felt

complete control and 5 = Felt no control. “Citizenship control” is a bit of a misnomer, as a higher score on this measure actually represents a *lack* of control.

Time commitment was measured using a slightly modified version of the 5-item time commitment subscale from Brown and Leigh’s (1996) Effort Measure (“Other people know me by the long hours I keep”; $\alpha = .84$). Two items were modified: one item referred to “our salespeople”, and this was modified to “our employees”; another item referred to “my clients”, and this was modified to “my clients/customers/co-workers”. Participants responded to this measure using a seven-point Likert-type scale with anchors 1 = Strongly Disagree and 7 = Strongly Agree.

Work intensity was measured using the work intensity subscale from Brown and Leigh’s (1996) Effort Measure. The subscale is 5-items long (“When I work, I do so with intensity”; $\alpha = .93$); participants responded to this measure using a seven-point Likert-type scale with anchors 1 = Strongly Disagree and 7 = Strongly Agree.

Negative emotions were measured using 10 negative items from Van Katwyk, Fox, Spector, and Kelloway’s (2000) Job-related Affective Well-being Scale (“My job made me feel angry”; $\alpha = .89$). Participants responded to this measure by indicating, how often they've experienced each emotion at work over the past 30 days. It was measured on a five-point Likert-type scale with anchors 1 = Never and 5 = Extremely often.

Frustration was measured using 3 items from Peters, O’Connor, and Rudolf’s (1980) frustration scale (“Being frustrated comes with this job”; $\alpha = .80$). Participants responded on a seven-point Likert-type scale with anchors 1 = Strongly Disagree and 7 = Strongly Agree.

Anxiety was measured using 10 items from Spielberger’s (1979) state-trait personality scale (“I am worried”; $\alpha = .86$) with a slight modification to the instructions. Participants were

instructed to respond to the items by thinking about how they have generally felt at work in the past 30 days. Participants responded to this scale on a four-point Likert-type scale with anchors 1 = Not at all and 4 = Very much so.

Job satisfaction was measured using 3 items from Cammann, Fichman, Jenkins, and Klesh's (1979) Michigan Organizational Assessment Questionnaire Job Satisfaction Subscale ("All in all I am satisfied with my job"; $\alpha = .93$). Participants responded to this measure on a seven-point Likert-type scale with anchors 1 = Disagree and 7 = Agree.

Job interference was measured using 7 items from O'Driscoll, Ilgen, and Hildreth's (1992) Interrole Conflict Scale ("Worry or concern over my work interferes with my non-work activities and interests"; $\alpha = .89$). Participants responded to this measure on a five-point Likert-type scale with anchors 1 = Never and 5 = Always.

Physical symptoms were measured using a list of 12 items from Spector and Jex's (1998) Physical Symptoms Inventory ("Headache"; $\alpha = .83$). Participants responded to this measure by indicating, over the past month, how often have they experienced each of the following symptoms. It was measured on a five-point Likert-type scale with anchors 1 = Not at all and 5 = Every day.

Counterproductive work behaviors were measured using Spector et al.'s (2006) 32-item Counterproductive Work Behavior Checklist ("Stolen something belonging to your employer"; $\alpha = .95$). Participants responded to this measure by indicating how often they have done each of the following items on their present job. It was measured on a five-point Likert-type scale with anchors 1 = Never and 5 = Every day.

Results

Intercorrelations and descriptive statistics for all study variables are listed in Table 1. An examination of the correlation table shows support for both Hypothesis 1 and Hypothesis 2.

Time commitment was positively correlated with OCBPs ($r = .17, p < .05$) and OCBOs ($r = .19, p < .05$). Similarly, work intensity was positively correlated with OCBPs ($r = .19, p < .05$) and OCBOs ($r = .33, p < .05$).

To test the hypotheses regarding the moderating role of control, moderated multiple regression was used. The various moderated multiple regressions were run as outlined by Baron and Kenny (1986). For each dependent variable (negative emotions, anxiety, frustration, job satisfaction, job interference, physical symptoms, and counterproductive work behaviors), a two-step regression was conducted: step 1 regressed the outcome variable onto the centered predictor and centered moderator; step 2 regressed the outcome variable onto the centered predictor, centered moderator, and the hypothesized interaction term, or the cross-product between the centered predictor and the centered moderator variable. For example, for anxiety, step 1 regressed anxiety onto the centered predictor (OCBO) and the centered moderator (compulsory OCBs), and step 2 regressed anxiety onto the centered predictor, the centered moderator, and the interaction term (OCBO x compulsory OCBs). Each moderated regression hypothesis had eight different combinations for testing the moderation effect; this was done to account for two different focuses for OCBs (OCBO and OCBP), two different moderators (Compulsory OCBs and Citizenship control), and an alternate source rating the target employee's OCBs (co-worker rating).

Table 1.

Descriptive Statistics and Correlations

	Means	Std. Dev	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 OCBP	3.16	0.74	(.78)															
2 OCBO	3.13	0.70	.66**	(.78)														
3 OCBP (Coworker)	3.22	0.75	.49**	.38**	(.79)													
4 OCBO (Coworker)	3.22	0.81	.33**	.48**	.68**	(.84)												
5 Compulsory OCB (CCB)	2.23	0.98	.14*	.08	.08	.17*	(.84)											
6 Citizenship Control Personal (CPP)	1.82	0.75	-.21**	-.14*	-.21**	-.11	.18**	(.84)										
7 Citizenship Control Organizational (CPO)	2.02	0.76	-.14*	-.11	-.21**	-.04	.29**	.76**	(.81)									
8 Time Commitment	3.62	1.42	.17**	.19**	.03	.13	.14*	-.02	-.05	(.84)								
9 Work Intensity	5.39	1.28	.19**	.33**	.10	.14	-.11	-.34**	-.24**	.30**	(.93)							
10 Negative Emotions	2.44	0.76	-.03	-.09	-.08	.00	.40**	.25**	.41**	-.06	-.21**	(.89)						
11 Frustration	3.73	1.53	-.04	-.09	-.06	.02	.45**	.06	.28**	.02	-.07	.67**	(.80)					
12 Anxiety	1.94	0.53	-.04	-.08	-.04	.08	.37**	.28**	.36**	.01	-.22**	.62**	.56**	(.86)				
13 Job Satisfaction	4.86	1.73	.07	.15*	.12	.05	-.37**	-.25**	-.39**	.10	.28**	-.64**	-.58**	-.48**	(.93)			
14 Job Interference	2.44	0.98	.01	-.00	-.04	.11	.34**	.14*	.21**	.34**	-.01	.37**	.32**	.39**	-.19**	(.89)		
15 Physical Symptoms	1.89	0.55	.03	.05	.07	.19**	.18**	.20**	.18**	.03	-.11	.33**	.24**	.42**	-.15*	.28**	(.83)	
16 CWB	1.32	0.39	-.03	-.06	-.06	.00	.13*	.27**	.24**	.04	-.26**	.32**	.19**	.20**	-.15*	.10	.30**	(.95)

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

There appeared to be little support for control moderating the relationship between performance of OCBs and negative emotional responses (negative emotions, frustration, and anxiety; hypotheses 3-5, respectively). As shown in Tables 2-4, none of the interaction terms for hypotheses 3-5 were statistically significant at the .05 level.

There was partial support for control as a moderator between OCBs and job satisfaction (hypothesis 6). Although none of the interaction terms with self-report OCBs were significant (see Table 5), the two interaction terms between co-workers' ratings of OCBs and CCBs in predicting job satisfaction were significant. The interaction term "CoOCBO x CCB" accounted for an additional two percent of the variance in job satisfaction, after controlling for the main effects of co-workers' perception of OCBOs and compulsory OCBs, $\beta = -.15, p = .04$. Similarly, the "CoOCBP x CCB" interaction term accounted for an additional two percent of the variance in job satisfaction, after controlling for the main effects of co-workers' perception of OCBPs and compulsory OCBs, $\beta = -.16, p = .02$. These two interactions are graphed in Figure 1 and Figure 2. An important point to remember when examining the graphs is that a higher score on either control measure (CCB or CPO/ CPP) represents a *lack* of control, not more control. In terms of job interfering with non-work, there was some support for control interacting with performance of OCBs (Hypothesis 7). Specifically, the interaction between OCBO and CPO in predicting job interference was significant ($\beta = -.16, p = .01$) and accounted for an additional two percent of the variance beyond the main effects. Also, the interaction between a co-worker's rating of OCBOs and CCB was significant ($\beta = -.15, p = .04$) and accounted for an additional two percent of the variance above the main effects. These interactions are presented in Figure 3 and Figure 4. All moderated regression results for control as a moderator between OCBs and job interfering with non-work are presented in Table 6.

Table 2.

Control Moderating OCBs and Negative Emotions

Variable	Negative Emotions		Variable	Negative Emotions	
	Step 1	Step 2		Step 1	Step 2
Step 1			Step 1		
OCBO	-0.12*	-.12*	CoOCBO	-.07	-.07
CCB	0.41**	.41**	CCB	.43**	.43**
Step 2			Step 2		
OCBO x CCB		.00	CoOCBO x CCB		-.00
Model F	27.03**	17.95**	Model F	18.83**	12.48**
R²	.17	.17	R²	.18	.18
Adj R²	.17	.16	Adj R²	.17	.16
Δ Adj R²		-.00	Δ Adj R²		-.01
Step 1			Step 1		
OCBP	-.09	-.10	CoOCBP	-.12	-.12
CCB	.41**	.41**	CCB	.42**	.42**
Step 2			Step 2		
OCBP x CCB		-.05	CoOCBP x CCB		-.02
Model F	25.66**	17.40**	Model F	20.00**	13.28**
R²	.17	.17	R²	.19	.19
Adj R²	.16	.16	Adj R²	.18	.17
Δ Adj R²		.00	Δ Adj R²		-.01
Step 1			Step 1		
OCBO	-.05	-.05	CoOCBO	.02	.02
CPO	.41**	.41**	CPO	.39**	.39**
Step 2			Step 2		
OCBO x CPO		-.00	CoOCBO x CPO		.03
Model F	26.86**	17.84**	Model F	15.72**	10.51**
R²	.17	.17	R²	.15	.15
Adj R²	.17	.16	Adj R²	.14	.14
Δ Adj R²		-.00	Δ Adj R²		-.00
Step 1			Step 1		
OCBP	.02	.02	CoOCBP	-.05	-.05
CPP	.25**	.25**	CPP	.15	.13
Step 2			Step 2		
OCBP x CPP		-.03	CoOCBP x CPP		-.05
Model F	8.60**	5.77**	Model F	2.47	1.78
R²	.06	.06	R²	.03	.03
Adj R²	.06	.05	Adj R²	.02	.01
Δ Adj R²		-.00	Δ Adj R²		-.00

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

Table 3.

Control Moderating OCBs and Frustration

Variable	Frustration		Variable	Frustration	
	Step 1	Step 2		Step 1	Step 2
Step 1			Step 1		
OCBO	-.13*	-.13*	CoOCBO	-.06	-.05
CCB	.46**	.46**	CCB	.47**	.47**
Step 2			Step 2		
OCBO x CCB		.06	CoOCBO x CCB		.07
Model F	36.05**	24.48**	Model F	24.46**	16.66**
R²	.22	.22	R²	.22	.22
Adj R²	.21	.21	Adj R²	.21	.21
Δ Adj R²		.00	Δ Adj R²		.00
Step 1			Step 1		
OCBP	-.11	-.10	CoOCBP	-.10	-.10
CCB	.46**	.46**	CCB	.47**	.48**
Step 2			Step 2		
OCBP x CCB		.05	CoOCBP x CCB		.10
Model F	35.11**	23.59**	Model F	25.25**	17.71**
R²	.21	.22	R²	.22	.23
Adj R²	.21	.21	Adj R²	.21	.22
Δ Adj R²		-.00	Δ Adj R²		.01
Step 1			Step 1		
OCBO	-.06	-.07	CoOCBO	.03	.02
CPO	.28**	.27**	CPO	.26**	.27**
Step 2			Step 2		
OCBO x CPO		.07	CoOCBO x CPO		.05
Model F	12.01**	8.44**	Model F	6.60**	4.55**
R²	.09	.09	R²	.07	.07
Adj R²	.08	.08	Adj R²	.06	.06
Δ Adj R²		.00	Δ Adj R²		-.00
Step 1			Step 1		
OCBP	-.03	-.03	CoOCBP	-.06	-.06
CPP	.05	.06	CPP	.00	-.00
Step 2			Step 2		
OCBP x CPP		.02	CoOCBP x CPP		-.03
Model F	.61	.45	Model F	.30	.23
R²	.01	.01	R²	.00	.00
Adj R²	-.00	-.01	Adj R²	-.01	-.01
Δ Adj R²		-.00	Δ Adj R²		-.01

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

Table 4.

Control Moderating OCBs and Anxiety

Variable	Anxiety		Variable	Anxiety	
	Step 1	Step 2		Step 1	Step 2
Step 1			Step 1		
OCBO	-.11	-.11	CoOCBO	.02	.01
CCB	.38**	.38**	CCB	.39**	.39**
Step 2			Step 2		
OCBO x CCB		.05	CoOCBO x CCB		-.04
Model F	22.34**	15.08**	Model F	15.71**	10.55**
R²	.15	.15	R²	.15	.15
Adj R²	.14	.14	Adj R²	.14	.14
Δ Adj R²		-.00	Δ Adj R²		-.00
Step 1			Step 1		
OCBP	-.09	-.10	CoOCBP	-.08	-.08
CCB	.38**	.38**	CCB	.40**	.40**
Step 2			Step 2		
OCBP x CCB		-.05	CoOCBP x CCB		-.00
Model F	21.75**	14.73**	Model F	16.38**	10.86**
R²	.14	.15	R²	.16	.16
Adj R²	.14	.14	Adj R²	.15	.14
Δ Adj R²		-.00	Δ Adj R²		-.01
Step 1			Step 1		
OCBO	-.04	-.04	CoOCBO	.09	.10
CPO	.35**	.35**	CPO	.31**	.31**
Step 2			Step 2		
OCBO x CPO		.02	CoOCBO x CPO		-.05
Model F	19.06**	12.69**	Model F	10.20**	6.95**
R²	.13	.13	R²	.10	.11
Adj R²	.12	.12	Adj R²	.09	.09
Δ Adj R²		-.00	Δ Adj R²		-.00
Step 1			Step 1		
OCBP	.02	.02	CoOCBP	-.00	-.00
CPP	.29**	.30**	CPP	.18*	.19*
Step 2			Step 2		
OCBP x CPP		.06	CoOCBP x CPP		.03
Model F	11.39**	7.87**	Model F	3.08*	2.08
R²	.08	.08	R²	.03	.03
Adj R²	.07	.07	Adj R²	.02	.02
Δ Adj R²		.00	Δ Adj R²		-.01

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

Table 5.

Control Moderating OCBs and Job Satisfaction

Variable	Job Satisfaction		Variable	Job Satisfaction	
	Step 1	Step 2		Step 1	Step 2
Step 1			Step 1		
OCBO	.18**	.18**	CoOCBO	.11	.09
CCB	-.38**	-.38**	CCB	-.34**	-.34**
Step 2			Step 2		
OCBO x CCB		-.05	CoOCBO x CCB		-.15*
Model F	25.75**	17.38**	Model F	11.17**	9.02**
R²	.17	.17	R²	.11	.13
Adj R²	.16	.16	Adj R²	.10	.12
Δ Adj R²		-.00	Δ Adj R²		.02*
Step 1			Step 1		
OCBP	.12*	.12*	CoOCBP	.15*	.15*
CCB	-.38**	-.38**	CCB	-.33**	-.34**
Step 2			Step 2		
OCBP x CCB		-.03	CoOCBP x CCB		-.16*
Model F	22.82**	15.26**	Model F	12.25**	10.14**
R²	.15	.15	R²	.12	.15
Adj R²	.14	.14	Adj R²	.11	.13
Δ Adj R²		-.00	Δ Adj R²		.02*
Step 1			Step 1		
OCBO	.11	.11	CoOCBO	.04	.04
CPO	-.38**	-.38**	CPO	-.35**	-.35**
Step 2			Step 2		
OCBO x CPO		-.05	CoOCBO x CPO		-.07
Model F	25.54**	17.21**	Model F	12.34**	8.50**
R²	.16	.17	R²	.12	.13
Adj R²	.16	.16	Adj R²	.11	.11
Δ Adj R²		-.00	Δ Adj R²		-.00
Step 1			Step 1		
OCBP	.02	.02	CoOCBP	.09	.09
CPP	-.25**	-.25**	CPP	-.15	-.13
Step 2			Step 2		
OCBP x CPP		-.02	CoOCBP x CPP		.06
Model F	8.93**	5.98**	Model F	3.13*	2.28
R²	.06	.07	R²	.03	.04
Adj R²	.06	.05	Adj R²	.02	.02
Δ Adj R²		-.00	Δ Adj R²		-.00

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

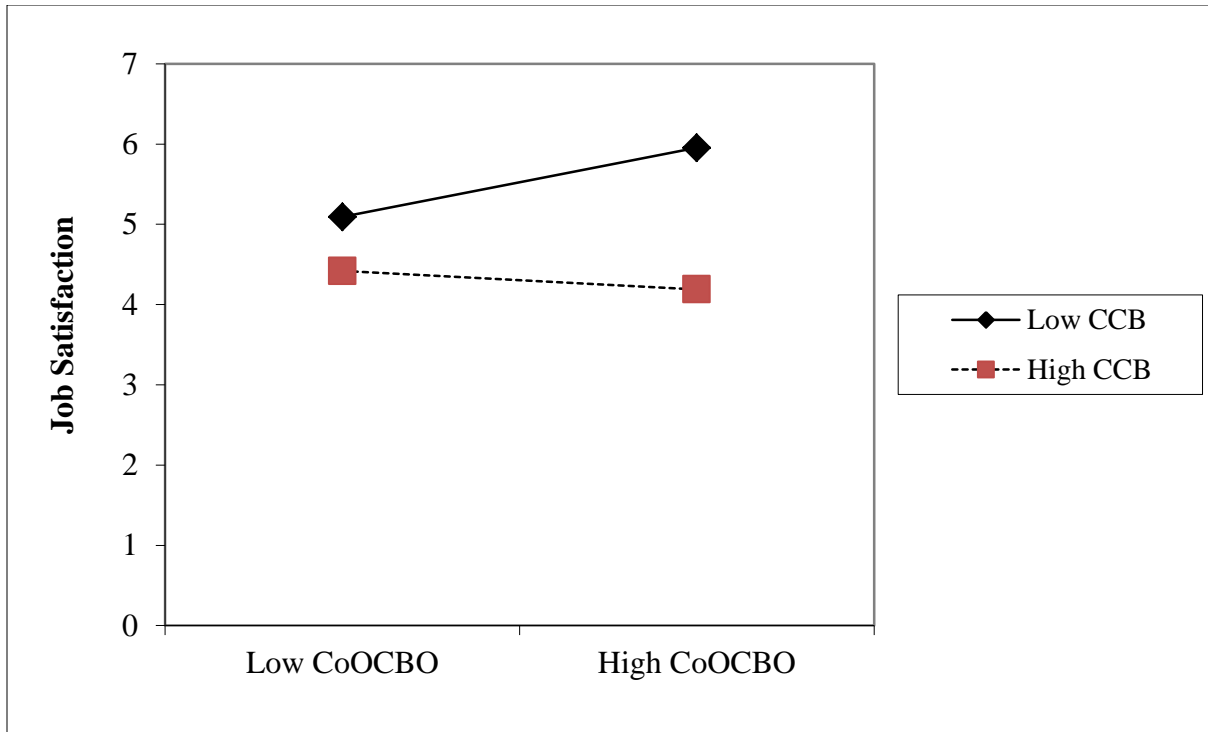


Figure 1. CoOCBOs interact with CCB to predict job satisfaction.

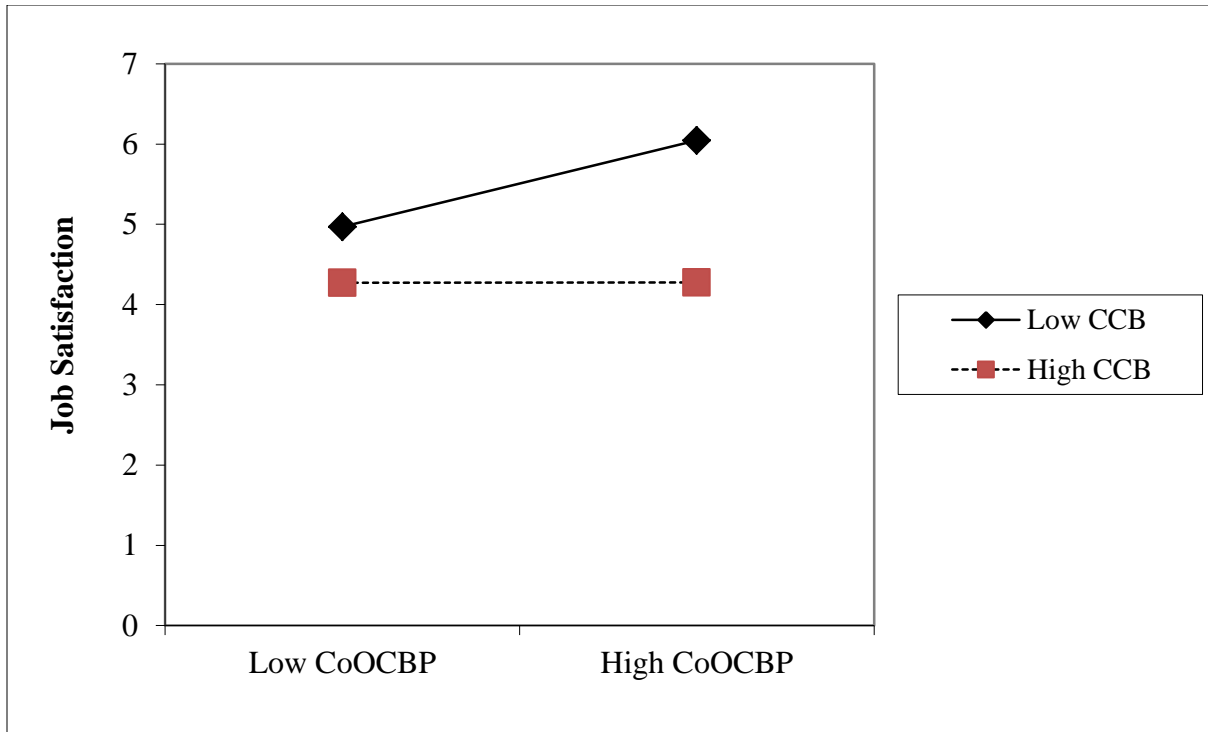


Figure 2. CoOCBPs interact with CCB to predict job satisfaction.

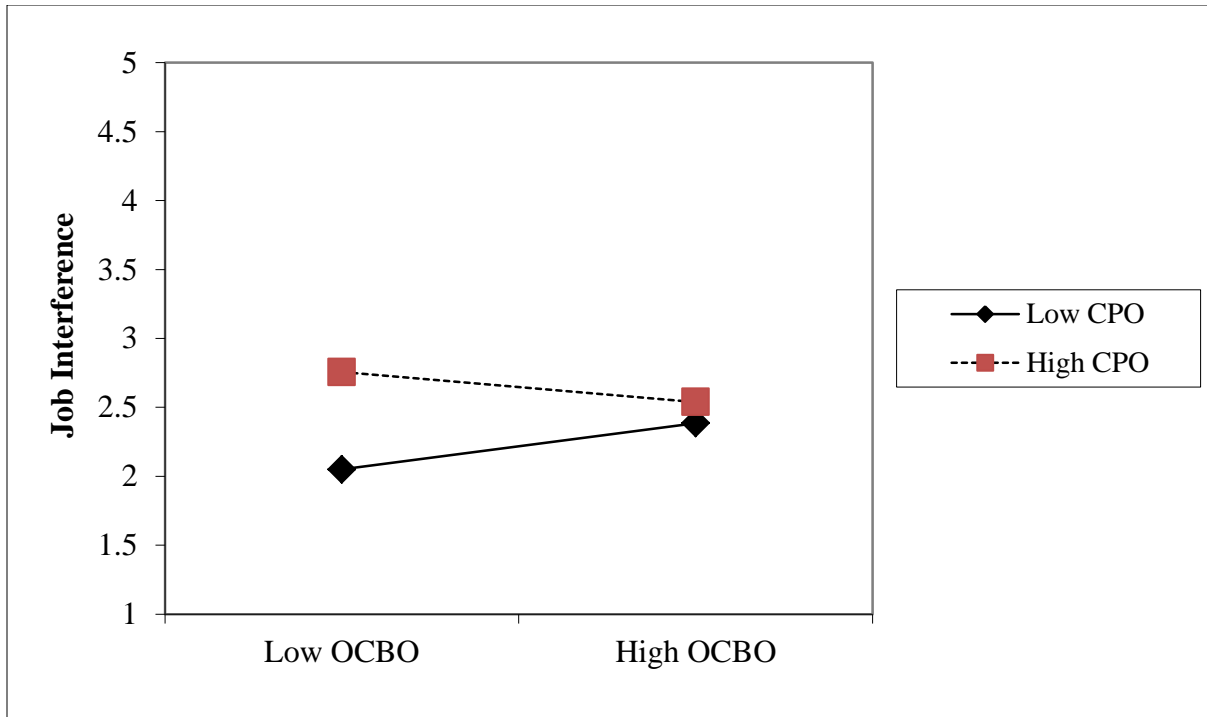


Figure 3. OCBOs interact with CPO to predict job interference.

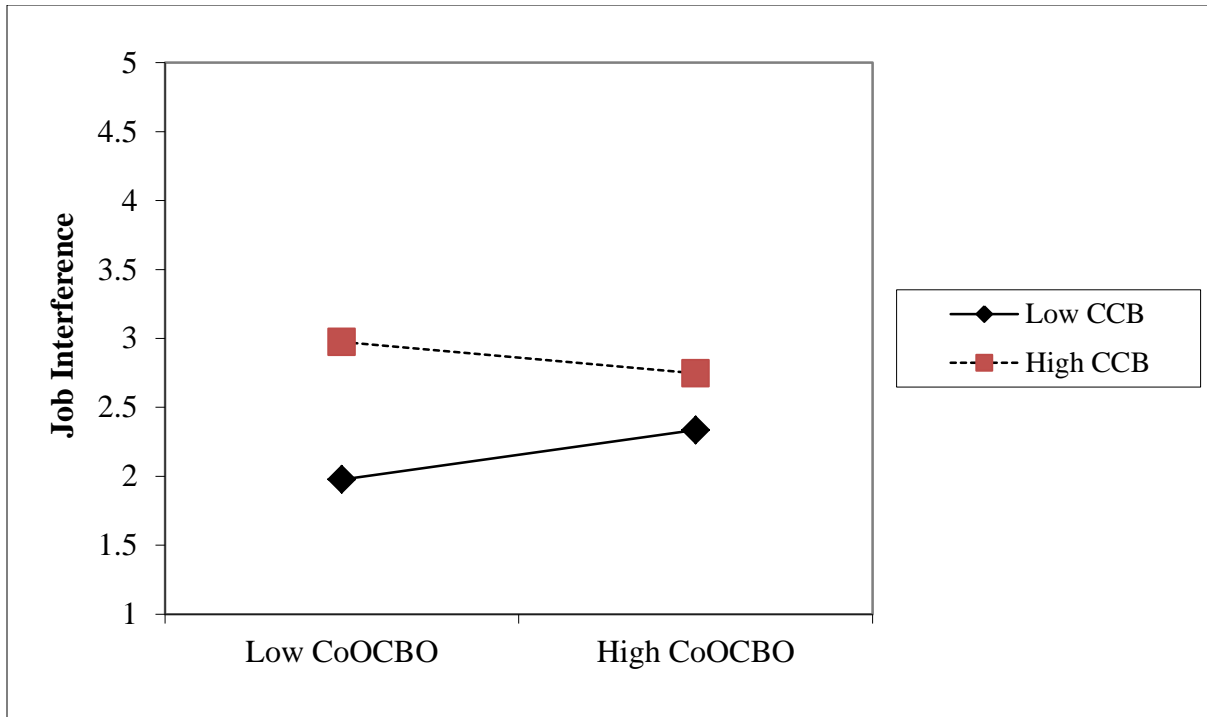


Figure 4. CoOCBOs interact with CCB to predict job interference.

Table 6.

Control Moderating OCBs and Job Interference

Variable	Job Interference		Variable	Job Interference	
	Step 1	Step 2		Step 1	Step 2
Step 1			Step 1		
OCBO	-.03	-.03	CoOCBO	.05	.03
CCB	.34**	.34**	CCB	.35**	.35**
Step 2			Step 2		
OCBO x CCB		-.03	CoOCBO x CCB		-.15*
Model F	16.90**	11.32**	Model F	13.47**	10.56**
R²	.12	.12	R²	.13	.15
Adj R²	.11	.11	Adj R²	.12	.14
Δ Adj R²		-.00	Δ Adj R²		.02*
Step 1			Step 1		
OCBP	-.03	-.04	CoOCBP	-.07	-.07
CCB	.34**	.34**	CCB	.37**	.36**
Step 2			Step 2		
OCBP x CCB		-.07	CoOCBP x CCB		-.13
Model F	16.95**	11.73**	Model F	13.72**	10.38**
R²	.12	.12	R²	.14	.15
Adj R²	.11	.11	Adj R²	.13	.14
Δ Adj R²		.00	Δ Adj R²		.01
Step 1			Step 1		
OCBO	.02	.03	CoOCBO	.12	.13
CPO	.21**	.22**	CPO	.22**	.22**
Step 2			Step 2		
OCBO x CPO		-.16*	CoOCBO x CPO		-.06
Model F	5.89**	6.21**	Model F	5.68**	4.01**
R²	.04	.07	R²	.06	.06
Adj R²	.04	.06	Adj R²	.05	.05
Δ Adj R²		.02*	Δ Adj R²		-.00
Step 1			Step 1		
OCBP	.05	.04	CoOCBP	-.01	-.01
CPP	.15*	.13*	CPP	.13	.13
Step 2			Step 2		
OCBP x CPP		-.10	CoOCBP x CPP		.03
Model F	2.72	2.63	Model F	1.50	1.04
R²	.02	.03	R²	.02	.02
Adj R²	.01	.02	Adj R²	.01	.00
Δ Adj R²		.01	Δ Adj R²		-.01

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

There was no support for control as a moderator between OCBs and physical symptoms (Hypothesis 8). None of the interaction terms between OCBs and control were significant predictors of physical symptoms. See Table 7.

Finally, there was limited support for control as a moderator between OCBs and CWBs (Hypothesis 9). Specifically, the interaction of a co-worker's rating of OCBPs and CCP in predicting CWBs was significant ($\beta = .15, p = .04$) and accounted for an additional two percent of the variance above and beyond co-workers' perception of OCBPs and control. This interaction is presented in Figure 5. None of the other interaction terms were significant (Table 8).

Table 7.

Control Moderating OCBs and Physical Symptoms

Variable	Physical Symptoms		Variable	Physical Symptoms	
	Step 1	Step 2		Step 1	Step 2
Step 1			Step 1		
OCBO	.03	.03	CoOCBO	.16*	.16*
CCB	.18**	.18**	CCB	.20**	.20**
Step 2			Step 2		
OCBO x CCB		-.03	CoOCBO x CCB		-.03
Model F	4.60*	3.15*	Model F	7.35**	4.95**
R²	.03	.04	R²	.08	.08
Adj R²	.03	.02	Adj R²	.07	.06
Δ Adj R²		-.00	Δ Adj R²		-.01
Step 1			Step 1		
OCBP	.00	-.00	CoOCBP	.05	.06
CCB	.18**	.18**	CCB	.23**	.22**
Step 2			Step 2		
OCBP x CCB		-.06	CoOCBP x CCB		-.06
Model F	4.46*	3.25*	Model F	5.15**	3.61*
R²	.03	.04	R²	.06	.06
Adj R²	.03	.03	Adj R²	.05	.04
Δ Adj R²		-.00	Δ Adj R²		-.00
Step 1			Step 1		
OCBO	.07	.07	CoOCBO	.20**	.20**
CPO	.19**	.19**	CPO	.19*	.19*
Step 2			Step 2		
OCBO x CPO		-.09	CoOCBO x CPO		.04
Model F	4.89**	4.04**	Model F	6.76**	4.61**
R²	.04	.05	R²	.07	.07
Adj R²	.03	.03	Adj R²	.06	.06
Δ Adj R²		.01	Δ Adj R²		-.00
Step 1			Step 1		
OCBP	.07	.07	CoOCBP	.12	.12
CPP	.22**	.21**	CPP	.22**	.25**
Step 2			Step 2		
OCBP x CPP		-.03	CoOCBP x CPP		.12
Model F	6.12**	4.17**	Model F	4.81**	4.03**
R²	.05	.05	R²	.05	.07
Adj R²	.04	.04	Adj R²	.04	.05
Δ Adj R²		-.00	Δ Adj R²		.01

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

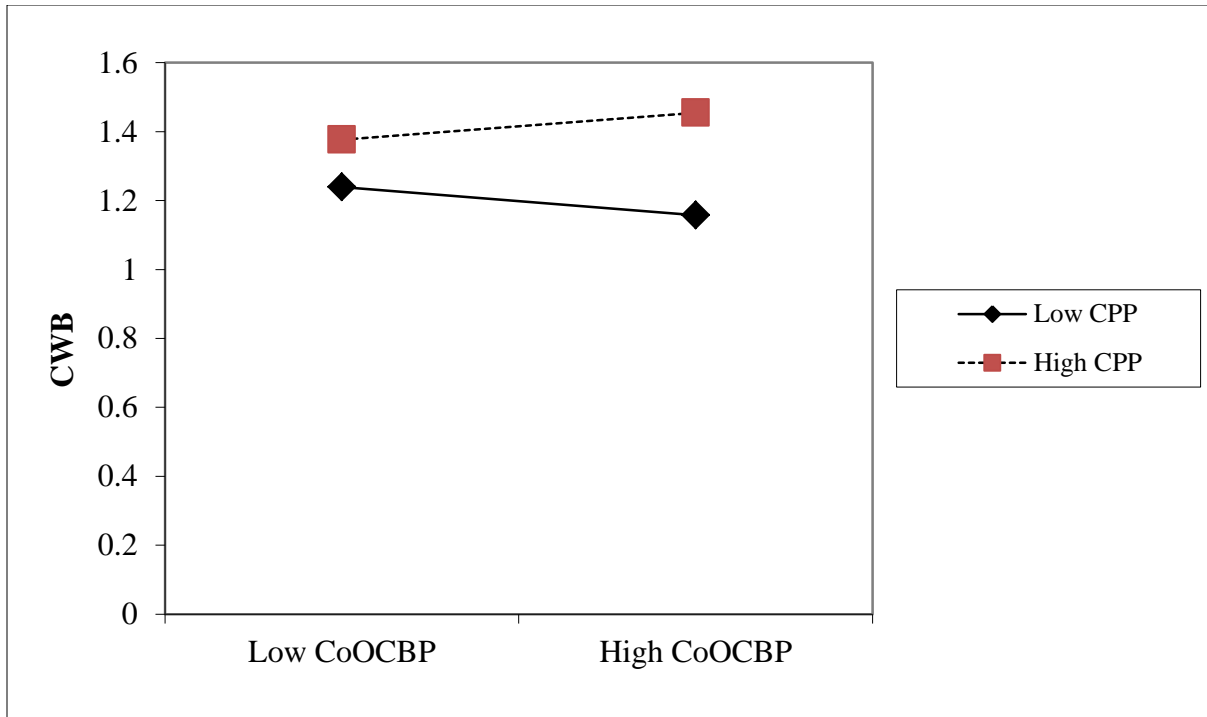


Figure 5. CoOCBPs interact with CCP to predict CWBs.

Table 8.

Control Moderating OCBs and CWBs

Variable	CWB		Variable	CWB	
	Step 1	Step 2		Step 1	Step 2
Step 1			Step 1		
OCBO	-.07	-.07	CoOCBO	-.02	-.02
CCB	.14*	.14*	CCB	.14	.14
Step 2			Step 2		
OCBO x CCB		-.00	CoOCBO x CCB		.03
Model F	3.00	1.99	Model F	1.62	1.14
R²	.02	.02	R²	.02	.02
Adj R²	.02	.01	Adj R²	.01	.00
Δ Adj R²		-.00	Δ Adj R²		-.01
Step 1			Step 1		
OCBP	-.05	-.05	CoOCBP	-.07	-.07
CCB	.14*	.14*	CCB	.14	.14
Step 2			Step 2		
OCBP x CCB		-.02	CoOCBP x CCB		.03
Model F	2.59	1.75	Model F	2.06	1.42
R²	.02	.02	R²	.02	.02
Adj R²	.01	.01	Adj R²	.01	.01
Δ Adj R²		-.00	Δ Adj R²		-.01
Step 1			Step 1		
OCBO	-.04	-.04	CoOCBO	.01	.00
CPO	.24**	.24**	CPO	.25**	.26**
Step 2			Step 2		
OCBO x CPO		.01	CoOCBO x CPO		.13
Model F	8.42**	5.60**	Model F	5.97**	5.01**
R²	.06	.06	R²	.06	.08
Adj R²	.05	.05	Adj R²	.05	.06
Δ Adj R²		-.00	Δ Adj R²		.01
Step 1			Step 1		
OCBP	.03	.03	CoOCBP	-.00	-.00
CPP	.27**	.28**	CPP	.28**	.32**
Step 2			Step 2		
OCBP x CPP		.03	CoOCBP x CPP		.15*
Model F	10.00**	6.71**	Model F	7.58**	6.52**
R²	.07	.07	R²	.08	.10
Adj R²	.06	.06	Adj R²	.07	.09
Δ Adj R²		-.00	Δ Adj R²		.02*

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

Discussion

The premise of this study was based on Frankenhaeuser and Johansson's (1986) model where control acts as a crucial variable in how stressors relate to strains (i.e., distress). Specifically, the model theorizes that effort will need to be exerted in order to deal with stressors, but when people are able to control and influence the stressor, less strain will be experienced; conversely, less control over the stressor tends to exacerbate strains. Applied to OCBs, the model dictates that regardless of perceived control, OCBs will lead to increased effort; however, employees who perform OCBs under the perception that they are being forced to perform OCBs will likely experience more strains. In contrast, employees performing OCBs of their own volition will perceive less strain.

Overall, there was partial support for the hypothesized model. Hypotheses 1 and 2 were fully supported: both OCBPs and OCBOs were significantly related to time commitment and work intensity. This implies that in order to perform either type of OCBs, it takes additional resources from the employee in terms of time and intensity, regardless of whether the OCBs are performed under forced or unforced conditions. However, the evidence for the portion of the model that hypothesizes that perception of control moderates the relationship between OCBs and experienced strains was much less conclusive. Seven different strains were examined (general negative emotions, frustration, anxiety, job satisfaction, job interfering with non-work, physical symptoms, and counterproductive work behaviors), with eight different combinations of stressors (OCBO vs. OCBP; self-report vs. co-worker report) interacting with control (compulsory OCBs vs. citizenship control). Of the seven strains, only job satisfaction, job interfering with non-

work, and counterproductive work behaviors had at least one significant interaction between OCBs and control. Unfortunately, there did not appear to be a consistent pattern in terms of which moderator or focus of OCBs (personal versus organizational) was most applicable to this model.

Interestingly, of the five significant interactions, four terms utilized a co-worker's perception of OCBs instead of self-report OCBs. This discrepancy should be noted, as it has implications in the interpretation of the findings. Intuition suggests that the hypothesized effects of the model should be strongest with self-report data, as a person should be the best and most accurate source for rating his or her own behaviors. However, in this study, a majority of the significant interactions did not involve self-report data for OCBs. Past literature has examined the discrepancy between self-report data and peer-report data, and according to Harris and Schaubroeck (1988), this discrepancy tends to occur due to reasons such as egocentric biases and observational opportunities. Egocentric biases are biases a person holds when rating one-self; the typical explanation involves defensiveness, with the expected outcome of a range-restricted, inflated score. Interestingly, an examination of the descriptive statistics reveals that self-report ratings were actually lower than co-worker ratings. Although the descriptive statistics did not support the idea of defensiveness, there very well could have been biases present when participants were rating their own frequency of OCB performance, implying that peer ratings could potentially be more accurate than self-report ratings.

An alternative explanation of the differential results between self and peer ratings is observational opportunities. Typically, the literature has discussed how supervisors likely have less opportunity to observe performance of an individual as compared to peers or self, resulting in differences in self, peer, and supervisor ratings. Although this is not directly relevant to this

study, the concept of observational opportunities can be modified and adapted to provide a logical explanation in the discrepancy of results. Assuming no egocentric biases, a person is likely the most accurate source for reporting his/her behaviors, both highly visible behaviors and less visible behaviors; in contrast, a co-worker's perception may focus primarily on high visibility behaviors. This explanation can be applied to the reporting of OCBs, as some OCBs are more visible than others. For example, the OCBP item "Lent a compassionate ear when someone had a personal problem" is most likely only visible to the co-worker who is having the personal problem. In contrast, "Changed vacation schedule, work days, or shifts to accommodate co-worker's needs" is much more visible to co-workers, as this employee would be at work on a day that he/she is not usually at work. Similarly, on the OCBO side, the item "Said good things about your employer in front of others" is likely directed toward non-co-workers, as a co-worker would have his/her own opinion of their employer. In contrast, when an employee volunteers for extra work assignments, this is much more likely to be noticed by co-workers. Although in general there is a high positive correlation between self-report and co-worker report of target employee's OCBs (OCBO: $r = .48, p < .05$; OCBP: $r = .49, p < .05$), this difference in focus could account for the lack of a higher correlation and the differential results of this study. This potential explanation will be expanded as the different strains and significant findings are discussed.

For job dissatisfaction, there was some support for the hypothesized model, although it relied on co-workers' perception of OCBs. Before delving into that, a quick look at the relationship between self-report OCBs, CCBs, and job satisfaction is warranted in order to aid in the interpretation of the interaction involving co-workers' perception of OCBs. The main effects of self-rated OCBs (OCBO: $\beta = .18, p < .05$; OCBP: $\beta = .12, p < .05$) and CCBs ($\beta = -.38, p <$

.05) were significant in predicting job dissatisfaction. The OCB main effect suggests that performing OCBs is related to higher levels of job satisfaction, even under forced conditions. The typical explanation relies on social exchange theory (Adams, 1965; Blau, 1964; Rousseau, & Parks, 1993) and posits that satisfied employees increase their input to the organization by performing OCBs (Organ, Podsakoff, & MacKenzie, 2006). However, this author argues that the relationship can act in a reciprocal or circular manner. Voluntarily performing a behavior that enhances the psychological, organizational, and social context of the work place would likely serve to increase job satisfaction of the employee. The CCB main effect suggests that a culture where employees feel forced to engage in extra-role behaviors or put in more effort than is formally required, results in lower job satisfaction, regardless of whether OCBs are performed sparingly or liberally. In other words, culture alone is enough to negatively influence employee affect, and this decrease in affect is not necessarily dependent on amount of resources spent on performing OCBs.

Compared to self-report OCBs, co-workers' perception of OCBs interacted with CCBs in predicting job satisfaction. An examination of the interactions (CoCOBO: Figure 1; CoOCBP: Figure 2) shows that when control was high (i.e., low CCB), higher co-workers' perception of OCBs was related to higher levels of job satisfaction. This is aligned well with past literature that has found a positive relationship between OCBs and job satisfaction (Organ et al., 2006). In contrast, when control was low (i.e., high CCB), the positive relationship between co-workers' perception of OCBs and job satisfaction was attenuated. This implies that, at a minimum, an employee will derive less job satisfaction from performing OCBs if done under forced conditions. Stated another way, this suggests that under forced conditions, OCBs (as perceived by co-workers) are more related to the strain of job dissatisfaction.

At first glance, this appears to contradict the results found with self-report OCBs (i.e., OCBs are related to increased job satisfaction in both forced and unforced conditions). In order to reconcile this inconsistency, recall the potentially different focus of self-report OCBs and co-workers' perception of OCBs: co-workers are more likely to perceive highly visible OCBs. Perhaps this negative relationship between OCBs and job satisfaction only holds for highly visible OCBs performed in an attempt to "satisfy" an employee's superiors when the culture pressures employees to work beyond their formal requirements. This relationship may be obscured when using self-report OCBs, as self-report OCBs encompass both highly visible OCBs and less visible OCBs. For example, even in a culture that places pressure on employees to perform OCBs, an employee may still perform OCBs for altruistic reasons; as the motive is altruistic, the employee will not likely care if the OCBs are recognized or rewarded, so the OCBs that are performed may be less noticeable. This type of OCB, even under pressure to perform OCBs, is likely to be positively related to job satisfaction. In contrast, if OCBs are only performed because the culture places pressure on employees to do so, the employee may specifically choose to perform highly visible behaviors in order to increase the probability of his/her manager recognizing the employee's extra hard work. In situations like this, OCBs may be more related to job dissatisfaction. In line with the results, these are the OCBs that a co-worker would most likely notice.

In addition to job dissatisfaction, the strain of job interference with non-work also had significant interaction terms. The first interaction term that was significant dealt with self-report ratings of OCBOs and citizenship control (for OCBOs) in the prediction of job interference. The hypothesis was that as control decreases, the relationship between OCBs and job interference would become more positive. Interestingly the opposite effect was found: as control decreased

(i.e., High CPO), OCBs became more negatively related to job interference. Although this does not support the overall model, a potential explanation is that those employees who actually perform OCBs under pressure may be different from those employees who do not perform OCBs under pressure. Specifically, employees who perform OCBs under pressure may do so because of a perceived reserve of resources (time, effort, etc.) that can be used to perform these behaviors in addition to normal work duties and responsibilities. In contrast, an employee who does not perform as many OCBs under pressure may do so because he/she simply does not have sufficient resources to perform these behaviors in addition to formal job duties and responsibilities. Employees in this latter situation would logically report higher levels of job interference.

For job interference, the other interaction term that was significant was the interaction between a co-worker's rating of OCBOs and CCBs. The graph of the interaction shows that as control decreases (i.e., high CCB), the relationship between OCBOs (as perceived by co-workers) and job interference becomes more negative. The explanation provided above can be applied to this interaction as well: employees who perform OCBs under forced conditions do so simply because they have sufficient resources to do these behaviors, whereas those that do not perform as many OCBs under forced conditions may do so simply because they do not have enough resources to devote to these behaviors.

The last strain that had a significant interaction was counterproductive work behaviors. OCBPs (as perceived by a co-worker) interacted with citizenship control (CPP) to predict CWBs. Before examining this interaction, a quick look at how self-report OCBPs and citizenship control predicted CWBs is warranted. Citizenship control was the only main effect that was significant, indicating that regardless of the amount of OCBPs performed, lack of control is positively related to performance of CWBs. However, when a co-worker's rating of OCBPs was used, the

relationship looked different. Decreasing the amount of control resulted in OCBs (as perceived by a co-worker) being more positively related to CWBs. Again, the different focus of self-report OCBPs versus a co-worker's perception of OCBPs acts as a potential explanation of this discrepancy. Self-report OCBPs include both low visibility OCBPs that are likely done for altruistic reasons and high visibility OCBPs that can be done to appease superiors when pressure is placed on employees to perform OCBs. Combining these types of OCBPs can obscure the relationship between OCBPs of different motives and CWBs; specifically, under low control conditions, altruistic OCBs are likely to be unrelated to CWBs, whereas OCBs performed to comply with the demands are more likely to be related to CWBs. When co-workers rate the target employee's OCBPs, the OCBPs that are likely to be noticed are those high visibility behaviors that an employee may perform in order to show that he/she is complying with the "citizenship" demands. In situations like this, the increase in high visibility OCBs may also be accompanied with higher levels of CWBs, as a sort of retaliation against the extra demands.

Results that provide the most evidence for the validity of the hypothesized OCB based stressor-strain model are the interactions between OCBs (as perceived by co-workers) and control in predicting job dissatisfaction and counterproductive work behaviors. The fact that these relationships only manifest themselves when an employee's OCBs are rated by a co-worker is an intriguing finding. This suggests that although OCBs as rated by the target employee and by the co-worker are supposed to measure the same construct, there are specific differences between the two sources that affect the measurement of the construct. As discussed above, a potential explanation of this difference is that self-report OCBs include both OCBs that are done for altruistic reasons, and therefore may not be particularly visible, and OCBs that are done to appease the culture that places pressure on employees to perform these extra duties and

responsibilities. The latter type of OCBs is more likely to be visible and therefore observed by a co-worker, so a co-worker's ratings of OCBs may focus primarily on these high visibility OCBs. It is these high visibility OCBs, done only to conform to culture, that are likely to result in additional strains. The original hypothesized model where OCBs are related to strains under low control conditions should be modified to only include those OCBs that are performed because of the pressure placed on employees.

Interestingly, the strains with at least one significant interaction are all variables that relate directly to work (job dissatisfaction, job interference with non-work, and counterproductive work behaviors). In other words, the definition of these three strains is inherently tied to the work context. For example, one cannot feel interference between job and non-work life without a job. In contrast, the four strains that had no significant interactions (negative emotions, frustration, anxiety, physical symptoms) can all be related to work, but are not entirely dependent on it for a definition. Frustration exists in both the work realm as well as the non-work realm. The potential implication of this finding is that perhaps the hypothesized effect of OCBs being more related to strains under low control conditions is strongest with strains that are directly tied to work. As the strain becomes broader, and other factors outside of work contribute to the strain, perhaps there is a smaller likelihood of observing the hypothesized effect. Although it is very beneficial to make these connections to purely work-related strains, it is still important to explore and research the relationship between OCBs and more distal strains to better understand the full impact of work stressors on employees in general.

Organizations and the work context are changing: organizations are focusing more on teams versus individual employees, the context of work is expanding to the global stage, and customer satisfaction/service is becoming a more important outcome. With these changes also

comes an increased focus on OCBs (Borman, 2004; Borman, & Motowidlo, 1997; Borman, & Penner, 2001). A ramification of this is that employers appear to be increasing pressure on employees to perform OCBs (Bolino et al., 2010; Vigoda-Gadot, 2006). The past literature may have provided justification for this trend as OCBs are typically related to positive outcomes for organizations, but this study shows there are potential hazards of continuing in this direction. Under forced conditions, benefits derived from OCBs may not only be attenuated, but the evidence suggests that OCBs done in response to these pressures are more related to job dissatisfaction and retaliation from the employee in the form of counterproductive work behaviors. This is obviously the exact opposite of the intended effects of trying to increase the amount of OCBs performed within an organization.

If employers want to foster a culture of high OCBs, having managers and leaders place pressure on employees to perform OCBs is likely a bad idea, as this study suggests that there are negative outcomes associated with this strategy. If an organizational intervention is the desired medium for increasing OCBs, an alternative would be to leverage the past literature and focus on enhancing specific antecedents of OCBs. For example, an organizational initiative could try to increase task feedback and increase intrinsic satisfaction of tasks, both of which have been found to be directly related to OCBs (Podsakoff et al., 1996a). Similarly, any initiative focused on increasing job satisfaction should have a similar result, as job satisfaction has been found to be positively related to performance of OCBs (Organ, Podsakoff, & MacKenzie, 2006).

Alternatively, a more selection oriented approach could also be used. In terms of selecting employees, a number of dispositional traits have been related to performance of OCBs, such as conscientiousness, agreeableness, positive affectivity, personal initiative, and prosocial personality (Borman, et al., 2001). Selecting employees that are high on traits that are highly

related to performance of OCBs should indirectly increase the overall performance of OCBs. Similarly, selecting leaders who approach leadership from a transformational perspective should also lead to increased levels of OCBs, as the transformational style has been related to high levels of OCBs (MacKenzie, Podsakoff, & Rich, 2001; Podsakoff, MacKenzie, & Bommer 1996b).

One area that deserves more research is how OCB motives affect the relationship between OCBs and strains. In this study, only interaction terms utilizing a co-worker's perception of OCBs interacted with control in predicting strains. Although it makes logical sense that co-workers are more likely to perceive high visibility OCBs that are done to appease superiors, and that these OCBs are more likely to be related to strains, this was not formally tested. More research should be done to distinguish between the different types of OCBs: OCBs done voluntarily for altruistic reasons and OCBs done for impression management reasons. These OCBs likely act very differently in terms of relating to organizational outcomes. Specifically, based on the findings of this study, under forced conditions, OCBs done for impression management reasons should be more highly related to strains than OCBs done for altruistic reasons.

A major limitation of this study is the sample: undergraduate students. Although students are a valid portion of the workforce and deserve studying, they are not the most appropriate sample for testing the hypothesized stressor-strain model. The average age of the participants was approximately 24 years old and a majority worked in retail/service (54%); participants were also predominately part-time workers (66%). This suggests that many of them are not in career positions where their livelihood is dependent on continued employment; furthermore, having a good or bad reputation in their current place of employment likely has less of an impact on future

employment, compared to someone who is working full time in their career field. Taking this into consideration, the focus variable “feeling forced to perform OCBs” is less likely to be relevant to this specific sample or may be less of a motivator to perform OCBs. In fact, one of the bivariate correlations implies that as control decreases, performance of OCBs also decreases (keep in mind that higher scores on CP represent *lower* levels of control: CPP-OCBP: $r = -.21, p < .05$; the CPO-OCBO correlation, although negative, was not significant). Because there is less motivation for these employees to manage impressions, perhaps they respond to these pressures and forced conditions by simply withdrawing instead of conforming to the culture. Although the “citizenship control” measure used in this study was unique, the past literature has found that as pressure increases, performance of OCBs also increases (Bolino, et al., 2010). This contradictory finding obviously has a detrimental impact on the hypothesized model, as one of the key tenants of the model is that employees experience pressure or a lack of control, and in turn perform OCBs. A replication of this study with full time employees in their career field would likely yield more robust findings.

Although there was not overwhelming support for the hypothesized model, this study did find evidence that 1) OCBs, as a stressor, require additional effort in both high and low control conditions, and 2) under low control conditions, OCBs (as perceived by co-workers) can be more related to the strains of job dissatisfaction and CWBs. This suggests that under certain situations, OCBs are related to negative outcomes. This study further contributes to the growing subset of literature that hypothesizes a dark side to OCBs. It is not an accurate assumption that OCBs always lead to positive outcomes for the employee and the organization. More research needs to be done in order to identify the situations where OCBs are related to negative outcomes.

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Appendix A: Target

OCBs and Citizenship Control

Instructions (OCBs): Please respond to the following items with the frequency with which you engage in the stated activities.

Anchors (OCBs): 1 = Never and 5 = Every day

Instructions (Citizenship Control): Indicate the degree to which you felt a lack of control in performing each of these behaviors due to pressures placed on you.

Anchors (Citizenship Control): 1 = Felt COMPLETE Control and 5 = Felt NO Control

1. Picked up meal 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 had a personal problem.
7. Changed vacation schedule, work days, 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.

Compulsory OCBs

Instructions: Please report the frequency of these behaviors.

Anchors: 1 = Never and 5 = Always

1. The management in this organization puts pressure on employees to engage in extra-role work activities beyond their formal job tasks.

2. There is social pressure in this organization to work extra hours, beyond the formal workload and without any formal rewards.
3. I feel that I am expected to invest more effort in this job than I want to and beyond my formal job requirements.
4. I feel that I am forced to help other employees beyond my formal obligations and even when I am short on time or energy.
5. I feel that I am forced to assist my supervisor against my will and beyond my formal job obligations.

Counterproductive Work Behaviors

Instructions: How often have you done each of the following things on your present job?

Anchors: 1 = Never and 5 = Every day

1. Purposely wasted your employer's materials/supplies.
2. Purposely did your work incorrectly.
3. Came to work late without permission.
4. Stayed home from work and said you were sick when you weren't.
5. Purposely damaged a piece of equipment or property.
6. Purposely dirtied or littered your place of work.
7. Stolen something belonging to your employer.
8. Started or continued a damaging or harmful rumor at work.
9. Been nasty or rude to a client or customer.
10. Purposely worked slowly when things needed to get done.
11. Taken a longer break than you were allowed to take.
12. Purposely failed to follow instructions.
13. Left work earlier than you were allowed to.
14. Insulted someone about their job performance.
15. Made fun of someone's personal life.
16. Took supplies or tools home without permission.
17. Put in to be paid for more hours than you worked.
18. Took money from your employer without permission.
19. Ignored someone at work.
20. Blamed someone at work for error you made.
21. Started an argument with someone at work.
22. Stole something belonging to 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.

Time Commitment

Instructions: For each item below, please indicate the extent to which you agree with each statement.

Anchors: 1 = Strongly Disagree and 7 = Strongly Agree

1. Other people know me by the long hours I keep.
2. My clients/customers know I'm in the office early and always leave late.
3. Among my peers, I'm always the first to arrive and the last to leave.
4. Few of my peers put in more hours weekly than I do.
5. I put in more hours throughout the year than most of our employees do.

Work Intensity

Instructions: For each item below, please indicate the extent to which you agree with each statement.

Anchors: 1 = Strongly Disagree and 7 = Strongly Agree

1. When there's a job to be done, I devote all my energy to getting it done.
2. When I work, I do so with intensity.
3. I work at my full capacity in all of my job duties.
4. I strive as hard as I can to be successful in my work.
5. When I work, I really exert myself to the fullest.

Negative Emotions

Instructions: Please indicate one response for each item that best represents how often you've experienced each emotion at work over the past 30 days.

Anchors: 1 = Never and 5 = Extremely often

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

Anxiety

Instructions: Please indicate how you have generally felt at work during the past 30 days.

Anchors: 1 = Not at all and 4 = Very much so

1. I feel calm. (R)
2. I am tense.
3. I feel at ease. (R)
4. I am presently worrying over possible misfortunes.
5. I feel nervous.
6. I am jittery.
7. I am relaxed. (R)
8. I am worried.
9. I feel steady. (R)
10. I feel frightened.

Frustration

Instructions: For each item below, please indicate the extent to which you agree with each statement.

Anchors: 1 = Strongly Disagree and 7 = Strongly Agree.

1. Trying to get this "job" done was a very frustrating experience.
2. Being frustrated comes with this "job".
3. Overall, I experienced very little frustration on this "job". (R)

Job Satisfaction

Instructions: For each item below, please indicate the extent to which you agree with each statement.

Anchors: 1 = Disagree and 7 = Agree

1. All in all I am satisfied with my job.
2. In general, I don't like my job. (R)
3. In general, I like working here.

Job Interference

Instructions: Indicate how often you have felt the following items.

Anchors: 1 = Never and 5 = Always

1. Worry or concern over my work interferes with my non-work activities and interests.
2. Other people in my life complain about how much time I have to spend on my job.
3. Things I want to do outside of work can't get done because of the demands my job puts upon my time.
4. My job prevents me from participating in many activities outside of work.
5. Due to emergencies at work, I have to make last minute changes to my plans for activities off the job.
6. I have to put off non-work things I would like to do because of my work requirements.
7. I can't sleep because of thinking about things at work that I have to get done.

Physical Symptoms

Instructions: Over the past month, how often have you experienced each of the following symptoms?

anchors: 1 = Not at all and 5 = Every day

1. An upset stomach or nausea
2. Trouble sleeping
3. Headache
4. Acid indigestion or heartburn
5. Eye strain
6. Diarrhea
7. Stomach cramps (Not menstrual)
8. Constipation
9. Ringing in the ears
10. Loss of appetite
11. Dizziness
12. Tiredness or fatigue

Demographics

1. Gender: Male | Female
2. Age (Years)
3. Ethnicity: Asian/Pacific Islander | Black/African-American | White/Caucasian | Hispanic/Latino(a) | Native American/Alaska Native | Other/Multi-Racial | Decline to Respond
4. GPA
5. I am currently employed: Yes | No
6. I have been working ___ YEARS in my current job.
7. I am employed: Part-time | Full-time
8. I work on average ___ HOURS per week.
9. I work in a: Professional industry (e.g., accounting, law) | Manufacturing industry (e.g., construction, assembly line) | Retail/service industry (e.g., restaurant, cashier) | Technical industry (e.g., mechanics, computer programming) | Government agency (e.g., military, City Hall) | Other (see next question)
10. If you specified "Other" in the previous question, please write the industry in which you are employed; otherwise skip this question.

Appendix B: Co-worker

OCBs

Instructions (OCBs): Please respond to the following items with the frequency with which THE CO-WORKER WHO GAVE YOU THIS LINK engages in the stated activities.

Anchors (OCBs): 1 = Never and 5 = Every day

1. Picked up meal 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 had a personal problem.
7. Changed vacation schedule, work days, 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.

Demographics

1. Gender: Male | Female
2. Age (Years)
3. Ethnicity: Asian/Pacific Islander | Black/African-American | White/Caucasian | Hispanic/Latino(a) | Native American/Alaska Native | Other/Multi-Racial | Decline to Respond
4. GPA
5. I am currently employed: Yes | No
6. Do you work at the same organization as the person who gave you think link? Yes | No
7. I have been working ___ YEARS in my current job.

8. I am employed: Part-time | Full-time

9. I work in a: Professional industry (e.g., accounting, law) | Manufacturing industry (e.g., construction, assembly line) | Retail/service industry (e.g., restaurant, cashier) | Technical industry (e.g., mechanics, computer programming) | Government agency (e.g., military, City Hall) | Other (see next question)

10. If you specified "Other" in the previous question, please write the industry in which you are employed; otherwise skip this question.