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Transformational Leadership, Leader-Member Exchange (LMX), and OCB: The Role of Motives

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Transformational Leadership, Leader-Member Exchange (LMX), and OCB:

The Role of Motives

by

Patrick W. Connell

A dissertation submitted in partial fulfillment
of the requirements for the degree of
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ABSTRACT

The purpose of this study was to investigate the impact of employee motives regarding select leadership-OCB relationships. Based on previous research, it was hypothesized that the relationships observed between transformational leadership and various dimensions of OCB would be mediated by subordinate Organizational Concern. In contrast, the relationship between LMX-quality and subordinate Altruism was predicted to be either mediated or moderated by subordinate Prosocial Values.

Two hundred and one part-time and full-time employees (subordinates and supervisors) served as participants in this study, representing a total of 13 organizations in the Southeast United States. Results were based on a final sample of 131 supervisor-subordinate pairs. In general, participants responded to questionnaires that measured transformational leadership, LMX-quality, and OCB Motives (i.e., Prosocial Values, Organizational Concern, and Impression Management). Both subordinate and supervisor ratings of OCB were also collected.

Analyses were based upon Baron and Kenny's (1986) approach for mediation and moderation, as well as the Aroian version (1944/1947) of the Sobel test (1982). Across self- and supervisor-reports of OCB, results revealed that the Organizational Concern

Motive significantly mediated the relationship between transformational leadership and various dimensions of OCB (Conscientiousness, Sportsmanship, Courtesy, and Civic Virtue). Results also supported the Prosocial Values Motive as a partial mediator in the relationship between LMX-quality and self-reported Altruism. Surprisingly, a stronger mediating effect was consistently observed for the Organizational Concern Motive across both leadership styles and all five of Organ's (1988) OCB dimensions. In contrast, no evidence was found for either motive with regard to moderation. Results also differed based on leadership perspective (subordinate versus supervisor).

Taken as a whole, these results suggest that both transformational leadership and LMX-quality are strongly associated with an employee's general concern for the organization. This motive is, in turn, associated with a variety of citizenship behaviors. In summary, this evidence addresses an important gap in the OCB literature by providing evidence for an indirect relationship between leadership perceptions and OCB.

Chapter One

Introduction

Research in the area of organizational citizenship behavior (OCB) has shown a dramatic increase in the last few years. This trend is illustrated by the rapid growth in publications dealing with OCB over recent decades, ranging from 13 occurring in the period from 1983 to 1988, to 122 in the period from 1993 to 1998 (Podsakoff, MacKenzie, Paine, & Bachrach, 2001). Although research has been extensive in addressing the numerous antecedents of OCB (e.g., job satisfaction, perceptions of fairness, personality factors), less attention has been focused on other important areas related to the construct. One such area is the mechanisms by which certain antecedents influence citizenship performance, as well as the potential for additional dispositional variables to moderate antecedent-OCB relationships (Podsakoff et al., 2001).

The purpose of this study is to address this particular gap in the literature by further investigating the role of motives in relation to OCB. Building on the results of past research that has found evidence for motives as both moderators and mediators between certain antecedent variables (both attitudinal and dispositional) and select dimensions of OCB (Tillman, 1998; Connell & Penner, 2004), the current study explores whether the effects of certain leadership styles (e.g., transformational leadership, leader-member exchange) on OCB reflect a similar trend. That is, contingent upon the type of leadership style and OCB motive explored, it is expected that the relationship between

leadership behaviors and OCB is either moderated or mediated by motives. The following introduction discusses four major areas of research relevant to this hypothesis: (1) the nature of OCB and its antecedents, (2) transformational leadership theory, (3) leader-member exchange (LMX) theory, and (4) OCB motives. At the conclusion, these four streams of research are tied together to form the foundation of the current study.

Organizational Citizenship Behavior (OCB)

Much of the work done on the conceptual framework of OCB is similar to research carried out by Borman and Motowidlo (1993) and Motowidlo and Van Scotter (1994). Specifically, these researchers distinguished between two types of job performance. The first of these is task performance, which they defined as “the effectiveness with which job incumbents perform activities that contribute to the organization’s technical core either directly by implementing a part of its technical process, or indirectly by providing it with needed materials or services” (Borman & Motowidlo, 1997, p. 99). For example, for a sales manager position, task performance activities would include keeping track of inventory, scheduling employees, and aiding and assisting customers. The second type of performance is contextual performance. Contextual performance includes activities that “shape the organizational, social, and psychological context that serves as the catalyst for task activities and processes” (Borman & Motowidlo, 1997, p. 100). Contextual activities are volitional, and include behaviors that may not be in an employee’s formal job description. Some examples of contextual performance include cooperating with other employees to accomplish tasks, working extra hours on a project even though it is not required, or volunteering to organize social events for the organization. Borman and Motowidlo suggest that

contextual performance makes a significant and valued contribution in organizations, and that in contrast to task performance that is specific to a particular job, contextual performance is more generalized and can cut across numerous jobs or occupations. In addition, Borman and Motowidlo (1993) have identified five specific categories of contextual performance: (1) volunteering to carry out task activities that are not formally part of the job, (2) persisting with extra enthusiasm when necessary to complete own task activities successfully, (3) helping and cooperating with others, (4) following organizational rules and procedures even when its is personally inconvenient, and (5) endorsing, supporting, and defending organizational objectives.

The construct of OCB is similar to contextual performance. Specifically, OCB was originally described by Organ (1988) as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (p.4). Although Organ initially defined OCB as extra-role behavior (i.e., behavior that is beyond an individual’s job requirements), he has since acknowledged that the distinction between in-role and extra-role performance is inherently “muddy” due to the role of supervisor expectations in the leader-member exchange dyad. More specifically, leader expectations can range from beliefs that are far below formal job requirements to those that go above and beyond them (Katz & Kahn, 1966). Thus, agreement on what is extra-role behavior can vary considerably depending on the source of inquiry (i.e., supervisors, subordinates, or peers). As a result, Organ has redefined OCB to refer to contextual performance, or behavior that “shapes the organizational, social, and psychological context that serves as the catalyst for task activities and processes” (Borman & Motowidlo, 1997, p. 100).

Although the essential notions of OCB remain the same, this new conceptualization shifts the focus from the dichotomy of in-role and extra-role performance to an emphasis on task and non-task behaviors.

Earlier research investigating OCB identified two main dimensions, Altruism and Conscientiousness (Smith, Organ, & Near, 1983; Organ & Konovsky, 1989). Later efforts expanded this framework to include three additional dimensions: Sportsmanship, Courtesy, and Civic Virtue (Organ & Ryan, 1995). This dimensional structure is conceptually similar to the five categories used to describe contextual performance, and is still widely used in research investigating OCB.

The Altruism dimension is used to describe OCB behaviors that are directed toward members of the organization (Organ, 1988; Smith, Organ, & Near, 1983). This type of helping behavior can be job-related, such as assisting a co-worker with a specific project or work task, or non-job-related, such as helping a co-worker or supervisor with a personal problem.

Conscientiousness (Generalized Compliance) refers to more “impersonal contributions to the organization” such as excellent attendance, and adherence to organizational rules and policies (Organ & Ryan, 1995, p.782). These contributions are not directed at any one person or co-worker, but are indirectly helpful to other members of the organization (Smith et al., 1983).

The dimension of Courtesy refers to behaviors that are intended to help prevent problems of coworkers (Organ & Ryan, 1995). These behaviors contribute most importantly to the smooth functioning of the organization, and involve both formal and

informal cooperation among employees (Organ, 1997; George & Brief, 1992; Konovsky & Organ, 1996).

Sportsmanship refers to “the inclination to absorb minor inconveniences and impositions accruing from the job without complaints or excessive demands for relief or redress (Konovsky & Organ, 1996, p. 255). Thus, a person high on this dimension would not complain about trivial aspects of the job, and would be inclined to think about others’ work problems in addition to his or her own (Konovsky & Organ, 1996).

The last dimension, Civic Virtue, refers to behaviors that represent active involvement and interest regarding organizational issues, as well as the governance of the organization as a whole (Organ & Ryan, 1995). This dimension includes behaviors such as attending meetings, reading and answering company email, keeping informed on organizational developments, and playing an active role in the overall running of the organization (Konovsky & Organ, 1996).

In general, researchers have suggested (Borman & Motowidlo, 1993; Organ, 1988; Smith et al., 1983) that OCB can have a beneficial effect on the organization by “lubricating” such aspects as its “social machinery,” increasing efficiency, and reducing friction among employees. As suggested earlier by Katz, organizational success is dependent upon more than just prescribed role behaviors, and creative behavior, such as OCB, “is vital to organizational survival and effectiveness” (1964, p.132). One of the ways in which OCB may enhance efficiency is by improving coworker or managerial productivity (MacKenzie et al., 1993; Organ, 1988; Podsakoff & MacKenzie, 1997). For example, Podsakoff and MacKenzie (1997) combined the results of four independent studies and found that “OCB accounted for an average of approximately 19% of the

variance in performance quantity, over 18% of the variance in the quality of performance, about 25% of the variance in financial efficiency indicators, and about 38% of the variance in customer service indicators” (p. 142). These results provide empirical support for the assumption that OCB is related to organizational effectiveness. Other suggested ways in which OCB can affect efficiency include freeing up company resources to be used for more productive purposes, aiding in the effective coordination of work teams, and enhancing the ability of organizations to adapt to change (Podaskoff & MacKenzie, 1997).

OCB is also important at the level of the individual employee. This notion is illustrated through studies that showed that OCB contributed independently to overall evaluations of employee performance (Motowidlo & Van Scotter, 1994; Borman & Motowidlo, 1997). In a study by Orr, Sackett, and Mercer (1989), supervisors were shown to take both prescribed and discretionary behaviors into account when evaluating employee job performance. Werner (1994) also provided evidence for an interaction between in-role performance and OCB. Specifically, when employee in-role performance was shown to be low, overall ratings of performance were also low regardless of the level of OCB displayed. However, as in-role performance increased, ratings of overall performance increased more sharply for high OCB employees than for those displaying average levels of OCB. Although using a somewhat outdated conceptualization of OCB (i.e. extra-role performance), these findings still strongly suggest that supervisors consider discretionary behaviors during the performance appraisal process (Werner, 1994). Thus, the notion that OCB is an important component of effective performance, both at the organizational and employee level, is supported by the OCB literature.

Other research has addressed the antecedents of OCB. These range from employee perceptions (e.g., Smith et al., 1983; Organ & Ryan, 1995; Konovsky & Organ, 1996; Skarlicki & Latham, 1996) to the personality characteristics associated with this type of behavior (e.g., Borman & Motowidlo, 1993; Borman, Penner, Allen, & Motowidlo, 2001). In a meta-analysis that combined the results of 55 studies, Organ and Ryan (1995) identified a number of variables as antecedents of OCB. One of the primary variables identified was job attitudes. For example, Organ and Ryan (1995) found that employee job satisfaction correlated significantly with both the Altruism (.28) and Generalized Compliance (.28) dimensions of OCB. Other notable findings involved perceptions of organizational justice and organizational commitment, both of which also correlated significantly with both the Altruism and Generalized Compliance dimensions. These results were further confirmed in a recent meta-analysis conducted by Podsakoff et al. (2001), which also reported significant relationships between each of the antecedents and both OCB dimensions.

According to the results described above, employees who are satisfied with their jobs are more likely to engage in altruistic and generalized compliance behaviors than employees who are less satisfied. Similarly, those employees who possess high levels of perceived justice or high levels of organizational commitment also tend to perform more OCBs than employees who display lower levels of each of these antecedents. These results should be tempered with the fact that other research has reported additional findings that suggest a slightly less straightforward relationship between these constructs. It has been suggested, for example, that perceptions of justice may account for the significant relationship found between job satisfaction and OCB (Moorman, 1991;

Williams & Anderson, 1991). More specifically, both Moorman (1991) and Williams and Anderson (1991) provided evidence that when perceptions of fairness were controlled, the relationship between job satisfaction and OCB was no longer significant. Evidence also suggests that the type of commitment experienced by the employee (e.g., affective, continuance, or normative) plays an important role in relation to the performance of citizenship behaviors. For example, Organ and Ryan (1995) found significant average correlations between affective commitment (an emotional attachment to the organization) and the Altruism (.23) and Generalized Compliance (.30) dimensions of OCB. In contrast, continuance commitment (feeling committed to the organization because of the salary or benefits associated with it) showed no significant correlation with either OCB dimension. Thus, although evidence is generally supportive of the relationship between job attitudes and OCB, additional research is needed to further refine and clarify the nature of these relationships.

Some researchers have also suggested that personality may play a role in OCB (Borman & Motowidlo, 1993; Borman et al., 2001). Personality characteristics will most likely be expressed in behaviors that involve planful actions, occur over an extended period of time and a variety of situations, and which are not limited by formal requirements or characteristics of the situation (Funder, 1995). As described previously, OCB shares many of these characteristics.

Research in this area has provided mixed results. For example, in the meta-analysis conducted by Organ and Ryan (1995), relationships between certain personality characteristics and selected OCB dimensions were examined. Specifically, these researchers addressed the personality traits of Agreeableness and Conscientiousness

taken from the Five-Factor Model of Personality (Costa & McCrae, 1992), as well as positive affectivity and negative affectivity (Watson & Clark, 1992). Results showed that among the personality variables examined, only the trait of conscientiousness showed even moderate correlations with OCB. More specifically, conscientiousness correlated .22 with the Altruism dimension and .30 with the Generalized Compliance dimension (these correlations were corrected for criterion unreliability and restriction of range). Agreeableness was also shown to correlate significantly with both the Altruism (uncorrected $r = .13$) and Generalized Compliance dimensions (uncorrected $r = .11$). However, these relationships were generally not as strong as those observed for conscientiousness. Based on these results, Organ and Ryan concluded that with the exception of conscientiousness, it is unlikely that personality plays a direct role in OCB.

Borman et al. (2001) analyzed research findings since Organ and Ryan's meta-analysis and reported more promising results. For example, Neuman and Kickul (1998) found a significant relationship between conscientiousness and all five of Organ's OCB dimensions. In addition, recent studies have found significant support for the relationship between agreeableness and OCB (e.g., Hense, 2000; McManus & Kelly, 1999; Neuman & Kickul, 1998; Van Scotter & Motowidlo, 1996), and have even identified additional variables that may affect citizenship performance, such as locus of control (Motowidlo & Van Scotter, 1994; Funderberg & Levy, 1997), collectivism (e.g., Moorman & Blakely, 1995; Van Dyne, Vandewalle, Kostova, Latham, & Cummings, 2000; Allen, 1999), and personal initiative (Fecteau, Allen, Fecteau, Bordas, & Tears, 2000). Finally, in a recent meta-analysis by Podsakoff et al. (2001), significant relationships were found between the Altruism dimension and conscientiousness ($r = .22$), agreeableness ($r = .13$), and

positive affectivity ($r = .15$). In addition, conscientiousness ($r = .30$), agreeableness ($r = .11$), and negative affectivity ($r = -.12$) all correlated significantly with the Generalized Compliance dimension. Taken together, these results suggest that personality may be more strongly related to OCB than originally reported by Organ and Ryan.

As can be seen from the wealth of previous studies, research in the area of OCB has been extensive in covering a wide range of antecedents and outcomes associated with this construct. Looking across this research, however, certain theoretical and methodological issues have also surfaced which deserve mention. For example, in a recent review of the OCB literature, Podsakoff et al. (2001) concluded that common method variance has had a significant impact on observed OCB relationships reported in studies where this artifact was not controlled. Specifically, in a review of 11 field studies dealing with OCB, results revealed that when common method variance was not controlled, the proportion of performance variance explained by objective performance averaged 9.5 percent, whereas the amount explained by OCBs averaged 42.9 percent. In contrast, when common method variance was controlled, the average amount explained by objective performance averaged 11.3 percent, while the amount explained by OCBs decreased to an average of 19.3 percent. In light of these results and others displaying the same general trend, Podsakoff et al. (2001) concluded that although common method variance can have a significant impact on the relationship between OCB and managerial judgments, “this bias generally weakens these relationships, it does not eliminate them” (p. 543).

On the same topic, two related methodological issues include the need to obtain evidence for the direction of causality between OCB, its antecedents, and outcomes, as

well as the need to conceptually distinguish measures of OCB and contextual performance from other closely related constructs (Podsakoff et al., 2001). Because the majority of OCB research has been cross-sectional in nature, it is currently not clear whether OCB is the cause in certain investigated relationships or the effect. Although certain studies (e.g., Koys, 2001) have provided longitudinal evidence that employee attitudes (e.g., job satisfaction) and behaviors (e.g., OCB) predict organizational effectiveness (rather than vice versa), there is still a significant need for longitudinal research in this area that further addresses the impact of these relationships over time. Similarly, as a result of many overlapping definitions of OCB-like behavior, it is necessary to test the discriminant validity of each of these constructs. Although the majority of research has focused on the relationships between OCB and other constructs, these relationships may be misinterpreted if the nature of the construct itself (i.e., OCB) is not truly understood.

Finally, Podsakoff et al.(2001) point out the need to investigate additional antecedents of OCB. A number of task variables (e.g., task feedback, task routinization, and intrinsically satisfying tasks), for example, have shown consistent relationships with OCB across a small number of studies. In addition, certain leadership styles (mainly transformational leadership and leader-member exchange) have also shown consistent relationships across all five OCB dimensions. Both of these variables remain grossly under investigated in the literature, despite their potential as an obvious predictor of citizenship performance. Similarly, personality variables alternative to the “Big Five” dimensions also deserve further consideration in relation to OCB. Other-oriented Empathy (the tendency to experience empathy for, and to feel responsibility and concern

about, the well-being of others) and Helpfulness (the self-reported history of engaging in helpful actions and an absence of egocentric physical reactions to other's distress), for example, have correlated significantly with both the Altruism and Generalized Compliance dimensions across several studies (Penner, Midili, & Kegelmeyer, 1997; Rioux & Penner, 2001; Connell & Penner, 2004). As cited in Podsakoff et al. (2001), Van Dyne, Cummings, & Parks (1995) suggest that the propensity to trust, need for affiliation, and empathic concern might also be worthwhile constructs to explore in the context of contextual performance. Thus, although research on OCB and its related constructs is both expansive and comprehensive, certain areas deserve further clarification and refinement. As mentioned previously, one such area is the impact of different leadership behaviors on OCB, a suggestion that is expanded upon in the current study.

Leadership and OCB

Research investigating predictors of employee performance has suggested that specific types of leadership behaviors are also important to employee task and contextual performance. Two primary theories of leadership that have shown consistent relationships with employee performance are Transformational Leadership theory and Leader-Member Exchange (LMX) theory. Although certain elements are shared between the two theories, each are considered distinct constructs, and have individually been shown to predict positive outcomes at both the individual and organizational level.

Transformational Leadership. The origin of transformational leader theory lies with the work of Burns (1978) who originally proposed two distinct leadership styles based on his analysis of the behaviors displayed by various political leaders. The first of

these, transactional leadership, characterized many of the traditional leadership theories existing at that time. According to Burns (1978), transactional leadership was based on an exchange process between leaders and subordinates where rewards were administered to employees based upon acceptable levels of displayed effort and performance. This type of leadership was in contrast to transformational leadership, the goal of which was to encourage followers to transcend their own self-interests and move beyond simple leader-member transactions for the good of the group or organization (Burns, 1978; Bass, 1985). Under this type of direction, followers were also expected to gain increased awareness for valued outcomes as well as their own higher level needs; the end result being a heightened desire to exceed traditional performance expectations.

Although Burns is credited with the original identification of these two types of leadership styles, much of the subsequent work on transformational leadership has been done under the direction of Bass and colleagues (e.g., Bass, 1985; Bass & Avolio, 1990; Bass, 1997). Bass's conception of transformational leadership is very similar to that of Burns's. However, their perspectives diverge in three main respects. First, Bass's (1985) conceptualization makes specific reference to the expansion of the follower's "portfolio of needs and wants" which is absent in Burns's description of the construct (p. 20). Second, according to Burns, a necessary component of transformational leadership is that followers are elevated to a goal that is inherently good or positive. Bass does not make this distinction, and considers all cases where the needs and actions of followers are "transformed," regardless of the nature of the intent (e.g., positive or negative), as examples of transformational leadership. Finally, the most notable distinction between these two researchers' perspectives deals with the relationship between transformational

and transactional leadership. Burns specifically views these leadership styles as polar constructs, with transactional leadership on one end of the continuum, and transformational leadership on the other. In contrast, Bass's view was that both constructs are complimentary in nature; a leader may display both transactional and transformational leadership behaviors to some degree. Overall, transformational leadership is proposed to augment the effects of transactional leadership in terms of subordinate performance, a theory now labeled the "augmentation hypothesis" (Waldman, Bass, & Yammarino, 1990).

In general, research supports Bass's theory that transformational leadership enhances the effects of transactional leadership. For example, based on a sample that included both U.S. Army officers and Fortune 500 managers, Bass (1985) found that transformational leadership behaviors accounted for significant variance in subordinate extra-effort and subordinate-rated leader effectiveness above and beyond what was accounted for by transactional leadership behaviors. Similar results were also reported by Hater & Bass (1988) using managers at an air delivery service company, as well as by several additional studies that have investigated the augmentation hypothesis (e.g., Bycio, Hackett, & Allen, 1995; Waldman et al., 1990). In general, Bass (1985) conceptualizes the transactional leader as one who works within the existing culture and constraints of the organization, placing a higher emphasis on process (e.g., leader-member exchanges) as opposed to outcomes. The transactional leader also places a premium on maintaining efficiency, and is most likely to be effective in environments that are stable and predictable. In contrast, Bass (1985) characterizes the transformational leader as one who challenges the organization's systems and culture rather than accepts them. More

specifically, transformational leaders are more likely to challenge the status quo by seeking new and creative ways of accomplishing goals. Transformational leaders also tend to be less risk avoidant than transactional leaders, and generally emphasize effectiveness over efficiency. As stated by Avolio and Bass (1988), transformational leaders attempt to create and shape their environments rather than simply react to the circumstances that are provided to them.

At the time of Bass's (1985) theoretical conceptualization of transformational leadership, no valid measure existed to measure the construct. This led Bass and colleagues to develop their own measure of transactional and transformational leadership which they labeled the Multifactor Leadership Questionnaire (MLQ). The development of the MLQ was based on a review of the literature as well as survey responses provided by 70 senior executives who were asked to describe the qualities of both transactional and transformational leaders (Bass, 1985; Bass, Avolio, & Goodheim, 1987). Factor analysis of the responses suggested a five-factor structure for the measure, which has also been demonstrated across additional studies (e.g., Hater & Bass, 1988). Three of the factors identified by the questionnaire were interpreted as transformational, whereas two were seen as transactional in nature. The first transformational factor was labeled Charisma, which describes leader behaviors that instill pride, faith, and respect in subordinates, communicate important issues, and clearly articulate a sense of mission and purpose. The second transformational factor, Individual Consideration, involves leader behaviors such as delegating projects to subordinates, showing a concern for follower development by acting as a coach or mentor, and treating followers with respect and concern. Finally, the third transformational factor was labeled Intellectual Stimulation, which describes leader

behaviors that emphasize subordinate problem solving and the ability of followers to think creatively. In particular, followers are encouraged to submit their own opinions, and are not criticized even if their ideas differ from their leader (Bass & Avolio, 1994).

In addition to these transformational factors, two transactional factors, Contingent Reward and Management-by-Exception, were also identified. The Contingent Reward factor describes the typical behaviors that embody a transactional leader. That is, this factor identifies whether the leader rewards subordinate performance that is in accordance with previous leader expectations. Management-by-Exception, however, is somewhat more passive in nature. Specifically, this factor describes the leader's tendency to avoid giving direction to subordinates if their level of performance is satisfactory. In other words, a leader scoring high on this factor would be likely to simply let his/her subordinates perform their jobs on their own as long as their level of performance was considered acceptable.

The MLQ has been used in over 75 research studies, and has been tested in a variety of organizational settings ranging from manufacturing and military settings to religious organizations. In addition, respondents have ranged from first-line supervisors to high-level managers (Lowe, Kroeck, & Sivasubramaniam, 1996). Most studies involving the MLQ support the distinction between transactional and transformation behaviors. For example, Bass (1985) revealed that the three transformational factors (Charisma, Individual Consideration, and Intellectual Stimulation) were all highly correlated, and that 66 % of the variance in the transformational scale was accounted for by Charisma.

Recent research has further explored the psychometric structure of the MLQ and has found somewhat more mixed results. Bycio, Hackett, and Allen (1995), for example, tested the fit of alternative two- and five-factor MLQ models using a sample of registered nurses. Based on the confirmatory factor analysis fit indices, they concluded that Bass's (1985) five-factor structure was most appropriate to describe the nature of the MLQ. However, strong correlations observed between the three transformational factors suggested that a two-factor interpretation may also be plausible. Additional research has also revealed a high positive correlation between the transformational factors and Contingent Reward (Lowe et al., 1996), and other studies have shown that Management-by-Exception sometimes loads on its own unique factor rather than on transactional leadership. These results are inconsistent with Bass's original conceptualization of transformational and transactional leadership. Thus, although the MLQ remains the most widely used measure of transformational leadership, additional work is warranted regarding the psychometrics of the measure.

In terms of outcome variables, studies have shown that many of the transformational leadership facets are associated with a number of positive leader and subordinate outcomes. For example, in a study by Bycio et al. (1995) each of the transformational dimensions showed high positive correlations with subordinate extra-effort, satisfaction with the leader, affective commitment, and ratings of leader effectiveness. In addition, significant negative relationships were also observed between each of the transformational factors and the intent to leave the profession, and intent to leave the job. In general, although the transactional leadership facets showed significant relationships with a number of outcome variables, these effects were augmented with the

presence of transformational leadership behaviors. These results have also been supported by other independent and meta-analytic studies which have addressed the relationship between transformational leadership and subordinate outcomes (e.g., Lowe et al. 1996). In addition to transformational factors, results have also been supportive of the contingent reward factor across a number of studies. In general, however, these findings have been weaker and less consistent (Yukl, 1999).

In the most general sense, the above results can be interpreted as evidence for a positive effect of transformational leadership behaviors on subordinate outcomes. Although this relationship appears relatively straightforward, other research has suggested that additional variables may moderate the relationship between transformational leadership and leader effectiveness. In a recent meta-analysis by Lowe et al. (1996) including 39 studies involving the MLQ, it was found that the type of organization (public versus private) and type of criterion (subordinate perceptions versus organizational measures) moderated the transformational leadership-effectiveness relationship. Contrary to prediction, a stronger positive relationship was found between transformational leadership behaviors and leader effectiveness in public as opposed to private organizations. In addition, significantly higher positive relationships were found for subordinate perceptions as compared with organizational measures of effectiveness. Although results did not support the level of the leader (low versus high) as a moderator, the mean incidence of transformational leadership behavior was significantly higher for low level as opposed to high level leaders. In addition, transformational leadership behaviors were more commonly observed in public as opposed to private organizations. These results are significant because they suggest that the relationship between

transformational leadership and leader effectiveness is contingent upon additional factors. In addition, these findings contradict preconceived notions about transformational leadership, specifically that the incidence of these behaviors is more prevalent in private organizations and within upper levels of management.

Another important performance variable found in past studies to be related to transformational leadership is OCB. Although a number of researchers have investigated the relationship between transformational leadership and OCB, the majority of the work in this area is credited to Podsakoff and colleagues (e.g., Podsakoff et al., 1990; Podsakoff, MacKenzie, & Bommer; 1996; Podsakoff et al., 2001). As an alternative to the MLQ, Podsakoff developed his own measure of transformational and transactional leadership labeled the Transformational Leadership Inventory (TLI). Based on a review of the transformational leadership literature, this measure consists of four first-order transformational factors (see Table 1): high performance expectations, individualized support, intellectual stimulation, and a “core” transformational behavior construct. In addition, one first-order transactional leadership factor, contingent reward behavior, was also identified. Each of these factors uses individual items as indicators. The only exception is the “core” transformational construct, which uses individual factor scores for three separate constructs as indicators: (1) articulating a vision; (2) providing an appropriate model; and (3) fostering the acceptance of group goals. Initial confirmatory factor analysis results support the existence of an overall six-factor structure for the measure (Podsakoff et al., 1990; Podsakoff et al., 1996). However, other studies have provided support for six first-order transformational behavior dimensions as opposed to combining three of the constructs into the “core” transformational leadership factor

(Podsakoff et al., 1996). Based on these findings, additional research addressing the dimensional nature of the measure is still warranted using different research samples.

Table 1. TLI Transformational Leadership Dimensions

High Performance Expectations	Behavior that demonstrates the leader’s expectation for excellence, quality, and/or high performance expectations.
Individualized Support	Behavior on the part of the leader that indicates that he/she respects followers and is concerned about their personal feelings and needs.
Intellectual Stimulation	Behavior on the part of the leader that challenges followers to re-examine some of their assumptions about their work and rethink how it can be performed.
Articulating a vision	Behavior on the part of the leader aimed at identifying new opportunities for his/her unit/division/company, and developing, articulating, and inspiring others with his or her vision of the future.
Providing an Appropriate Model	Behavior on the part of the leader that sets an example for employees to follow that is consistent with the values the leader espouses.
Fostering the Acceptance of Group Goals	Behavior on the part of the leader aimed at promoting cooperation among employees and getting them to work together toward a common goal.

Using the TLI, Podsakoff has found significant support for the relationship between transformational leadership behaviors and OCB. For example, in an independent study using employees of a petrochemical company, Podsakoff et al. (1990) found a number of significant relationships between the TLI’s transformational factors and Organ’s (1988) five OCB dimensions. Most notably, the “core” transformational

behavior dimension was found to correlate significantly with Conscientiousness (.27), Sportsmanship (.20), Courtesy (.23), and Altruism (.22). Similar relationships were also found with the individualized support dimension, that also correlated significantly across all OCB dimensions except Civic Virtue. These results were later confirmed in a more recent study involving corporate employees in both the U.S. and Canada (Podsakoff et al., 1996). In this study, the subdimensions comprising the “core” transformational construct were also examined separately, and revealed that each of the three constructs (articulating a vision, providing an appropriate model, and fostering the acceptance of group goals) correlated significantly with all OCB dimensions except Civic Virtue.

Since the discovery of these promising results, Podsakoff et al. (2001) have conducted a meta-analysis examining the effects of transformational leadership on OCB across studies. Results of this study again revealed significant relationships between each of the TLI factors (including contingent reward behavior) and OCB. Most notable was the finding that all TLI factors correlated significantly with the Altruism, Conscientiousness, Courtesy, and Sportsmanship dimensions, with the majority of correlations within the .20 to .25 range. In addition, significant (albeit smaller) relationships were also observed between each of the core transformational constructs and Civic Virtue, as well as between contingent reward behavior and the Civic Virtue dimension. Taken together, these results show that transformational leaders have a consistent positive impact on every form of citizenship behavior. These behaviors range from OCBs directed at individual members of the organization, to those that are intended to benefit the organization as a whole. As suggested by Podsakoff and colleagues (2001), these results should not come as a shock, as the central notion of transformational

leadership is to encourage employees to perform above and beyond expectations. Although studies have provided relatively strong support for the link between transformational leadership and OCB, little research has provided insight regarding the actual nature of these effects. That is, the issue of whether the effect of transformational leadership on citizenship behavior is more direct or indirect in nature has yet to be determined.

Although transformational leadership has shown impressive validities regarding a number of positive performance-related outcomes, researchers have also criticized certain aspects of the theory. In his evaluation of some of the conceptual weaknesses of transformational leadership theory, Yukl (1999) pointed out that one major flaw has been the lack of theoretical rationale for labeling certain behaviors as transformational. For example, the MLQ's individualized consideration scale includes both supporting and developing behaviors as key constructs. Although there is significant evidence to support such developmental constructs as coaching and mentoring as predictors of subordinate performance and self-efficacy, the effect of supporting behaviors on subordinate motivation and performance has generally been weak (Bass, 1990, Yukl, 1998). Thus, the rationale for the inclusion of supporting behaviors as a core transformational construct is somewhat unclear. Along similar lines, the high inter-correlation found between transformational behavior dimensions raises additional concerns about construct validity. Are these dimensions really distinct, or, in contrast to the theory, does evidence suggest that they are all measuring the same behaviors?

In addition to doubts about construct validity, Yukl (1999) has also raised a few other concerns in relation to the theory. One complaint was that there is an over-emphasis

on the dyadic process between leader and subordinate. In other words, the emphasis of transformational leadership theory is too narrow, and should be broadened to include both group and organizational influence processes. In addition, the theory includes what Yukl (1999) labels a “heroic leadership bias.” That is, the theory devotes significant attention to how the actions of the leader impact those of the followers. These theories are explained without mention of how the influence process may be reciprocal in nature, with subordinate actions conjointly influencing leader behavior. Finally, Yukl (1999) also makes specific reference to the theory’s significant ambiguity in its description of the influence process. Based on the current research, it is still unclear how transformational leadership behaviors influence subordinate outcomes. According to Yukl (1999), what is needed is systematic study of how “certain mediating variables relevant to task performance, such as arousal of motives,” are related to transformational leadership behaviors and subordinate performance (p. 287). In his opinion, “the theory would be stronger if the essential influence processes were identified more clearly,” a criticism that is addressed by the current study (p. 287).

Leader-member Exchange. In addition to transformational leadership, the leader-member exchange model of leadership (LMX) has also received increasing amounts of attention by researchers in recent decades. Born from the “Vertical Dyad Linkage” (VDL) model of leadership, LMX is unique from other leadership theories in that its’ focus is on “the dyadic relationship” between the leader and the subordinate (Gernster & Day, 1997). In contrast to more traditional theories, which are concerned with identifying effective leader traits and behaviors, LMX focuses on how the quality of the relationship

between a leader and a subordinate can have positive effects at the individual, group, and organizational level (Gernster & Day, 1997).

Although certain aspects of LMX theory have been altered since its' original conception, the general focus of the theory has remained the same throughout the decades. In a summary of the evolution of LMX, Graen and UhlBien (1995) described the history of the theory as occurring in four distinct stages. In the first stage, the major discovery was that leaders develop different relationships with each of their subordinates. This finding was somewhat revolutionary, as it was predominantly assumed by most leadership scholars of the time that leaders engaged in similar leadership behaviors across all of their subordinates (an approach known as the "Average Leadership Style") (Schrisheim, Castro, & Cogliser, 1999). Building on the notion of individualized relationships, the second stage of LMX development focused primarily on the specific relationship constructs involved in the leader-subordinate dyad. In addition, the relationships between these constructs and those that were similar/dissimilar to LMX were also explored. In the third stage, these efforts were expanded to address the specific leader behaviors that were used to develop individualized "partnerships" with subordinates (Graen &Uhl-Bien, 1995). Finally, in the fourth stage of evolution, sole attention on the leader-subordinate dyad was widened to include investigation of how networks of dyads are organized both inside and beyond organizational boundaries.

According to LMX theory, dyadic relationships are developed through a series of "exchanges" that occur between the leader and the subordinate over time. For example, the leader may offer increased job responsibility and flexibility to the subordinate, while the subordinate may respond by showing increased effort, commitment, or performance

(Diensesch & Liden, 1986; Liden & Graen, 1980; Scandura & Graen, 1984). Both parties invest each of their own resources into the relationship, which serves to shape the overall quality of the relationship over time (Bauer & Green, 1996).

In a formal effort to describe the evolution of leader-subordinate exchange relationships, Graen and Scandura (1987) provided a three-phase model of LMX development. In the first phase, Role-taking, a key component is perspective taking. That is, both the leader and subordinate learn to view work-related issues from the perspective of both parties. In the next phase, Role-making, the focus is shifted to the development of trust between leader and subordinate. Special emphasis is also given to how leader and subordinate actions influence their own attitudes and behaviors. Finally, in the last stage of Role-routinization, efforts are made to incorporate the behaviors learned in the first two phases (e.g., perspective taking, trust-building) into the “routine” of the relationship between leader and subordinate. In this last stage, the goal is that these behaviors should become automatic during exchanges between the two parties, leading to an overall high-quality leader-subordinate relationship.

Because the resources available to both leaders and subordinates are limited, it is inevitable that a leader’s relationships with his or her subordinates will range on a continuum from low to high quality (Bauer & Green, 1996; Liden et al., 1993). Those subordinates who engage in higher quality exchanges with their supervisor are termed the “in-group,” and usually receive special benefits and opportunities from the leader such as specialized attention, favorable assignments, and career planning support (Deluga, 1998). In contrast, those subordinates classified in the “out-group” tend to have lower quality relationships with their supervisors, typically characterized by less attention and

“restricted levels of reciprocal influence and support” (Deluga, 1998, p. 190). Although LMX theory emphasizes the existence of differential relationships between leaders and subordinates, there is still some disagreement as to what elements actually constitutes a “high” and “low” quality relationship. In one of the earliest attempts at describing the theory of LMX, Graen (1976) proposed that LMX was an exchange relationship consisting of three dimensions: competence, interpersonal skill, and trust. In contrast, Cashman, Dansereau, Graen, and Haga (1976) argued that LMX was based solely on two constructs: attention and sensitivity. Mirroring the initial disagreement characterizing the early development of LMX, later efforts to describe the dimensionality of the construct was plagued by a similar lack of consensus among researchers. Dienesch and Liden (1986), for example, proposed that LMX was comprised of three dimensions: perceived contribution, loyalty, and affect. In contrast, Graen and Uhl-Bien argued that a combination of respect, trust, and mutual obligation comprise the LMX construct. Although the dimensionality of LMX is still somewhat in question, six content subdomains have surfaced as the most prominent across studies (Schriesheim et al., 1999). These include: mutual support, trust, liking, latitude, attention, and loyalty. In general, high levels of support, trust, liking, latitude, attention, and loyalty characterize high-quality LMX relationships, whereas low quality exchanges are typified by lower levels of each of these subdimensions.

A driving force behind the major interest in LMX theory has been the numerous significant relationships found between LMX and both performance-related and attitudinal outcomes. For example, results of several independent studies have shown that higher quality exchanges between leaders and subordinates are predictive of higher

performance ratings (Liden, Wayne, & Stilwell, 1993), increased objective performance (Graen, Novak, & Sommerkamp, 1982), higher organizational commitment (Nystrom, 1990), and higher overall job satisfaction (Graen, et al., 1982). In addition, meta-analytic studies have found similar results. In a recent meta-analysis by Gernester and Day (1997) summarizing the results of 79 independent studies, the quality of the relationship between the leader and subordinate was found to be significantly correlated with objective performance (.11), supervisor ratings of performance (.30), satisfaction with supervision (.71), overall job satisfaction (.50), organizational commitment (.42), role conflict (- .31), role clarity (.43), and member competence (.28). In addition, although LMX was not found to significantly correlate with turnover (- .04), a significant relationship was found with turnover intention (-.31).

In addition to the large number of positive task-related performance outcomes (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986; Graen & Scandura, 1987), high quality leader-member exchanges have also been associated with increased non-task related activities such as OCB (e.g., Deluga, 1994; Settoon, Bennett, & Liden, 1996; Wayne & Green, 1993). Specifically, a number of studies have found that the quality of the relationship between leader and subordinate is predictive of subordinate OCB, at both the aggregate and subdimensional level. For example, in a study by Wayne and Green (1993) involving 73 nurses and their supervisors, results showed that the nurses who had higher quality relationships with their supervisors engaged in significantly more altruistic OCBs (e.g., assisting a supervisor or co-worker with their work, helping others who have been absent) than those with lower quality relationships with their supervisors. In contrast, no significant relationship was found between LMX-quality and Generalized

Compliance behaviors (e.g., not taking undeserved breaks or time-off, being punctual). In another study by Tansky (1993), employee perceptions of the quality of the supervisory/subordinate relationship were significantly correlated to all five OCB dimensions. In addition, after controlling for a number of demographic variables (e.g., years of education, sex, supervisory position, and age), the quality of the supervisory/subordinate relationship accounted for an additional 13% of the variance in the Altruism dimension, 14% in Conscientiousness, 9% in Sportsmanship, 9% in Courtesy, and 13% in Civic Virtue. Finally, the results of Organ and Ryan's meta-analysis (1995) support the suggestion that the quality of leader-subordinate relationships influence OCB. In their review of OCB studies dealing with leader supportiveness, they found an average correlation of .32 between leader supportiveness and the Altruism dimension, as well as an average correlation of .35 with the Generalized Compliance dimension.

Although these results are encouraging, research has most consistently supported the relationship between perceptions of LMX-quality and both Altruism and overall OCB. In a recent meta-analysis summarizing the empirical correlates of OCB, Podsakoff et al. (2001) found a .36 corrected correlation between perceptions of LMX-quality and Altruism, and a .30 corrected correlation with overall OCB. Taken together, these results suggest that one by-product of high quality exchanges between leader and subordinate is altruistic behaviors aimed toward both the supervisor and other co-workers. These findings precipitate the question, however, of why these behaviors occur?

The primary explanation for the relationship found between LMX-quality and OCB lies in the framework of social exchange and reciprocity. As suggested by Blau

(1964), social exchanges are based on a foundation of trust, with the expectation that acts of goodwill from one party will be reciprocated by the other. When certain gestures made on behalf of the supervisor are perceived positively by the recipient (i.e., the subordinate), these actions evoke feelings of subordinate obligation. In response, the subordinate engages in increased functional behavior (e.g., task performance, OCB) as a means of fulfilling the perceived obligation. Research has shown that individuals seek to reciprocate in ways that will be clearly recognized by the other party in the relationship (Blau, 1964; Gouldner, 1960). In addition, it has been found that employees view both task and contextual performance as appropriate forms of reciprocation within the context of a work environment (e.g., Katz & Kahn, 1966; Levinson, 1965; Foa & Foa, 1980; Moorman, 1991). Based on this framework, it seems appropriate to assume that high quality relationships between leader and subordinate are characterized by gestures of goodwill that are perceived positively by the subordinate (e.g., favorable job assignments, increased responsibility). In return for these benefits, the subordinate is motivated to respond in kind, and does so by engaging in altruistic behaviors aimed at benefiting the supervisor and/or other employees of the organization.

Although research has consistently been supportive of the relationships between LMX and both performance and attitudinal outcomes, researchers have also raised significant theoretical and methodological concerns in relation to LMX. One of the primary criticisms is that the evolution of the theory has included multiple iterations of LMX definitions that have been “confusing and sometimes appear to be contradictory” (Schrisheim, et al., 1999). More importantly is the fact that there have been no explanations for why the theory has evolved over the years, or why particular changes in

the nature of the construct have been adopted. Although it is important for a theory to evolve, it is critical to have adequate theoretical justification accompanying any changes that are made. Unfortunately, this latter point was not strictly observed during the development of LMX theory.

A related theoretical issue is the level of analysis adopted by LMX theory. Although the VDL model (the premise of LMX) and early LMX frameworks focused on both leader and subordinate behaviors within the relationship dyad, later research has shown a departure from this level of analysis. As reviewed by Schriesheim et al. (1999), Graen and Uhl-Bien (1995) argue that the relationship itself should be the primary focus, as opposed to either the leader or the subordinate. Taking an opposing perspective, Dansereau et al. (1995) suggest that this approach introduces ambiguity into LMX theory by deeming any level of analysis appropriate, as long as the “relationship” between the two parties remains the focus. In general, it is important for a theory to specify upfront the level of analysis at which a phenomenon is expected to exist so that the theory, measurement, and data-analytic techniques may be aligned and accurate results may be acquired (Klein, Dansereau, & Hall, 1994). Thus, based on these two criticisms, it seems that more theoretical work is needed to further clarify both the foundation and focus of LMX theory.

One final criticism of LMX theory deals with the variety of scales that been developed to measure the construct. Overall, many different measures have been used to operationalize LMX, with various scales ranging from 2 to 25 items (Schriesheim, et al., 1999). In addition, as noted by Schriesheim et al. (1999), the rationale for choosing these measures was frequently not provided, and some “were modified from existing measures

without adequate psychometric testing” (p. 94). Because different studies used different scales, it has also been unclear whether mixed results are due to the construct itself or the method by which it was measured (Gernster & Day, 1997). Although psychometric evidence is supportive of the seven-item LMX7 (the predominantly used LMX measure), future LMX research should focus on increased scale validation as well as efforts to increase the content validity of existing measures (Schrishheim et al., 1999).

OCB Motives

In addition to leadership variables, it has also been suggested that in order to understand the causes of OCB, one must identify the motives that underlie these actions (Rioux & Penner, 2001). Although other researchers have previously investigated the role of motives in relation to OCB (e.g., Bolino, 1999), Penner and his colleagues were the first to address the area from a functional perspective. The basic idea behind the functional approach is that people engage in certain behaviors (e.g., OCB) because these actions serve some need or purpose for them (Borman & Penner, 2001). However, different people may engage in the same behavior for different reasons. For example, one employee may stay late after work to help a co-worker because he/she generally enjoys helping other people. Another employee may engage in the same type of behavior, not because he/she enjoys helping others, but because of concern for the welfare of the organization. In each case, the person’s behavior is the same. However, the motives behind these behaviors are different depending upon the needs of the individual.

A large portion of the support for taking a functional approach to OCB comes from research on a related phenomenon, volunteerism. Volunteering is defined by Hanson (1991) as a “form of formal planned helping” that involves aiding others usually

through organizations such as churches, schools, hospitals, and service organizations (also see Allen, 1982). This type of behavior is similar to OCB in that both kinds of behavior: (1) are considered to be long-term phenomenon; (2) are preceded by thought and planning; (3) occur in an organizational context; and (4) involve a choice to help made on behalf of the individual. In general, researchers applying a functional approach to volunteerism (Clary & Snyder, 1991; Omoto and Snyder, 1995; Omoto, Snyder, & Berghuis, 1993; Penner and Finkelstein, 1998; Clary & Orenstein, 1991) have found strong support for the view that the reasons for volunteering can vary based on the needs of the individual. As a result, this research has served as a springboard for work on OCB motives.

Recently, Rioux and Penner (2001) applied a functional explanation to OCB. Specifically, they identified three primary OCB dimensions or motives. The first of these was called Prosocial Values, that describes OCB that is motivated by a desire to help others and be accepted by them. As suggested by Rioux (1998) this motive is especially important to those who have a need to be liked by their co-workers, and who place a heavy emphasis on maintaining relationships. The second motive is Organizational Concern, or engaging in OCB out of a need to show commitment to the organization. This motive also allows an employee to increase and expand his/her knowledge of the organization as well as gain increased work experience (Tillman, 1998). Finally, the third motive is called Impression Management, and describes OCB that is motivated by a desire to avoid negative evaluation by others or to gain material rewards. As suggested by Rioux (1998), certain individuals are greatly concerned with how they are perceived by

others. Thus, engaging in OCB is a way to avoid being perceived as lazy or irresponsible, which can even lead to certain monetary rewards such as raises or promotions.

In their study of OCB, Rioux and Penner administered a scale that measured each of these three motives to a group of municipal employees. In addition, they obtained self-, peer-, and supervisor-ratings of two dimensions of OCB: Altruism and Generalized Compliance. Results showed that motives correlated significantly across all three types of ratings. More specifically, the Prosocial Values Motive was shown to correlate most strongly with the Altruism dimension, while the Organizational Concern Motive was shown to correlate most strongly with the Generalized Compliance dimension. Results also showed significant correlations between the Organizational Concern Motive and procedural justice (.44), mood (.49), and Other-Oriented Empathy (.27). Similarly, the Prosocial Values Motive was found to significantly correlate with procedural justice (.24), mood (.21), Other-Oriented Empathy (.46), and Helpfulness (.31). Independent evidence of these relationships was provided by Forde (2000), using a sample of working college students. Taken together, these results show that motives are, in fact, related to certain aspects of OCB and its antecedents. Thus, it is possible that motives may play an important role in the prediction of this type of prosocial behavior.

Building on the results of Rioux and Penner, recent research has investigated the role of motives in relation to some of the antecedents of OCB. For example, Tillman (1998) found that both the Prosocial Values Motive and Organizational Concern Motive moderated the relationship between perceptions of procedural justice and OCB. More specifically, the relationship between procedural justice and OCB was the strongest for those individuals high on these two motives, and weakest for those scoring low. In

addition, the Organizational Concern Motive was shown to moderate the relationship between conscientiousness and OCB. That is, the relationship between conscientiousness and OCB was the strongest for those individuals high on this motive, and weakest for those scoring low.

Expanding on these efforts, Connell & Penner (2004) investigated whether motives could perhaps mediate the relationship between certain antecedents and dimensions of OCB. Across both self- and peer-reports of OCB, results provided strong evidence for the Organizational Concern Motive as the primary mediator between the Generalized Compliance dimension of OCB and three antecedents: affective commitment, procedural justice, and conscientiousness. In addition, the relationship between Other-oriented Empathy and the Altruism dimension was partially mediated by both the Organizational Concern and Prosocial Values motives. These results were important from both a theoretical and practical perspective because they revealed that the influence of certain antecedent variables on select dimensions of OCB were, at least in part, accounted for by motives. Most notable, however, was the finding that different motives mediated different antecedent-OCB relationships.

Moderators and Mediators

Because moderator and mediator variables are sometimes confused, a brief discussion of the differences between them may be in order. As described by Baron and Kenny (1986), moderators can be described as qualitative or quantitative variables that affect the direction and/or strength of the relationship between a predictor (independent) variable and a criterion (dependent) variable. That is, the relationship between an independent and dependent variable differs based on the level of the moderator variable.

In contrast, a variable functions as a mediator when its presence accounts for the relationship between the predictor and the criterion. More simply, the mediator serves as “the general mechanism” through which the predictor influences the criterion (Baron, & Kenny, 1986, p. 1173). Thus, the primary distinction between these two variables is that moderators specify when certain effects will be observed between variables, while mediators indicate how or why such effects are observed.

The Current Study

The purpose of the current study is to further investigate the role of motives in relation to both transformational leadership and LMX behaviors and OCB. Various researchers (e.g., Podsakoff et al., 2001; Yukl, 1999) have suggested that future studies should address possible mediators in the leader influence process. In addition, two other streams of research provide the foundation for the current study. The first stream includes those studies that have found a positive relationship between both transformational leadership and LMX behaviors and various dimensions of OCB (e.g., Altruism, Conscientiousness). In general, this research suggests that increased levels of either transformational or LMX behaviors is associated with increased citizenship performance among subordinates. In addition, evidence implies that the effects of certain leadership behaviors (e.g., transformational leadership) may indirectly affect OCB via other constructs (e.g., trust) (Podsakoff et al., 1990), and that certain variables may also moderate the relationship between leadership behavior and OCB. The second stream suggests that motives play an important role in relation to OCB, specifically serving as both moderators and mediators of antecedent-OCB relationships. Based on these results,

we contend that it may be worthwhile to investigate whether additional variables (e.g., motives) moderate or mediate the relationship between leadership behaviors and OCB.

The specific goal on the current study is to expand on previous studies (e.g., Tillman, 1998; Connell & Penner, 2004) that have found evidence for motives as both moderators and mediators between select antecedent variables and both the Altruism and Generalized Compliance dimensions of OCB. Similar to the previous studies, positive relationships are predicted to exist between additional antecedent variables (e.g., transformational and LMX behaviors) and OCB motives. In addition, the Organizational Concern motive is expected to mediate the relationship between transformational leadership and OCB, while the Prosocial Values Motive is predicted to either mediate or moderate the relationship between LMX-quality and OCB.

Hypothesis 1. There will be a positive relationship observed between supervisor transformational leadership behavior and subordinate Organizational Concern.

One of the basic tenets of transformational leadership is to encourage followers to transcend their own self-interests and move beyond simple leader-member transactions for the good of the organization (Bass, 1985). This aspect of transformational leadership seems synonymous with the promotion of organizational concern among employees. Due to the conceptual overlap observed between these two constructs, it is expected that increases in transformational leadership behavior will be associated with increases in the Organizational Concern Motive among subordinates.

Hypothesis 2. Subordinate Organizational Concern will mediate the relationship between supervisor transformational leadership behavior and subordinate Conscientiousness (i.e., Generalized Compliance).

Previous research has shown that transformational leadership is positively related to the Conscientiousness dimension of OCB (e.g. Podsakoff et al., 2001). Other research has also revealed a link between the Organizational Concern Motive and the Conscientiousness dimension (Rioux & Penner, 2001). On the basis of these relationships, we propose that leaders who engage in transformational leadership behaviors will have subordinates who participate in behaviors that are indirectly helpful to other members of the organization. Assuming support for Hypothesis 1, this relationship will be mediated by the subordinate's concern for the welfare of the organization. More specifically, the performance of transformational leadership behaviors will be associated with subordinate Organizational Concern, which, in turn, will be linked to OCB that is beneficial to the organization as whole.

Hypothesis 3. Subordinate Organizational Concern will mediate the relationship between supervisor transformational leadership behavior and subordinate Civic Virtue.

In addition to the Generalized Compliance dimension, transformational leadership has correlated positively with the Civic Virtue dimension in past studies. Other research has also revealed a positive relationship between the Organizational Concern Motive and the Civic Virtue dimension (Rioux & Penner, 2001). We propose that leaders who engage in transformational leadership behaviors will have subordinates who show active involvement and interest regarding organizational issues, as well as the governance of the organization as a whole (Organ & Ryan, 1995). Assuming support for Hypothesis 1, we also predict that this relationship will be mediated by the employees' concern for the welfare of the organization. That is, the performance of transformational leadership

behaviors will be associated with a general concern for the organization among subordinates, which, in turn, will be linked to subordinate Civic Virtue.

Hypothesis 4. Subordinate Organizational Concern will mediate the relationship between supervisor transformational leadership behaviors and subordinate Courtesy.

Evidence has shown that transformational leadership behaviors correlate positively with the Courtesy dimension of OCB. Other research has also revealed a positive relationship between a generalized concern for the organization and the Courtesy dimension (Rioux & Penner, 2001). It is predicted that leaders who engage in transformational leadership behaviors will have subordinates who actively help prevent problems among coworkers by engaging in both formal and informal cooperation with other employees (Organ & Ryan, 1995; Organ, 1997; George & Brief, 1992; Konovsky & Organ, 1996). Assuming support for Hypothesis 1, this relationship is expected to be mediated by employees' concern for the welfare of the organization. That is, the performance of transformational leadership behaviors will be associated with subordinate Organizational Concern, which, in turn, will be linked with cooperation among employees.

Hypothesis 5. Subordinate Organizational Concern will mediate the relationship between supervisor transformational leadership behaviors and subordinate Sportsmanship.

Previous research has shown that transformational leadership behaviors correlate positively with subordinate Sportsmanship. In addition, other research has revealed a positive relationship between the Organizational Concern Motive and the Sportsmanship dimension (Rioux & Penner, 2001). We propose that leaders who engage in

transformational leadership behaviors will have subordinates who tend to absorb minor inconveniences about their jobs without complaint, and who also tend to consider other employees' work problems in addition to their own (Konovsky & Organ, 1996).

Assuming support for Hypothesis 1, this relationship is predicted to be mediated by the subordinate's concern for the welfare of the organization. That is, the performance of transformational leadership behaviors will be associated with subordinate Organizational Concern, which, in turn, will be linked to Sportsmanship behaviors among subordinates.

Hypothesis 6. There will be a positive relationship between LMX-quality and subordinate Prosocial Values.

As explained previously, LMX theory is based on the existence of beneficial exchange relationships between leaders and their followers. In theory, high levels of support, trust, liking, and loyalty characterize a high quality relationship, whereas lower levels of each of these variables typify a low-quality relationship. Based on these characteristics, we propose that LMX-quality will be positively associated with subordinate Prosocial Values. That is, a high-quality relationship between a leader and a subordinate will be positively related with the subordinate's desire to help others within the organization and to be accepted by them. In contrast, the desire to help others within the organization will not be salient among subordinates who hold lower quality relationships with their supervisor.

Conceptually, it is possible to conceive of the Prosocial Values Motive as both a moderator and mediator of the relationship between LMX-quality and the Altruism dimension of OCB. As such, the remaining two hypotheses address the role of Prosocial Values from both a moderating and mediating perspective.

Hypothesis 7. Subordinate Prosocial Values will mediate the relationship between LMX-quality and subordinate Altruism.

It is predicted that a possible mechanism through which LMX impacts Altruism is the Prosocial Values Motive. More specifically, it is proposed that high LMX-quality arouses among subordinates the motivation to help others and be accepted by them (Hypothesis 6), which, in turn, is associated with OCB directed toward individual members of the organization. This prediction is supported by research that has shown a positive link between the Altruism dimension and both LMX-quality (e.g., Podsakoff et al., 2001) and the Prosocial Values Motive (Rioux & Penner , 2001).

Hypothesis 8. Subordinate Prosocial Values will moderate the relationship between LMX-quality and subordinate Altruism

In addition to Hypothesis 7, it is predicted that the relationship between LMX-quality and Altruism is contingent upon the extent that the Prosocial Values Motive is possessed by the subordinate. In other words, a relatively strong positive relationship between LMX-quality and subordinate Altruism is proposed to exist when the level of subordinate Prosocial Values is high. In contrast, when the level of subordinate Prosocial Values is low, a much smaller relationship is predicted to exist between these two variables. This research is again contingent upon Hypothesis 6, but is also based on the positive relationships observed between the Altruism dimension and both LMX-quality (e.g., Podsakoff et al., 2001) and the Prosocial Values Motive (Rioux & Penner , 2001).

Chapter Two

Method

Participants

This study included responses from 201 employees working either part-time or full-time at one of 13 organizations located in the Southeastern United States. In total, 62 employees who completed the survey responded as a supervisor while 139 responded as a subordinate. The surveys were distributed to a total of 306 employees (118 supervisors, 188 subordinates) yielding an overall response rate of 66 percent. In addition, the individual response rates were 53 percent for the supervisors and 74 percent for the subordinates.

The initial sample of 201 employees was screened using a number of criteria. First, because the objective of this study was to include the perspective of both supervisors and their subordinates, both parties were asked to submit responses to the survey. This approach allowed for the eventual collection of supervisor-subordinate pairs. After submitting their responses, if a given supervisor could not be paired with a subordinate response, the supervisor was eliminated from the sample. This was also the case for any subordinates who could not be paired with a supervisor.

Employees were also eliminated if they failed to answer more than ten percent of the items included in a scale, or if their responses to the survey appeared questionable. In order to identify “questionable” responders, the standard deviation for each of the

measures (with the exception of the LMX7) was calculated for each of the participants (supervisors and subordinates). If a participant provided the same response for every question in a particular measure ($SD = 0$), that participant's responses were further examined to determine if they should be eliminated from the sample. Based on this criterion, a participant was only eliminated if their responses appeared reasonably suspect.

Finally, supervisors were instructed to rate only those subordinates whom they had supervised for at least four months. Thus, if a supervisor indicated that they had supervised a particular subordinate for less than 4 months, that supervisor-subordinate pair was eliminated from the sample.

Using the above criteria, 7 supervisors and 9 subordinates were eliminated from the initial sample. Thus, the final sample was comprised of 55 supervisors and 131 subordinates (i.e., 131 supervisor-subordinate pairs). The demographic characteristics of the final sample are displayed in Table 2.

Overall, the final sample contained slightly less males than females (43 % versus 57 %, respectively). In addition, most of the employees were of White ethnicity (82 %). Sixty-five percent reported that they had been employed with their organization for at least 3 years, while only 11 percent reported that they had been with the organization for 6 months or less. It should be noted that no employees were included in the final sample who reported less than 4 months experience with their current place of employment. Finally, this sample consisted mostly of full-time employees (88 %), and over half (55 %) described their position as managerial/professional.

Table 2. Participant Demographics ($N = 186$)

	Supervisors (%) $N = 55$	Subordinates (%) $N = 131$	Total (%) $N = 186$
<i>Gender</i>			
Male	53	39	43
Female	47	61	57
Not specified	0	0	0
<i>Race/National Origin</i>			
American Indian/ Alaska Native	0	0	0
Asian	0	5	3
Hispanic/Latino	2	3	3
Black/African American	9	7	8
Native Hawaiian/Pacific Islander	0	1	1
White	86	82	82
Other Ethnicity	2	3	3
Not Specified	2	1	1
<i>Months employed with the organization</i>			
Less than 6 months	6	13	11
Between 6 and 11 months	6	6	6
Between 12 and 35 months	6	24	18
36 months or longer	84	57	65
Not Specified	0	1	1

Table 2. Continued

	Supervisors (%) <i>N</i> = 55	Subordinates (%) <i>N</i> = 131	Total (%) <i>N</i> = 186
<i>Position Description</i>			
Managerial/Professional	87	41	55
Administrative	6	11	9
Clerical	2	3	3
Technical	6	19	15
Other	0	25	18
Not Specified	0	1	1
<i>Employment Status</i>			
Part-time	4	20	15
Full-time	96	80	88
Not specified	0	0	0

Overall, responses were collected from a total of 13 organizations. In general, each of these organizations could be classified as a small businesses (less than 500 employees). The breakdown of responses across industries was as follows: Public Administration (17 %), Professional, Scientific, and Technical Services (50 %), Educational Services (17 %), Utilities (2 %), Health Care/Social Assistance (3 %), Retail Trade (2 %), and Food Service (8 %). As seen by these statistics, this sample is slightly biased in favor of Professional, Scientific, and Technical Service organizations. Given the variety of different industries that participated, however, it can be argued that this sample is still reasonably representative of the current work force.

Measures

A number of accepted measures were used to evaluate the constructs relevant to this study. Each of these measures is briefly described below. In addition, the means, standard deviations, and reliabilities observed for each scale are also displayed in Tables 4 -7.

Transformational Leadership. Podsakoff et al.'s (1990) Transformational Leadership Inventory (TLI) was used to measure transformational leadership behaviors in this study. This scale consisted of 22 items, and measured six dimensions of transformational leadership: articulating a vision, providing an appropriate model, fostering the acceptance of group goals, high performance expectations, providing individualized support, and intellectual stimulation. Although previous research supports the hypothesized six-factor structure (e.g., Podsakoff et al., 1996), three of the dimensions have been found to be highly correlated (articulating a vision, providing an appropriate model, and fostering the acceptance of group goals). As such, these three factors are sometimes combined to represent a “core” transformational leadership construct. Internal consistency reliabilities for each of the dimensions range from .82 to .87. In addition, the TLI has shown impressive validities with related constructs across several studies (e.g., Podsakoff et al., 1990; Podsakoff et al., 1996; Podsakoff et al., 2001). For the purposes of this study, each of the TLI dimensions were combined to create an overall index of transformational leadership. Specifically, this index was created by summing the individual dimension scores for each participant.

Leader-Member Exchange (LMX). LMX-quality was assessed using a modified version of the LMX7 (Graen, Novak, & Sommerkamp, 1982). This measure is by far the

most frequently used LMX measure, and is recommended by Graen & Uhl-Bien (1995) as the standard measure of LMX. The LMX7 consisted of seven items, and asked the respondent to indicate their answer to each item using a five-point Likert scale. Psychometric evidence for the measure provided by Gerstner & Day (1997) indicates internal consistency reliabilities are in the range of .79 to .89. In addition, acceptable validities for the measure have also been observed across multiple studies (e.g., Gerstner & Day, 1997; Podsakoff et al., 2001).

OCB. A modified version of the scales developed by Podsakoff and MacKenzie (1989) was used to measure OCB. This measure consisted of 24 items, and measured all five OCB dimensions identified by Organ (1988): Altruism, Conscientiousness, Sportsmanship, Courtesy, and Civic Virtue. Respondents were asked to indicate the degree to which they agreed with each item using a seven-point Likert scale. This scale ranged from (1) “strongly disagree” to (7) “strongly agree.” Numerous studies using the scale have shown that the measure possesses good validity as well as acceptable internal consistency reliability (e.g., MacKenzie, Podsakoff, & Fetter, 1991; Moorman, 1991; Moorman, Niehoff, & Organ, 1993). Confirmatory factor analysis results also provide evidence for the five-factor structure of the measure (Podsakoff et al., 1990).

OCB Motives. Participant motives for engaging in OCB was measured using Rioux and Penner’s (2001) Citizenship Motives Scale (CMS). This scale consisted of 30 items, and measured all three of the motives for engaging in OCB: (1) Prosocial Values, (2) Organizational Concern, and (3) Impression Management. Respondents were asked to rate on a scale ranging from “not at all important” to “extremely important” how influential each item was in their decision to engage in OCB. Psychometric evidence

provided by Rioux and Penner (2001) reports internal consistency reliabilities above .80, and test-retest reliabilities for each of the 2 factors above .70. In addition, the same three-factor structure for the measure has been replicated across 3 diverse samples.

Procedure

The majority of survey responses were collected and maintained via an online survey system. Approximately one week prior to the study, each participant received a brief introduction email that provided: (1) a short description of the study; (2) the time required to complete the survey (i.e., approximately 20 minutes); (3) a statement of assurance that each of their responses would be held confidential; and (4) contact information for the primary researcher. On the scheduled date of administration, each supervisor was sent an additional email containing the link to the online survey.

After accessing the survey, each supervisor was asked to enter a unique six-digit code of their own choosing. Next, they were instructed to enter the email addresses of up to four of their subordinates using the criteria presented in Table 3. After this information had been entered, the supervisors were directed to the rest of the survey which included items taken from the TLI, LMX7, and Podsakoff's OCB measure. Thus, each supervisor provided: (1) ratings of their own transformational leadership behaviors; (2) an estimate of the quality of their relationship with each of the subordinates they listed; and (3) ratings of each subordinate's OCB behaviors. Each supervisor was required to rate their subordinates using the same order that was used on the first page of the survey.

The online survey system was designed such that after the supervisor entered the email addresses of his/her subordinates, an email containing a link to the subordinate

Table 3. Supervisor Survey Instructions

1. Please select subordinates that you have supervised *at least 4 months*.
 2. Please select subordinates that feel you can provide *accurate* information about. For example, if you have supervised a particular subordinate for more than 4 months, but feel that you are not familiar enough with their behavior to provide accurate feedback, please *do not* include them in your final selection.
 3. Please try to select employees that, as a group, represent a *range of performance* (e.g., excellent, fair, and poor). In other words, *try not* to select all high performers or all low performers.
 4. Finally, please select only those subordinates that work at least *20 hours* per week.
-

version of the survey was immediately sent to each of the subordinates that were listed. The subordinate version included the TLI, the LMX7, Podsakoff's OCB measure, and the CMS. Thus, each subordinate provided: (1) ratings of their supervisor's transformational leadership behaviors; (2) an estimate of the quality of their relationship with their supervisor; (3) ratings of their own OCB behaviors; and (4) their own responses to the CMS. The six-digit code created by each subordinate's respective supervisor also appeared with the subordinate's final set of responses. In addition, a random code of 3 numbers ending with 1, 2, 3, or 4 automatically appeared immediately after this six-digit code. Taken together, these numbers served as the mechanism by which the subordinates' responses were matched-up with their supervisors.

After each survey was completed, responses were sent to a secure database that was only accessible to the principal investigator. A reminder email was also distributed to all participants encouraging them to complete the survey if they had not already done so by the specified date.

Because not all employees who were willing to participate in the study had access to the Internet at their place of employment, paper and pencil versions of the survey were also distributed. As a result, 27 percent of the sample completed the survey using this method. The procedure for these participants was basically the same as the one used for the online survey participants. In most cases, however, the supervisor was responsible for distributing surveys to each of his/her subordinates. Each participant was also provided with a self-addressed, stamped envelope, and was instructed to mail completed versions of the survey back to the Psychology Department at the University of South Florida.

Chapter Three

Results

Preliminary Steps and Analyses

Before formal testing of the hypotheses, further examination of the final sample was conducted. Specifically, if a respondent failed to answer an item included in a scale, the missing value was replaced with the median value of the scale. This procedure was used when the proportion of missing items for the scale was not above ten percent. As a whole, this procedure was applied to approximately one percent of the sample. In addition, no participants included in the final sample failed to respond to more than ten percent of the items for any given scale.

Further analyses were also conducted to determine if it was appropriate to pool the responses from those participants who completed the online version of the survey with those who took the paper and pencil version. Specifically, a Box's M test was performed to assess if variation between each of the variables were the same for the different groups. Results of this test were significant ($\chi^2 = 197.99, p < .01$), suggesting that caution should be taken when pooling the covariance matrices associated with each group. Although this is a cause for concern, it should be noted that the number of participants who completed the paper-and-pencil version of the survey (35) was significantly smaller in comparison to those who completed the online version (96). In addition, Stevens (2002) provides statistical evidence that Box's M is extremely sensitive to normality. Therefore, it is possible that a lack of normality may have caused this result,

as opposed to unequal covariance matrices in the population. Combined with the fact that both groups underwent almost identical procedures, it was determined that the results of the Box's M test alone did not merit preventing the pooling of these two groups.

Variable Descriptives

The means, standard deviations, and reliabilities for each of the measures included in this study are displayed in Tables 4 - 7. Internal consistency estimates ranged from a low of .66 (self-reported Conscientiousness) to a high of .96 (subordinate rated transformational leadership). In general, these estimates indicate that adequate reliability was observed for each of the measures. In addition, ratings were similar across measures for both subordinates and supervisors. That is, responses tended to occur toward the high end of the scale for both groups. Finally, although some variation was observed, the standard deviations tended to be somewhat small for the majority of the measures.

It was also observed that each supervisor provided feedback on an average on 2.24 subordinates. The only exception was one supervisor, who provided feedback on ten subordinates. In addition, the median amount of time that a supervisor reported supervising a subordinate was 24 months.

Zero-order Correlations

As shown in Tables 5 -7, a number of significant relationships were observed between the variables included in this study. Beginning with transformational leadership, subordinate reports of transformational leadership correlated significantly with all five self-report dimensions of OCB. These correlations ranged from .27 ($p < .01$) for the Courtesy dimension to .33 ($p < .01$) for the Altruism dimension. A similar trend was observed using supervisor-reports of OCB, although these correlations were somewhat

Table 4. Descriptive Statistics for Study Variables

	Subordinate				Supervisor			
	Mean	SD	Min	Max	Mean	SD	Min	Max
Transformational Leadership	123.05	21.85	48.00	154.00	126.91	13.61	88.00	151.00
LMX-quality	28.11	5.35	13.00	35.00	29.15	3.79	21.00	35.00
Prosocial Values	37.34	7.84	13.00	50.00	--	--	--	--
Organizational Concern	39.03	8.36	13.00	50.00	--	--	--	--
Impression Management	31.50	8.64	10.00	50.00	--	--	--	--
Altruism	29.68	3.50	19.00	35.00	28.69	5.20	9.00	35.00
Conscientiousness	29.65	3.90	19.00	35.00	29.15	5.22	9.00	35.00
Sportsmanship	28.64	5.15	8.00	35.00	27.15	6.70	8.00	35.00
Courtesy	30.10	3.20	20.00	35.00	28.66	4.96	13.00	35.00
Civic Virtue	21.98	3.94	7.00	28.00	21.20	4.15	11.00	28.00

smaller in magnitude. Specifically, subordinate reports of transformational leadership correlated significantly with four of the five supervisor-reported dimensions:

Conscientiousness (.20, $p < .05$), Sportsmanship (.21, $p < .05$), Courtesy (.19, $p < .05$), and Civic Virtue (.18, $p < .05$).

With regard to OCB motives, significant relationships were found between subordinate reports of transformational leadership and both Organizational Concern (.44, $p < .01$) and Prosocial Values (.24, $p < .01$). Although both of these relationships were significant, transformational leadership showed a significantly stronger association with the Organizational Concern Motive [$t(130) = 3.16$, $p < .01$]. In contrast, no relationship was observed between subordinate reported transformational leadership and the Impression Management Motive (.05, $p > .05$).

Table 5. Variable Reliabilities and Intercorrelations for Self Ratings of OCB (N = 131)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Transformational Leadership (subordinate) (.96)												
2. Transformational Leadership (supervisor) .16 (.92)												
3. LMX-quality (subordinate) .77** .05 (.90)												
4. LMX-quality (supervisor) .19* .37** .26** (.79)												
5. Prosocial Values Motive .24** .01 .28** -.08 (.92)												
6. Organizational Concern Motive .44** .15 .39** .18* .70** (.94)												
7. Impression Management Motive .05 .06 .08 -.20* .52** .39** (.89)												
8. Altruism .33** -.06 .34** .04 .56** .68** .16 (.76)												
9. Conscientiousness .31** .02 .24** .16 .32** .55** .10 .54** (.66)												
10. Sportsmanship .29** -.01 .21* .04 .27** .36** -.07 .36** .44** (.81)												
11. Courtesy .27** .00 .20* -.09 .54** .55** -.13 .63** .48** .47** (.73)												
12. Civic Virtue .32** .05 .37* .10 .49** .61** .16 .57** .49** .35** .53** (.71)												

* Statistically significant at the .05 alpha level. ** Statistically significant at the .01 alpha level.

Table 6. Variable Reliabilities and Intercorrelations for Supervisor Ratings of OCB ($N = 131$)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Transformational Leadership (subordinate)	(.96)											
2. Transformational Leadership (supervisor)	.16	(.92)										
3. LMX-quality (subordinate)	.77**	.05	(.90)									
4. LMX-quality (supervisor)	.19*	.37**	.26**	(.79)								
5. Prosocial Values Motive	.24**	.01	.28**	-.08	(.92)							
6. Organizational Concern Motive	.44**	.15	.39**	.18*	.70**	(.94)						
7. Impression Management Motive	.05	.06	.08	-.20*	.52**	.39**	(.89)					
8. Altruism	.14	.27**	.22*	.50**	.18*	.34**	-.08	(.85)				
9. Conscientiousness	.20*	.32**	.14	.44**	.07	.24**	-.05	.80**	(.83)			
10. Sportsmanship	.21*	-.01	.19*	.19*	.09	.17	-.06	.42**	.53**	(.88)		
11. Courtesy	.19*	.10	.23**	.32**	.14	.25**	-.06	.71**	.73**	.72**	(.86)	
12. Civic Virtue	.18*	.24**	.23**	.36**	.29**	.43**	.01	.62**	.53**	.49**	.55**	(.75)

* Statistically significant at the .05 alpha level. ** Statistically significant at the .01 alpha level.

Table 7. Variable Reliabilities and Intercorrelations for Self and Supervisor Ratings of OCB (N = 131)

Variable	1	2	3	4	5	6	7	8	9	10
1. Altruism (self)	(.76)									
2. Conscientiousness (self)	.54**	(.66)								
3. Sportsmanship (self)	.36**	.44**	(.81)							
4. Courtesy (self)	.63**	.48**	.47**	(.73)						
5. Civic Virtue (self)	.57**	.49**	.35**	.53**	(.71)					
6. Altruism (supervisor)	.29**	.33**	.21**	.19*	.33**	(.85)				
7. Conscientiousness (supervisor)	.14	.37**	.19*	.17	.25**	.80**	(.83)			
8. Sportsmanship (supervisor)	.08	.19*	.29**	.18*	.16	.42**	.53**	(.88)		
9. Courtesy (supervisor)	.18*	.25**	.26**	.18*	.24**	.71**	.73**	.73**	(.86)	
10. Civic Virtue (supervisor)	.32**	.28**	.22*	.32**	.44**	.62**	.53**	.49**	.55**	(.75)

* Statistically significant at the .05 alpha level. ** Statistically significant at the .01 alpha level.

Surprisingly, results revealed that subordinate reports of transformational leadership were not significantly related to supervisor reports (.16, $p > .05$). Supervisor reports of transformational leadership also failed to correlate significantly with any of the three OCB Motives. In contrast, significant relationships were observed between supervisor reports of transformational leadership and three of the five supervisor-reported OCB dimensions: Altruism (.27, $p < .01$), Conscientiousness (.32, $p < .01$), and Civic Virtue (.24, $p < .05$).

In general, similar findings were observed with regard to perceptions of LMX-quality. Specifically, subordinate perceptions of LMX-quality correlated significantly with all five self-reported OCB dimensions. These correlations ranged from .20 ($p < .05$) for the Courtesy dimension to .37 ($p < .01$) for the Civic Virtue dimension. In addition, significant relationships were also observed between subordinate LMX perceptions and four of the five supervisor-reported OCB dimensions: Altruism (.22, $p < .05$), Sportsmanship (.19, $p < .05$), Courtesy (.23, $p < .01$), and Civic Virtue (.23, $p < .01$). Similar to transformational leadership, subordinate perceptions of LMX-quality were also significantly related to both the Organizational Concern (.39, $p < .01$) and Prosocial Values Motives (.28, $p < .01$). However, although slightly higher in magnitude, the association between LMX-quality and the Organizational Concern Motive was not significantly stronger in comparison to the Prosocial Values Motive. Finally, no significant relationship was found between subordinate perceptions of LMX-quality and the Impression Management Motive (.08, $p > .05$).

Unlike perceptions of transformational leadership, subordinate reports of LMX-quality were significantly related to supervisor reports (.26, $p < .01$). In addition,

supervisor reports of LMX correlated significantly with both the Organizational Concern (.18, $p < .05$) and Impression Management Motives (-.20, $p < .05$), as well as the five supervisor reported dimensions of OCB: Altruism (.50, $p < .01$), Conscientiousness (.44, $p < .01$), Sportsmanship (.19, $p < .05$), Courtesy (.32, $p < .01$), and Civic Virtue (.36, $p < .01$). Finally, perceptions of LMX-quality and transformational leadership correlated significantly across both sources, subordinate (.77, $p < .01$) and supervisor (.37, $p < .01$).

Similar to previous research, a strong association was observed between the Organizational Concern Motive and Prosocial Values Motive (.70, $p < .01$). In addition, the Impression Management Motive showed significant correlations with both the Organizational Concern (.39, $p < .01$) and Prosocial Values (.52, $p < .01$) Motives. Significant relationships were also observed between all five subordinate reported OCB dimensions and both Prosocial Values and Organizational Concern. Specifically, these correlations ranged from .36 ($p < .01$) to .68 ($p < .01$) for the Organizational Concern Motive, and from .27 ($p < .01$) to .56 ($p < .01$) for the Prosocial Values Motive. Regarding supervisor reports of OCB, the Organizational Concern Motive correlated significantly with four of the five dimensions: Altruism (.34, $p < .01$), Conscientiousness (.24, $p < .01$), Courtesy (.25, $p < .01$), and Civic Virtue (.43, $p < .01$). In contrast, the Prosocial Values Motive correlated significantly with only two OCB dimensions: Altruism (.18, $p < .05$) and Civic Virtue (.29, $p < .01$). No significant relationships were found between the Impression Management Motive and any of the five OCB dimensions.

It is interesting to note that both the Organizational Concern and Prosocial Values Motives correlated significantly stronger with the Altruism dimension (in comparison to the Conscientiousness dimension) across both self [$t(130) = 2.19$, $p < .05$] and supervisor

[$t(130) = 1.98, p < .05$] reports. This finding is significant in the context of previous research on motives, and will be addressed later in the Discussion section of this paper.

Finally, Table 7 also displays the correlations between each of the five OCB dimensions across both subordinate and supervisor reports. Each dimension correlated with itself across sources within the range of .18 ($p < .05$) for the Courtesy dimension to .44 ($p < .01$) for the Civic Virtue dimension.

Analysis Approach

In the case of each mediational hypothesis (Hypotheses 2, 3, 4, 5, and 7) Baron and Kenny's (1986) procedure involving a series of four regression equations was used to test for mediation. In the first equation, the relevant OCB dimension was regressed onto the antecedent variable. In the second equation, the relevant OCB motive, or predicted mediator, was regressed onto the antecedent variable. In the third equation, the relevant OCB dimension was regressed onto the relevant OCB motive. Finally, in the fourth equation, the relevant OCB dimension was regressed onto both the OCB motive and antecedent variable, with the relevant OCB motive being entered first into the equation.

At each stage, the beta coefficients were examined for significance. Mediation occurred when four criteria were met: (1) the antecedent variable was shown to significantly affect the relevant OCB dimension (equation 1); (2) the antecedent variable was shown to significantly affect the relevant motive (equation 2); (3) the relevant motive was shown to significantly affect the relevant OCB dimension (equation 3); and (4) the effect of the antecedent variable on the relevant OCB dimension was significantly less in the fourth equation than in the first. If one or more of the specified criteria were unmet, then mediation was said not to have occurred.

In cases where partial mediation was observed using Baron and Kenny's (1986) test, the Aroian version (1944/1947) of the Sobel test (1982) was also performed to further test for the significance of the mediation effect. In general, the Sobel test determined the significance of the intervening variable effect by first calculating the product of the path coefficient associated with the independent variable and the mediator (α) and the path coefficient associated with the mediator and the dependent variable (β). The product of these two terms, $\alpha \beta$, was then divided by its standard error, and compared to a standard normal distribution (see MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002, for a review).

In the case of Hypothesis 8, the moderating effect of the Prosocial Values Motive on the relationship between LMX-quality and OCB was also tested using Baron and Kenny's (1986) procedure. It was assumed that the effect of LMX-quality on Altruism would change linearly with respect to the moderator. To test this hypothesis, the dependent variable (Altruism) was regressed onto: (1) the independent variable (LMX-quality), (2) the predicted moderator (Prosocial Values), and (3) the product of these two variables (LMX-quality and Prosocial Values). Moderation was indicated by the significance of the beta-weight associated with the product term while controlling for the individual effects of the independent and moderator variables.

Finally, in the cases of each mediational hypothesis, separate analyses were performed using the Organizational Concern Motive and Prosocial Values Motive. This approach was adopted due to the finding that both motives significantly correlated with transformational leadership, LMX-quality, and various dimensions of OCB. Both of these motives are discussed in terms of their comparative mediational effects later in this paper.

Also, unless otherwise mentioned, all analyses investigating the relationship between leadership perceptions (i.e., transformational leadership or LMX-quality) and additional criterion measures (e.g., motives, OCB) were based on subordinate perceptions of leadership. This second approach was justified based on the finding that subordinate reports of transformational leadership and LMX-quality correlated more consistently, in comparison to supervisor reports of leadership, with both the motives and self- and supervisor-reports of OCB. A separate section is devoted to the comparison of subordinate versus supervisor-reported results.

Hypothesis 1

The first hypothesis predicted a significant, positive relationship between supervisor transformational leadership behavior and subordinate Organizational Concern. As shown in Table 5, results supported this prediction using subordinate reports of transformational leadership. Specifically, a .44 correlation ($p < .01$) was observed between subordinate ratings of transformational leadership behavior and the Organizational Concern Motive. In contrast, when transformational leadership was rated by the leaders themselves, these perceptions were not significantly related with the Organizational Concern Motive ($r = .15, p > .05$).

Hypothesis 2

Self-reports of OCB. The second hypothesis predicted that subordinate Organizational Concern would mediate the relationship between supervisor transformational leadership behavior and subordinate Conscientiousness. Using Baron and Kenny's (1986) approach, the first two regression equations revealed significant relationships between transformational leadership and both the Conscientiousness

dimension ($\beta = .31, p < .01$) and the Organizational Concern Motive ($\beta = .44, p < .01$). In addition, it was shown in the third equation that the Organizational Concern Motive significantly affected the Conscientiousness dimension ($\beta = .55, p < .01$). When Conscientiousness was regressed onto both the Organizational Concern Motive and transformational leadership, respectively, the beta-weight associated with transformational leadership showed a decrease from .31 ($p < .01$) in the first equation (which included transformational leadership alone) to .09 ($p > .05$) in the fourth equation (which included the Organizational Concern Motive and transformational leadership, respectively). Based on Baron and Kenny's (1986) criteria, these results provided relatively strong evidence for full mediation (see Table 8).

Because significant relationships were also observed between transformational leadership, the Prosocial Values Motive, and Conscientiousness, this same series of steps was performed using subordinate Prosocial Values as the predicted mediator. As can be seen in Table 8, the beta-weight associated with transformational leadership showed a decrease from .31 ($p < .01$) in the first equation to .25 ($p < .01$) in the fourth equation. These results provide evidence for partial mediation, and were also confirmed by results of the Sobel test ($z = 2.00, p < .05$).

Supervisor-reports of OCB. As shown in Table 9, support was also found for Hypothesis 2 using supervisor-reports of Conscientiousness. Specifically, the first two regression equations revealed significant relationships between transformational leadership and both the Conscientiousness dimension ($\beta = .20, p < .05$) and the Organizational Concern Motive ($\beta = .44, p < .01$). In addition, it was shown in the third equation that the Organizational Concern Motive significantly affected the

Table 8. Motives Mediator Analysis for Transformational Leadership and Self-reports of OCB

Dependent Variable: Conscientiousness				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.31**		.31	.10**
Step4: OC Motive, TFL	.09	.51**	.56	.31**
Dependent Variable: Conscientiousness				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.31**		.31	.10**
Step4: PV Motive, TFL	.25**	.26**	.40	.16**
Dependent Variable: Sportsmanship				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.29**		.29	.08**
Step4: OC Motive, TFL	.16	.29**	.39	.15**
Dependent Variable: Sportsmanship				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.29**		.29	.08**
Step4: PV Motive, TFL	.24**	.22**	.36	.13**
Dependent Variable: Courtesy				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.27**		.27	.07**
Step4: OC Motive, TFL	.03	.54**	.55	.30**
Dependent Variable: Courtesy				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.27**		.27	.07**
Step4: PV Motive, TFL	.15	.50**	.55	.31**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.32**		.32	.10**
Step4: OC Motive, TFL	.07	.58**	.61	.37**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.32**		.32	.10**
Step4: PV Motive, TFL	.21**	.44**	.53	.28**

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

Table 9. Motives Mediator Analysis for Transformational Leadership and Supervisor-reports of OCB

Dependent Variable: Conscientiousness				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.20*		.20	.04*
Step4: OC Motive, TFL	.12	.19	.26	.07*
Dependent Variable: Courtesy				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.19*		.19	.04*
Step4: OC Motive, TFL	.10	.21*	.27	.07**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.18*		.18	.03*
Step4: OC Motive, TFL	-.01	.44**	.43	.19**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.18*		.18	.03*
Step4: PV Motive, TFL	.12	.26**	.31	.10**

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

Conscientiousness dimension ($\beta = .24, p < .01$). When Conscientiousness was regressed onto both the Organizational Concern Motive and transformational leadership, respectively, the beta-weight associated with transformational leadership showed a decrease from .20 ($p < .05$) to .12 ($p > .05$). Thus, these results provided evidence for full mediation. Results did not support the Prosocial Values Motive as a mediator, however, as no relationship was found between this motive and supervisor reports of Conscientiousness ($\beta = .07, p > .05$).

In the case of Hypothesis 2, both motives received empirical support as mediators. However, based on the strength of the mediational effect associated with the

Organizational Concern Motive across sources, it can be argued that subordinate Organizational Concern was the primary mediator in this relationship.

Hypothesis 3

Self-reports of OCB. Similar to the second hypothesis, Hypothesis 3 predicted that subordinate Organizational Concern would mediate the relationship between transformational leadership behavior and the Civic Virtue dimension. The first two regression equations revealed significant relationships between transformational leadership and both the Civic Virtue dimension ($\beta = .32, p < .01$) and the Organizational Concern Motive ($\beta = .44, p < .01$). In addition, it was shown in the third equation that the Organizational Concern Motive significantly affected the Civic Virtue dimension ($\beta = .61, p < .01$). When Civic Virtue was regressed onto both the Organizational Concern Motive and transformational leadership, respectively, the beta-weight associated with transformational leadership showed a decrease from $.32 (p < .01)$ to $.07 (p > .05)$. Similar to Hypothesis 2, these results again provided evidence for full mediation for the Organizational Concern Motive.

This same series of steps was also performed with the Prosocial Values Motive. Again, evidence for partial mediation was found, as the beta-weight associated with transformational leadership showed a decrease from $.32 (p < .05)$ in the first equation (which included transformational leadership alone) to $.21 (p < .05)$ in the fourth equation (which included the Prosocial Values Motive and transformational leadership, respectively). These results were also confirmed by results of the Sobel test ($z = 2.46, p < .05$).

Supervisor-reports of OCB. Analyses based on supervisor-reports of Civic Virtue revealed similar results. That is, the first two regression equations revealed significant relationships between transformational leadership and both the Civic Virtue dimension ($\beta = .18, p < .05$) and the Organizational Concern Motive ($\beta = .44, p < .01$). In addition, it was shown in the third equation that the Organizational Concern Motive significantly affected the Civic Virtue dimension ($\beta = .43, p < .01$). When Civic Virtue was regressed onto both the Organizational Concern Motive and transformational leadership, respectively, the beta-weight associated with transformational leadership showed a decrease from $.18 (p < .05)$ to $-.01 (p > .05)$. Based on Baron and Kenny's (1986) criteria, these results provided evidence for full mediation.

Similar results were found substituting the Prosocial Values Motive as the predicted mediator. Specifically, previous analyses revealed significant relationships between transformational leadership and both the Prosocial Values Motive and supervisor-reports of Civic Virtue. In addition, when Civic Virtue was regressed onto the Prosocial Values Motive, this relationship was also found to be significant ($\beta = .29, p < .01$). When Civic Virtue was regressed onto both the Prosocial Values Motive and transformational leadership, respectively, the beta-weight associated with transformational leadership showed a decrease from $.18 (p < .05)$ to $.12 (p > .05)$. These results provided evidence for the Prosocial Values Motive as a full mediator in this antecedent-OCB relationship.

Thus, although both motives were associated with mediational effects in the case of this hypothesis, results again supported the Organizational Concern Motive as the primary mediator. These findings provide empirical evidence for Hypothesis 3.

Hypothesis 4

Self-reports of OCB. The fourth hypothesis predicted that subordinate Organizational Concern would mediate the relationship between supervisor transformational leadership behavior and subordinate Courtesy. The first two regression equations revealed significant relationships between transformational leadership and both the Courtesy dimension ($\beta = .27, p < .01$) and the Organizational Concern Motive ($\beta = .44, p < .01$). In addition, it was shown in the third equation that the Organizational Concern Motive significantly affected the Courtesy dimension ($\beta = .55, p < .01$). When Courtesy was regressed on to both the Organizational Concern Motive and transformational leadership, respectively, the beta-weight associated with transformational leadership showed a decrease from $.27 (p < .01)$ to $.03 (p > .05)$. This finding provides evidence of full mediation.

This same series of steps was also performed with the Prosocial Values Motive. In contrast to previous results, however, evidence for full mediation was observed. Specifically, the beta-weight associated with transformational leadership showed a decrease from $.27 (p < .01)$ in the first equation (which included transformational leadership alone) to $.15 (p > .05)$ in the fourth equation (which included the Prosocial Values Motive and transformational leadership, respectively). These results again conform to the mediational criteria outlined by Baron and Kenny (1986) regarding full mediation.

Supervisor-reports of OCB. Supervisor-reports of Courtesy were also significantly associated with transformational leadership ($\beta = .19, p < .05$) and the Organizational Concern Motive ($\beta = .25, p < .01$). When Courtesy was regressed onto

both the Organizational Concern Motive and transformational leadership, respectively, the beta-weight associated with transformational leadership decreased to .10 ($p > .05$). Thus, support was provided for the Organizational Concern Motive as a full mediator. In contrast, no relationship was found between the Prosocial Values Motive and supervisor-reports of Courtesy. As a result, mediational analyses were not conducted with the Prosocial Values Motive with regard to the Courtesy dimension.

In the case of Hypothesis 4, it was again observed that both the Organizational Concern and Prosocial Values Motives were associated with mediational effects. However, the relative reduction in the size of the beta-weights from the first to the fourth equations again supports the Organizational Concern Motive as the primary mediator. Thus, these results lend support to Hypothesis 4.

Hypothesis 5

Self-reports of OCB. Finally, results of this study also supported the fifth hypothesis, which predicted a mediated relationship between supervisor transformational leadership behavior and subordinate Sportsmanship using the Organizational Concern Motive. Using Baron and Kenny's (1986) procedure, the first two regression equations revealed significant relationships between transformational leadership and both the Sportsmanship dimension ($\beta = .29, p < .01$) and the Organizational Concern Motive ($\beta = .44, p < .01$). The third equation also revealed that the Organizational Concern Motive significantly affected the Sportsmanship dimension ($\beta = .36, p < .01$). When Sportsmanship was regressed onto both the Organizational Concern Motive and transformational leadership, respectively, the beta-weight associated with

transformational leadership showed a decrease from .29 ($p < .01$) to .16 ($p > .05$). These results again provide evidence for full mediation.

In contrast, mediational support was not found using the Prosocial Values Motive. Although the beta-weight associated with transformational leadership showed a small decrease from .29 ($p < .01$) in the first equation (which included transformational leadership alone) to .24 ($p < .01$) in the fourth equation (which included the Prosocial Values Motive and transformational leadership, respectively), results of the Sobel test did not support partial mediation ($z = 1.81, p > .05$).

Supervisor-reports of OCB. In contrast to the self-report results, no evidence was found for a correlation between supervisor reports of Sportsmanship and either the Organizational Concern (.17, $p < .05$) or Prosocial Values (.09, $p > .05$) Motives. Due to the absence of these relationships, mediational analyses were not performed using this criterion. Thus, Hypothesis 5 was only supported using self-reports of Sportsmanship.

Hypothesis 6

Hypothesis 6 dealt specifically with perceptions of LMX-quality, and predicted that LMX-quality would correlate significantly with subordinate Prosocial Values. This hypothesis was supported using subordinate reports of LMX-quality (.28, $p < .01$). In contrast, no relationship was observed with regard to supervisor perceptions of LMX-quality (-.08, $p > .05$).

Hypothesis 7

Self-reports of OCB. Based on the support found for Hypothesis 6, Hypothesis 7 predicted that subordinate Prosocial Values would mediate the relationship between LMX-quality and the Altruism dimension. This hypothesis was partially supported, as

shown in Table 10. Specifically, the first two regression equations revealed significant relationships between LMX-quality and both the Altruism dimension ($\beta = .34, p < .01$) and the Prosocial Values Motive ($\beta = .28, p < .01$). In addition, it was shown in the third equation that the Prosocial Values Motive significantly affected the Altruism dimension ($\beta = .56, p < .01$). When Altruism was regressed onto both the Prosocial Values Motive and LMX-quality, respectively, the beta-weight associated with LMX-quality showed a decrease from $.34 (p < .01)$ to $.20 (p < .01)$. Because the beta-weight associated with LMX-quality remained significant in the fourth equation, evidence was provided for partial mediation. Results of the Sobel test reinforced this conclusion ($z = 2.98, p < .01$).

As results showed a significant correlation between LMX-quality and the Organizational Concern Motive, this motive was also tested as a possible mediator. In contrast to the Prosocial Values Motive, evidence for full mediation was observed. Specifically, the beta-weight associated with transformational leadership showed a decrease from $.34 (p < .01)$ in the first equation (which included transformational leadership alone) to $.09 (p > .05)$ in the fourth equation (which included the Organizational Concern Motive and transformational leadership, respectively).

Table 10. Motives Mediator Analysis for LMX-quality and Self-reports of Altruism

Dependent Variable: Altruism				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.34**		.34	.12**
Step4: PV Motive, LMX-quality	.20**	.50**	.59	.35**
Dependent Variable: Altruism				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.34**		.34	.12**
Step4: OC Motive, LMX-quality	.09	.65**	.69	.47**

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

Supervisor-reports of OCB. Results based upon supervisor-reports of Altruism further supported the Organizational Concern Motive as the primary mediator (see Table 11). Specifically, the first two regression equations revealed significant relationships between LMX-quality and both the Altruism dimension ($\beta = .22, p < .05$) and the Prosocial Values Motive ($\beta = .28, p < .01$). In addition, it was shown in the third equation that subordinate Prosocial Values significantly affected the Altruism dimension ($\beta = .18, p < .05$). When Altruism was regressed onto both the Prosocial Values Motive and LMX-quality, respectively, the beta-weight associated with LMX-quality showed a decrease from $.22 (p < .05)$ to $.18 (p < .05)$. Although this finding provided evidence for partial mediation based on Baron and Kenny's (1986) procedure, results of the Sobel test were not significant ($z = 1.29, p > .05$). Therefore, these results did not provide strong evidence for the Prosocial Values Motive as a partial mediator.

In contrast, evidence for full mediation was found for the Organizational Concern Motive. That is, the beta-weight associated with transformational leadership showed a decrease from $.22 (p < .05)$ in the first equation (which included transformational leadership alone) to $.10 (p > .05)$ in the fourth equation (which included the Organizational Concern Motive and transformational leadership, respectively).

Due to the relative reduction in the size of the beta-weights associated with the Organizational Concern and Prosocial Values Motives, it can be argued that Hypothesis 7 only received partial support. While results were supportive of the Prosocial Values Motive as a partial mediator in the relationship between LMX-quality and Altruism, findings more fully supported subordinate Organizational Concern as the primary mediator.

Table 11. Motives Mediator Analysis for LMX-quality and Supervisor-reports of Altruism

Dependent Variable: Altruism				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.22*		.22	.05*
Step4: PV Motive, LMX-quality	.18*	.13	.25	.06*
Dependent Variable: Altruism				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.22*		.22	.05*
Step4: OC Motive, LMX-quality	.10	.31**	.35	.13**

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

Hypothesis 8

Self-reports of OCB. Alternative to Hypothesis 7, Hypothesis 8 predicted that the Prosocial Values Motive would moderate the relationship between LMX-quality and the Altruism dimension. Results did not support this prediction, as the beta-weight associated with the LMX*Prosocial Values interaction term was not significant ($\beta = -.40$, $p > .05$) once LMX-quality and the Prosocial Values Motive were accounted for in the regression equation. Similar results were also observed for the Organizational Concern Motive ($\beta = -.25$, $p > .05$).

Supervisor-reports of OCB. Hypothesis 8 was also tested using supervisor-reports of Altruism. Again, results did not support a moderated relationship with regard to the Prosocial Values Motive. In particular, the beta-weight associated with the LMX*Prosocial Values interaction term was not significant ($\beta = -.66$, $p > .05$) once LMX-quality and the Prosocial Values Motive were accounted for in the regression equation. This effect was also observed using the Organizational Concern Motive ($\beta = -.80$, $p > .05$).

Additional Analyses

Based on additional relationships observed in this study (e.g., LMX-quality and various dimensions of OCB), further analyses were conducted to learn more about the connection between leadership, motives, and OCB. The results of these analyses are described below.

Transformational Leadership, Altruism, and the OC and PV Motives. As mentioned, a significant correlation (.33, $p < .01$) was observed between subordinate perceptions of transformational leadership and self-reports of Altruism. To further investigate the nature of this relationship, additional mediational analyses were conducted using both the Organizational Concern and Prosocial Values Motives (see Table 12).

Beginning with the Organizational Concern Motive, results were supportive of full mediation. Specifically, the beta-weight associated with transformational leadership showed a decrease from .33 ($p < .01$) in the first equation (which included transformational leadership alone) to .04 ($p > .05$) in the fourth equation (which included the Organizational Concern Motive and transformational leadership, respectively).

In contrast, results supported the Prosocial Values Motive as a partial mediator. Specifically, the beta-weight associated with transformational leadership showed a decrease from .33 ($p < .01$) in the first equation (which included transformational leadership alone) to .21 ($p < .01$) in the fourth equation (which included the Prosocial Values Motive and transformational leadership, respectively). In addition, results of the Sobel test supported this conclusion ($z = 2.55$, $p < .05$).

Table 12. Motives Mediator Analysis for Transformational Leadership and Self-reports of Altruism

Dependent Variable: Altruism				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.33**		.33	.11**
Step4: OC Motive, TFL	.04	.67**	.69	.47**
Dependent Variable: Altruism				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: TFL	.33**		.33	.11**
Step4: PV Motive, TFL	.21**	.51**	.60	.36**

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

LMX-quality, OCB, and Motives. It was also observed that LMX-quality related positively to all five self-reported OCB dimensions, and, with the exception of Conscientiousness, all five supervisor-reported dimensions. Additional analyses were performed to identify the nature of these relationships; specifically, to determine whether the Organizational Concern or Prosocial Values Motives served as a primary mediator.

The results of each of the regression analyses, including the beta-coefficients and their associated significance levels, are displayed in Tables 13 and 14. With the exception of Civic Virtue, full mediation was observed regarding both motives for each of the self-report OCB dimensions. However, in each case, the relative decrease in the beta-weights from the first to the fourth equations was greatest for the Organizational Concern Motive. These results argue for the subordinate Organizational Concern as the primary mediator, although the Prosocial Values Motive was also associated with significant mediational effects.

In the case of self-reported Civic Virtue, both motives were associated with partial mediation. This finding was also supported by results of the Sobel test

Table 13. Motives Mediator Analysis for LMX-quality and Self-reports of OCB

Dependent Variable: Conscientiousness				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.24**		.24	.06**
Step4: OC Motive, LMX-quality	.03	.54**	.55	.31**
Dependent Variable: Conscientiousness				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.24**		.24	.06**
Step4: PV Motive, LMX-quality	.16	.27**	.36	.13**
Dependent Variable: Sportsmanship				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.21*		.21	.05*
Step4: OC Motive, LMX-quality	.09	.32**	.37	.14**
Dependent Variable: Sportsmanship				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.21**		.21	.05*
Step4: PV Motive, LMX-quality	.15	.23**	.31	.10**
Dependent Variable: Courtesy				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.20*		.20	.04*
Step4: OC Motive, LMX-quality	-.02	.56**	.55	.30**
Dependent Variable: Courtesy				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.20**		.20	.04*
Step4: PV Motive, LMX-quality	.05	.52**	.54	.29**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.37**		.37	.13**
Step4: OC Motive, LMX-quality	.15*	.55**	.62	.39**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.37**		.37	.13**
Step4: PV Motive, LMX-quality	.25**	.42**	.55	.30**

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

Table 14. Motives Mediator Analysis for LMX-quality and Supervisor-reports of OCB

Dependent Variable: Courtesy				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.23**		.23	.05**
Step2: OC Motive, LMX-quality	.16	.19*	.29	.08**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.23**		.23	.05**
Step2: OC Motive, LMX-quality	.07	.40**	.44	.19**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.23**		.23	.05**
Step2: PV Motive, LMX-quality	.16	.24**	.33	.11**

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

[Organizational Concern Motive ($z = 3.98$, $p < .01$), Prosocial Values Motive ($z = 2.82$, $p < .05$)]. Again, however, the largest decrease in the value of the beta-weights was associated with the Organizational Concern Motive. This result would again support subordinate Organizational Concern as the primary mediator in this relationship.

Supervisor-reports of OCB displayed a similar trend. As mentioned, LMX-quality correlated significantly with four of the five OCB dimensions (the exception was Conscientiousness). Of these, subsequent mediational analyses were performed with the Courtesy and Civic Virtue dimensions (mediation was not attempted with Sportsmanship, as supervisor-reports of this dimension failed to correlate with either the Prosocial Values or Organizational Concern Motive). As can be seen in Table 14, evidence for full mediation was observed for the Organizational Concern Motive regarding both the Courtesy and Civic Virtue dimensions. In addition, the Prosocial Values Motive was found to fully mediate the relationship between LMX-quality and Civic Virtue. In the

case of this dimension, however, the relative decrease in the value of the beta-weights was larger for the Organizational Concern Motive in comparison to the Prosocial Values Motive.

Mediational Analyses from the Supervisors' Leadership Perspective

As mentioned, subordinate and supervisor perceptions of leadership displayed differential relationships with a number of criteria. For example, although subordinate perceptions of transformational leadership correlated significantly with both the Organizational Concern and Prosocial Values Motives, these relationships did not exist when transformational leadership was measured from the perspective of the supervisor. As such, mediational analyses were only conducted using subordinate reports of transformational leadership.

The case was somewhat different for LMX-quality. Specifically, significant relationships were observed between supervisor perceptions of LMX-quality and both the Organizational Concern and Impression Management Motives, as well as the five supervisor-reported OCB dimensions. Therefore, mediational analyses were conducted using the Organizational Concern Motive (no relationship was found between the Impression Management Motive and supervisor-reported OCB) and supervisor-reported Altruism, Conscientiousness, Courtesy, and Civic Virtue. Sportsmanship was not included in these analyses, as the Organizational Concern Motive failed to significantly correlate with this dimension.

As can be seen in Table 15, the beta-weights associated with LMX-quality dropped slightly from the first regression equation to the fourth for each of the OCB dimensions tested. Although these results are evidence for partial mediation according to

Baron and Kenny's (1986) criteria, results of the Sobel test argued against partial mediation for each dimension (Altruism, $z = 1.73$, $p > .05$; Conscientiousness, $z = 1.38$, $p > .05$; Courtesy, $z = 1.50$, $p > .05$; Civic Virtue, $z = 1.87$, $p > .05$). Thus, given these results and the relatively small decrease in the value of the beta-weights, it can be argued that the Organizational Concern Motive was not a mediator in these relationships.

Table 15. Motives Mediator Analysis Based on the Supervisors' Perspective of LMX-quality and OCB.

Dependent Variable: Altruism				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.50**		.50	.25**
Step4: OC Motive, LMX-quality	.45**	.26**	.56	.31**
Dependent Variable: Conscientiousness				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.44**		.44	.19**
Step4: OC Motive, LMX-quality	.41**	.16*	.47	.22**
Dependent Variable: Courtesy				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.32**		.32	.10**
Step4: OC Motive, LMX-quality	.28**	.20*	.37	.14**
Dependent Variable: Civic Virtue				
Independent Variable	β (antecedent)	β (mediator)	R	R ²
Step1: LMX-quality	.36**		.36	.13**
Step4: OC Motive, LMX-quality	.29**	.38**	.52	.27**

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

Chapter Four

Discussion

In general, the goal of this study was to expand upon previous research in the area of leadership and OCB by further defining relationships between select leadership styles (i.e., transformational leadership and LMX-quality) and different OCB dimensions. In contrast to a direct effects model, this study hypothesized that both transformational leadership and LMX- quality were associated with the arousal of specific motives states (e.g., Organizational Concern, Prosocial Values), and that these motives, in turn, were associated with the performance of OCB (i.e., a through mediation and/or moderation). This hypothesis was taken one step further by suggesting that different motives were more strongly associated with specific leadership styles, as well as with different OCB dimensions.

As a whole, results of this study support the mediated model depicted in Figure 1. That is, support was found across both supervisor and subordinate ratings of OCB that motives do, in fact, mediate the relationship between select leadership styles and different OCB dimensions. Contrary to prediction, however, the Organizational Concern Motive was supported as the dominant mediator across all leadership-OCB relationships. Specifically, although both motives received support as mediators, the mediational effect was generally stronger for the Organizational Concern Motive as compared to the Prosocial Values Motive. Taken together, these findings suggest that both leadership

styles are associated with a general concern for the organization, which in turn, is linked with the performance of OCB.

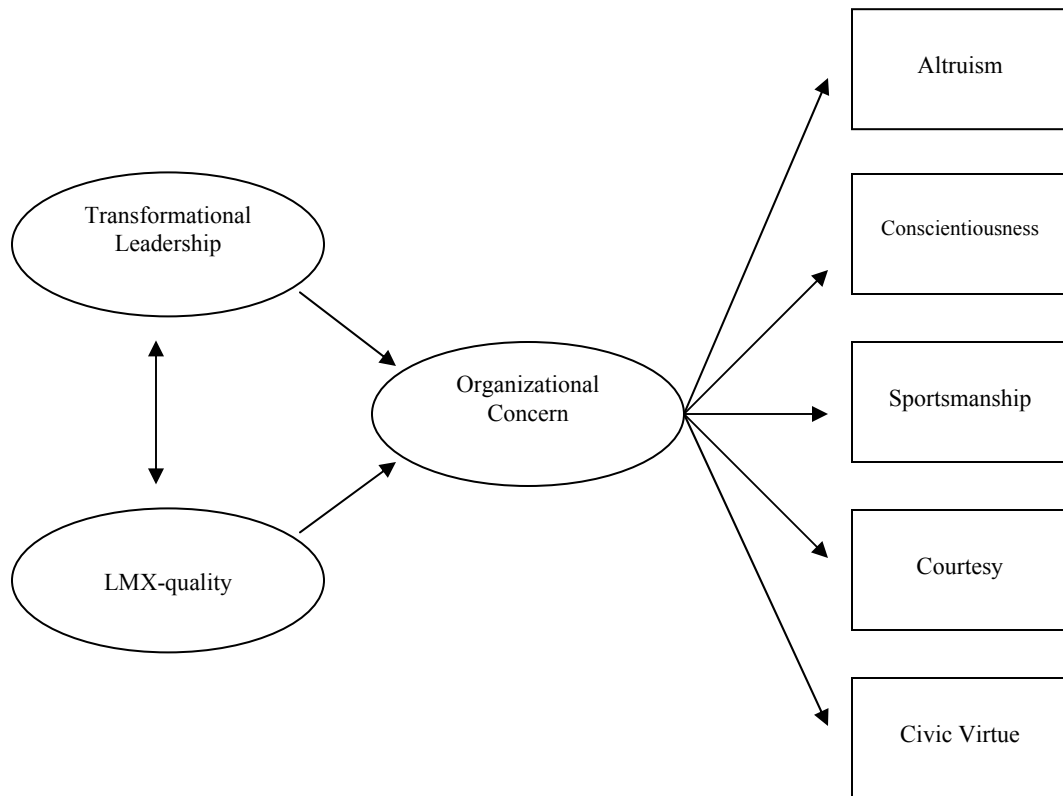


Figure 1. A Mediated Model of the Effects of Transformational Leadership and LMX quality on OCB

It should be noted that Figure 1 displays a slightly oversimplified interpretation of the results of this study by failing to include the mediational effects observed for the Prosocial Values Motive. The rationale for this model as well as further discussion of the results are provided below.

Relationships Among Variables

As previously mentioned, a number of significant relationships were observed among the variables in this study. Most importantly, subordinate reports of

transformational leadership and LMX-quality were significantly associated with all five dimensions of OCB. As a whole, this trend was observed across both self- and supervisor-reports of OCB, although the correlations were somewhat smaller using the supervisor OCB ratings. The only exception to this trend were the nonsignificant correlations found between transformational leadership and supervisor-reported Altruism, as well as LMX-quality and supervisor-rated Conscientiousness.

In general, these findings support previous research addressing the connection between transformational leadership, LMX-quality, and OCB (e.g., Podsakoff et al., 2001). That is, transformational leaders were found to have a positive impact across every form of citizenship behavior. Similarly, supervisor-subordinate relationships characterized by high levels of trust, support, liking, and attention were also associated with increased OCB. This research suggests that these specific leadership styles encourage employees to engage in informal behaviors that benefit the organization, ranging from those directed toward individual organizational members (e.g., Altruism, Courtesy) to those aimed at benefiting the organization as a whole (e.g., Conscientiousness, Civic Virtue). This was a key finding that set the stage for determining the exact nature of these leadership-OCB relationships.

As predicted, significant relationships were also found between both styles of leadership and OCB motives. Specifically, results showed significant positive relationships between subordinate perceptions of both leadership styles and the Organizational Concern and Prosocial Values Motives (lending support to Hypotheses 1 and 6). Transformational leadership, however, showed a significantly stronger relationship with the Organizational Concern Motive. Although larger in magnitude, the

correlation between LMX-quality and the Organizational Concern Motive was not significantly different from its correlation with the Prosocial Values Motive. Finally, no relationship was found between subordinate perceptions of either leadership style and the Impression Management Motive.

These findings suggest that both transformational leadership and LMX-quality are linked with specific employee motivations. Although also associated with the desire to help others and be accepted by them, transformational leadership was more strongly related with an employee's general concern for the organization's overall well-being. As mentioned, this association aligns with a basic tenant of transformational leadership. That is, encouraging followers to transcend their own self-interests and move beyond simple leader-member transactions for the good of the organization (Bass, 1985).

In contrast, perceptions of LMX-quality were closely linked with both motive states. That is, high-quality supervisor-subordinate relationships were positively related to a desire to help others and be accepted by them, as well as a positive regard for the organization as a whole. Although not significantly different, perceptions of LMX-quality did show a slightly stronger association with the Organizational Concern Motive. As with transformational leadership, this finding suggests that a general concern for the organization is a primary outcome of a healthy supervisor-subordinate relationship.

It was interesting to note that neither leadership style was associated with Impression Management (when measured from the perspective of the subordinate). More specifically, subordinate perceptions of either leadership style were not linked with a desire to avoid negative evaluation by others or to gain material rewards. This finding is somewhat encouraging, as it suggests that effective leadership is more likely to evoke

more genuine motivations to help the organization. While past studies have shown an association between all three motives and various types of OCB (e.g., Finkelstein & Penner, 2004), the Organizational Concern and Prosocial Values motives seem to be a closer match with conceptions of how effective leadership impacts subordinate motivations.

In general, past studies on OCB motives had revealed differential relationships between both the Organizational Concern and Prosocial Values Motive and certain dimensions of OCB (e.g., Rioux & Penner, 2001; Connell & Penner, 2004). In particular, the Organizational Concern Motive was consistently most strongly associated with the Conscientiousness dimension, while the Prosocial Values Motive was more strongly related to the Altruism dimension. The current study observed a slightly different trend. That is, of the two OCB dimensions mentioned (Altruism and Conscientiousness), both the Organizational Concern and Prosocial Values Motive were found to correlate significantly stronger with the Altruism dimension across both subordinate and supervisor reports of OCB. In addition, both the Organizational Concern and Prosocial Values Motive correlated most strongly with the Civic Virtue dimension (.43, .29, respectively, $p < .01$) using supervisor-reports of OCB. Currently, we have not found a convincing explanation for why this occurred. For example, restriction of range alone could not have accounted for this effect, as the degree of variability was similar across both motives and OCB dimensions. Regardless, the finding that both motives consistently correlated with each of the five OCB dimensions reinforces their role as important antecedents of OCB.

With regard to supervisor perceptions of leadership, findings were somewhat less consistent when compared with subordinate perceptions. For example, it was somewhat surprising to observe the lack of agreement between subordinate and supervisor perceptions of transformational leadership ($r = .16, p > .05$). Similarly, although the correlation between subordinate and supervisor perceptions of LMX-quality was significant ($.27, p < .01$), this relationship was surprisingly small considering both parties were (in theory) rating the same relationship.

Although perceptions of transformational leadership are predominantly measured from the subordinate perspective, other research has compared the perceptions of LMX-quality across leaders and followers. For example, in their meta-analytic review of LMX theory, Gernster and Day (1997) found an uncorrected correlation of .29 between leader and member perceptions of LMX-quality. This finding suggests that a certain amount of disagreement between leader and subordinate perceptions of leadership is not unusual, as was the case in the current study. As such, it is important to include both parties' perspectives when investigating the overall effects of leadership on both subordinate and organizational outcomes. From a practical perspective, this finding also demonstrates that a leader should make the effort to understand how his/her behaviors are being perceived by the employees that he/she supervises.

Along similar lines, supervisor perceptions of leadership also showed different relationships with a number of criterion variables. Not surprisingly, supervisor perceptions of both leadership styles most consistently correlated with supervisor reports of OCB (with the exception of transformational leadership and both the Sportsmanship and Courtesy dimensions). However, in contrast to transformational leadership,

supervisor reports of LMX-quality correlated significantly with both the Organizational Concern and Impression Management Motives. This finding is especially interesting for the Impression Management Motive, which was not significantly related to subordinate perceptions of LMX-quality. It is not completely clear why leader perceptions of LMX-quality would be a better indicator of employee Impression Management than subordinate perceptions. Conversely, it could perhaps be argued that an employee's tendency to impression manage somehow influences their supervisor's view of their own leadership ability. Regardless of the direction of this relationship, future research is needed to further clarify the relationship between Impression Management and subordinate and supervisor perceptions of LMX-quality.

Finally, significant correlations were also observed between each of the OCB dimensions across rating sources. In general, the size of these correlations suggests that, although related, subordinate and supervisor perceptions of OCB do not completely overlap. This finding again argues for the use of multiple sources regarding OCB research. In addition, better agreement was observed for certain types of OCB versus others. For example, OCB directed towards the organization as a whole (e.g., Civic Virtue, Conscientiousness) tended to show higher correlations across sources than OCB directed towards individual members (e.g., Altruism, Courtesy). This finding may be attributed to the increased visibility associated with certain types of OCB. For example, serving on a formal committee within the organization may be more visible to a supervisor than assisting another co-worker during a typical workday.

Transformational Leadership, Motives, and OCB

Overall, significant support was found for subordinate Organizational Concern as a primary mediator in the relationship between subordinate perceptions of transformational leadership and OCB. This likewise provided support for Hypotheses 1 – 5. As mentioned, subordinate perceptions of transformational leadership correlated significantly with the Organizational Concern Motive (.44). In addition, evidence for full mediation was found for the Organizational Concern Motive across self- and supervisor-reports of Conscientiousness, Courtesy, and Civic Virtue, as well as self-reports of Sportsmanship. Finally, additional analyses also revealed that the Organizational Concern Motive was associated with full mediational effects with regard to self-reports of Altruism.

Taken together, these findings provide important evidence for the notion that the relationship between perceptions of transformational leadership and OCB may not be direct in nature. Rather, as predicted, a mediated model that includes employee motivations seems more descriptive (see Figure 1). Based on the results of this study, it can be argued that subordinate perceptions of transformational leadership are associated with a general concern for the organization. These feelings are, in turn, linked with a number of different types of OCB. Thus, evidence supports the notion that subordinate Organizational Concern serves as the underlying mechanism by which transformational leadership influences OCB.

It should be noted that evidence was provided for the Prosocial Values Motive as a partial, and in some cases, full mediator regarding transformational leadership and all five OCB dimensions. However, in each case, the relative decrease in the beta-weights

from the first regression equation (including transformational leadership alone) to the fourth equation (including transformational leadership and the relevant motive, respectively) was larger for the Organizational Concern Motive than the Prosocial Values Motive. These results suggest that subordinate perceptions of transformational leadership are associated with two specific motive states: a desire to help others and be accepted by them, and a general concern for the organization's well-being. However, in terms of their relative mediational effects regarding different types of OCB, evidence supports the Organizational Concern Motive as the primary underlying mechanism.

As a whole, these results clearly identify a third variable (Organizational Concern) as the primary underlying mechanism by which transformational leadership influences employee OCB. In addition, the mediational effects associated with the Organizational Concern Motive were roughly the same across most forms of citizenship performance. This finding is significant, as it supports the theoretical notion that transformational leaders promote a general positive regard for the organization among their followers. Most importantly, this study addresses a current gap in the literature by describing how certain leadership behaviors impact OCB. As depicted here, without feelings of Organizational Concern, the effects of transformational leadership on subordinate OCB are unlikely to be realized.

LMX-quality, Motives, and OCB

This study also predicted that the relationship between LMX-quality and the Altruism dimension would be mediated and/or moderated by employee motives. In the case of Hypothesis 7, it was predicted that the Prosocial Values Motive would serve as the underlying mechanism by which LMX-quality influenced subordinate Altruism.

Results were supportive of the Prosocial Values Motive as a partial mediator using self-reports of Altruism (no support was found using supervisor reports). However, stronger evidence was observed for the Organizational Concern Motive. Specifically, results provided evidence of full mediation for the Organizational Concern Motive across both sources of OCB ratings (self and supervisor).

In the case of Hypothesis 8, it was predicted that the Prosocial Values Motive would also moderate the relationship between LMX-quality and subordinate Altruism. In other words, a relatively strong positive relationship between LMX-quality and subordinate Altruism was proposed to exist when the level of subordinate Prosocial Values was high. In contrast, when the level of subordinate Prosocial Values was low, a much smaller relationship was predicted to exist between these two variables. Results did not support this prediction using either self- or supervisor-reports of OCB. In addition, nonsignificant results were also observed with the Organizational Concern Motive.

Although these last set of hypotheses did not receive strong support, their results are still useful regarding the effects of relationship quality on OCB. Specifically, this evidence suggests that LMX-quality is significantly associated with both the Organizational Concern and Prosocial Values Motives, and that a slightly stronger relationship exists regarding the Organizational Concern Motive. These motivations are, in turn, linked with OCB directed toward individual members of the organization. Thus, similar to transformational leadership, Organizational Concern serves as the general mechanism by which LMX-quality impacts this particular OCB dimension. Although contrary to prediction, this result is not surprising based on the relatively strong correlation found between transformational leadership and LMX-quality (.77, $p < .01$). In

addition, both leadership styles showed larger correlations with the Organizational Concern Motive as compared with the Prosocial Values Motive.

With regard to the role of either the Organizational Concern or Prosocial Values Motive as a moderator, it is unlikely that either motive is associated with the hypothesized effects. More specifically, the strength of the relationship between LMX-quality and subordinate Altruism was not contingent upon the level of Prosocial Values (or Organizational Concern) reported by the subordinate. Although a small sample size likely contributed to this result, the nonsignificant *p*-values were large, and were unlikely to increase even given a larger sample size (i.e., $N > 200$). Although contrary to prediction, it seems both the Organizational Concern and Prosocial Values Motives are more suited to the role of mediators. However, future research employing larger sample sizes is still needed to further clarify these relationships.

Although results were not strongly supportive of Hypotheses 7 and 8, additional analyses involving LMX-quality, motives, and additional dimensions of OCB provided more encouraging results. Specifically, with the exception of Civic Virtue, full mediation was observed for both motives (e.g., Prosocial Values and Organizational Concern) regarding each of the self-reported OCB dimensions. For Civic Virtue, both motives were associated with partial mediation. In the case of supervisor-reports of OCB, results were also similar. For the dimensions that were tested, Courtesy and Civic Virtue, evidence for full mediation was observed for the Organizational Concern Motive. Full mediation was also observed for the Prosocial Values Motive in the case of Civic Virtue.

Taken together, these results somewhat mirror those found with transformational leadership. That is, across both rating sources and numerous dimensions of OCB,

evidence was provided that supports the Organizational Concern Motive as the primary mediator between LMX-quality and subordinate OCB. As depicted in Figure 1, leader-member relationships characterized by high levels of support, trust, liking, and latitude are associated with a general concern for the organization. These feelings, in turn, are linked with different types of subordinate OCB. This result was somewhat contrary to prediction, as the Prosocial Values Motive was predicted to play a more substantial role in these relationships. However, based on the strong correlation found between perceptions of transformational leadership and LMX-quality, it is not surprising that these two leadership approaches, although arguably unique, would display similar relationships with the OCB motives.

Comparative Mediation Effects

Overall, the analyses described above lend support to the Organizational Concern Motive as the primary mediator in the relationships between perceptions of both leadership variables and various dimensions of OCB. Two main pieces of evidence support this argument. First, although in the case of most of the hypotheses, the Prosocial Values Motive received support as a partial mediator, the relative decrease in the beta-weights associated with the leadership predictor (e.g., transformational leadership, LMX-quality) from the first regression equation to the fourth was generally larger for the Organizational Concern Motive than for the Prosocial Values Motive. Based on this evidence, it can be argued that the Organizational Concern Motive played a more dominant role in these leadership-OCB relationships.

Second, partial correlations observed between the leadership variables, both motives, and the five OCB dimensions further support this argument. That is, in order to

address the relative effect of each motive, partial correlations were computed between the Prosocial Values Motive and both transformational leadership and LMX-quality while controlling for the effects of the Organizational Concern Motive. In both cases, the partial correlation between the Prosocial Values Motive and either transformational leadership or LMX-quality was nonsignificant (-.10, .02, respectively). Results were similar when partial correlations were calculated between the Prosocial Values Motive and both self- and supervisor-reports of OCB. Specifically, when the effect of the Organizational Concern Motive was controlled, the correlation between the Prosocial Values Motive and each of the five OCB dimensions was nonsignificant (the only exception was self-reports of Courtesy). In contrast, this effect was not observed with the Organizational Concern Motive when the influence of the Prosocial Values Motive was controlled.

These findings provide further support for the Organizational Concern Motive as the primary mediator. Specifically, it is possible that any mediational effects observed with the Prosocial Values Motive were due to its overlap with the Organizational Concern Motive. Alternatively, it was also postulated that the Prosocial Values Motive may have acted as a suppressor variable. In other words, including this variable in the regression equation along with the other predictors (i.e., either transformational leadership or LMX-quality, and the Organizational Concern Motive) may have helped to explain additional variance in OCB. This hypothesis was also tested using multiple regression. However, results did provide evidence for this effect with regard to any of the OCB dimensions.

Different Leadership Perspectives (Subordinate versus Supervisor)

It should be noted that the results of this study differed substantially depending on the source of leadership inquiry. For example, one interesting finding was that mediational effects were only observed with transformational leadership when these behaviors were measured from the perspective of the subordinate. As mentioned, supervisor perceptions of transformational leadership failed to correlate significantly with either the Organizational Concern, Prosocial Values, or Impression Management motives. Thus, mediational analyses could not be performed using this particular set of predictors. Combined with the finding that subordinate reports of transformational leadership failed to significantly correlate with supervisor reports (.16, $p > .05$), these results suggest that a leader's view of their own transformational leadership behaviors is not necessarily an accurate indicator of their subordinates' performance motivations.

In the case of LMX-quality, significant relationships were observed between supervisor-reports of leadership and both the Organizational Concern and Impression Management Motives, as well as all five supervisor-reported OCB dimensions. However, evidence was not supportive of either motive as a mediator in these leadership-OCB relationships. As mentioned, these results are in stark contrast to those associated with subordinate-reports of LMX-quality, which found substantial evidence for the Organizational Concern Motive as a primary mediator. These different outcomes again highlight the need to include both parties perspectives in leadership research. Also, in comparison to leader perceptions of transformational leadership, this study suggests that a leader's assessment of LMX-quality can be a significant predictor of what motivates a subordinate on the job.

Limitations

This study helped to shed light on a number of important relationships between transformational leadership, LMX-quality, motives, and OCB. That being said, certain limitations should also be acknowledged. First and foremost, as with most studies investigating OCB, this study was cross-sectional in nature. As a result, it is difficult to make causal inferences regarding the relationship between leadership, motives, and OCB. Future studies should incorporate more longitudinal designs, so that the influence of both leadership and motives on OCB may be examined over time. In addition, more experimental approaches should also be used, allowing more insight regarding the issue of causality.

A second potential weakness of this study was that the supervisors selected the subordinates included in this study. This approach is in contrast to either the researcher randomly selecting the subordinates for each supervisor, or the supervisor providing ratings on *each* of the employees that they supervise (which was the case in some instances). The danger with the approach used in this study is that the supervisors could have inadvertently biased these results by selecting only those employees who perform exceptionally well on the job. Thus, the sample would have only included employees who tended to report high levels of OCB, as well as more favorable ratings of transformational leadership and LMX-quality. We attempted to counter this threat by including a statement in the supervisor's set of instructions that reminded them to select employees that represented a range of performance. In other words, each supervisor was instructed not to select all high performers or all low performers.

Examination of the descriptives and distributions for each scale indicated that the instructions were moderately successful at incorporating an acceptable amount of variance into the sample. Although a number of significant correlations were observed across variables, the range of scores observed for each scale tended to be somewhat small. In addition, the distributions were bimodal for some of the measures. That is, the majority of scores tended to occur both towards the middle and at the high end of the range for these particular scales. However, although it could be argued that this sample displayed a slight positive bias with regard to leadership perceptions and OCB, we would argue that this trend is not significant enough to discredit the results of this study.

Finally, research has consistently demonstrated that reports of OCB differ depending on the source. For instance, employees tend to exaggerate the frequency of their own behaviors, or may monitor these behaviors while in the presence of a supervisor. The present study addressed this concern by including both self- and supervisor-ratings of OCB. However, it could be argued that the inclusion of co-worker ratings would have provided a more comprehensive perspective. This criticism is justified by the tendency of co-workers to have closer and more frequent contact with an employee when compared to a supervisor, which allows them more opportunities to observe the occurrence of OCB. However, supervisor ratings generally have been found to be more objective in comparison to co-worker ratings. This observation has been credited to factors such as friendship, which may sometimes bias co-worker perceptions. Thus, although the inclusion of supervisor-reports of OCB was clearly a more comprehensive approach than relying on self-reports alone, the inclusion of co-worker

reports would have arguably provided an even more complete representation of the subordinates' OCB.

Future Research

Based on what this study has revealed, a number of future directions should be taken to further expand on these results. First, these findings have significant bearing on traditional antecedent-OCB models. Penner et al.'s (1997) conceptual model of OCB (see Figure 2), for example, argues that short-term OCB (i.e., intermediate OCB) is influenced by organizational variables, job attitudes, mood on the job, prosocial orientation, and motives for OCB. However, as time passes, individuals who engage in high levels of OCB began to identify with the role of the "good organizational citizen." That is, organizational citizenship becomes a component of their "role identity" within the organization. Penner and his colleagues argue that the development of this type of personal identity is important because it becomes the mechanism by which each of the variables mentioned above affects "enduring" or long-term OCB. That is, over time, the direct effects of these variables on OCB are significantly reduced, and are instead transferred through the individual's "role identity" as a good organizational citizen.

Combined with the work of other researchers (Tillman, 1998; Connell & Penner, 2004; Finkelstein & Penner, 2004), results of the study reconceptualize the manner in which motives are expected to influence OCB. Specifically, in addition to serving as antecedents, these prior studies suggest that the Prosocial Values and Organizational Concern Motives both moderate and mediate the relationship between certain antecedent variables (e.g., procedural justice, affective commitment) and OCB. In addition, Finkelstein and Penner (2004) determined that the development of citizen role identity is

linked with the acquisition of motives, and that these motives influence the performance of OCB (rather than the reverse).

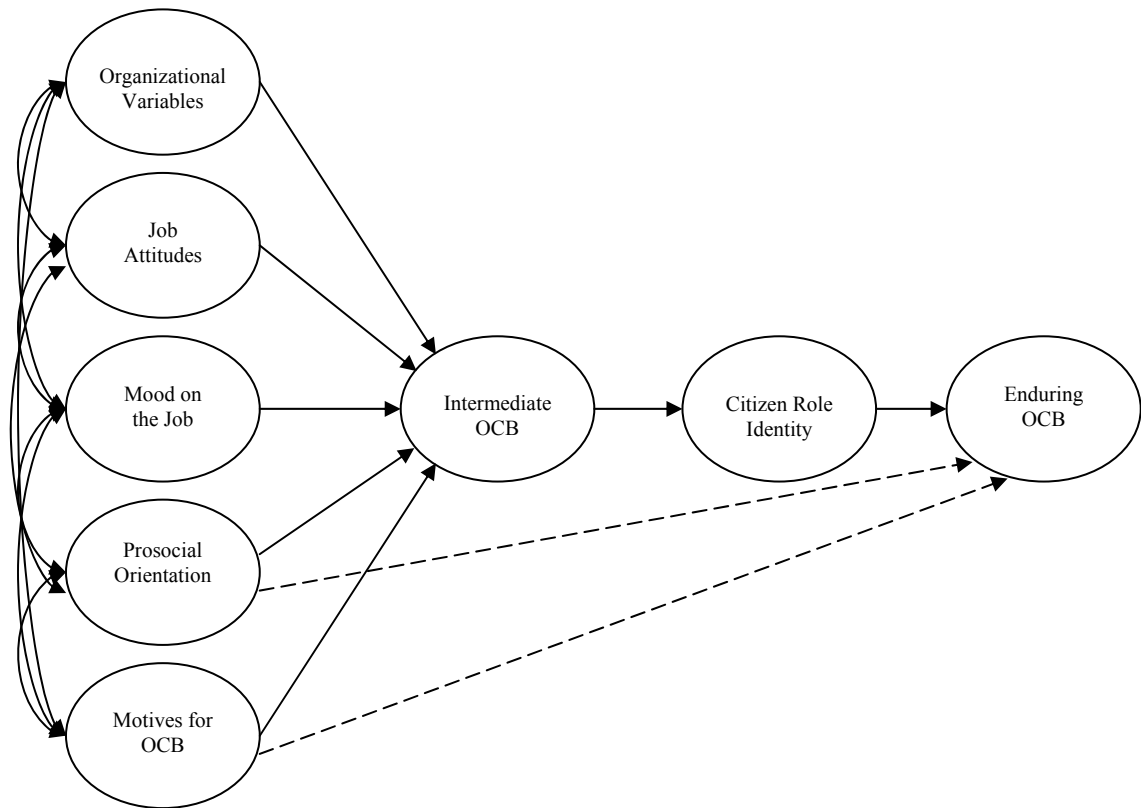


Figure 2. Penner et al.'s (1997) Conceptual Model of the Causes of OCB

The current study expanded upon these results by providing evidence for similar relationships among additional antecedents (i.e., transformational leadership, LMX-quality) and different dimensions of OCB. That is, perceptions of both leadership styles were primarily associated with subordinate Organizational Concern, which in turn, was linked with a variety of short-term OCB behaviors. Combined with previous studies, these results clearly demonstrate a need to revisit Penner et al.'s OCB model. Future research should continue to expand upon its theoretical tenants, as well as similar models

of OCB. As seen with the current study, additional dispositional variables and outcomes of OCB should be investigated to help further clarify the nature of these relationships.

On a related note, efforts should also be directed towards more underemphasized antecedents of OCB. As mentioned, one such area that has shown significant potential are task characteristics. For example, in his recent review of the OCB literature, Podsakoff et al. (2001) demonstrated that task feedback, task routinization, and intrinsically satisfying tasks each displayed significant correlations with Altruism, Conscientiousness, Sportsmanship, Courtesy, and Civic Virtue across multiple studies. Specifically, task feedback and intrinsically satisfying tasks displayed significant positive relationships, while task routinization displayed significant negative relationships. Building on the results of this study, future efforts should address whether employee motives play any significant role in these relationships. For example, it may be the case that all three task variables are significantly related with subordinate Organizational Concern. That is, the amount of satisfaction and feedback associated with a particular task could be positively related to one's concern for the organization, while the routine nature of a task could likewise contribute to a lack of organizational concern. As with perceptions of transformational leadership and LMX, the Organizational Concern Motive could also potentially serve as the underlying mechanism by which these task characteristics influence OCB. In addition, similar effects may also be observed with other leadership variables (e.g., Supportive Behavior) and antecedents (e.g., role ambiguity, role conflict, perceived organizational support), each of which have shown significant relationships with OCB and also share a theoretical connection with the Organizational Concern Motive.

In sum, the areas mentioned above are currently underresearched in the OCB literature. The results of the current study provide a theoretical basis for uncovering what mechanisms may be involved in their relationships with citizenship performance.

At this time, research addressing the effects of cultural differences on OCB is somewhat limited. As proposed by Podsakoff et al. (2001), these potential effects could vary from the types of OCB that are performed in organizations, to the strength of the relationships observed between select antecedents and different dimensions of OCB. Similarly, employee motivations for engaging in OCB may also vary by culture. For example, it is reasonable to assume that a greater importance may be placed on the Organizational Concern Motive in a culture that is primarily collectivistic versus individualistic. This hypothesis is based on the tendency of collectivist cultures to value the success of the group as a whole (e.g., the organization), whereas individualistic cultures tend to emphasize personal success as the ultimate reward. Similarly, an entirely different set of motives may be appropriate for cultures that are dissimilar to the United States. That is, cultural values may play a significant role in shaping an employees' performance motivations. However, until efforts are made to incorporate cultural nuances into OCB research, the knowledge surrounding OCB, including its drivers and organizational impacts, will only be generalizable to Western societies.

Finally, better statistical techniques are needed in the investigation of antecedents and OCB. Structural equation modeling (SEM), for example, has the ability to test the plausibility of an entire model as it applies to a given data set. Such an approach is advantageous because the relative effects of multiple variables can be tested at the same time while also accounting for the effects of measurement error (Byrne, 1998). This is in

contrast to multiple regression techniques, which are limited to examining portions of a model one at a time. Because of these advantages, it has also been argued that SEM is a more effective means of testing cause and effect relationships between variables.

However, a drawback of using SEM is that it requires rather large sample sizes to test for these effects. This disadvantage aside, the use of SEM would help to clarify the accuracy of such models as Penner et al.'s (1997) model of OCB. Applying such a technique would provide a more comprehensive perspective of the antecedents of OCB, and would showcase the relative effect of each antecedent in combination with an entire set of predictors. Based on these obvious advantages, it is recommended that future research on leadership and OCB utilize more SEM techniques so that more accurate inferences can be made regarding the leader influence process and citizenship performance.

Conclusions

This study provides empirical evidence that employee motives play a significant role in the relationships between two specific leadership variables (transformational leadership and LMX-quality) and various dimensions of OCB. In general, consistent support was found for subordinate Organizational Concern as a significant mediator in these relationships across self- and supervisor-reports of OCB. However, the prediction that subordinate Prosocial Values moderated the relationship between LMX-quality and subordinate Altruism was not supported. These findings are significant in the context of current OCB research, as they provide insight regarding the nature of certain antecedent-OCB relationships. From a practical standpoint, they also highlight the need to consider employee motives as key determinants of employee citizenship performance.

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Appendices

Appendix A: Transformational Leadership Inventory (TLI)

Subordinate Version

Below is a set of statements that may or may not describe your supervisor's behavior at work. Using the scale below, please indicate the extent to which you agree (or disagree) that each statement is descriptive of your SUPERVISOR.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

1. Is always seeking new opportunities for the unit/department/organization.
2. Paints an interesting picture of the future for our group.
3. Has a clear understanding of where we are going.
4. Inspires others with his/her plans for the future.
5. Is able to get others committed to his/her dream of the future.
6. Leads by “doing” rather than simply “telling.”
7. Provides a good model to follow.
8. Leads by example.
9. Fosters collaboration among work groups.
10. Encourages employees to be “team players.”
11. Gets the group to work together for the same goal.
12. Develops a team attitude and spirit among his/her employees.
13. Shows that he/she expects a lot from us.
14. Insists on only the best performance.
15. Will not settle for second best.
16. Acts without considering my feelings.

Appendix A (Continued)

17. Shows respect for my personal feelings.
18. Behaves in a manner that is thoughtful of my personal needs.
19. Treats me without considering my personal feelings.
20. Has provided me with new ways of looking at things which used to puzzle me.
21. Has ideas that have forced me to rethink some of my own ideas that I have never questioned before.
22. Has stimulated me to think about old problems in new ways.

Appendix B: Transformational leadership Inventory (TLI)

Supervisor Version

Below is a set of statements which may or may not describe your behavior at work. Using the scale below, please indicate the extent to which you agree (or disagree) that each statement is descriptive of YOUR behavior as a leader.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

1. I am always seeking new opportunities for the unit/department/organization.
2. I paint an interesting picture of the future for our group.
3. I have a clear understanding of where we are going.
4. I inspire others with my plans for the future.
5. I am able to get others committed to my dream of the future.
6. I lead by “doing” rather than simply “telling.”
7. I provide a good model to follow.
8. I lead by example.
9. I foster collaboration among work groups.
10. I encourage employees to be “team players.”
11. I get the group to work together for the same goal.
12. I develop a team attitude and spirit among my employees.
13. I show that I expect a lot from my employees.
14. I insist on only the best performance.
15. I will not settle for second best.
16. I act without considering my employees’ feelings.

Appendix B (Continued)

17. I show respect for my employees' personal feelings.
18. I behave in a manner that is thoughtful of my employees' personal needs.
19. I treat my employees without considering their personal feelings.
20. I have provided my employees' with new ways of looking at things which used to puzzle them.
21. I have ideas that have forced my employees' to rethink some of their own ideas that they have never questioned before.
22. I have stimulated my employees to think about old problems in new ways.

Appendix C: LMX7

Subordinate Version

Using the scales presented below, please answer each of the following statements.

1. Do you know where you stand with your supervisor...do you usually know how satisfied your leader is with what you do?

1	2	3	4	5
Rarely	Occasionally	Sometimes	Fairly Often	Very Often

2. How well does your supervisor understand your job problems and needs?

1	2	3	4	5
Not a Bit	A Little	A Fair Amount	Quite a Bit	A Great Deal

3. How well does your supervisor recognize your potential?

1	2	3	4	5
Not at All	A Little	Moderately	Mostly	Fully

4. Regardless of how much formal authority he/she has built into his/her position, what are the chances that your supervisor would use his/her power to help you solve problems at work?

1	2	3	4	5
None	Small	Moderate	High	Very High

5. Again, regardless of the amount of formal authority your supervisor has, what are the chances that he/she would "bail you out," at his/her expense?

1	2	3	4	5
None	Small	Moderate	High	Very High

Appendix C (Continued)

6. I have enough confidence in my supervisor that I would defend and justify his/her decision if he/she were not present to do so?

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

7. How would you characterize your working relationship with your supervisor?

1	2	3	4	5
Extremely Ineffective	Worse Than Average	Average	Better Than Average	Extremely Effective

Appendix D: LMX7

Supervisor Version

Using the scales presented below, please answer each of the following statements.

1. Does your subordinate know where they stand with you...do they usually know how satisfied you are with what they do?

1	2	3	4	5
Rarely	Occasionally	Sometimes	Fairly Often	Very Often

2. How well do you understand your subordinate's job problems and needs?

1	2	3	4	5
Not a Bit	A Little	A Fair Amount	Quite a Bit	A Great Deal

3. How well do you recognize their potential?

1	2	3	4	5
Not at All	A Little	Moderately	Mostly	Fully

4. Regardless of how much formal authority you have built into your position, what are the chances that you would use your power to help solve your subordinate's problems at work?

1	2	3	4	5
None	Small	Moderate	High	Very High

5. Again, regardless of the amount of formal authority you have, what are the chances that you would "bail your subordinate out," at your own expense?

1	2	3	4	5
None	Small	Moderate	High	Very High

Appendix D (Continued)

6. My subordinate has enough confidence in me that they would defend and justify my decision if I was not present to do so?

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

7. How would you characterize your working relationship with your subordinate?

1	2	3	4	5
Extremely Ineffective	Worse Than Average	Average	Better Than Average	Extremely Effective

Appendix E: OCB Measure

Subordinate Version

Below is a set of statements which may or may not describe YOUR behavior at work. Using the scale below, please indicate the extent to which you agree (or disagree) with each statement.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

1. My attendance at work is above the norm.
2. I help orient new people even though it is not required.
3. I consume a lot of time complaining about trivial matters.
4. I am one of my supervisor's most conscientious employees.
5. I help others who have heavy work loads.
6. I am the classic "squeaky wheel" that always needs greasing.
7. I attend meetings that are not mandatory, but are considered important.
8. I keep abreast of changes in the organization.
9. I tend to make "mountains out of molehills."
10. I obey company rules and regulations even when no one is watching.
11. I try to avoid creating problems for coworkers.
12. I am mindful of how my behavior affects other people's jobs.
13. I always focus on what's wrong, rather than the positive side.
14. I read and keep up with organizational announcements, memos, and so on.
15. I willingly help others who have work related problems.
16. I attend functions that are not required, but help the company image.

Appendix E (Continued)

17. I do not abuse the rights of others.
18. I consider the impact of my actions on coworkers.
19. I help others who have been absent.
20. I do not take extra breaks.
21. I am always ready to lend a helping hand to those around me.
22. I believe in giving an honest day's work for an honest day's pay.
24. I always find fault with what the organization is doing.

Appendix F: OCB Measure

Supervisor Version

Below is a set of statements which may or may not describe your subordinate's behavior at work. Using the scale below, please indicate the extent to which you agree that each statement is descriptive of your SUBORDINATE.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree

1. Attendance at work is above the norm.
2. Helps orient new people even though it is not required.
3. Consumes a lot of time complaining about trivial matters.
4. Is one of my most conscientious employees.
5. Helps others who have heavy work loads.
6. Is the classic "squeaky wheel" that always needs greasing.
7. Attends meetings that are not mandatory, but are considered important.
8. Keeps abreast of changes in the organization.
9. Tends to make "mountains out of molehills."
10. Obeys company rules and regulations even when no one is watching.
11. Tries to avoid creating problems for coworkers.
12. Is mindful of how his/her behavior affects other people's jobs.
13. Always focuses on what's wrong, rather than the positive side.
14. Reads and keeps up with organizational announcements, memos, and so on.
15. Willingly help others who have work related problems.
16. Takes steps to try to prevent problems with other workers.

Appendix F: (Continued)

17. Attends functions that are not required, but help the company image.
18. Does not abuse the rights of others.
19. Considers the impact of his/her actions on co-workers.
20. Helps others who have been absent.
21. Does not take extra breaks.
22. Is always ready to lend a helping hand to those around him/her.
23. Believes in giving an honest day's work for an honest day's pay.
24. Always finds fault with what the organization is doing.

Appendix G: Citizenship Motives Scale (CMS)

During the course of the workday people often engage in prosocial or helpful behaviors. These behaviors are not a required part of the job and they are not formally rewarded (e.g., more money). Yet these behaviors are very important and help the organization function smoothly. Examples of such behavior include:

- helping coworkers with a heavy workload
- touching base with others before initiating action
- attending functions that aren't mandatory
- not taking long lunches or breaks
- keeping informed of changes in the organization
- not complaining over small things

People are motivated to engage in these kinds of behavior by many different things. Below is a list of motives that may influence people to engage in these behaviors. For each motive listed, please indicate HOW IMPORTANT that motive is for YOU to engage in these kinds of behaviors at work. Please see the scale below and darken in the number corresponding to your response.

Use the following scale to indicate your answer:

1	2	3	4	5
Not at all important	Slightly important	Important	Very important	Extremely important

1. Because I have a genuine interest in my work.
2. Because I feel it is important to help those in need.
3. To make myself more marketable to other organizations.
4. So that others will see me as helpful.
5. Because I want to be fully involved in the company.
6. To get a good raise.
7. In order to keep my job.
8. Because I am concerned about other people's feelings.
9. Because I want to be a well-informed employee.

Appendix G (Continued)

10. To have fun with my co-workers
11. To get a promotion.
12. So that others will like me.
13. Because I care what happens to the company.
14. Because I like interacting with my co-workers.
15. So that others will think of me as supportive.
16. Because the organization values my work.
17. Because I want to help my co-workers in any way I can.
18. Because I feel pride in the organization.
19. Because I can put myself in other people's shoes.
20. Because I want to understand how the organization works.
21. Because I believe in being courteous to others.
22. So that others will think highly of me.
23. To keep up with the latest developments in the organization.
24. Because it is easy for me to be helpful.
25. So that I don't get laid off.
26. Because I am committed to the company.
27. To get to know my co-workers better.
28. Because the organization treats me fairly.
29. To be friendly with others.
30. So that others will think I pull my weight.