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Self-Determination Theory and locus of control as antecedents of voluntary workplace behaviors

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Self-Determination Theory and Locus of Control as Antecedents of Voluntary Workplace Behaviors

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
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Kimberly E. O'Brien

ABSTRACT

Antecedents of organizational citizenship behaviors and counterproductive work behaviors have been studied in depth, focusing on both individual differences and environmental variables. However, motivation has been largely overlooked as a contributor to these voluntary behaviors. Self-Determination Theory, a motivational framework, posits that environmental support in the form of fulfilled basic psychological needs leads to activities geared towards growth and development, whereas a lack of environmental supports thwarts these attempts towards self-growth. It is hypothesized that environmental support will account for unique variance above and beyond previously studied antecedents of voluntary workplace behaviors. This was supported using hierarchical regression. It was also hypothesized that locus of control will moderate the effect of environmental support on voluntary behaviors, such that environmental support will play a larger role in people with an external locus of control, compared to those with an internal locus of control. This was not supported using moderated regression, but the trends suggest that future research in this area may be more successful. The implications for research and practice are discussed.

Chapter 1

Introduction

Motivational theories have been developed to explain why people choose to engage in certain behaviors, however motivational antecedents to voluntary work behaviors have been largely overlooked (Schnape, 1991). Self-determination theory (Deci, 1972) is a framework for conceptualizing motivation and personality; it argues that the overarching goal of human behavior is growth and development. When an individual's social environment fulfills basic psychological needs, thereby providing the individual with environmental support, the individual chooses to engage in activities that will be beneficial to his or her self-improvement. Unfulfilled needs lead to the thwarting of attempts to reach the goal of self-development.

Consequently, aspects of an individual's social environment, such as degree of environmental support, can influence behavior. Individual differences, such as locus of control, also play a role. Locus of control is a dispositional characteristic that determines whether people typically believe that they have control over events and are responsible for their outcomes, or whether they believe that forces outside of their control, such as luck or fate, are what control their life events.

In the workplace, employees engage in diverse behaviors, depending largely on their environment and personal characteristics. Some activities are related to their job, and functioning in this area is often referred to as task performance. Task performance is reliant mainly on general cognitive ability and task-related experience (Hunter &

Hunter, 1984). Furthermore, task performance is often mandated by supervisors and closely monitored. Employees do not have a great deal of discretion regarding whether or not they participate in these activities.

On the other hand, some activities that take place inside of organizations, such as organizational citizenship behavior and counterproductive work behavior, are not typically part of the task description. Smith, Organ, and Near (1983) define organizational citizenship behavior as an extra-role, voluntary behavior that helps other organization members to perform their jobs, or shows support for the organization. Activities such as voluntarily helping coworkers and enhancing the reputation of the organization are included in this construct. Conversely, counterproductive work behavior refers to intentional acts that are harmful, such as taking unnecessary breaks, stealing, or aggression (Fox & Spector, in press).

Almost any employee, regardless of skills and abilities, can engage in some level of OCB or CWB. For this reason, it is likely that motivational factors will be related to the exhibition of these activities. However, the majority of research in the area has neglected motivational constructs as theoretical antecedents. Furthermore, organizational citizenship behaviors and counterproductive work behaviors have not been studied simultaneously until recently (Spector & Fox, 2002; Lee & Allen, 2002), but data support the further concurrent consideration of these behaviors. This study will investigate these two volitional behaviors simultaneously through a motivational framework.

The focus of the proposed study is to investigate motivational antecedents of organizational citizenship behaviors and counterproductive work behaviors. Self-determination theory predicts that environmental support will foster self-growth, whereas

a lack of support might encourage detrimental activities. Within the workplace, organizational citizenship behaviors are beneficial and counterproductive workplace behaviors are detrimental; thus individuals with high levels of need fulfillment might choose to engage in organizational citizenship behaviors whereas individuals whose needs are not fulfilled may choose to engage in counterproductive work behaviors. An internal locus of control has been weakly related to reports of greater organizational citizenship behavior (Borman, Penner, Allen, & Motowidlo, 2001) and strongly related to less counterproductive work behavior (Spector & Fox, 2002). Since locus of control describes the degree that an individual attributes responsibility for an outcome to either themselves or to their environment, environmental support will likely moderate the relation of locus of control to both organizational citizenship behaviors and counterproductive work behavior, such that environmental support will have a stronger relationship with voluntary work behaviors when the locus of control is more external. Furthermore, the unique contribution of motivational constructs will be investigated to determine the extent that motivational constructs contribute to the exhibition of OCB and CWB in a way that is not accounted for by previously studied predictors of these behaviors, such as personality, justice, and job satisfaction.

Self-Determination Theory (SDT) Background

The basic assumption of SDT is that all humans are naturally active, seeking opportunities for learning and development to incorporate into a positive sense of self-identity. When the social environment supports a person by fulfilling his or her basic psychological needs, the individual tries to attain growth and development. This person might make choices that will lead toward self-advancement. When the environment does

not fulfill the basic psychological needs, the person's attempt to grow and develop is thwarted. In this case, people might choose actions that are detrimental to themselves or to their environment. The basic psychological needs that proponents of SDT recognize are autonomy, affiliation, and perceived competence.

This theory originated when Deci (1972) found that providing external rewards to children lowered their performance on a learning task. This finding contradicted the predominant behaviorist zeitgeist, which held that external rewards entirely conditioned behavior. SDT was developed to explain these counterintuitive findings. According to SDT, external rewards place constraints upon the individual, inhibiting the fulfillment of the basic psychological need of autonomy, and subsequently leading him or her to perform poorly on the task.

Self-determination theory is different from previous motivational need theories such as Need for Achievement theory (McClelland, Atkinson, & Clark, 1953) and Maslow's Needs Hierarchy (1943), which state that people are driven to engage in activities in order to fulfill certain needs. SDT states that humans have basic psychological needs that, when fulfilled, enable them to reach some other goal. In this theory, the fulfillment of needs is the means, not the end.

The construct of environmental support is conceptually distinct from perceived organizational support (POS). Organizational support theory puts forth that in order to meet socioemotional needs and to assess the organization's readiness to reward increased efforts, employees form general beliefs concerning how much the organization values their contributions and cares about their well-being (Rhoades, Eisenberger, & Armeli, 2001). Environmental support, however, is specific to the theory of motivation, and is an

assessment of the amount that the environment supports the autonomy, perceived competence, and affiliation of the individual. Accordingly, environmental support theoretically leads to an attempt for an individual to attain self-growth in development, whereas organizational support leads to cognitions about socioemotional needs and potential for reward from the organization.

This theory and its constructs have been applied to many settings. Domains studied include health care (e.g. Sheldon, Williams, & Joiner, 2003), education (e.g. Williams, Saizow, Ross, & Deci, 1997), parenting (e.g. Deci, Driver, Hotchkiss, Robbins, & Wilson, 1993), organizations (e.g. Deci, Connell, & Ryan, 1989), and mental health (e.g. Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). The results have been extended to cultures throughout the United States, Western Europe (e.g. Schmuck, Kasser, & Ryan, 2000), Russia (e.g. Chirkov, & Ryan, 2001) and Asia (e.g. Chirkov, Ryan, Kim, Kaplan, 2003). The current study will focus on the organizational implications of this theory, particularly how the fulfillment of basic psychological needs and the individual's locus of control interact to influence non-task behaviors such as organizational citizenship behavior and counterproductive work behavior.

SDT in Organizations

Whereas the majority of literature on this theory has been studied in the context of learning or well being (Ryan & Deci, 2000), there has been some research investigating the relevance of SDT to organizational settings. For the most part, this research has extended tenets of the theory to the work domain or demonstrated that SDT is predictive of work performance.

In one such study, researchers tested a basic premise of SDT, which holds that basic psychological needs are universal (Deci, Ryan, Gagné, Leone, Usunov, & Kornazheva, 2001). To examine this principle, the authors compared the level of basic needs fulfillment and its correlates across cultures in multiple organizations using samples from American and Bulgarian businesses. A major reason for this study was to investigate whether the tenets of motivation theory would hold in collectivist, nondemocratic, nonprivatized businesses and countries. The authors also put forth a model stating that autonomy support leads to need satisfaction, which in turn increases work engagement and self-esteem, and decreases anxiety. A confirmatory factor analysis supported the model for each sample, although some small significant differences existed between the American and Bulgarian sample. The authors concluded that the three basic needs are not nation specific. Consequently, this study supports the tenets of SDT, including the beneficial properties of the fulfillment of basic psychological needs and autonomy support to organizations, as well the cross-national nature of basic needs.

Ilardi, Leone, Kasser, and Ryan (1993) studied both employee and supervisor perceptions of the employees' level of environmental support, and the amount that the two raters' accounts differed. It was found that the three basic psychological needs were positively related to work satisfaction, psychological well-being, and self-esteem. Higher levels of intrinsic motivation, a correlate of environmental support, were exhibited in the form of enhanced task performance and mental well-being, even though these outcomes have been shown to rely mainly on other factors. This illustrates the favorable work outcomes associated with environmental support.

In 1989, Deci, Connell, and Ryan provided an intervention to 23 managers in an attempt to increase the autonomy support of their employees. Data was collected from nearly 1,000 employees at Xerox who reported their perceptions of the work climate and job attitudes, as well as their manager's orientation towards job control. Workers whose supervisors were autonomy-supportive reported that they felt satisfied with job autonomy, feedback, atmosphere, security, and trust, whereas workers whose supervisors were controlling did not feel satisfied. This research shows that using an SDT approach to management can have benefits in terms of job satisfaction.

Although SDT is usually studied in the social psychology or clinical psychology area, constructs similar to those in SDT are often studied in I/O psychology. For example, the basic needs of perceived competence, affiliation, and autonomy seem to have parallel concepts in the I/O area. One example is the apparent similarity between the basic need of perceived competence, or the degree that individuals feel capable of dealing with events presented to them, and Bandura's (1977) concept of generalized self-efficacy. Self-efficacy is related to task performance in several studies (Wood, Bandura, & Bailey, 1990; Bandura & Locke, 2003). Furthermore, the proponents of SDT as well as other researchers, including Baumeister, have studied the affiliation need in depth. Baumeister and Leary (1995) put forth that the desire for interpersonal attachments is a fundamental human motivation, and found support that this is a universal need. Autonomy is frequently viewed as an important antecedent to several work outcomes, including job stress, occupational health, job satisfaction, and task performance (Chen, Spector, & Jex, 1995). This demonstrates how concepts frequently studied in I/O psychology might relate to motivational concepts.

Locus of Control (LoC)

Locus of control is an individual difference regulating the degree that individuals attribute responsibility for outcomes, both positive and negative, to either themselves or to an outside influence. It is linked to job outcomes, such as job satisfaction and job performance (Spector 1982), and has been studied in terms of organizational citizenship behavior and counterproductive work behavior (Paulhus, 1983). The relationship between organizational citizenship behavior and LoC varies, ranging from moderate negative correlations ($r = -.34$) to moderate positive correlations ($r = .33$), even within the same experiment depending on source of reporting (Funderburg & Levy, 1997). Generally, correlations are positive and significant when using self-report data, and negative when using peer reports of OCB (Motowidlo & Van Scotter, 1994; Fecteau, Allen, Fecteau, Bordas, & Tears, 2000). An external LoC has been shown to be consistent predictor of counterproductive work behavior (Storms & Spector, 1987) as well as aggression (Perlow & Latham, 1993).

The relationship between organizational citizenship behavior and LoC is unclear. The direction of the relationship, whether positive or negative, is unknown, much less the magnitude of the relationship. Due to the small number of studies on this relationship, it cannot be determined if the conflicting results are due to different rating sources, measuring different targets or facets of organizational citizenship behavior, or another cause. The closest estimate comes from a meta-analytic review of personality predictors of organizational citizenship behavior, in which researchers reported the mean uncorrected correlation of three studies to be .16, or .12 when self-report data was excluded (Borman, Penner, Allen, & Motowidlo, 2001).

Among the first researchers to investigate the relationship between organizational citizenship behavior and LoC were Funderburg and Levy (1997). Although their article focused on predictors of attitudes towards 360-degree feedback systems, they reported correlations between self-reported organizational citizenship behaviors, peer reported organizational citizenship behavior, and LoC. In their sample, self-reported organizational citizenship behavior and peer reported organizational citizenship behavior correlated at a non-significant .18. This lack of a relationship across different sources of reporting is not uncommon (Spector & Fox, 2003). Also, they found that having an internal work locus of control correlated with both self-reported organizational citizenship behavior ($r = .33, p < .01$) and peer ratings of organizational citizenship behavior ($r = -.34, p < .01$), although in different directions.

In a study by Hoffi-Hofstetter and Mannheim (1999), organizational citizenship behaviors were related to an internal locus of control. Furthermore, the wish to exit, sometimes considered a “withdrawal behavior” and consequently a facet of counterproductive work behavior, was also positively related to internal locus of control. However, this wish to exit was also related to high self-esteem, so it is possible that feelings of competence and control mediated the effect of both LoC and self-esteem. Other research, however, generally supports a negative relationship between internal locus of control and counterproductive work behavior.

Research investigating the relationship between LoC and counterproductive work behavior, however, has been more consistent. Studies of violence in the general aggression literature, as well in the work domain, have investigated the role of attributions, stress, and threat, all of which have been correlated with LoC. Within the

area of counterproductive work behavior, the causal reasoning perspective of Martinko, Gundlach, and Douglas (2002) and Spector's frustration-aggression model (1975) have investigated these relationships.

The causal reasoning perspective of counterproductive work behavior (Martinko, Gundlach, & Douglas, 2002) proposes that the attributions an individual makes regarding the cause of workplace events creates emotions and behaviors that result in counterproductive work behavior. In this paradigm, situational variables and individual differences either independently or synergistically affect cognitive processing through attributions or perceptions of disequilibria, which leads to counterproductive work behavior. In their model, they briefly mention that LoC may result in attributions that are related to the opportunity for the individual to commit a counterproductive work behavior, without being more precise.

Spector (1975) proposed a model which states that the frustration of goals results in emotional and behavioral reactions. The emotional response, anger, is aversive and results in increased psychological arousal. In response to frustration, individuals engage in several actions, including an attempt to find alternatives that allow goal attainment, acts of aggression directed toward the organization, or withdrawal from the situation (Spector, 1978). It was later found that locus of control moderated this relationship such that individuals with an external locus of control were more likely to respond to frustration in counterproductive ways, relative to individuals with an internal locus of control (Storms & Spector, 1987).

In sum, the relationship between LoC and voluntary workplace behaviors is not straightforward, even though one would intuit that OCB and CWB would have opposite

relationships with LoC. It has not received much attention from the organizational citizenship behavior literature and the information that does exist is contradictory and difficult to interpret as a meaningful whole. In contrast, counterproductive work behavior has been studied with its relationship to LoC in depth. It has consistently been shown that an external LoC is related to aggression at work, and possibly other forms of counterproductive work behavior.

Organizational Citizenship Behavior (OCB)

OCBs are behaviors enacted by employees that support the company or its employees in some way, but are not part of the job task. These activities go beyond formal job requirements and consequently cannot be enforced using typical incentives. They do, however, contribute greatly to the organization's productivity by allowing the company to adapt to change and its workers to cooperate (Smith, Organ, & Near, 1983). OCB is conceptually similar to other constructs such as prosocial organizational behavior, organizational spontaneity, extra-role behavior, and contextual performance. Much of the research on OCB has focused on antecedents to this behavior, including environmental and personal factors.

The construct of OCB has undergone substantial change over the past several decades. Organ, a researcher who has contributed a great deal to the literature in the area, has modified his definition of OCB several times (e.g. Smith, Organ, & Near, 1983; Organ, 1988, 1997). Originally, he considered OCB to be extra-role, however his most recent reconceptualization (1997) defined OCB as behaviors that contribute to the maintenance and enhancement of the social and psychological context that supports task performance, which he adapted from Borman and Motowidlo's (1993) definition.

Although there is a debate over whether OCB is in-role or extra-role, the behavior is still considered voluntary by many researchers (Spector & Fox, 2002).

The dimensions of OCB have also varied over the past 25 years. In 1983, Smith, Organ, and Near described two factors: altruism and generalized compliance. Eventually, Organ revised the definition and a five-factor model was described, including altruism, conscientiousness, sportsmanship, courtesy, and civic virtue (1988). Williams and Anderson (1991) used a factor analysis to show that OCB should be defined by its target. Some OCB, including helping others, is targeted at coworkers, while other OCB, such as enhancing the reputation of the organization, is directed at the organization. This led to two facets of OCB called interpersonal OCB (OCB-I) and organizational OCB (OCB-O). LePine, Erez, and Johnson (2002) supported this conceptualization in their meta-analysis of the dimensionality of OCB, which shows little discrimination between Organ's five factors. The five dimensions that he suggested are correlated between .34-.58 when mean correlations are uncorrected, or .40-.87 when mean correlations are corrected for unreliability. Although not tested, the authors suggest that target would be a preferable conceptualization.

Organizational factors have been studied as antecedents to OCB. Organizational justice is one such factor. Moorman (1991) found that job satisfaction influenced OCB through the mediation of procedural justice perceptions, but not distributive justice. Niehoff and Moorman (1993) later amended the model of organizational justice by showing that the effect of procedural justice on OCB was mediated by perceived organizational support, such that individuals who had been treated well tried to reciprocate the actions. In another study of OCB and justice, Moorman, Niehoff, and

Organ (1993) demonstrated that justice mediates the relationship between methods of supervision and OCB. A meta-analysis by Podsakoff, MacKenzie, Paine, & Bachrach (2000) also supports organizational justice as a key antecedent of OCB. This shows support that environmental factors, particularly perceived organizational support, job satisfaction, and perceived organizational justice may influence OCB. However, individual differences also play a role.

Individual differences, including personality and attributional style, have also been studied in the past. A meta-analytic review of personality predictors of OCB showed that conscientiousness was moderately correlated with OCB (Borman, Penner, Allen, & Motowidlo, 2001). The predictive ability of agreeableness varies depending on the OCB construct being measured (LePine & VanDyne, 2001). For example, it correlates positively with altruism, but negatively with voice behavior. Positive and negative affectivity were related to OCB in the expected direction according to mean, uncorrected correlations ($r = .15$, $r = -.06$; Organ & Ryan, 1995). George (1991) however, found that although positive mood affects OCB even above fairness cognitions, positive affect as a trait does not.

In sum, OCB is often studied in terms of the environmental and personal factors that precede it. The commonly studied environmental factors include job satisfaction, perceived organizational support, and organizational commitment, and the commonly studied individual differences include conscientiousness, agreeableness, and mood. Of these, job satisfaction and perceived organizational justice are the strongest predictors of OCB, according to the Podsakoff, MacKenzie, Paine, and Bachrach (2000) review. Also, conscientiousness is the most supported of the individual difference factors reviewed

(Borman, Penner, Allen, & Motowidlo, 2001; Podsakoff, MacKenzie, Paine, & Bachrach, 2000) and will also be included as a variable over which SDT will provide incremental validity.

Counterproductive Work Behavior (CWB)

Counterproductive work behavior (CWB) consists of volitional acts that harm or are intended to harm organizations or people in organizations (e.g. aggression, hostility, sabotage, theft, and withdrawal). It is potentially a serious organizational problem, since 75% of employees report having stolen from their employers at least once and it can cost \$6 to \$200 billion annually (Aquino, Lewis, & Bradfield, 1999). It is conceptually similar to constructs such as incivility, workplace aggression, workplace deviance, and retaliation.

In a factor analysis (Kelloway, Loughlin, Barling, & Naught, 2002) assessing the overlap between OCB, CWB, and task-related behaviors, a three factor method representing OCB, CWB, and task behaviors, fit better than a two factor model that combined any of the constructs or a four factor model which included a common method factor. This supports the view of OCB and CWB as separate but correlated constructs.

Research has focused on different facets of CWB. Similar to OCB, CWB can be differentiated according to the target of the behavior. The target of CWB can be either the organization or other employees. Several measures of CWB consequently have different subscales for organizational and interpersonal directed CWB (e.g. Robinson & Bennett, 1995). Various studies have used factor analysis to support CWB target as a reasonable conceptualization (Spector, in press). Greenberg and Barling (1999) found that workplace factors and person factors predict aggression against different targets,

such that workplace factors predicted violence against a supervisor, whereas person factors predicted violence against a coworker. The varying antecedents support this conceptualization of CWB.

A number of personal characteristics have been significantly related to the exhibition of counterproductive workplace behavior. In one such study, it was found that positive affectivity, job tenure, and job satisfaction interacted such that those with high positive affectivity, long job tenure, and high job satisfaction engaged in the least counterproductive work behavior (Duffy, Ganster, & Shaw, 1998). In a meta-analysis of big five personality traits, Salgado (2002) demonstrated that conscientiousness predicted deviant behavior such as theft and drug use, all five factors predicted turnover, but none of the traits were associated with absenteeism or accidents.

Another analysis of individual-level factors on the exhibition of workplace aggression comes from Douglas and Martinko (2001). They found that trait anger, attribution style, negative affectivity, and other person factors account for a large amount of the variance in workplace aggression. This is relevant to the current study because attribution style and locus of control are closely related (Martinko, Gundlach, & Douglas, 2002). In fact, the definition of locus of control is based on how people make either internal or external attributions regarding outcomes. In several recent studies, trait anger was also shown to be a significant correlate of CWB (e.g. Jockin, Arvey, & McGue, 2001; Martinko, Gundlach, & Douglas, 2002).

A relationship between organizational characteristics and CWB has also been investigated. Justice, for example, is commonly studied. Aquino, Lewis, and Bradfield (1999) found that distributive, interactional, and procedural justice were differentially

linked to CWB, depending on the target or the action. Specifically, interpersonal deviance was correlated significantly with all three forms of justice, as well as negative affectivity, whereas organization deviance was correlated with only interactional justice. This emphasizes the importance of investigating different targets of CWB, and provides supports for justice as an antecedent of CWB.

The interaction between person and environment in relation to CWB has been investigated as well. Skarlicki, Folger, and Tesluk (1999) found that negative affectivity and agreeableness moderated the relationship between organizational justice factors and retaliation, such that individuals high on agreeableness and low on negative affectivity engaged in less retaliation behaviors. In particular, agreeableness mitigated the benefits of low interactional justice, and negative affectivity lessened the effect of distributive justice. This emphasizes the importance of studying the interaction between workplace characteristics and person factors, as in the current study, and provides support for justice perceptions as an antecedent to CWB.

In summary, CWB is usually predicted by organizational factors such as justice, as well as individual differences such as trait anger. Several reviews agree that these are two of the key antecedents to CWB (e.g. Jockin, Arvey, & McGue, 2001; Martinko, Gundlach, & Douglas, 2002), whereas there was less consensus regarding other antecedents. Another commonly mentioned antecedent was attribution style, which is represented by locus of control in this study. Consequently, trait anger and organizational justice will be included in this study as variables over which SDT will provide incremental validity in predicting CWB.

The Current Study

Organizational citizenship behavior (OCB) and counterproductive work behavior (CWB) are seemingly opposing, non-task-related workplace behaviors. Because employees are not explicitly told to engage in these activities, and these activities are not directly related to the employee's primary job tasks, they are considered voluntary and non-task-related. Antecedents to OCB and CWB should complement the volitional nature of these two behaviors.

Self-Determination Theory (SDT) predicts that people choose to engage in actions that are either beneficial or detrimental to them, depending on their level of basic psychological needs fulfillment, or environmental support (Deci & Ryan, 2000). In the workplace, a volitional activity that may benefit the employee would be OCB, whereas a volitional activity that could be detrimental to the employee would be CWB.

Hypothesis 1a: OCB will be positively related to environmental support.

Hypothesis 1b: CWB will be negatively related to environmental support.

Much of the past research has investigated environmental and personal antecedents to OCB and CWB, however the literature has neglected the volitional nature of these behaviors. As purely voluntary actions, it is likely that there will be a stronger relationship between these actions and motivation that accounts for variance not represented by previously studied antecedents.

Hypothesis 2a: Higher levels of needs fulfillment will be positively related to OCB and will account for variance above and beyond that contributed by perceived organizational justice, conscientiousness or job satisfaction.

Hypothesis 2b: Lower levels of needs fulfillment will be positively related to CWB, and will account for variance above and beyond that contributed by trait anger or perceived organizational justice.

Locus of control has been studied in relation to OCB and CWB. The literature examining the relationship between LoC and OCB is relatively new, and not consistent. However, research in other areas of psychology has shown that an internal locus of control is related to positive outcomes, such as job performance and job satisfaction (Storms & Spector, 1987). Additionally, it has been consistently shown that external locus of control is positively related to CWB (Spector, in press).

Hypothesis 3a: OCB will be positively related to an internal locus of control.

Hypothesis 3b: CWB will be negatively related to an internal locus of control.

People with an external locus of control attribute their life events mostly to external factors. Therefore, it is likely that environmental support, in the form of fulfilled basic psychological needs, will affect the relationship between LoC and outcomes more for those with an external LoC than for those with an internal LoC. The nature of the interaction is expected to be ordinal. Specifically, there will be a large disparity in scores on OCB and CWB for individuals with an external LoC, depending on the level of environmental support, and less of a disparity between individuals with an internal locus of control, since their outcomes will depend less on the environment (see Figures 1 and 2).

Hypothesis 4a: Environmental support will moderate the effect of LoC on OCB, such that environmental support will be more strongly related to OCB when LoC is more external.

Hypothesis 4b: Environmental support will moderate the effect of LoC on CWB, such that environmental support will be more strongly related to CWB when LoC is more external.

Chapter 2

Method

Participants

Undergraduate psychology majors from the University of South Florida received extra-credit for participating in this study. The 205 participants reported working a minimum of 20 hours a week and an average of 27.07 hours a week, had an average job tenure of 20.7 months, and an average organizational tenure of 23.7 months. The average participant was 21 years old and was female (83%). The sample was comprised of 61% Caucasian, 15% African American, 13% Hispanic, 2% Asian and 9% other ethnicity participants. They held a wide array of jobs, including manual labor (4%), food service (19%), customer service (5%), clerical (17%), sales (19%), education (14%), financial (10%), management (7%), medical (3%), and consulting (2%).

Measures

Environmental Support. The Basic Psychological Needs Scale (BPNS; Deci & Ryan, 2000) was selected to measure the fulfillment of basic psychological needs. The work-domain form has 21 items, which participants rated on a 7-point scale (1= not true, 7= very true). Higher scores indicate fulfilled needs, or environmental support, although some items were reverse scored. Although there are 7 items to represent each of the basic psychological needs, they do not typically constitute their own subscale. This scale is usually used in its entirety to represent fulfilled needs in general. The scale reliability was .88.

Locus of Control. To assess locus of control in the work domain, the Work Locus of Control (Spector, 1988) was chosen. On this 16-item modified Likert scale,

respondents reported the degree that they agree with each statement (such as “A job is what you make of it”) on a 6-point scale, such that higher scores indicate an external locus of control. Internal reliability was .82.

Organizational Citizenship Behavior. OCB was measured using Williams and Anderson’s (1991) measure. This measure has two facets that measure OCB directed at coworkers or at the organization. It consists of a sentence “I am a person who” and is finished by 14 behaviors (such as “Helps others who have been absent”). Participants reported the extent that they agree with each item on a 7-point Likert scale. Higher scores reflect greater levels of OCB. The three negatively worded items (e.g. “Takes unnecessary work breaks) were reworded such that higher scores reflect positive behavior (e.g. “Does not take unnecessary work breaks”). There are 7 items in each subscale (individual-directed and organization-directed). The combined scale reliability was .86.

Counterproductive Work Behavior. Robinson and Bennett’s (1995) 19-item CWB measure was chosen to represent the construct of CWB. Participants responded on a 1-5 scale (never - every day) how often they engage in certain activities, such as “made fun of someone at work.” The scale has 7 items intended to represent interpersonal CWB, and 12 to represent organization directed CWB. The combined internal consistency was .83

Job Satisfaction. This was assessed using the job satisfaction scale from the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins & Klesh, 1979). This measure has three items that participants responded to using a 5-point scale (1= strongly disagree, 5= strongly agree). Higher scores indicate more job satisfaction. Internal consistency was .88.

Perceived Organizational Support. This was measured using 8 items from Rhoades, Eisenberger, and Armeli (2001). Participants reported how strongly they agree with items such as “My organization shows concern for me” using a 7-point scale, in which high scores represent greater perceived organizational support. The scale reliability was .95.

Conscientiousness. Ten items from the Big Five Inventory of Goldberg’s (1999) International Personality Item Pool (IPIP) that represent conscientiousness were included in this study. The IPIP is a well-validated test bank with a collection of personality measures. Participants rated how often each item described them on a 1-6 (never-always) scale. Higher scores indicate higher levels of conscientiousness. The scale alpha was .86.

Justice Perceptions. The role of justice perceptions was measured using distributive (5 items), procedural (5 items), and interactional (8 items) justice subscales of the Niehoff and Moorman Organizational Justice Scale (1993). Participants used a 6-point scale to report their perceptions of how fair certain aspects of their job are. Higher scores represent greater perceived levels of justice. The scales were combined as in McNeely and Meglino (1994). Although many researchers have analyzed the subscales individually, they were largely unable to find a noticeable distinction (e.g. Bennett & Robinson, 2000; Skarlicki, Folger, & Tesluk, 1999) unless using other subscales as controls or mediators (e.g. Aquino, Lewis, & Bradfield, 1999; Moorman, Blakely, & Niehoff, 1998). The combined scale alpha was .95.

Trait Anger. The 10-item trait anger subscale of the revised State-Trait Anger Expression Inventory (Spielberger, 1988) was used to measure this construct.

Participants reported how well each item described them on a four-point scale (1= not at all, 4= very much so). Higher scores indicate higher levels of trait anger. The scale alpha was .85.

Demographics. Data on age, gender, and ethnicity was collected, as well as information about the participant's job. The number of hours worked each week, the participant's job title, and job tenure constitute the job information.

Procedure

Participants were informed about the study and their rights regarding participation. They were then administered the questionnaire packet. After completing and returning the packet, the debriefing form was presented to the participant, in order to provide him or her with information about the study and contact information for the lab.

Chapter 3

Results

Hypothesis Testing

The means, standard deviations, and descriptives of study variables are presented in Table 1. Intercorrelations among study variables and coefficient alphas are reported in Table 2. Hypotheses 1a and 1b stated that higher levels of environmental support would relate to increased reporting of OCB and decreased reporting of CWB. These hypotheses were supported as indicated by moderate significant correlations in the expected directions. Specifically, environmental support was positively correlated with OCB ($r=.51, p<.001$) and negatively correlated with CWB ($r=-.42, p<.01$).

Hypotheses 2a and 2b stated that environmental support would account for variance unique from that contributed by previously studied antecedents of these behaviors. These hypotheses were assessed using separate hierarchical regressions for OCB and CWB. In the first regression equation, the previously studied antecedents of OCB, including perceived organizational support, conscientiousness, perceived organizational justice, and job satisfaction, were included in the first block of the regression equation. The second step of the regression equation added environmental support. Supporting Hypothesis 2a, environmental support contributed unique variance, as evidenced by a significant change in R^2 from the first block to the second block in the regression equation (R^2 change=.02, $p<.05$). See Table 3 for this regression.

Hypothesis 2b stated that environmental support would account for variance above and beyond that contributed by trait anger and perceived organizational justice with CWB as the dependent variable. These previously studied antecedents of CWB were included in the first block of the regression equation. The second step of this regression equation included environmental support. The significant change in R^2 from the first block to the second block indicated that environmental support contributed unique variance (R^2 change=.02, $p<.05$). Table 4 contains more detail regarding this regression.

Hypotheses 3a and 3b, which stated that a more internal locus of control would relate to increased reporting of OCB and decreased reporting of CWB, were tested with correlations between locus of control and voluntary behaviors. Moderate significant correlations were found in the expected directions. Specifically, locus of control was positively correlated with OCB ($r=.40$, $p<.001$) and negatively correlated with CWB ($r=-.24$, $p<.01$), supporting the hypotheses (see Table 2).

Hypotheses 4 and 4b proposed that LoC would serve as a moderator of the effect of environmental support on OCB and CWB. Moderated regression was used to test these hypotheses. The main effects of environmental support and locus of control were included in the first step. In the second step, the interaction between environmental support and locus of control was included. There was no significant interaction between environmental support and locus of control in reports of OCB, failing to support this hypothesis (R^2 change=.001, *n.s.*). In a second regression equation, CWB was regressed onto the main effects of environmental support and locus of control in the first step, and the interaction in the second step. This equation was also not significant (R^2

change=.001, *n.s.*). Due to the difficulty in finding moderators using regression (McClelland & Judd, 1993), the scales were dichotomized and the trends were plotted using GLM. The equation was significant and in the expected direction, suggesting that power might be responsible for the null results in the regression equations. However, since the GLM equation was plotted using dichotomized data, it is strongly encouraged that no implications be drawn from the plots without further research.

Exploratory Analyses

A series of factor analyses were performed to further examine the data. First, given the strong correlation between perceived organizational support and environmental support, the distinction between the two variables was assessed. Next, a factor analysis was used to determine if OCB and CWB are separate constructs, or if they represent the same construct with items worded in different directions (e.g. “Takes unnecessary work breaks” and “Does not take unnecessary work breaks”). Finally, factor analyses were performed to determine if the individual versus organizational target two factor structures were supported by the data. All factor analyses used a primary axis analysis with direct oblimin (oblique) rotation due to probable correlation among factors. Factor loadings of .3 and above were used as a cutoff, as suggested by Stevens (2002).

First, the 8 items representing perceived organizational support and the 21 items representing environmental support were included in a factor analysis. The results are shown in Table 5. There were 7 factors with eigenvalues over 1, accounting for 54.49% of the total variance, but they were not clearly interpretable. Consequently, a two-factor solution was forced based on the proposed theoretical distinction between the factors. The two-factor solution accounted for 40.23% of the variance and was more meaningful.

Items from each of the two scales loaded on different factors, with two complex loadings and 5 items that did not load on either factor. There were no items that loaded on the wrong factor, partially supporting the distinction.

A factor analysis differentiating OCB and CWB items was performed next. There is some discussion in the literature stating that OCB and CWB items are similar, except reverse scored in each case (Lee & Allen, 2002). For example, an OCB item might be “does not take unnecessary work breaks” whereas a CWB item might be “takes unnecessary work breaks.” This would contribute to the negative correlation typically found between the two constructs. To determine if this was a potential confound of this study, a factor analysis including all of the study OCB and CWB items was performed (Table 6). A two-factor solution was forced based on the proposed theoretical distinction between the scales after 10 uninterpretable factors, accounting for 52.67% of the variance, were found with eigenvalues over 1. These two factors accounted for 27.22% of the variance. Six items did not load onto either factor, but there were no items that were complex or loaded on the wrong factor, providing some support for the distinction between the two scales.

Next, factor analyses were performed on the OCB scale to determine if the target-based distinction (interpersonal or organizational-directed) was evident. The factor analysis (Table 7) showed that there were three factors with eigenvalues greater than 1 (accounting for 48.50% of the variance), but again these were not interpretable. A two-factor solution was forced based on previous empirical research and supported the target-based distinction. This model accounted for 40.93% of the variance. One item loaded on

the incorrect factor (“Attendance is above normal” loaded on interpersonal rather than organization directed OCB). Otherwise, the factor analysis supported the dimensions.

A similar factor analysis investigating the target-based distinction (interpersonal or organizational-directed) within the CWB scale was performed (Table 8). Four factors with eigenvalues greater than 1 were found, accounting for 37.69% of the variance, but were not interpretable. Again, a two-factor solution was forced based on previous empirical research, and supported the target-based distinction. Due to generally low factor loadings, the minimum cutoff was changed from .3 to .2 for this analysis. There was one complex loading, and one item that did not load on either factor, and one item that loaded on the incorrect factor (“Litters the workplace” loaded on interpersonal rather than organization-directed CWB). The two factors accounted for 28.68% of the variance.

Following the factor analyses, subscales of OCB and CWB were created to represent the target of the behavior. The scales were built based upon the factor analyses, such that items with incorrect, complex, or no factor loadings were dropped from the hypothesized subscale. The OCB-I scale was 7 items and had an internal reliability of .86, whereas the OCB-O scale consisted of 8 items with an internal reliability of .77. The CWB-I scale had 7 items with a coefficient alpha of .79, and the CWB-O scale had 9 items with an alpha of .72.

Hypotheses 1a, 1b, 3a, and 3b, which stated that environmental support and locus of control would be positively related to OCB and negatively related to CWB, were tested with correlations. Using each subscale of OCB and CWB, the hypotheses were supported except that the correlation between LOC and CWB-I was only marginally

significant. The overall results of these correlations supported the hypotheses and were expected since the correlations using the overall scale were significant (Table 9).

Hypotheses 2a and 2b, which put forth that environmental support would contribute unique variance, above and beyond that contributed by previously studied antecedents of these behaviors, was partially supported in the subscale analyses. In the OCB analyses, environmental support contributed unique variance above and beyond justice, support, conscientiousness and job satisfaction but only for OCB-I (Table 10). In the CWB analyses, environmental support contributed unique variance above and beyond justice, support, conscientiousness and job satisfaction but only for CWB-O (Table 11). OCB-O and CWB-I did not gain significant changes in R^2 when environmental support was included in the second step (Tables 12 and 13).

Hypotheses 4a and 4b, which posited a moderating effect of LOC on the relationship between environmental support and OCB/CWB was again not supported using any of the subscales. This is consistent with the results of the overall OCB/CWB scales.

Chapter 4

Discussion

This study demonstrated that the motivational framework of SDT can be used to help explain employee engagement in OCB and CWB. These are both voluntary behaviors; consequently there must be some distinction between employees who enact these behaviors from those who do not. Even though OCB is predominantly prosocial and CWB is largely antisocial, participation in either of these activities is discretionary so employees need a reason to enact these behaviors. The reason proposed and supported in this article is motivation.

Environmental support was positively related to OCB and negatively related to CWB, supporting motivation as an antecedent of OCB and CWB, and providing further extension of SDT into organizational settings. While fulfilled basic psychological needs have been linked to enhanced task performance, work engagement, work satisfaction, psychological well-being, self-esteem, and satisfaction with job autonomy, feedback, atmosphere, and security, it has not been associated with OCB and CWB. This study extends the SDT literature by showing that environmental support is beneficial to organizations because it is related to higher levels of OCB and decreased levels of CWB. The study also provides further support for the theory, because fulfilled basic psychological needs led to greater involvement in activities that are beneficial for a person (OCB) and less involvement in activities that can be detrimental to a person (CWB).

While POS has been studied in terms of OCB and CWB, environmental support has not. One possible reason for this is the potential overlap between the POS and ES constructs. However, the factor analysis showed that the items from the two scales loaded onto two separate factors in a way that supported the distinction between the constructs. This provides evidence that the two constructs are distinct and encourages future research on environmental support.

Furthermore, environmental support contributed unique variance to both OCB and CWB, over and above the amount contributed by more commonly studied antecedents of the voluntary behaviors. This indicates that motivation is a distinct construct that impacts OCB and CWB and encourages future research in this area, especially since it has been largely neglected in the OCB and CWB literature. Future research could investigate additional motivational need-fulfillment theories, such as need for affiliation and need for power, to help explain these behaviors. Need for affiliation might affect OCB-I or CWB-I more than the organizational-directed counterparts, thereby helping us distinguish between the factors. Also, since one model of OCB is an input/output model in which employees evaluate the amount that they contribute to the company (input) versus the amount they get back from the company (output), people with a high need for power might be more sensitive to impending inequalities and might alter the amount of OCB or CWB accordingly (Nassauer, 1999).

Decision making theories might also help explain OCB and CWB. For example, expectancy theory might be related to these activities through procrastination. A recent study altered the expectancy theory formula (expectancy= valence multiplied by instrumentality) to include time and explain procrastination (Steele & Brothen, 2004).

Employees might be committing OCB in order to put off other beneficial activities, such as those related to task performance, without feeling guilt associated with outright procrastination. For example, employees faced with a deadline might find themselves cleaning the office. While this does not help them achieve their primary goal, it is another action that is easier (so that the instrumentality is higher) and also beneficial (so that the valence remains high).

Another finding of the study was that internal locus of control was correlated positively with OCB and negatively with CWB. This is as expected since internal locus of control is usually associated with positive outcomes. Although the interaction between locus of control and environmental support was hypothesized to show that external factors were more important to people with an external locus of control in predicting OCB and CWB, this did not receive support from the data. McClelland and Judd (1993) posit that detecting moderator effects in field studies is particularly difficult, due to less efficient parameter estimates and measurement error. Therefore, it is possible that lack of power contributed to the null results.

The results from the factor analyses supported the target-based factor distinction of OCB and CWB. Furthermore, the regression analyses using OCB/CWB dimensions as the dependent variable showed that different constructs might affect whether the organization or its employees will be targeted by the behavior. Environmental support contributed unique variance only when considering OCB-I and CWB-O. This is particularly interesting because the correlations between the OCB and CWB subscales and environmental support are significant. This suggests that environmental support is related to OCB-I, OCB-O, CWB-I, and CWB-O, but that it only accounts for unique

variance when OCB-I and CWB-O are analyzed. One possible explanation for this is that the variables entered into the regression equation share variance. In support of this explanation, zero-order correlations between OCB/CWB factors and the previously studied antecedents are much higher for OCB-O and CWB-I, possibly suppressing the effect of environmental support in the hierarchical analyses.

This distinction between antecedents found in this study is important because little past literature has differentiated among the constructs that are related to the different targets of these behaviors. In a review of the literature, Spector and Fox (2002) note that positive emotion and lack of autonomy decreases CWB-O but not CWB-I. They also report that empathy is related to OCB-I but not OCB-O. Other studies have found that intrinsic cognitions about the job (such as task importance; Lee & Allen, 2002) and leader support (Smith, Organ, & Near, 1995) are related to OCB-O but not OCB-I. Bennett and Robinson (1995) report that frustration was related to CWB-I but not CWB-O, although they hypothesized that frustration would be related to both types of CWB. Future research should aim to distinguish among antecedents of these behaviors by the target, and to include emotion since it seems to be a common link between these factors.

This study has implications for practice. Management training interventions aimed at fulfilling the basic psychological needs of employees have been effective in increasing perceptions of environmental support (Deci, Connell, & Ryan, 1989). This led to increased task performance, more positive perceptions of the supervisor and the organization, and decrease in anxiety and depression. Possibly, such a program would also increase OCB and decrease CWB, since it was demonstrated through this study that environmental support was related to these behaviors.

Another intervention that might benefit the workplace could be aimed at locus of control. Locus of control is frequently cited as an important contribution to organizational effectiveness (e.g. Spector, 1982). This study further supports this relationship. It would therefore be useful to determine if locus of control can be trained in order to encourage OCB and deter CWB within a workplace. Although locus of control is usually considered a trait and therefore relatively stable, clinical psychology has had a great deal of success with teaching coping skills. These interventions often encourage people to look for alternative or multiple sources of consequences in their lives, and have led to decreased depression, anxiety, and aggressive tendencies (Akhtar & Bradley, 1991). This is similar to locus of control, because people have a tendency to attribute events in their life to internal or external sources. This type of intervention might encourage a pattern of internal attributions, leading to a more internal locus of control. Extending this type of intervention to employees might affect OCB and CWB, since this study showed that locus of control was related to these activities.

The study is not without limitations. First, the sample was small for a moderated regression, possibly contributing to the null results. Also, it is unclear how generalizable these results are, since the sample included mostly college educated young females. Another problem is that the sole reliance on self-report data might contribute to a potential monomethod bias problem. Objective OCB and CWB ratings would be preferable. Also, the cross-sectional design of the study makes it impossible to draw casual conclusions.

Another potential problem is the possible overlap between the OCB and CWB measures. Some research has shown that OCB and CWB items are similar, in that they

simply represent reverse scored items (Lee & Allen, 2002). A factor analysis used to support the findings of this study looked at OCB items and CWB items simultaneously and showed that the items loaded on different factors. This supports the distinction between the two constructs and suggests that the measurement overlap is not evident in this study.

A lab manipulation would be very useful in extending the results of this study. Manipulating a participant's level of needs fulfillment would allow for a comparison of OCB and CWB enacted by those employees with environmental support and those with less environmental support. This type of study would illuminate the direction of causality. The experimenter would be able to measure OCB and CWB across samples who receive different levels of needs fulfillment, thereby determining if environmental support is the driving factor in this relationship.

In conclusion, this study provided further support for SDT in the workplace, and extended the known benefits of fulfilled basic needs of employees to include increased OCB and decreased CWB in the workplace and encourages future research in the area. It also suggested some alternative antecedents to OCB and CWB which have not been previously studied. Finally, it supported the target-based distinction of OCB and CWB and encourages future research to distinguish between antecedents of these behaviors.

References

- Akhtar, N., & Bradley, E. J. (1991). Social information processing deficits of aggressive children: Present findings and implications for social skills training. *Clinical Psychology Review, 11*, 621-644.
- Aquino, K., Lewis, M.U., & Bradfield, M. (1999). Justice constructs, negative affectivity, and employee deviance: A proposed model and empirical test. *Journal of Organizational Behavior, 20*, 1073-1091.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.
- Bandura, A., & Locke, E. A. (2003). Negative self-efficacy and goal effects revisited. *Journal of Applied Psychology, 88*, 87-99.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497-529.
- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*, 349-360.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personality Selection*, (pp. 71-98). San Francisco: Jossey-Bass.

- Borman, W., Penner, L., Allen, T., & Motowidlo, S. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment, 9*, 52-69.
- Camman, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan Organizational Assessment Questionnaire. Unpublished manuscript, University of Michigan, Ann Arbor.
- Chen, P. Y., Spector, P. E., & Jex, S. M. (1995). Effects of manipulated job stressors and job attitude on perceived job conditions: A simulation. In S. L. Sauter & L. R. Murphy (Eds.), *Organizational risk factors for job stress*, (pp. 341-356). Washington, DC, US: American Psychological Association.
- Chirkov, V., & Ryan, R. M. (2001). Parent and teacher autonomy-support in Russian and U. S. Adolescents: Common effects on well-being and academic motivation. *Journal of Cross-Cultural Psychology, 32*, 618-635.
- Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A Self-Determination Theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology, 84*, 97-109.
- Deci, E. L. (1972). The effects of contingent and non-contingent rewards and controls on intrinsic motivation. *Organizational Behavior and Human Performance, 8*, 217-229.
- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology, 74*, 580-590.

- Deci, E. L., Driver, R. E., Hotchkiss, L., Robbins, R. J., & Wilson, I. M. (1993). The relation of mothers' controlling vocalizations to children's intrinsic motivation. *Journal of Experimental Child Psychology, 55*, 151-162.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.
- Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former Eastern Bloc country. *Personality and Social Psychology Bulletin, 27*, 930-942.
- Douglas, S. C., & Martinko, M. J. (2001). Exploring the role of individual differences in the prediction of workplace aggression. *Journal of Applied Psychology, 86*, 547-559.
- Duffy, M. K., Ganster, D. C., & Shaw, J. D. (1998). Positive affectivity and negative outcomes: The role of tenure and job satisfaction. *Journal of Applied Psychology, 83*, 950-959.
- Fox, S. & Spector, P.E. (In press). *Counterproductive Work Behavior: Investigations of Actors and Targets*. Washington D.C.: APA Press.
- Funderburg, S. A., & Levy, P. E. (1997). The influence of individual and contextual variables on 360-degree feedback system attitudes. *Group and Organization Management, 22*, 210-235.
- George, J. M. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. *Journal of Applied Psychology, 76*, 299-307.

- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe, Vol. 7*, (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.
- Greenberg, L., & Barling, J. (1999). Predicting employee aggression against coworkers, subordinates and supervisors: The roles of person behaviors and perceived workplace factors. *Journal of Organizational Behavior, 20*, 897-913.
- Hoffi-Hofstetter, H., & Mannheim, B. (1999). Managers' coping resources, perceived organizational patterns, and responses during organizational recovery from decline. *Journal of Organizational Behavior, 20*, 665-685.
- Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternative predictors of job performance. *Psychological Bulletin, 96*, 72-98.
- Ilardi, B. C., Leone, D., Kasser, R., & Ryan, R. M. (1993). Employee and supervisor ratings of motivation: Main effects and discrepancies associated with job satisfaction and adjustment in a factory setting. *Journal of Applied Social Psychology, 23*, 1789-1805.
- Jockin, V., Arvey, R. D., & McGue, M. (2001). Perceived victimization moderates self-reports of workplace aggression and conflict. *Journal of Applied Psychology, 86*, 1262-1269.
- Kelloway, E. K., Loughlin, C., Barling, J., & Nault, A. (2002). Self-reported counterproductive behaviors and organizational citizenship behaviors: Separate but related constructs. *International Journal of Selection and Assessment, 10*, 143-151.

- Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology, 87*, 131-142.
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology, 87*, 52-65.
- LePine, J. A., & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with Big Five personality characteristics and cognitive ability. *Journal of Applied Psychology, 86*, 326-336.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*, 370-396.
- Martinko, M. J., Gundlach, M. J., & Douglas, S. C. (2002). Toward an integrative theory of counterproductive workplace behavior: A causal reasoning perspective. *International Journal of Selection and Assessment, 10*, 36-50.
- McClelland, D.C., Atkinson, J.W., & Clark, R.A. (1953). *The achievement motive*. East Norwalk, CT, US: Appleton-Century-Crofts.
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin, 114*, 376-390.
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology, 76*, 845-855.

- Moorman, R. H., Blakely, G. L., & Neihoff, B. P. (1998). Does perceived organizational support mediate the relationship between procedural justice and organizational citizenship behavior? *Academy of Management Journal*, *41*, 351-357.
- Moorman, R. H., Niehoff, B. P., & Organ, D. W. (1993). Treating employees fairly and organizational citizenship behavior: Sorting the effects of job satisfaction, organizational commitment, and procedural justice. *Employee Responsibilities and Rights Journal*, *6*, 209-225.
- Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied Psychology*, *79*, 475-480.
- Nassauer, F. J. (1999). *An examination of equity sensitivity regarding perceptions of supervisors, team tendencies, and organizational citizenship behaviors*. Unpublished doctoral dissertation, City University of New York.
- Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management Journal*, *36*, 527-556.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA, England: Lexington Books/D. C. Heath and Com.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, *10*, 85-97.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, *48*, 775-802.

- Paulhus, D. (1983). Sphere-specific measures of perceived control. *Journal of Personality and Social Psychology, 44*, 1253-1265.
- Perlow, R., & Latham, L. L. (1993). Relationship of client abuse with locus of control and gender: A longitudinal study in mental retardation facilities. *Journal of Applied Psychology, 78*, 831-834.
- Piedmont, R. L., McCrae, R. R., Riemann, R., & Angleitner, A. (2000). On the invalidity of validity scales: Evidence from self-reports and observer ratings in volunteer samples. *Journal of Personality and Social Psychology, 78*, 582-593.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behavior. *Journal of Management, 26*, 513-563.
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin, 26*, 419-435
- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of Applied Psychology, 86*, 825-836.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal, 38*, 555-572.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68-78.

- Salgado, J. (2002). The Big Five personality dimensions and counterproductive behaviors. *International Journal of Selection & Assessment, 10*, 117-125.
- Schmuck, P., Kasser, T., & Ryan, R. M. (2000). The relationship of well-being to intrinsic and extrinsic goals in Germany and the U.S. *Social Indicators Research, 50*, 225-241.
- Schnake, M. (1991). Organizational citizenship: A review, proposed model, and research agenda. *Human Relations, 44*, 735-759.
- Sheldon, K. M., Williams, G., & Joiner, T. (2003). *Self-determination theory in the clinic: Motivating physical and mental health*. New Haven, CT: Yale University Press.
- Siegall, M., & McDonald, T. (1995). Focus of attention and employee reactions to job change. *Journal of Applied Social Psychology, 25*, 1121-1141.
- Skarlicki, D. P., Folger, R., & Tesluk, P. (1999). Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal, 42*, 100-108.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology, 68*, 653-663.
- Spielberger, C. D. (1998). *The revised and expanded STAXI-2*. Lutz, FL: Psychological Assessment Resources.
- Spector, P. E. (1975). Relationships of organizational frustration with reported behavioral reactions of employees. *Journal of Applied Psychology, 60*, 635-637.
- Spector, P. E. (1978). Organizational frustration: A model and review of the literature. *Personnel Psychology, 31*, 815-829

- Spector, P. E. (1982) Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*, 91, 482-497.
- Spector, P. E. (1988) Development of the Work Locus of Control Scale. *Journal of Occupational Psychology*, 61, 335-340.
- Spector, P. E. & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human Resource Management Review*, 12, 269-292.
- Spector, P. E., & Fox, S. (2003). Reducing subjectivity in the assessment of the job environment: Development of the factual autonomy scale (FAS). *Journal of Organizational Behavior*, 24, 417-432.
- Spector, P. E., Fox, S., & Penney, L. M. (2004). *To sum or not to sum: Development of the Counterproductive Workplace Behavior Checklist (CWB-C)*. Unpublished manuscript, University of South Florida.
- Steel, P., & Brothen, T. (2004). *Self-regulation, personality traits, and procrastination*. Unpublished manuscript, University of Calgary, Alberta, Canada.
- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences, fourth edition*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Storms, P. L., & Spector, P. E. (1987). Relationships of organizational frustration with reported behavioural reactions: The moderating effect of locus of control. *Journal of Occupational Psychology*, 60, 227-234.

- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management, 17*, 601-617.
- Williams, G. C., Saizow, R., Ross, L., & Deci, E. L. (1997). Motivation underlying career choice for internal medicine and surgery. *Social Science and Medicine, 45*, 1705-1713.
- Wood, R., Bandura, A., & Bailey, T. (1990). Mechanisms governing organizational performance in complex decision-making environments. *Organizational Behavior and Human Decision Processes, 46*, 181-201.

Table 1.

Descriptive Statistics for Study Variables.

Variable	# of Items	Response Points	N	Mean	SD	Observed Min	Observed Max
1. Gender	1	2	204	1.83	0.38	1.00	2.00
2. Age	1	Open	202	21.28	2.90	18.00	37.00
3. Environmental Support	21	7	204	5.34	0.76	2.71	6.67
4. Locus of Control	16	6	204	4.69	0.57	3.13	5.94
5. OCB	16	7	204	5.76	0.70	2.88	6.94
6. CWB	19	7	203	1.92	0.68	1.00	4.53
7. Job Satisfaction	3	5	204	3.92	0.93	1.00	6.00
8. Organizational Support	8	7	204	5.18	1.33	1.00	7.00
9. Conscientiousness	10	6	204	4.92	0.66	1.90	6.00
10. Organizational Justice	18	6	202	5.17	1.13	1.50	7.00
11. Trait Anger	10	4	203	1.74	0.49	1.00	3.90

Table 2.

Coefficient Alphas and Intercorrelations Among Study Variables.

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Gender	-										
2. Age	.00	-									
3. Environmental Support	.09	-.07	(.88)								
4. Locus of Control	.07	-.11	.45***	(.82)							
5. OCB	.17*	.00	.51***	.40***	(.86)						
6. CWB	-.08	-.03	-.28***	-.24**	-.31***	(.83)					
7. Job Satisfaction	.16*	-.24***	.62***	.35***	.45***	.23**	(.88)				
8. Organizational Support	.10	-.16*	.66***	.39***	.40***	.16*	.53***	(.95)			
9. Conscientiousness	.14*	-.03	.35***	.13	.41***	-.31***	.22**	.13	(.86)		
10. Organizational Justice	.07	-.16*	.63***	.37***	.37***	-.21**	.57***	.78***	.17*	(.95)	
11. Trait Anger	-.10	.04	-.19**	-.17*	-.17*	.39***	-.10	-.04	-.18*	-.19*	(.85)

Notes: Gender is coded 0 = female, 1 = male.

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

Table 3.

Hierarchical Regression on OCB Showing Unique Variance Accounted for by Environmental Support.

Independent Variable	Step 1 β	Step 2 β
Job Satisfaction	.25*	.19*
Conscientiousness	.33***	.29***
Organizational Support	.23*	.15
Organizational Justice	.00	-.03
Environmental Support		.21*
R ² change	(.34***)	(.02*)
R ² total	.34	.36
Final F		21.31***

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

Table 4.

Hierarchical Regression on CWB Showing Unique Variance Accounted for by Environmental Support.

Independent Variable	Step 1 β	Step 2 β
Trait Anger	.36***	.35***
Organizational Justice	-.14*	-.02
Environmental Support		-.20*
R ² change	(.16***)	(.02*)
R ² total	.16	.18
Final F		15.79***

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

Table 5.

Factor Loadings of POS and Environmental Support.

Scale and Item #	Factor 1	Factor 2
Perceived Organizational Support # 03	.953	.001
Perceived Organizational Support # 02	.915	.001
Perceived Organizational Support # 06	.906	.001
Perceived Organizational Support # 01	.882	.001
Perceived Organizational Support # 04	.880	.001
Perceived Organizational Support # 05	.831	.001
Perceived Organizational Support # 08	.714	.001
Perceived Organizational Support # 07	.688	.001
Environmental Support # 13	.488	-.358
Environmental Support # 11	.001	.001
Environmental Support # 07	.001	.001
Environmental Support # 17	.001	-.654
Environmental Support # 02	.001	-.639
Environmental Support # 18	.001	-.622
Environmental Support # 04	.001	-.605
Environmental Support # 06	.001	-.601
Environmental Support # 09	.001	-.591
Environmental Support # 15	.246	-.579
Environmental Support # 08	.205	-.518
Environmental Support # 16	-.153	-.434
Environmental Support # 01	.224	-.421
Environmental Support # 14	-.178	-.415
Environmental Support # 03	.106	-.369
Environmental Support # 19	.001	-.364
Environmental Support # 10	.177	-.348
Environmental Support # 12	.310	-.321
Environmental Support # 20	-.235	.001
Environmental Support # 05	-.115	.001
Environmental Support # 21	.001	.001

Table 6.

Factor Loadings of OCB and CWB Items.

Scale and Item #	Factor 1	Factor 2
OCB #01	.724	.001
OCB #05	.705	.001
OCB #02	.703	.001
OCB #04	.668	.131
OCB #07	.628	.100
OCB #03	.627	.101
OCB #06	.597	.170
OCB #10	.562	-.152
OCB #08	.542	.001
OCB #14	.493	-.274
OCB #16	.476	.001
OCB #09	.475	.001
OCB #13	.442	-.184
OCB #15	.416	-.113
CWB #10	-.288	.001
OCB #11	.286	.001
CWB #08	-.244	.131
CWB #01	.181	.644
CWB #06	.176	.642
CWB #04	.001	.596
CWB #02	.001	.566
CWB #14	-.136	.532
CWB #15	.001	.511
CWB #05	.120	.504
CWB #07	.001	.504
CWB #18	-.139	.494
CWB #03	.123	.459
CWB #09	.001	.449
CWB #11	-.147	.433
CWB #13	.001	.401
CWB #12	-.144	.317
CWB #16	.001	.300
CWB #19	.001	.297
OCB #12	.229	-.229
CWB #17	-.142	.225

Table 7.

Factor Loadings of OCB Dimensions.

Scale and Item #	Factor 1	Factor 2
OCB #06	.776	-.195
OCB #01	.712	.001
OCB #04	.709	.001
OCB #05	.704	.109
OCB #02	.674	.001
OCB #07	.673	.001
OCB #03	.512	.157
OCB #08	.336	.297
OCB #14	.001	.828
OCB #13	.001	.787
OCB #12	.001	.516
OCB #09	.118	.501
OCB #15	.001	.481
OCB #10	.270	.400
OCB #16	.199	.394
OCB #11	.001	.374

Table 8.

Factor Loadings of CWB Dimensions.

Scale and Item #	Factor 1	Factor 2
CWB #02	.802	-.200
CWB #06	.690	.001
CWB #04	.685	.001
CWB #07	.663	.001
CWB #01	.508	.175
CWB #03	.403	.001
CWB #05	.396	.145
CWB #13	.340	.129
CWB #09	.001	.674
CWB #18	.115	.576
CWB #11	.001	.566
CWB #15	.138	.543
CWB #12	.001	.504
CWB #14	.255	.455
CWB #08	.001	.338
CWB #19	.123	.264
CWB #16	.140	.263
CWB #17	.124	.231
CWB #10	.001	.001

Table 9.

Intercorrelations Among Hypothesis Variables and OCB/CWB Dimensions.

Variable	1	2	3	4	5	6
1. OCB-I	-					
2. OCB-O	.48***	-				
3. CWB-I	-.04	-.16*	-			
4. CWB-O	-.22**	-.40***	.40***	-		
5. Locus of Control	.35**	.32***	-.14*	-.26***	-	
6. Environmental Support	.38***	.35***	-.13	-.25***	.35***	-

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

Table 10.

Hierarchical Regression on OCB-I Showing Unique Variance Accounted for by Environmental Support.

Independent Variable	Step 1 β	Step 2 β
Job Satisfaction	.28***	.19*
Conscientiousness	.25***	.29**
Organizational Support	.14	.24
Organizational Justice	-.06	-.10
Environmental Support		.31**
R ² change	(.21***)	(.04**)
R ² total	.21	.25
Final F		13.00***

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

Table 11.

Hierarchical Regression on CWB-O Showing Unique Variance Accounted for by Environmental Support.

Independent Variable	Step 1 β	Step 2 β
Trait Anger	.30***	.28***
Organizational Justice	-.04	.16
Environmental Support		-.33***
R ² change	(.10***)	(.06***)
R ² total	.10	.16
Final F		12.79***

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

Table 12.

Hierarchical Regression on OCB-O Showing Unique Variance Accounted for by Environmental Support.

Independent Variable	Step 1 β	Step 2 β
Job Satisfaction	.12	.10
Conscientiousness	.30***	.29**
Organizational Support	.24*	.22*
Organizational Justice	.09	.08
Environmental Support		.06
R ² change	(.29***)	(.00)
R ² total	.29	.29
Final F		15.81***

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

Table 13.

Hierarchical Regression on CWB-I Showing Unique Variance Accounted for by Environmental Support.

Independent Variable	Step 1 β	Step 2 β
Trait Anger	.34***	.34***
Organizational Justice	-.17*	-.17*
Environmental Support		-.01
R ² change	(.16***)	(.00)
R ² total	.16	.16
Final F		12.84***

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

Figure 1.

Hypothesized Interaction Between Locus of Control and Environmental Support on OCB.

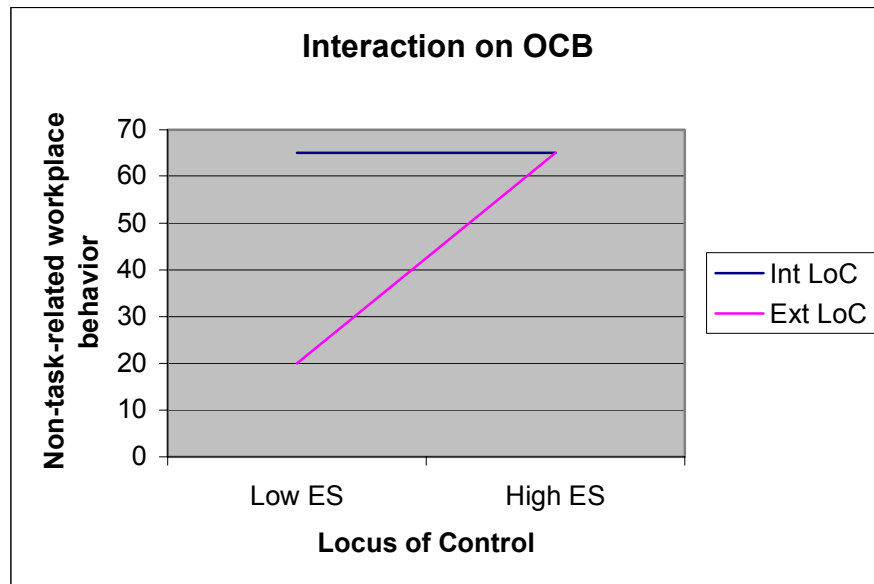
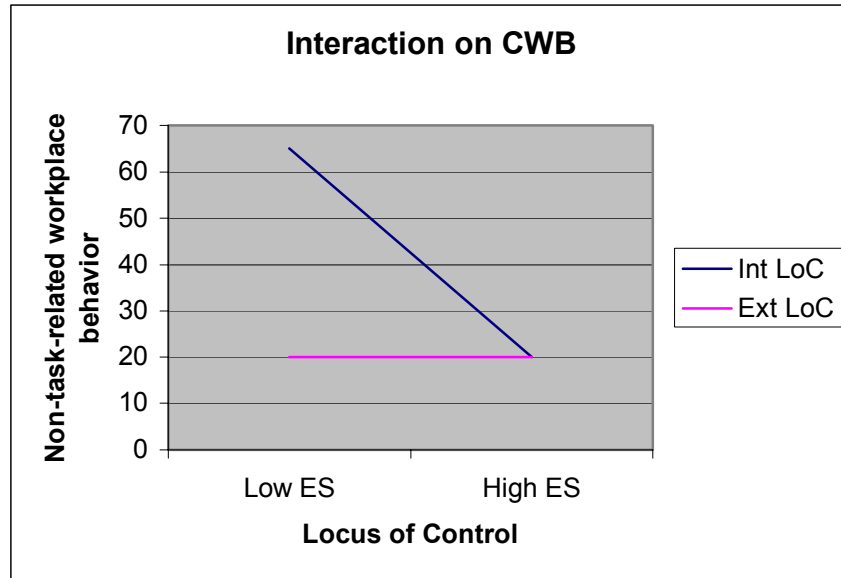


Figure 2.

Hypothesized Interaction Between Locus of Control and Environmental Support on CWB.



Appendix A: Survey Materials

When I Am at Work (BPNS)

The following questions concern your feelings about your job during the last year. (If you have been on this job for less than a year, this concerns the entire time you have been at this job.) Please indicate how true each of the following statement is for you given your experiences on this job. Please use the following scale in responding to the items.

1	2	3	4	5	6	7
Not at all true			Somewhat true		Very true	

1. _____ I feel like I can make a lot of inputs to deciding how my job gets done.
2. _____ I really like the people I work with.
3. _____ I do not feel very competent when I am at work.
4. _____ People at work tell me I am good at what I do.
5. _____ I feel pressured at work.
6. _____ I get along with people at work.
7. _____ I pretty much keep to myself when I am at work.
8. _____ I am free to express my ideas and opinions on the job.
9. _____ I consider the people I work with to be my friends.
10. _____ I have been able to learn interesting new skills on my job.
11. _____ When I am at work, I have to do what I am told.
12. _____ Most days I feel a sense of accomplishment from working.
13. _____ My feelings are taken into consideration at work.
14. _____ On my job I do not get much of a chance to show how capable I am.
15. _____ People at work care about me.
16. _____ There are not many people at work that I am close to.
17. _____ I feel like I can pretty much be myself at work.
18. _____ The people I work with do not seem to like me much.
19. _____ When I am working I often do not feel very capable.
20. _____ There is not much opportunity to decide for myself how to go about my work.
21. _____ People at work are pretty friendly towards me.

Appendix A (continued)

Beliefs About Working (WLC)

The following questions concern your beliefs about jobs in general. They do not refer only to your present job. Please base your responses on the following scale:

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

1. ___ A job is what you make of it
2. ___ On most jobs, people can pretty much accomplish whatever they set out to accomplish
3. ___ If you know what you want out of a job, you can find a job that gives it to you
4. ___ If employees are unhappy with a decision made by their boss, they should do something about it
5. ___ Getting the job you want is mostly a matter of luck
6. ___ Making money is primarily a matter of good fortune
7. ___ Most people are capable of doing their jobs well if they make the effort
8. ___ In order to get a really good job, you need to have family members or friends in high places
9. ___ Promotions are usually a matter of good fortune
10. ___ When it comes to landing a really good job, who you know is more important than what you know
11. ___ Promotions are given to employees who perform well on the job
12. ___ To make a lot of money you have to know the right people
13. ___ It takes a lot of luck to be an outstanding employee on most jobs
14. ___ People who perform their jobs well generally get rewarded
15. ___ Most employees have more influence on their supervisors than they think they do
16. ___ The main difference between people who make a lot of money and people who make a little money is luck

Appendix A (continued)

Behaviors at Work (SCWB)

Please use the following scale to rate how often you have engaged in the following behaviors

1	2	3	4	5	6	7
Never	Once a year	Twice a year	Several times a year	Monthly	Weekly	Daily

How often have you...

1. _____ Made fun of someone at work
2. _____ Said something hurtful to someone at work
3. _____ Made an ethnic, religious, or racial remark at work
4. _____ Cursed at someone at work
5. _____ Played a mean prank on someone at work
6. _____ Acted rudely toward someone at work
7. _____ Publicly embarrassed someone at work
8. _____ Taken property from work without permission
9. _____ Spent too much time fantasizing or daydreaming instead of working
10. _____ Falsified a receipt to get reimbursed for more money than you spent on a business expense
11. _____ Taken an additional or longer break than is acceptable at your workplace
12. _____ Come in late to work without permission
13. _____ Littered your work environment
14. _____ Neglected to follow your boss' instruction
15. _____ Intentionally worked slower than you could have worked
16. _____ Discussed confidential company information with an unauthorized person
17. _____ Used an illegal drug or consumed alcohol on the job
18. _____ Put little effort into your work
19. _____ Dragged out work in order to get overtime

Appendix A (continued)

Behaviors at Work (OCB-IO)

Please use the following scale to rate how much you agree with each statement.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Mildly disagree	Neutral	Mildly agree	Agree	Strongly agree

1. _____ I am a person who helps others who have been absent.
2. _____ I am a person who helps others who have heavy workloads.
3. _____ I am a person who assists supervisor with his/her work, even when not asked.
4. _____ I am a person who takes time to listen to co-workers' problems and worries.
5. _____ I am a person who goes out of my way to help new employees.
6. _____ I am a person who takes a personal interest in other employees.
7. _____ I am a person who passes along information to co-workers.
8. _____ I am a person whose attendance at work is above the norm.
9. _____ I am a person who gives advance notice when unable to come to work.
10. _____ I am a person who does not take undeserved work breaks.
11. _____ I am a person who does not spend great deal of time with personal phone conversations.
12. _____ I am a person who does not complain about insignificant things at work.
13. _____ I am a person who conserves and protects organizational property.
14. _____ I am a person who adheres to informal rules devised to maintain order at work.

Appendix A (continued)

Job Satisfaction Scale (JS)

Please use the following scale to rate how much you agree with each statement.

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

1. _____ In general, I do not like my job.
2. _____ All in all, I am satisfied with my job.
3. _____ In general, I like working here.

Appendix A (continued)

Personality (IPIP)

Please read the following items and indicate how often the statement describes you.

1	2	3	4	5	6
Never	Seldom	Sometimes	Often	Usually	Always

- _____ 1. I am always prepared.
- _____ 2. I pay attention to details.
- _____ 3. I get chores done right away.
- _____ 4. I like order.
- _____ 5. I follow a schedule.
- _____ 6. I am exacting in my work.
- _____ 7. I leave my belongings around.
- _____ 8. I make a mess of things.
- _____ 9. I often forget to put things back in their proper place.
- _____ 10. I shirk my duties.

Appendix A (continued)

Organizational Attitudes Scale (JUST)

Please read each item and indicate the amount you agree with it, using the following scale:

1	2	3	4	5	6
Strongly disagree	Disagree	Mildly disagree	Mildly agree	Agree	Strongly agree

1. _____ My work schedule is fair.
2. _____ I think my level of pay is fair.
3. _____ I consider my workload to be quite fair.
4. _____ Overall, the rewards I receive here are quite fair.
5. _____ I feel that my job responsibilities are fair.
6. _____ The general manager makes job decisions in an unbiased manner.
7. _____ My general manager makes sure that all employee concerns are heard before job decisions are made.
8. _____ To make job decisions, my general manager collects accurate and complete information.
9. _____ All job decisions are applied consistently across all affected employees.
10. _____ Employees are allowed to challenge or appeal job decisions made by the general manager.
11. _____ When decisions are made about my job, the general manager treats me with kindness and consideration.
12. _____ When decisions are made about my job, the general manager treats me with respect and dignity.
13. _____ When decisions are made about my job, the general manager is sensitive to my personal needs.
14. _____ When decisions are made about my job, the general manager shows concerns about my rights as an employee.
15. _____ Concerning decisions made about my job, the general manager discusses the implications of the decisions with me.
16. _____ The general manager offers adequate justification for decisions made about my job.
17. _____ When making decisions about my job, he general manager offers explanations that make sense to me.
18. _____ My general manager explains very clearly any decision made about my job.

Appendix A (continued)

Personality (STAXI-2)

Read each of the following statements that people have used to describe themselves, then write in the number that indicates how much you generally feel or react. There are no right or wrong answers. Do not spend too much time on any one statement. Mark the answer that best describes how you generally feel or react.

1	2	3	4
Almost never	Sometimes	Often	Always

- _____ 1. I am quick-tempered
- _____ 2. I have a fiery temper
- _____ 3. I am a hot-headed person
- _____ 4. I get angry when I'm slowed down by others' mistakes
- _____ 5. I feel annoyed when I am not given recognition for doing good work
- _____ 6. I fly off the handle
- _____ 7. When I get mad, I say nasty things
- _____ 8. It makes me furious when I am criticized in front of others
- _____ 9. When I get frustrated, I feel like hitting someone
- _____ 10. I feel infuriated when I do a good job and get a poor evaluation

Appendix A (continued)

My Organization (POS)

Please use the following scale to rate how much you agree with each statement.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Mildly disagree	Neutral	Mildly agree	Agree	Strongly agree

- _____ 1. My organization really cares about my well-being
- _____ 2. My organization strongly considers my goals and values
- _____ 3. My organization shows concern for me
- _____ 4. My organization cares about my opinions
- _____ 5. My organization is willing to help me if I need a special favor
- _____ 6. Help is available from my organization when I have a problem
- _____ 7. My organization would forgive an honest mistake on my part
- _____ 8. My organization would not take advantage of me, even if given the opportunity

Appendix A (continued)

Demographic Questions

Thank you for completing the questionnaires. Please take a moment to complete the following personal information:

1. Sex: M F

2. Age _____

3. What is your racial/ethnic heritage?
 1. White/Anglo or European American
 2. Black/African American
 3. Asian, Asian American, Pacific Islander
 4. Hispanic/Latino(a)
 5. Native American
 6. Bi-racial or multi-racial
 7. Other

4. What is your job title? _____
5. How long have you been working at this position? _____
6. How long have you been working at this organization? _____