Spring 2010

The Relationship Between Leader Behaviors and Subordinate Performance: Examining the Moderating Influence of Leader-Member Exchange

Kurt L. Oborn
Old Dominion University

THE RELATIONSHIP BETWEEN LEADER BEHAVIORS AND SUBORDINATE PERFORMANCE: EXAMINING THE MODERATING INFLUENCE OF LEADER-MEMBER EXCHANGE

by

Kurt L. Oborn
B.S. December 2004, Utah State University
M.S. August 2007, Old Dominion University

A Dissertation Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirement for the Degree of

DOCTOR OF PHILOSOPHY

PSYCHOLOGY

OLD DOMINION UNIVERSITY
April 2010

Approved by:

Debra A. Major (Director)

Janis Sanchez (Member)

Alexis Fink (Member)

ABSTRACT

THE RELATIONSIHP BETWEEN LEADER BEHAVIORS AND SUBORDINATE PERFORMANCE: EXAMINING THE MODERATING INFLUENCE OF LEADER-MEMBER EXCHANGE

Kurt Oborn
Old Dominion University, 2010
Director: Debra A. Major

Subordinates interpret and react to the behaviors of their leaders. Based on a theory of organizational trust, it was argued that greater trust between subordinate and leader is required to respond appropriately to relations-oriented behaviors than task-oriented behaviors due to a higher level of personal risk to the subordinate. As a consequence of responding appropriately to relations-oriented behaviors, a subordinate immediately becomes identified with or connected to a leader. Such identification requires the specific LMX currency of professional respect be present in order for an adequate amount of trust to be developed. In contrast, task-oriented behaviors ally the subordinate with job and task responsibilities, not necessarily their leader. In these instances, any of the LMX currencies (i.e., professional respect, affect, contribution, or loyalty to the leader) may generate sufficient trust to counter the lower risk involved. In higher-risk situations, professional respect is mandatory for trust to be developed. This variable importance of LMX currencies in developing adequate levels of trust is both consistent with theory and a newer area of LMX research expanded upon by the present study. Therefore, the relationship between a subordinate and leader was hypothesized to increase the effectiveness of specific leader behaviors in raising subordinate performance. Seven mid-level leader behaviors divided into either a task-oriented or relations-oriented

factor were examined. It was hypothesized that relations-oriented behaviors (i.e., supporting, mentoring, recognizing, and consulting) required professional respect to be present in the leader-subordinate relationship in order to successfully raise subordinate performance. Task-oriented behaviors (i.e., delegating, clarifying, and inspiring) in contrast, required only one currency of the LMX relationship (i.e., professional respect, affect, contribution, or loyalty) to be present for the behavior to be effective. Data were collected from 240 subordinates at two different high-technology manufacturing organizations located in the Western United States. Two surveys, one at three months job tenure measuring leader behaviors and the LMX relationship and one at six months job tenure measuring performance, were used. A two-factor leader-behavior structure was confirmed using structural equation modeling before hierarchical linear regression was used to examine the relationship between leader behaviors and subordinate performance. The interaction of the leader behavior and the LMX currency was added in the second step of the hierarchical analyses. The relationship between task-oriented behaviors and performance was moderated by the currencies of LMX such that when high levels of any of the currencies were present, greater amounts of the leader behavior were related to higher subordinate performance. For relations-oriented behaviors, only professional respect moderated the performance relationship. At high levels of professional respect, higher amounts of relations-oriented behaviors were related to higher subordinate performance. Implications for both theory and practice are discussed.

This dissertation is dedicated to Watty Piper

ACKNOWLEDGMENTS

I am very appreciative of my advisor, Dr. Debra Major. Without her support and guidance both academically and personally, this dissertation would not have been possible. I will always be grateful to her for going above and beyond what her job required so I could reach my goals. She is truly remarkable. I also thank my committee members, Dr. Janis Sanchez-Hucles and Dr. Alexis Fink, for their work on this committee and for the confidence they expressed in me.

Without my parents, Leon and Karen Oborn, I would not have started down this path nor would I have ever come close to finishing. They supported me in ways I will likely not understand for years to come and provided an excellent model of parenting that I hope to emulate.

Most of all, I thank my wife, Crystal, who has trekked patiently with me through graduate school. Her encouragement and unconditional support gave me the strength to overcome obstacles. Together we are grateful for Dallin who came into our family and provided us with joy in this journey.

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1
Introduction

Over the past century, hundreds of studies have examined the leader behaviors that enhance subordinate performance (Fleishman, 1995; Judge, Piccolo, & Ilies, 2004). Decades of research show that effective leader behaviors are broadly captured by two categories: relations-oriented which are those focused on building a relationship with the subordinate, and task-oriented which are those focused on facilitating the accomplishment of subordinate or team tasks (Yukl, Gordon, & Taber, 2002). The goal of this research is to investigate the dimensions of the leader-subordinate relationship that influence the extent to which relations-oriented and task-oriented leader behaviors impact subordinate performance.

Subordinate willingness to take risks influences the extent to which leader behaviors, especially those that are relations-oriented, will improve subordinate performance. In a typical interchange, the leader offers help, support, or guidance to the subordinate through either a relations- or task-oriented behavior. The subordinate can choose to accept the help, receive the support, and change their behavior accordingly. The subordinate can also choose to ignore the help or support, not change their behavior, or change their behavior in a manner inconsistent with the leader's desires. Despite the behavior of the leader, the subordinate still has volition over responses. Desired responses to relations-oriented behaviors entail more risk to the subordinate than responses to task-oriented behaviors. Through responses to relations-oriented behaviors, the subordinate

---

This dissertation adheres to the format of the *Journal of Applied Psychology*.

identifies or partners with the leader. For example, the leader may become a mentor and the subordinate a protégé to the leader in the eyes of others in the organization. In contrast, task-oriented behaviors can be a one-way exchange from the leader to the subordinate as the leader delegates a task, corrects a subordinate's methods, or inspires the subordinate to set work goals. Less personal risk is involved because personal alignment with the leader is not required to perform the desired subordinate response to a task-oriented leader behavior.

The level of risk a subordinate is willing to take is dependent on the amount of trust in the leader: the greater the trust, the greater the risk a person will accept (Mayer, Davis, & Schoorman, 1995). Since the 1970s, researchers have examined the amount of trust in leader-subordinate relationships using the leader-member exchange (LMX) framework (Gerstner & Day, 1997; Graen, 2003). Using a theoretical model of organizational trust, the current study explains how different currencies of the LMX relationship moderate eventual subordinate performance levels by altering the responses subordinates have to different leader behaviors. Different LMX-level requirements exist for relations-oriented and task-oriented behaviors to be effective at raising subordinate performance due to the level of trust required to accept risk.

Leader Behaviors

During the 1950s and 1960s, researchers at two universities established programs to determine the most effective leader behaviors. At The Ohio State University, over 1800 behaviors were narrowed into a survey of 150 behaviors given to multiple samples of military and civilian employees to describe their leaders' actions (Fleishman, 1953; Halpin & Winer, 1957; Hemphill & Coons, 1957; Yukl, 2006). At the University of

Michigan, surveys as well as interviews and field studies of managers and supervisors in insurance (Katz, Maccoby, & Morse, 1950), manufacturing (Katz & Kahn, 1952), and railroad (Katz, Maccoby, Gurin, & Floor, 1951) companies were used to study effective leader behaviors. Both programs of research came to similar conclusions, classifying the myriad of behaviors into two meta-categories: task-oriented (initiating structure) and relations-oriented (consideration).

Hundreds of studies have been conducted examining leader behavior using these two meta-categories (Yukl, 2006) with most confirming this dichotomy of leader behavior (Fleishman, 1995). However, as Yukl (1998) summarizes: "The results [of studies examining relations- and task-oriented behaviors] have been weak and inconsistent for most criteria of leadership effectiveness" (p. 49). This inconsistency is due in part to relating general behaviors to more specific outcomes such as individual task performance and job satisfaction.

While keeping within the established two-category framework, more recent approaches look at leader behavior at a more specific level. One such taxonomy is represented in the Managerial Practices Survey (MPS), which looks at mid-range leader behaviors including: delegating, clarifying, and inspiring which are classified as task-oriented behaviors and supporting, mentoring, recognizing, and consulting which are classified as relations-oriented behaviors (Yukl, 2006). Briefly exploring each of these behaviors clarifies the components of the task- and relations-oriented categories.

Delegating behavior involves assigning new responsibilities to subordinates and providing the extra authority the subordinate needs to fulfill them (Yukl, 2006). Delegating is a unique and common leader behavior (Yukl & Fu, 1999) with its own set

of determinants (Leana, 1987). Some have classified delegating as a relations-oriented behavior (Yukl et al., 2002) since one outcome may be a more trusting relationship if the subordinate performs the delegated task well (Bauer & Green, 1996), but delegating is more accurately seen as a task-oriented behavior (Yukl, 2006) since it specifically focuses on tasks performed by the subordinate. When done correctly, delegating can result in increased subordinate task commitment, greater decision quality, and a more enriched job for the subordinate (Yukl, 2006). Some studies have found the amount of delegation is positively correlated with subordinate performance (Bauer & Green, 1996; Leana, 1987; Schriesheim, Neider, & Scandura, 1998).

Clarifying is a task-oriented behavior and involves the "communication of plans, policies, and role expectations" to subordinates as well as setting goals for their accomplishment (Yukl et al., 2002, p. 19). Leaders clarify their expectations to subordinates to ensure tasks are understood. A positive relationship between clarifying and managerial effectiveness has been shown in many studies (Bauer & Green, 1998; Kim & Yukl, 1995; Yukl & Van Fleet, 1982; Yukl, Wall, & Lepsinger, 1990). These findings, which can be explained using goal-setting theory, have found setting specific, challenging goals results in higher performance, as long as the goals are accepted by subordinates (Locke & Latham, 1990).

Inspiring behavior is defined by Yukl and Van Fleet (1982) as that which "stimulates enthusiasm among subordinates for the work of the group and says things to build their confidence in their ability to successfully perform assignments and attain group objectives" (p. 90). It consists of leaders motivating subordinates to perform quality work through planning, vision statements, and example. Only one study (Kim &

Yukl, 1995) was found examining inspiring as measured by the MPS wherein a positive relationship between subordinate-reported leader inspiring behavior and subordinate performance was found.

Supporting is showing concern and acceptance of others' feelings and needs, and it is a core component of relations-oriented behaviors (Fleishman, 1953; Stogdill, Goode, & Day, 1962; Yukl et al., 2002). Supporting is consistently, positively related to satisfaction with one's leader (Bass, 1990; Yukl, 1998), but only a weak and inconsistent relationship has been found with follower performance (Fisher & Edwards, 1988; Kim & Yukl, 1995; Yukl et al., 1990).

Mentoring, another relations-oriented behavior consists of actions leaders take to develop subordinates including career-related and psychosocial support (Kram, 1985). Both forms of mentoring are related to subordinate job satisfaction (Allen, Eby, Poteet, Lentz, & Lima, 2004), but career-related support, which is the chief focus of the work of Yukl and colleagues (1990), shows more inconsistent relationships with subordinate performance (Javidan, 1992; Kim & Yukl, 1995; Yukl et al., 1990).

Recognizing involves praising subordinates for work done well (Yukl et al., 2002) and is considered a relations-oriented behavior (Yukl, 2006). In a field study involving manipulation of praise given by the supervisor, this recognizing behavior by leaders resulted in higher subordinate performance (Wikoff, Anderson, & Crowell, 1983); however, survey research asking about more general recognizing behaviors has shown a more inconsistent relationship (Kim & Yukl, 1995; Lowe, Kroeck, & Sivasubramaniam, 1996; Podsakoff & Todor, 1985; Podsakoff, Todor, Grover, & Huber, 1984; Yukl et al., 1990; Yukl et al., 2002).

Consulting as a leader behavior consists of leaders "involving followers in making important decisions" (Yukl et al., 2002, p. 21). Followers may be asked for their opinion on certain matters, but the leader makes the final decision which may or may not reflect the opinions received (see also Vroom & Jago, 1988). Consulting is considered a relations-oriented behavior as it is often done to strengthen a leader-subordinate relationship (Yukl et al., 2002). Possibly because follower opinion is only sought, not necessarily acted upon, only a weak, inconsistent relationship with follower satisfaction and performance exists (e.g., Leana, Locke, & Schweiger, 1990; Sagie & Koslowsky, 2000).

Using factor analysis and theoretical reasoning, several other leader-behavior taxonomies besides the MPS have been created. They range in their classification of behaviors from broad, abstract categories to specific actions taken by leaders on a daily or hourly basis (see Yukl, 2006 for a list). However, the MPS is an effective measure of leader behaviors for two reasons: (1) the original task- and relations-oriented divisions are preserved, and (2) other more specific taxonomies were considered in its creation (Yukl et al., 1990). The classification of these mid-level behaviors within the task- and relations-oriented categories is illustrated in Table 1.

Responses to Leader Behaviors

For leader behaviors to be effective at raising subordinate performance, the subordinate must choose to respond effectively to the behavior exhibited. This process would typically proceed as follows. First, the leader exhibits the behavior (e.g., clarifying a task with a subordinate). Specifically, the leader sets a deadline for task completion.

Table 1

Mid-Level Leader Behaviors Classified into Task- and Relations-Oriented Categories

Task-Oriented	**Relations-Oriented**
Delegating	Supporting
Clarifying	Mentoring
Inspiring	Recognizing
	Consulting

Second, the subordinate decides whether or not to accept the deadline and to work toward it. Accepting the deadline leads to higher performance because the subordinate works toward accomplishing the task at the expected time.

However, accepting the deadline or responding appropriately to any other leader behaviors has additional consequences besides subordinate performance levels. These additional outcomes entail various levels of risk to the subordinate and influence the subordinate's decision to respond to the leader's behavior. The level of risk is higher for relations-oriented behaviors than task-oriented behaviors.

For relations-oriented behaviors, if a subordinate responds in the desired manner, a stronger subordinate-leader relationship is created. In supporting, a subordinate would accept interpersonal (e.g., sympathy when struggling with a difficult task) or expert (e.g., advice for a difficult technical problem) help from a leader. To see such information as valid, a subordinate must respect the leader at some level. Acceptance may imply eventual reciprocation and at the very least would be seen by others as cooperation with the leader. In responding appropriately to recognizing behavior, the subordinate's acceptance of the leader's praise or recognition acknowledges agreement with the leader's judgment. If the leader is respected by the subordinate and others in the organization little risk may be involved. However, if few others in the organization agree with the judgment of the leader, the subordinate aligned with such a leader takes a larger personal risk. By accepting mentoring advice from a leader, subordinates would be linked to the leader in the eyes of upper-level management and others in the organization. Again, respect would be needed to accept the provided career-related advice and assistance. Finally, consulting requires the leader and subordinate to work together for an

outcome. Both parties would be seen as cooperating, involved, and responsible for results, a potentially risky alliance for both leader and subordinate. In short, desired responses to relations-oriented behaviors may create more opportunity for the subordinate, but they come with a risk, especially if the reputation of the leader is in question. A positive, professional regard for the leader is needed for their effectiveness.

Task-oriented behaviors, in contrast, involve less risk. While a strengthened relationship may develop over time from responding appropriately to task-oriented behaviors (Bauer & Green, 1996), the immediate result is higher subordinate and team performance (Bass, 1990; Yukl, 2006, 2008). By exhibiting task-oriented behaviors, the leader may simply be helping a subordinate complete their formally-assigned tasks. The leader is not necessarily seeking a trusted protégé to develop or a long-term relationship. In contrast to consulting, if a leader delegates a task to a subordinate effectively by thoroughly explaining the task and providing the necessary authority needed for its accomplishment, the work of the subordinate stands separate from the work of the leader. Even if the leader were terminated for unethical behavior, the work of the subordinate could remain unblemished. Also in contrast with consulting and other relations-oriented behaviors, clarifying and inspiring can be viewed as one-way communications and effort from the leader to the subordinate. If a leaders decides on a deadline a subordinate does not meet, a subordinate could claim immunity from consequences as it was not a deadline he or she set. Less personal investment is required of the subordinate when responding to task-oriented behaviors than relations-oriented behaviors, and more opportunity to escape adverse consequences exist. Task-oriented behaviors may involve changing the way a task is performed while relations-oriented behaviors involve a responsibility to

reciprocate or identify with a leader. In general, heeding or responding to task-oriented behaviors entails less risk to the subordinate than relations-oriented behaviors.

The Role of Trust in Leadership

The amount of trust in a relationship determines the amount of risk a person is willing to take (Mayer et al., 1995). Trust is "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer et al., 1995, p. 712). An essential component of trust that separates it from similar constructs, such as cooperation and predictability, is the willingness of the trustor to take risks. Trust is not taking the risk, but the willingness to be vulnerable to the actions of another person based on the belief the other person will not cause personal harm. People often take risks and cooperate without trusting each other. Ubiquitous examples include nations forming treaties and companies forming joint ventures with limited time spans. Obviously, trust can increase the effectiveness of cooperation, but the two are separate constructs. Trust is also not predictability. A person can be completely predictable in always making decisions to harm another, but such a person would not be trusted.

Research from the past 50 years has identified the characteristics a person must have to be trusted by others and labeled this 'trustworthiness' (Colquitt, Scott, & LePine, 2007). Both early (Hovland, Janis, & Kelley, 1953) and more recent (Lieberman, 1981) studies identified 'competence' and 'integrity' as two general dimensions. While much of the research on trust has focused on relationships in general, Mayer and colleagues (1995) created a theoretical model of trust specific to organizational relationships

focusing on relationships between a subordinate and leader or between coworkers. Their model includes the ability, benevolence, and integrity of the trustee as three correlated factors with different weights in the calculation of trustworthiness (Colquitt et al., 2007).

Ability, the "group of skills, competencies, and characteristics that enable a party to have influence within some [job] specific domain" (Mayer et al., 1995, p. 717), has the strongest relationship with trust according to a recent meta-analysis (Colquitt et al., 2007). As mentioned previously, ability and its synonyms (e.g., competence, expertness) have been considered essential elements of trust in many theories (see Cook & Wall, 1980; Deutsch, 1960; Giffin, 1967; Jones, James, & Bruni, 1975; Lieberman, 1981; and Sitkin & Roth, 1993).

Benevolence is "the perception of a positive orientation of the trustee toward the trustor" (Mayer et al., 1995, p. 719). For a subordinate to trust a leader, the subordinate must feel the leader has their best interest at heart and wants to help them. This would be evidenced by some level of affect or liking and a demonstrated willingness to do specific tasks or favors for the subordinate. Benevolence has a slightly weaker but moderate relationship with trust compared to ability (Colquitt et al., 2007).

Integrity is determined by consistency in the actions and words of the trustee (Mayer et al., 1995). Gabarro (1978) labeled this as 'character,' which he argued included integrity. In short, the trustee's actions are consistent whether in the presence of the trustor or not. In the organizational setting, the actions of the leader when the subordinate is present and when the subordinate is absent would be consistent. The leader would defend the actions of the subordinate to other leaders or peers. Through meta-analysis,

integrity has been shown to have a moderate relationship with trust, slightly weaker than ability and benevolence (Colquitt et al., 2007).

Leader-Member Exchange

One shortcoming of the theoretical work on trust is the lack of measures specifically designed for leader-subordinate relationships in organizational settings. Much of the trust research has focused on relationships in general or the relationships within married couples (Mayer et al., 1995). Relationships in the workplace differ because they are located within hierarchies and built on professional respect, not just mutual attraction and friendship. Contemporary to the development of the theoretical trust literature has been the empirical work examining the leader-subordinate relationship and its individual components, or "currencies of exchange" (Liden & Maslyn, 1998). This stream of research provides measures for the theoretical dimensions hypothesized by Mayer and colleagues (1995) developed specifically for leader-subordinate dyads.

Traditional leadership theorists examined leadership as an individual construct. The traits and behaviors of the leader were of ultimate concern. In the 1970s Graen and colleagues began examining leadership from the dyadic level. Their original proposition stated that as individuals work together, leaders form varied relationships with subordinates due to time and resource constraints. While some subordinates keep the original, formal relationship with their supervisor as specified by their employment contract, others become trusted subordinates. Based on social exchange theory, LMX theory claims the supervisor provides these subordinates with increased job latitude, more influence in decision-making, and more support in exchange for the trusted subordinate taking on more tasks and internalizing the success of the workgroup (Dansereau, Graen,

& Haga, 1975). According to Graen (2003) trust is the central core of the LMX relationship. The benefits received by both subordinate and leader result from the trust both parties have in each other.

Traditional LMX research identified LMX as a multidimensional construct without identifying its individual dimensions (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995). More recent examinations by Liden and his colleagues (Dienesch & Liden, 1986; Liden & Maslyn, 1998) identified the dimensions, labeling them as four 'currencies' that are exchanged in an LMX relationship. These currencies of exchange include professional respect, affect, contribution, and loyalty. They mirror closely the three factors of trustworthiness (i.e., ability, benevolence, and integrity) theorized by Mayer and colleagues (1995).

Professional respect is defined as "the perception of the degree to which [a person] has built a reputation, within and/or outside the organization at excelling at his or her line of work" (Liden & Maslyn, 1998, p. 50). The professional respect a subordinate has for a leader is based on the abilities of the leader in their specific domain of work. This is in keeping with the general definition of ability provided by Mayer et al. (1995) wherein skills, competencies, and characteristics in a specific domain are cited as a leader's ability. The three items used to measure professional respect in the LMX-MDM capture the perceptions of the trustee's ability in the Mayer et al. (1995) model.

Affect is the amount of liking or affection each person in the dyad has for the other based primarily on personal factors. It is similar to friendship as it is also based mostly on non-work factors (Liden & Maslyn, 1998). Contribution is the level of work a leader or subordinate puts into accomplishing mutual goals. For a leader, it specifically

includes the resources, help, and opportunities given to the subordinate for work accomplishment. Taken together, affect and contribution can be seen as a measure of the benevolence of a leader. A subordinate rating the benevolence of a leader would consider the affect the leader has for the subordinate to determine if the leader's actions were done with the intent to help the subordinate. "Benevolence suggests that the trustee has some specific attachment to the trustor" (Mayer et al., 1995, p. 718). Additionally, the contributions given in the form of resources and help to accomplish work provide a way for the subordinate to evaluate the benevolence attitude or actual service rendered by the leader. Taken together, affect and contribution measure the service provided by a leader to a subordinate and provide a basis for the motives of such behavior.

In the original work of Liden and Maslyn (1998), trust was limited to the dimension of loyalty, but trust is something much larger than faithfulness to a subordinate. For example, the trust a person has in another's ability is captured by the professional respect dimension, but they failed to recognize this as trust. Liden and Maslyn's (1998) limited definition of trust included only defending the work of a subordinate to a superior or to other subordinates. Their dimension of loyalty can be seen as equivalent to integrity. It includes knowing a trustee will behave in a similar manner when interacting with the trustor or with the trustee's superiors. By consulting the trust literature it is seen that trust is bigger than just integrity, it includes the other three dimensions of LMX, or the currencies exchanged in the LMX relationship.

The overlap in factors of trustworthiness (Mayer et al., 1995) and currencies of exchange (Liden & Maslyn, 1998) allow LMX to be viewed as an indication of the trust a subordinate and leader share. While the theoretical work on trust has developed

sophisticated models, the empirical work on LMX measurement has developed practical instruments. Together, trust theory can enhance understanding of information gathered using LMX instruments. This overlap of trust and LMX confirms the theorizing by LMX researchers that trust is the central component of the LMX relationship (Graen, 2003).

Attributions

Attributions are the explanations people infer as the causes of behavior (Brehm, Kassin, & Fein, 2002), and they serve as the mediator between trust levels and risk-taking behaviors in the conceptual model. Most research on attributions has been conducted outside of organizational relationships, with a large body focusing on individuals in marriage relationships (Bradbury & Fincham, 1990). While the leader-subordinate relationship is not the same as a marriage relationship, similar attributions may be made dependent on relationship factors. When individuals are in satisfying, and trusting relationships, they make different attributions about their partner's behavior than when they are in unsatisfying relationships characterized by lower trust. Bradbury and Fincham (1990, 1992) found that when explaining the same behaviors, happy couples make relationship-enhancing attributions while unhappy couples make distress-maintaining attributions. For example:

> "A satisfied husband might attribute an unexpected gift from his wife to her wanting to do something special for him, whereas a dissatisfied husband might view the same act as an attempt on her part to justify spending money on herself" (Bradbury & Fincham, 1992, p. 613).

Bradbury and Fincham (1990) created a framework relating attributions and behavior partially recreated in Figure 1. Applying this paradigm into the work-relationship context

suggests that private attributions made by a subordinate about a leader's behavior could affect the subordinate's subsequent behavior. In the context of the present research, a leader displays a task-oriented or relations-oriented behavior. The subordinate perceives this behavior (primary processing) and then assigns a motive to explain it (private attribution). Notice that all of this occurs without an overt response to the leader who initiated the behavior, hence the label of private attribution (Bradury & Fincham, 1992). This explanation for the behavior made by the subordinate will then influence his or her own behavior, specifically if they will respond favorably or unfavorably (Bradbury & Fincham, 1990). For example, if a leader attempts to provide support by giving advice to a subordinate faced with a problem, the subordinate may or may not accept the advice based on the attribution made for the helping behavior. If the subordinate has little professional respect for the leader, the advice given may be seen as a futile attempt by a leader to appear more knowledgeable than they really are, perhaps to impress third-party onlookers. Such advice would be disregarded, making the subordinate unlikely to comply with the leader's advice.

In marriage relationships, the term stonewalling has been used to describe one such response behavior. It is one behavior individuals in a dyadic relationship may use if there is a low level of respect in the relationship (Gottman, 1994). Stonewalling is "avoiding communication with a partner, either by physically distancing oneself so that communication is impossible or by emotionally withdrawing until it seems futile for the other partner to try" (Harvey, Pauwels, & Zickmund, 2005, p. 426).

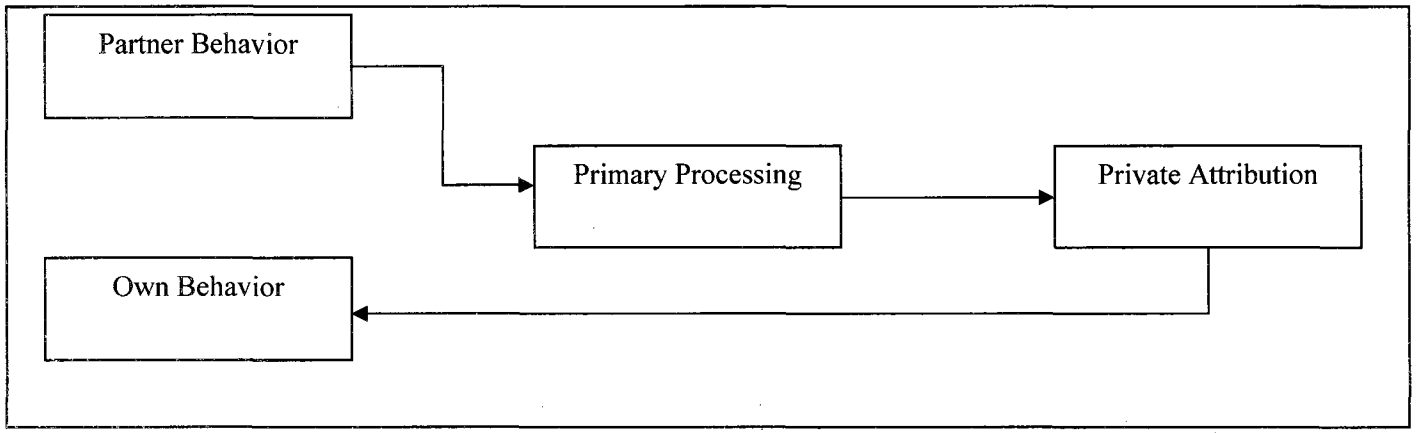

Figure 1. Framework relating subordinate attributions of leader behaviors to subsequent subordinate behaviors.

Based on Figure 1 in "Attributions in Marriage: Review and Critique," by T. N. Bradbury and F. D. Fincham, 1990, *Psychological Bulletin, 107,* p. 24. Copyright 1990 by the American Psychological Association.

Applying the work on attributions and behavior in marriage relationships, two conclusions can be made about the moderating effect of relationship quality on the efficacy of leader behaviors in improving subordinate performance. First, it is likely that attributions made by the subordinate about a leader's behavior will moderate the subordinate's response. Second, a certain level of respect in any relationship can make stonewalling less likely to occur. Leader behaviors will not be effective at increasing performance if the subordinate is physically or emotionally distanced so as to not receive the communication.

Conceptual Model

Figure 2 depicts the conceptual model used to guide the current study. Relationships were based on the previously discussed theoretical and empirical work completed in the leader behavior, LMX, trust, and attribution research literatures.

Hypotheses

Task-oriented behaviors. As described previously, when subordinates respond to relations-oriented behaviors they are taking greater risks than when they respond to task-oriented behaviors. For task-oriented behaviors to be effective, less trust is required because a lower risk is perceived (Mayer et al., 1995). Therefore, any currency exchanged (i.e., professional respect, affect, contribution, or loyalty) should provide enough trust to motivate the subordinate to respond positively to the behavior, since higher levels of one factor of trustworthiness can compensate for lower levels of another (Mayer et al., 1995).

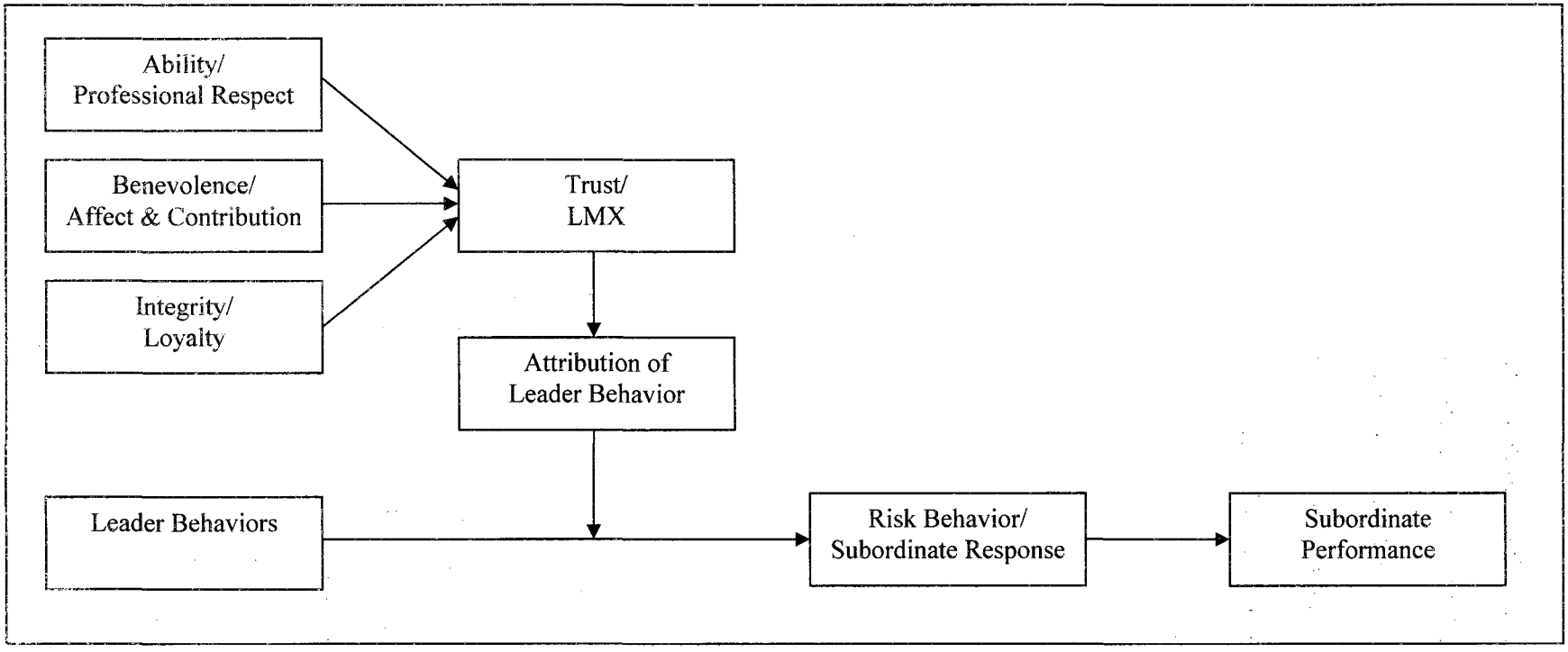

Figure 2. Conceptual model

H1: For task-oriented behaviors (i.e., delegating, clarifying, and inspiring), all dimensions of the LMX relationship will moderate the performance relationship such that the task-oriented behaviors will be positively related to subordinate performance when high levels of any currency are exchanged (see Figure 3a).

Relations-oriented behaviors. For relations-oriented behaviors (i.e., supporting, mentoring, recognizing, and consulting) greater trust is required for the subordinate to respond in-kind to the leader behaviors, due to increased risk to the subordinate should the leader be someone in the organization who is not respected. There are two reasons why professional respect would be needed to generate these higher levels of trust, thus allowing relations-oriented behaviors to be effective. First, empirical research shows that ability is the dimension of trustworthiness most strongly related to trust (Colquitt et al., 2007), and professional respect from a subordinate is built on the ability of the leader. Without this critical component, the trustworthiness of a leader would be deficient, unable to generate sufficient trust. Second, theoretical work explains the importance of the trustworthiness dimensions can vary based on context. In this instance, the context is dependent on the leader behavior. For example, Mayer and colleagues (1995) specifically explain the need for professional respect in a mentoring relationship. Although a person may have incredible integrity and benevolence enabling them to offer psychosocial support, without knowledge of the profession, less-effective or limited career-related advice would be given. Supporting, recognizing, and consulting behaviors would also require some minimum level of professional respect in order for enough trust to be developed for the behavior to be received effectively by the subordinate. Supporting behavior involves offering advice, guidance, and explanations of complicated processes

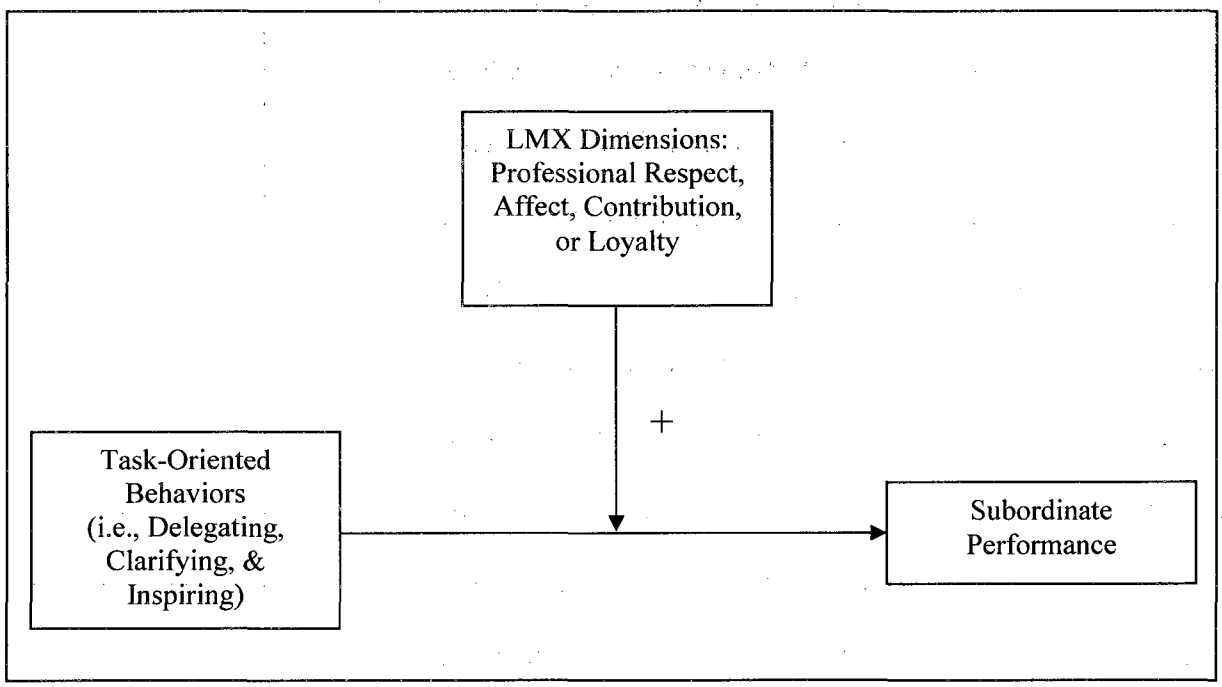

Figure 3a. Hypothesized Model for Task-Oriented Behaviors

to subordinates. Without professional respect, the information given may be ignored, despite the best of leader intentions. Recognizing behavior requires a leader to understand the job of the subordinate well enough to cite and reward specific examples of effective behavior. While a leader may be perceived to have high integrity and benevolence, any recognition without a respect for the leader's job knowledge and competence would be viewed by a subordinate as uninformed. Again, consulting requires professional respect to be effective; without it, the relationship is one-sided. If a subordinate admires a leader's integrity and benevolence, but has little respect for the leader's competence, consulting could appear to be an ignorant person asking advice. Instead of empowerment resulting from collaboration, the subordinate may feel used. Professional respect is needed for relations-oriented behavior to be effective.

> H2: For relations-oriented behaviors (i.e., supporting, mentoring, recognizing, and consulting), only professional respect will moderate the performance relationship; relations-oriented behaviors will be positively related to subordinate performance when high levels of professional respect are exchanged. Other currencies (affect, contribution, and loyalty) will not moderate the relationship (see Figure 3b).

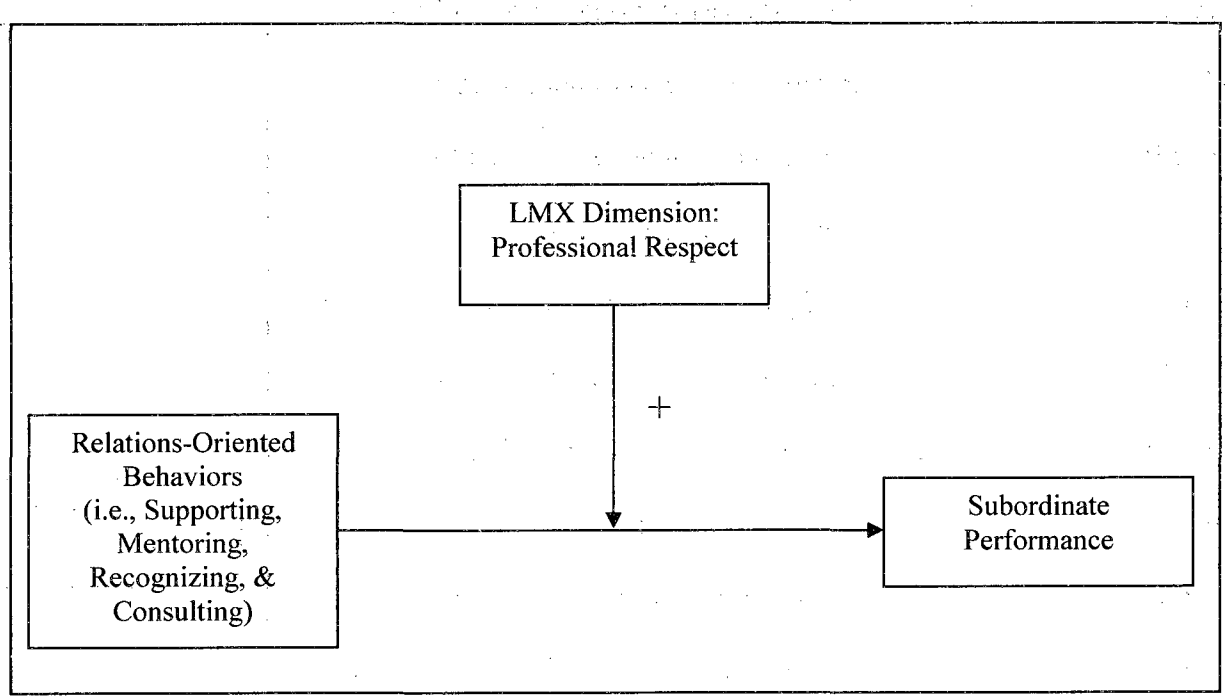

Figure 3b. Hypothesized Model for Relations-Oriented Behaviors

CHAPTER 2
Method

Participants

Archival data were used to test the hypotheses. New employees of two large high-technology manufacturing organizations headquartered in the western United States were mailed surveys at three months job tenure. Employees were asked about their leader's behaviors and the relationship that had formed with their leader. They also answered demographic questions. Performance was assessed through a second survey mailed three months later. The overall response rate across both time periods was 23%. The majority of participants held a bachelor's or graduate degree (77.2%) with their average age being 36.05 years (SD=8.26). Most were Caucasian (76.6%) and the average number of hours worked per week was 45.78 (SD=7.23).

A uniform sample size was sought for the testing of all hypotheses. According to Tabachnick and Fidell (2007), deletion of cases with missing data is not appropriate when greater than 5% of data are missing. Employing listwise deletion (i.e., requiring a participant to have answered all items on every scale used in every analysis to be included) for all variables to create a uniform sample for all analyses would result in a sample size of 169. In some instances, using this sample would exclude over 60 people (over 26% of the sample). To avoid this resulting loss of power, variable mean substitution was used creating a final sample of 240 participants for all analyses. Table 2 lists the mean value and number of case substitutions for each variable.

Measures

Leader behaviors. Leader behaviors were assessed with the MPS (Yukl et al., 1990) wherein subordinates were asked to rate the frequency of leader behaviors using a scale ranging from 1 (*Never, not at all/not applicable/don't know*) to 4 (*Usually, to a great extent*). Kim and

Table 2

Summary of Mean Substitution by Variable

Variable	Mean	No. of Substitutions	% Missing
Age	35.86	7	2.92
Education	4.02	3	1.25
Tenure	110.03	3	1.25
Hours Worked per Week	45.83	8	3.33
Affect	5.40	1	0.42
Loyalty	5.28	5	2.08
Contribution	5.58	2	0.83
Professional Respect	5.72	1	0.42
Support	3.08	31	12.92
Mentor	2.79	32	13.33
Recognize	2.98	49	20.42
Consult	3.10	28	11.67
Delegate	3.04	16	6.67
Clarify	3.00	9	3.75
Inspire	2.94	22	9.17

Yukl (1995) found subordinates more accurately rated leader behavior than leaders did themselves. Delegating ($\alpha = .75$) was measured with three items, mentoring ($\alpha = .82$) with four items, supporting ($\alpha = .85$) and consulting ($\alpha = .86$) with five items, and recognizing ($\alpha = .88$), clarifying ($\alpha = .89$), and inspiring ($\alpha = .89$) with six items each.

A two-factor leadership behavior solution was verified using confirmatory factor analysis (CFA) via LISREL 8.80. The fit of the model to the data was assessed using fitness indices: the normal theory-weighted least squares chi-square, the root mean square error of approximation (RMSEA), the non-normed fit index (NNFI), and the comparative fit index (CFI). According to Browne and Cudeck (1993), RMSEA values below .05 indicate a close-fitting model, where values between .05 and .08 indicate the model fits reasonably well. NNFI and CFI values .90 or higher indicate reasonable model fit (Bentler, 1990; Tucker & Lewis, 1973). The RMSEA, NNFI, and CFI are unaffected by sample size unlike the chi-square test which will often be significant when a complex model is examined. Therefore, it is recommended to use more than one index to examine fit. The first loading of each factor was fixed to one with all other paths freely estimated. Delegating, clarifying, and inspiring loaded onto the task behaviors factor and supporting, mentoring, recognizing, and consulting loaded onto the relations behaviors factor. Figure 4 depicts the CFA model with path coefficients included. The following goodness-of-fit statistics were obtained: $\chi^2 (544) = 1208.57$, $p < .05$, RMSEA = .07, NNFI = .97, and CFI = .97. For hypothesis testing, two leader behaviors were created by averaging items: delegating, clarifying, and inspiring for task-oriented behaviors and supporting, mentoring, recognizing, and consulting for relations-oriented behaviors. Therefore, task-oriented behaviors ($\alpha = .92$) were measured using 15 items and relations-oriented behaviors ($\alpha = .93$) were measured using 20 items.

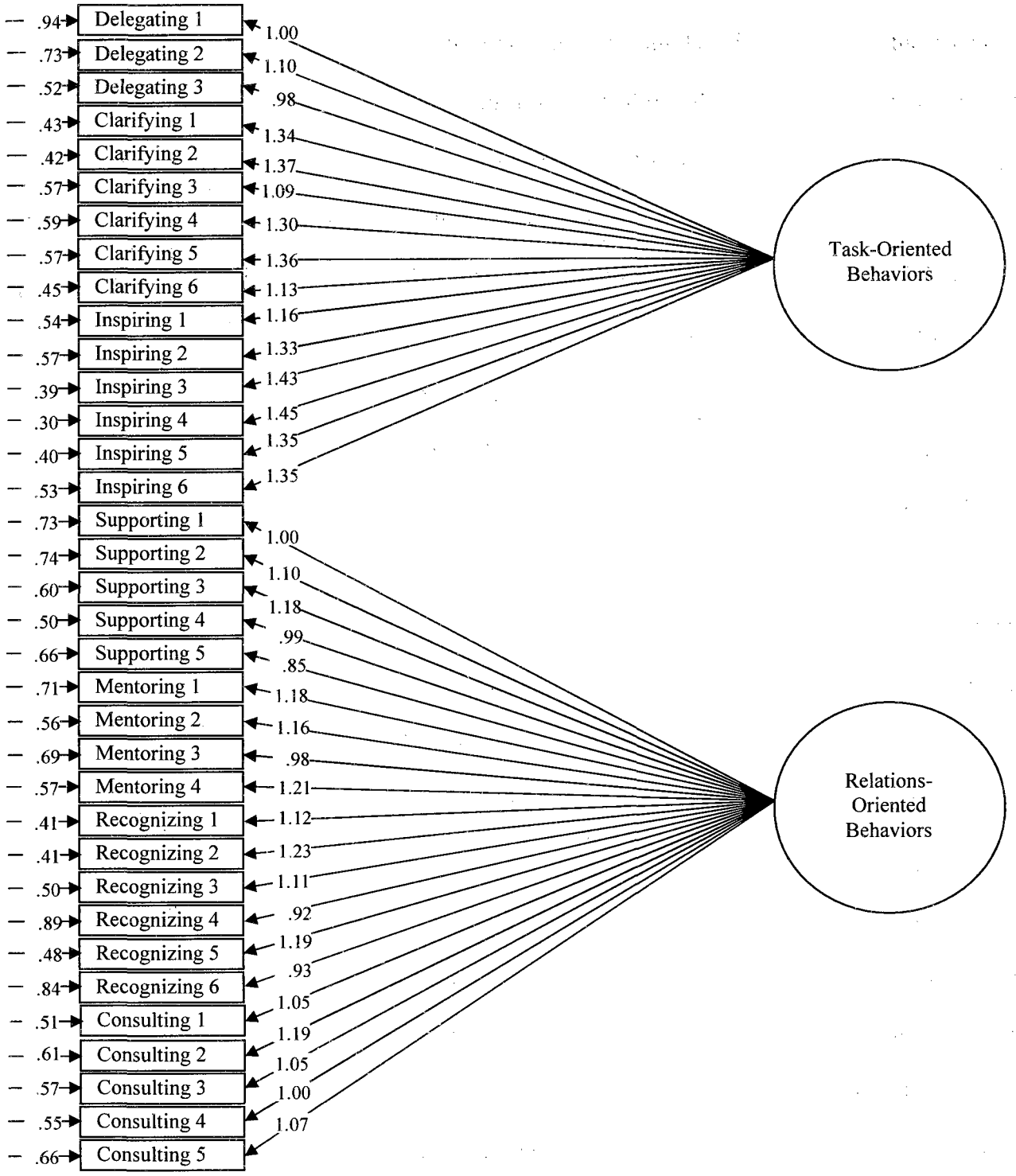

Figure 4. Confirmatory factor analysis results

LMX. LMX was measured using the LMX-MDM (α = .93; Liden & Maslyn, 1998) which has convergent validity with the LMX-7 (Graen & Uhl-Bien, 1995), the most commonly used measure of LMX (Gerstner & Day, 1997). The LMX-MDM was chosen because of its ability to divide LMX into its four currencies of exchange: affect (3 items; α = .91), loyalty (3 items; α = .88), contribution (4 items; α = .69), and professional respect (3 items; α = .95). In the original research validating the LMX-MDM, three items were developed to measure contribution, but showed a low Cronbach's alpha of .77 in a sample of production workers (Liden & Maslyn, 1998). In an attempt to increase the reliability of this scale, one item was not used and two new contribution items were created for this study. Unfortunately, a lower reliability was obtained. All ratings for all four scales were made using a response scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Performance. Self-reported performance (α = .76) was measured by combining a five-item scale (α = .74) developed by Wayne, Shore, and Liden (1997) with a sixth item assessing the subordinate's overall level of performance on a scale ranging from 1 (*poor*) to 5 (*superior*).

Demographics. Subordinate age, organization tenure, education level, and hours worked per week were also assessed in the first survey.

CHAPTER 3
Results

Overview of Analyses

Organization, subordinate age, education level, organization tenure, and hours worked per week were examined as possible control variables but none had a significant bivariate correlation with subordinate performance and therefore were not included in subsequent analyses (see Tabachnick & Fidell, 2007). Correlations between all variables, basic descriptive statistics, and Cronbach's alpha reliability estimates are shown in Table 3 for the sample with and without mean substitution.

Hierarchical linear regression was used to examine the hypotheses. In step 1, the task-oriented or relations-oriented leader behaviors variable was entered along with the individual LMX dimension of affect, loyalty, contribution, or professional respect. To determine the amount of additional variance predicted, the interaction between the leader behavior and the individual LMX dimension score was added in step two. Four regression analyses were conducted for the leader behavior, one for each LMX dimension, with each analysis consisting of two steps. All variables except subordinate performance were mean centered.

Task-Oriented Behaviors

To support Hypothesis 1, all dimensions of the LMX relationship should have moderated the relationship between task-oriented leader behavior and subordinate performance. Increases in task-oriented behavior should have been related to higher subordinate performance when there was a high level of professional respect, affect, contribution, or loyalty. Four hierarchical linear regression analyses were conducted. Affect was examined first, followed by loyalty, contribution, and professional respect as main predictors and as moderators of the leader behavior/performance relationship.

Table 3

Means, Standard Deviations, Cronbach's Alphas, and Intercorrelations of Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Company	1.85	.36	(--/--)	.14*	.05	.14*	.21**	.01	.07	.20**	-.04	.28**	.25**	.03
2. Age	35.86	8.36	.14	(--/--)	.02	.09	.18**	.04	.11	.11	.05	.15*	.08	-.10
3. Education	4.02	.89	.05	.02	(--/--)	.18**	.15*	-.07	-.11	-.06	-.10	.02	.06	-.10
4. Tenure	110.03	32.38	.13*	.09	.18**	(--/--)	.18**	-.06	-.03	-.03	-.12	-.08	.00	-.02
5. Hours Worked per Week	45.83	6.91	.21**	.18**	.15*	.17**	(--/--)	-.05	-.04	.06	-.13*	.04	.02	.07
6. Affect	5.40	1.26	.01	.04	-.07	-.06	-.05	(.90/.90)	.65**	.50**	.66**	.56**	.56**	.11
7. Loyalty	5.28	1.23	.07	.11	-.11	-.04	-.04	.65**	(.87/.87)	.50**	.59**	.52**	.55**	.06
8. Contribution	5.58	.96	.20**	.10	-.06	-.03	.06	.50**	.50**	(.66/.66)	.46**	.48**	.51**	.24**
9. Professional Respect	5.72	1.36	-.04	.05	-.10	-.12	-.13	.66**	.59**	.46**	(.94/.94)	.58**	.58**	.08
10. Task-Oriented Behaviors	2.98	.67	.29**	.15*	-.02	-.10**	.02	.53**	.51**	.50**	.58**	(.92/.92)	.81**	.12
11. Relations-Oriented Behaviors	3.01	.71	.24**	.05	.03	-.07	.00	.55**	.56**	.51**	.58**	.80**	(.93/.93)	.19*
12. Performance	4.08	.54	.03	-.10	-.10	-.02	.07	.11	.06	.24**	.08	.12	.14*	(.76/.76)

Notes. N = 181-240 above diagonal using pairwise deletion; N = 240 below diagonal using means substitution. Cronbach's alphas are recorded as (with mean substitution; without mean substitution).

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

The results of these analyses are found in Tables 4 through 7. If a significant interaction was found, the results were graphed following procedures outlined by Cohen, Cohen, West, and Aiken (2003) with low and high levels of the moderating variable defined as one standard deviation below and above the variable mean, respectively.

The main effects of task-oriented behaviors ($\beta = .09$, *ns*) and affect ($\beta = .06$, *ns*) were not significantly related to subordinate performance at step 1 of the analysis examining affect as a moderator. This pattern continued into step two where the main effects were not significant for task-oriented behaviors ($\beta = .10$, *ns*) and affect ($\beta = .13$, *ns*), but the interaction between task-oriented behaviors and affect was significant ($\beta = .18$, $p < .05$; see Table 4). As seen in Figure 5, at low levels of affect, task-oriented behaviors were not related to subordinate performance, but at high levels of affect, as task-oriented behaviors increased, so did subordinate performance.

A similar pattern of results was found for task-oriented behaviors and loyalty (see Table 5). Neither task-oriented behaviors ($\beta = .12$, *ns*; $\beta = .14$, *ns*) nor loyalty ($\beta = .00$, *ns*; $\beta = .07$, *ns*) had a significant relationship with performance in step one or in step two; however, the interaction between task-oriented behaviors and loyalty was significant ($\beta = .16$, $p < .05$). At low levels of loyalty, no relationship is seen between task-oriented behaviors and performance but at high levels of loyalty, a pattern showing that increases in task-oriented behaviors were related to increases in performance emerged (see Figure 6).

Analyses examining contribution and task-oriented behaviors as predictors of future performance are depicted in Table 6 and Figure 7. In step one, task-oriented behaviors ($\beta = .00$, *ns*) were not significantly related to performance, but contribution showed a positive relationship ($\beta = .24$, $p < .01$). When the interaction was entered in step two, again task-oriented behaviors

Table 4

Regression Analyses for Task-Oriented Behaviors and Affect Predicting Performance

Predictor	R^2	F	B	$SE\ B$	β	*t-value*
Step 1	.01	1.96				
Task-Oriented Behaviors			.07	.06	.09	1.11
Affect			.03	.03	.06	.79
Step 2	.03	3.52*				
Task-Oriented Behaviors			.08	.06	.10	1.33
Affect			.05	.03	.13	1.61
Task-Oriented Behaviors X Affect			.09	.03	.18*	2.56

Note. N = 240.

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

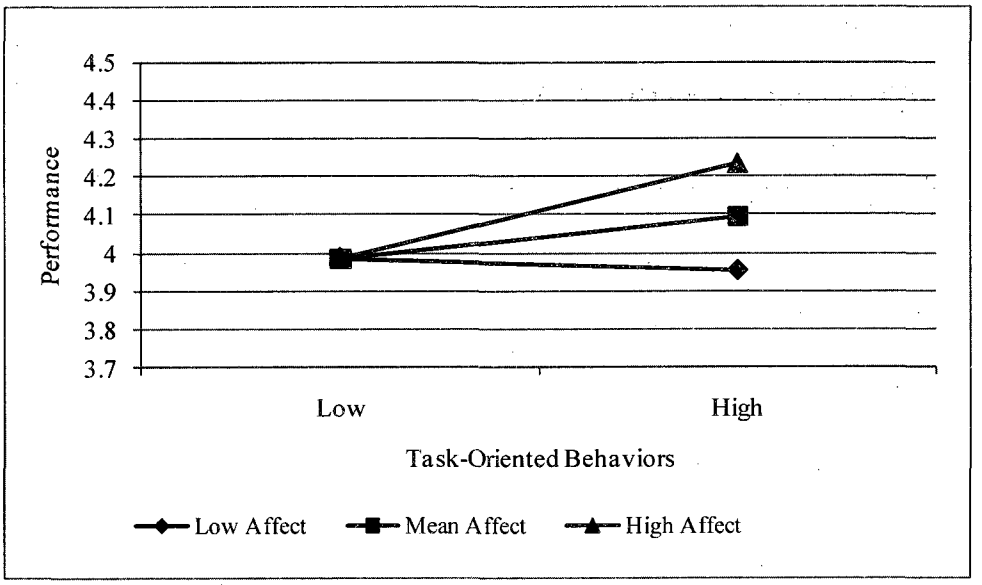

Figure 5. The interaction of task-oriented behaviors and affect on performance

Table 5

Regression Analyses for Task-Oriented Behaviors and Loyalty Predicting Performance

Predictor	R^2	F	B	$SE\ B$	β	*t-value*
Step 1	.01	1.65				
Task-Oriented Behaviors			.10	.06	.12	1.53
Loyalty			.00	.03	.00	.06
Step 2	.02	2.83*				
Task-Oriented Behaviors			.11	.06	.14	1.80
Loyalty			.03	.04	.07	.83
Task-Oriented Behaviors X Loyalty			.09	.04	.16*	2.26

Note. N = 240.

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

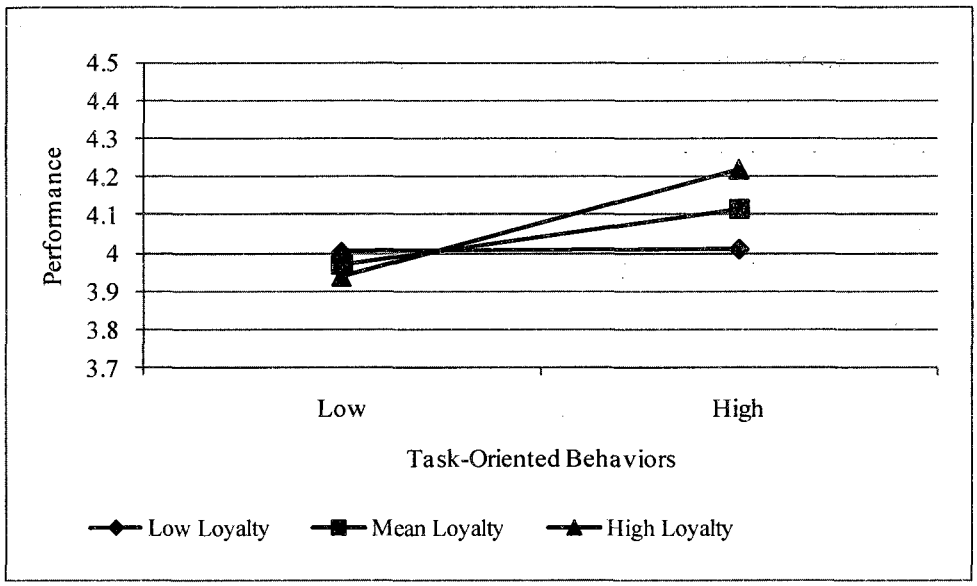

Figure 6. The interaction of task-oriented behaviors and loyalty on performance

Table 6

Regression Analyses for Task-Oriented Behaviors and Contribution Predicting Performance

Predictor	R^2	F	B	$SE\ B$	β	*t-value*
Step 1	.05	7.18**				
Task-Oriented Behaviors			.00	.06	.00	-.05
Contribution			.14	.04	.24**	3.31
Step 2	.08	6.55**				
Task-Oriented Behaviors			.03	.06	.04	.47
Contribution			.16	.04	.28**	3.78
Task-Oriented Behaviors X Contribution			.11	.05	.16*	2.24

Note. N = 240.

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

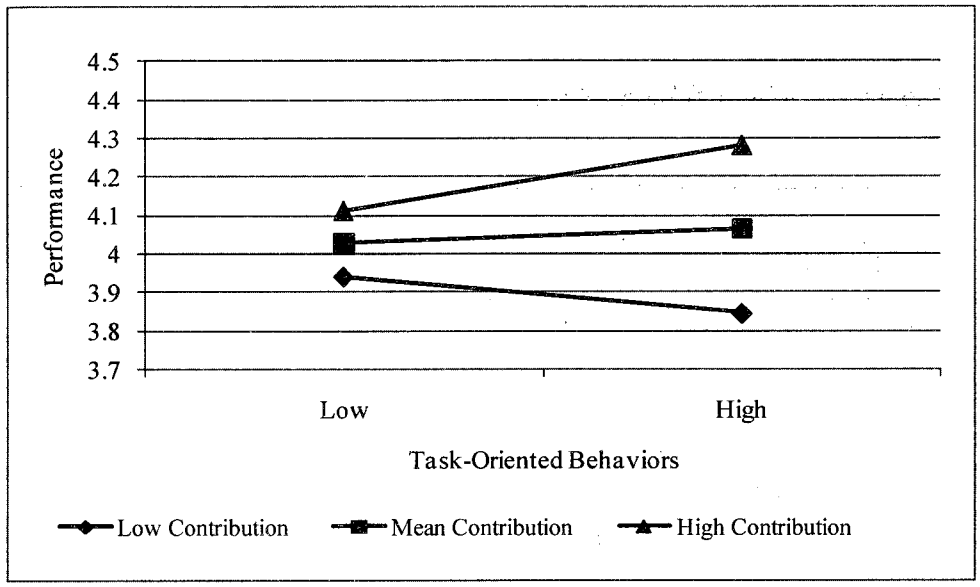

Figure 7. The interaction of task-oriented behaviors and contribution on performance

were not significantly related to performance ($\beta = .04$, *ns*), but contribution ($\beta = .28$, $p < .01$) and the interaction between task-oriented behaviors and contribution ($\beta = .16$, $p < .05$) were significantly related to performance. At low levels of contribution, a more negative relationship was found between task-oriented behaviors and performance meaning as more task-oriented behaviors were displayed, performance decreased. At high levels of contribution, the opposite relationship was found with higher levels of task-oriented behaviors being related to higher levels of performance (see Figure 7).

For professional respect, neither task-oriented behaviors ($\beta = .11$, *ns*) nor professional respect ($\beta = .01$, *ns*) were significant predictors at step one. Again, at step two the same pattern emerges with neither task-oriented behaviors ($\beta = .13$, *ns*) nor professional respect ($\beta = .16$, *ns*) having a significant main effect on performance; however, the interaction between task-oriented behaviors and professional respect ($\beta = .26$, $p < .01$; see Table 7) was significant. At low levels of professional respect, greater displays of task-oriented behaviors were related to slightly lower levels of performance but at high levels of professional respect, task-oriented behaviors were related to higher levels of performance (see Figure 8).

Table 7

Regression Analyses for Task-Oriented Behaviors and Professional Respect Predicting Performance

Predictor	R^2	F	B	$SE\ B$	β	*t-value*
Step 1	.01	1.66				
Task-Oriented Behaviors			.09	.07	.11	1.39
Professional Respect			.01	.03	.01	.17
Step 2	.05	4.76**				
Task-Oriented Behaviors			.10	.06	.13	1.62
Professional Respect			.06	.04	.16	1.77
Task-Oriented Behaviors X Professional Respect			.10	.03	.26**	3.29

Note. N = 240.

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

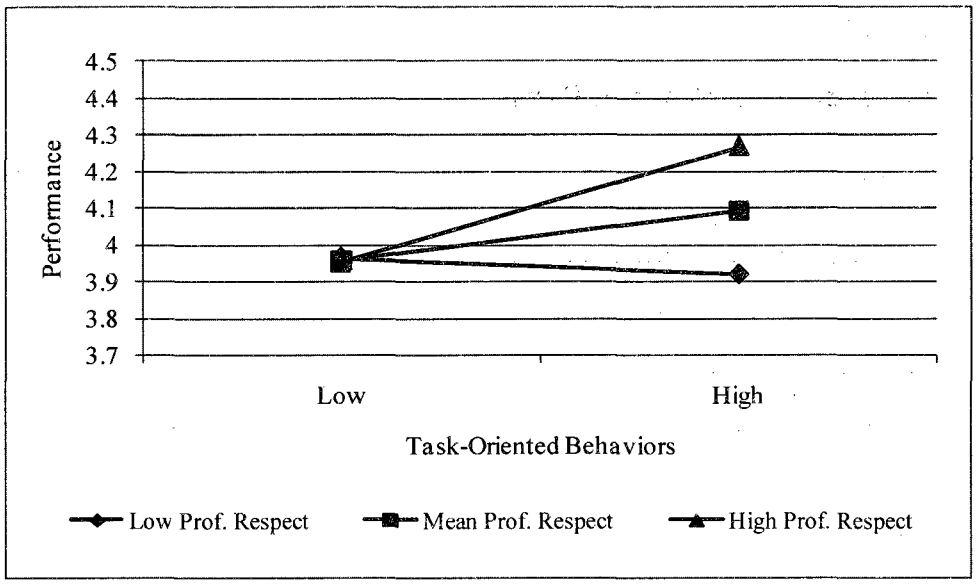

Figure 8. The interaction of task-oriented behaviors and professional respect on performance

Summary. Task-oriented behaviors (i.e., delegating, clarifying, and inspiring) were not consistently related to performance, but a pattern of consistent interactions was found. The effectiveness of task-oriented behaviors at increasing performance was moderated by individual LMX dimensions. There was a significant difference in the relationship between task-oriented behaviors and performance when LMX dimensions were low versus high. In situations where high-quality relationship dimensions were observed, increases in task-oriented behaviors were related to increases in performance. Hypothesis 1 was supported by these findings.

Relations-Oriented Behaviors

To support the second hypothesis, only professional respect should moderate the leader behavior and subordinate performance relationship. In other words, increases in relations-oriented behaviors will be related to higher subordinate performance only when there is a high level of professional respect. Increases in affect, contribution, or loyalty would not have the same moderating effect. Four hierarchical linear regression analyses were conducted with performance regressed on the combination of relations-oriented behaviors (i.e., supporting, mentoring, recognizing, and consulting) and a dimension of LMX, controlling for both relations-oriented behaviors and the LMX dimension. Affect was examined first followed by loyalty, contribution, and professional respect. The results of these analyses are depicted in Tables 8 through 11. If a significant interaction was found, the results were graphed following the same procedures used for task-oriented behaviors.

When only the main effects of relations-oriented behaviors ($\beta = .12$, *ns*) and affect ($\beta = .04$, *ns*) were examined, neither were related to performance. Again, no evidence for main effects of task-oriented behaviors ($\beta = .13$, *ns*) or affect ($\beta = .07$, *ns*) were found when the interaction ($\beta = .07$, *ns*) was added in step two (see Table 8).

When examined with loyalty, relations-oriented behaviors were significantly, positively related to performance ($\beta = .15$, $p = .05$), but loyalty was not ($\beta = -.02$, *ns*). As more relations-oriented behaviors were shown by leaders, subordinate performance also increased. In step two when the interaction was entered, relations-oriented behaviors remained a significant predictor of performance ($\beta = .16$, $p < .05$), but neither loyalty ($\beta = .01$, *ns*), nor the interaction ($\beta = .09$, *ns*) were significantly related to performance (see Table 9).

Table 8

Regression Analyses for Relations-Oriented Behaviors and Affect Predicting Performance

Predictor	R^2	F	B	$SE\ B$	B	*t-value*
Step 1	.01	2.52				
Relations-Oriented Behaviors			.09	.06	.12	1.53
Affect			.02	.03	.04	.59
Step 2	.01	2.04				
Relations-Oriented Behaviors			.10	.06	.13	1.63
Affect			.03	.04	.07	.85
Relations-Oriented Behaviors X Affect			.04	.03	.08	1.05

Note. N = 240.

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

Table 9

Regression Analyses for Relations-Oriented Behaviors and Loyalty Predicting Performance

Predictor	R^2	F	B	$SE\ B$	β	*t-value*
Step 1	.01	2.41				
Relations-Oriented Behaviors			.12	.06	.16*	2.10
Loyalty			-.01	.03	-.02	-.28
Step 2	.01	2.10				
Relations-Oriented Behaviors			.13	.06	.16*	2.10
Loyalty			.00	.04	.01	.12
Relations-Oriented Behaviors X Loyalty			.04	.04	.09	1.21

Note. N = 240.

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

A different pattern was found for contribution. Relations-oriented behaviors were not significantly related to performance at step one ($\beta = .03$, *ns*) or step two ($\beta = .05$, *ns*), but contribution was positively, significantly related to performance at step one ($\beta = .23$, $p < .01$) and step two ($\beta = .25$, $p < .01$). As more contribution from leaders was perceived at three months job tenure, greater subordinate performance was exhibited at six months job tenure. No evidence for moderation was found ($\beta = .10$, *ns*; see Table 10).

For professional respect and relations-oriented behaviors predicting performance, a significant relationship was not found between relations-oriented behaviors and performance at step one ($\beta = .14$, *ns*), but was at step two ($\beta = .17$, $p < .05$). As more relations-oriented behaviors were demonstrated at three months job tenure, performance was higher at six months job tenure. Professional respect was not significantly related to performance at step one ($\beta = -.01$, *ns*) or step two ($\beta = .11$, *ns*). However, a significant interaction between professional respect and relations-oriented behaviors was found ($\beta = .23$, $p < .01$; see Table 11). At a low level of professional respect, greater relations-oriented behaviors were not related to changes in performance, but at a high level of professional respect, greater relations-oriented behaviors were related to much higher levels of performance (see Figure 9).

Table 10

Regression Analyses for Relations-Oriented Behaviors and Contribution Predicting Performance

Predictor	R^2	F	B	$SE\ B$	β	*t-value*
Step 1	.05	7.24**				
Relations-Oriented Behaviors			.02	.06	.03	.34
Contribution			.13	.04	.23**	3.09
Step 2	.05	5.52**				
Relations-Oriented Behaviors			.04	.06	.05	.67
Contribution			.14	.04	.25**	3.33
Relations-Oriented Behaviors X Contribution			.07	.05	.10	1.42

Note. N = 240.

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

Table 11

Regression Analyses for Relations-Oriented Behaviors and Professional Respect Predicting Performance

Predictor	R^2	F	B	$SE\ B$	β	*t-value*
Step 1	.01	2.37				
Relations-Oriented Behaviors			.11	.06	.14	1.83
Professional Respect			.00	.03	-.01	-.09
Step 2	.04	4.45**				
Relations-Oriented Behaviors			.14	.06	.17*	2.23
Professional Respect			.04	.04	.11	1.21
Relations-Oriented Behaviors X Professional Respect			.09	.03	.23**	2.91

Note. N = 240.

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

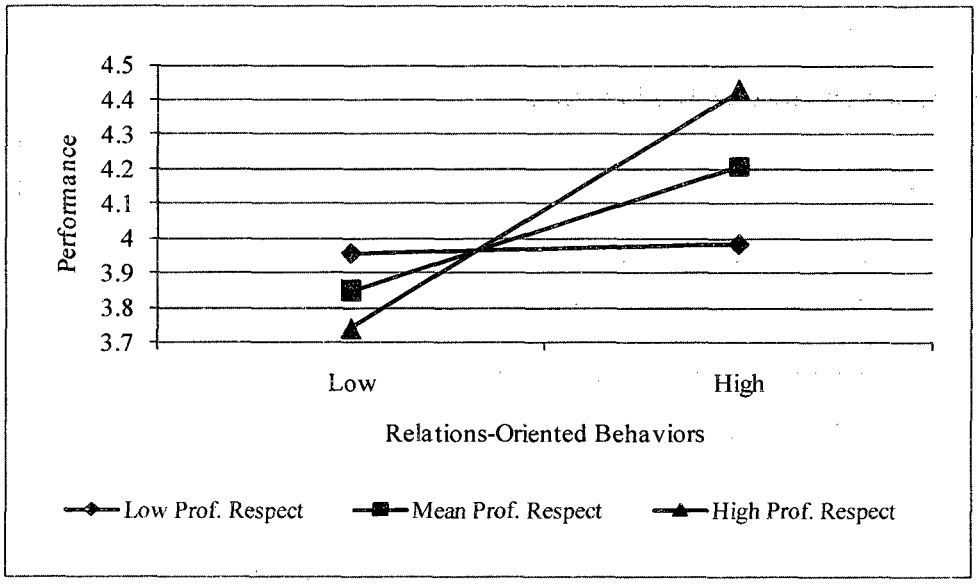

Figure 9. The interaction of relations-oriented behaviors and professional respect on performance

Summary. Evidence for only professional respect moderating the leader behavior and performance relationship was found with relations-oriented behaviors. This pattern of results supported Hypothesis 2.

CHAPTER 4
Discussion

Overview

Evidence was found supporting both hypotheses. Task-oriented behaviors will be discussed first with relations-oriented behaviors covered second. Limitations of the current study will be discussed next followed by considerations and directions for future research. This chapter concludes with the implications of these research findings for practice.

Task-Oriented Behaviors

A pattern of all LMX currencies moderating the task-oriented behaviors-performance relationship emerged, supporting the first hypothesis. When trust based on affect, loyalty, contribution, or professional respect is high, greater amounts of delegating, clarifying, and inspiring are related to higher subordinate performance than when trust based on one of these currencies is low.

The bivariate correlation between task-oriented behaviors and performance was not significant. However, while low amounts of affect and loyalty perceived in a leader negated the effectiveness of task-oriented behaviors (see Figures 5 and 6), low amounts of contribution and professional respect showed a significantly different, reversed relationship. In these latter circumstances, when contribution and professional respect are low, increases in task-oriented behaviors are related to decreases in performance (see Figures 7 and 8). When high amounts of any currency of LMX are perceived in the leader, enough trust is present for task-oriented behaviors to be effective at raising subsequent performance.

Task-oriented behaviors can be effective across many situations; they are effective provided that at least one currency of LMX is perceived. Nearly all leaders, including those

newly-assigned to a group or subordinate should be taught to delegate, clarify, and inspire. As long as subordinates perceive or feel affect, loyalty, contribution, or professional respect, increased performance should result when these behaviors are displayed.

Relations-Oriented Behaviors

Professional respect is necessary for relations-oriented behaviors to be most effective. Based on the significant bivariate correlation between relations-oriented behaviors and performance, increases in relations-oriented behaviors at three months job tenure were related to higher subordinate performance at six months job tenure. However, this relationship becomes stronger only when there is a high-level of professional respect present in the relationship. Trust built on other currencies of exchange is not able to counteract the risks involved with accepting and reciprocating appropriately to relations-oriented behaviors.

Limitations

All constructs were measured from the subordinates' perspective using a survey method thus raising the possibility that results might be attributable to common method variance (i.e., observed relationships among variables are spurious and due to a common source and measurement method). Although this criticism has been raised repeatedly since Campbell and Fiske (1959) first showed that some systematic variance can be attributed to measurement methods, many researchers believe the true threat has been overstated (Crampton & Wagner, 1994), with some labeling it urban legend (Spector, 2006). However, because of ongoing debate (Richardson, Simmering, & Sturman, 2009) precautions were taken to reduce the threat. First, data collection was separated temporally: measures of leader behaviors and LMX dimensions were obtained at three-months job tenure and performance data were not collected until six-months job tenure, thus creating a time gap of three months. It has been acknowledged by

researchers who believe common method variance is a serious problem that temporally separating the data collection of predictor and criterion variables can mitigate the risk of common method variance (Campbell & Fiske, 1959: Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, the focus of the hypotheses was on the moderating influence of particular variables. Interactions are difficult to explain based on common method variance alone (Kozlowski & Doherty, 1989; Major, Kozlowski, Chao, & Gardner, 1995).

It would have been ideal to obtain both leader and subordinate perspectives on all measures. However, most LMX research of the past 30 years has viewed only the subordinate perspective (Gerstner & Day, 1997), and other research has shown that subordinates actually provide more accurate ratings of leader behaviors than leaders do themselves (Kim & Yukl, 1995). Perhaps the greatest opportunity for future improvement is in the use of an objective or supervisor-rated performance criterion to confirm these findings, as some studies have found low correlations between objective and self-reported measures of performance (Ford, Kraiger, & Schechtman, 1986) and between self and supervisor ratings (Harris & Schaubroeck, 1988). In general, low performers usually inflate self ratings while high performers will often deflate ratings (Dunning, Johnson, Ehrlinger, & Kruger, 2003). However, dismissing findings as invalid due to self-report data would be imprudent. Attribution theory does not support the logic of subordinates biasing performance upward because of higher levels of external factors such as leader behaviors and relationships. Instead, it would predict that individuals tend to explain their own successful performance on internal factors (e.g., ability), not the behaviors of others (i.e., leader behaviors; see Gioia & Sims, 1985; Murphy & Cleveland, 1995). Thus, the current study's findings may be a conservative estimate.

Although two organizations were sampled, both were high-technology companies where only newer employees were surveyed. Generalizability to other organizations and more experienced populations could be limited. Future research should attempt to replicate findings using different samples. However, LMX researchers have found that LMX at two-months job tenure is highly correlated with LMX at 34-weeks job tenure (Bauer & Green, 1996), thus providing some evidence that employee tenure beyond three months may play a minor role in LMX levels. Additionally, job experience has also been shown to have only a minor relationship with future employee performance ($r = .18$; Schmidt & Hunter, 1998). However, employee tenure is usually negatively related to task-oriented leader behaviors (Bass, 1960; Badin, 1973). While new employees need more direction in structuring their roles and tasks, more experienced employees would need more relations-oriented behaviors to keep them motivated in completing their tasks and preparing for future roles. Therefore, the results are likely applicable to more experienced employees, but fewer task-oriented behaviors may be observed in samples of longer-tenured employees.

Relatively small effect sizes were found (R-squared values ranged from .01 to .08), but practical and statistical significance differ. Any increase in performance should be taken seriously. A five or 10 percent increase in performance in these competitive, high-technology organizations sampled could equate to practically significant increases in profits and innovations. Often it is the company to first propose a product or solution that benefits most, thus organizations will go to great lengths to increase individual performance. Theoretical models show that these small increases in individual performance translate into large increases in organization performance (Rucci, Kirn, Quinn, 1998).

Additionally, the criterion in this research was performance, and many factors besides the behavior of another person can have an effect on performance. Many studies that relate subordinate characteristics such as ability or personality to subsequent performance rarely find effect sizes larger than .25 (Schmidt & Hunter, 1998). This study looks beyond individual differences to leader behaviors and relationships for factors affecting performance, thus providing a way that incremental variance in performance could be explained beyond what ability or personality can predict before the hiring decision is made. While some links have been established between individual difference variables and LMX quality (e.g., conscientiousness & extraversion; Bernerth, Armenakis, Feild, Giles, & Walker, 2008) and between individual difference variables and leader behaviors (e.g., perceived subordinate ability; Howell & Dorfman, 1981) in general the relationships have been relatively small (r .07 to .35). This study focuses on predictors of performance that are conceptually more orthogonal than other internal qualities to the established general mental ability and conscientiousness predictors of performance

Contributions and Future Research

This study contributed to the theoretical literature and provided practical guidance for managers. It added to the short list of studies looking at LMX longitudinally (e.g., Bauer & Green, 1996; Major et al., 1995; Wakabayashi, Graen, Graen, & Graen, 1988) thus confirming the direction of the LMX to performance relationship seen in numerous cross-sectional studies (Gerstner & Day, 1997). Future research should continue adopting longitudinal methodologies.

Two rich leadership traditions, leader behaviors and LMX, were partially integrated showing that richer conclusions can be made when viewed together. The three studies that looked at LMX and leader behaviors previously (Bauer & Green, 1996; Schriesheim et al., 1998;

Yukl & Fu, 1999) focused on only one or two specific behaviors (e.g., delegating). This study examined a broader range of leader behaviors covering both the relations- and task-oriented realms. Future studies should work to include more leader behaviors and also use different research methodologies besides surveys. A study by Amabile, Schatzel, Moneta, and Kramer (2004) took a first step. They asked individuals to record leadership behaviors using diaries, and showed that when and how behaviors were performed was often more important than the type of behavior shown. While affect was their major outcome variable examined, future studies should involve varied data collection methods and could examine how all leader behaviors may influence all individual LMX currencies over time.

This was the first study using the specific currencies of exchange in the LMX relationship as moderators. Most studies use the LMX-7 measure and neglect examining which part of the relationship is having the greatest effect. This study moves LMX research down a path of greater specificity in the identification of relationship components. Such exactness can lead to more specific theory building, incorporating literatures that overlap the individual currencies of affect, loyalty, contribution, and professional respect. While the original LMX-MDM development study examined convergent validity with another overall measure of LMX, the LMX-7, no known studies have examined convergent validity with other measures of the individual currencies. As future studies examine individual currencies both as main effects and moderators, greater insights into what makes LMX a potent predictor of employee outcomes will be gained.

In the employee journey, this study fits in the onboarding stage, between the time an employee is selected and the time he or she is fully-trained. Selection research has found best practices include general mental ability testing, personality assessments, and structured interviews to hire employees with the highest likelihood of succeeding. This study looks at the

time directly after these employees were selected and hired. Does subordinate general mental ability affect the development of LMX? In other words, is one reason intelligence is a potent predictor of performance that subordinates who are more intelligent develop better relationships or encourage more effective leader behaviors? Subordinates with greater general mental ability may be eventually trusted more due to their ability to fulfill delegated tasks (Bauer & Green, 1996). Leader behavior effectiveness may also be moderated by subordinate ability and individual personality characteristics. For example, individuals with a higher general mental ability or higher levels of conscientiousness may respond effectively to task-oriented behaviors because they prefer high levels of structure. However, if relations-oriented behaviors are not also exhibited, these same individuals may react negatively to task-oriented behaviors as they may feel the leader does not trust them enough to make their own decisions or believes they are incapable of completing their tasks. Therefore, many factors and their interactions may influence LMX quality level and eventual performance.

Additional outcomes such as job satisfaction and turnover should also be examined. Leader behaviors have been shown to have a positive relationship with satisfaction, but may be made more effective by examining moderators (Allen et al., 2004; Bass, 1990; Leana, Locke, & Schweiger, 1990; Sagie & Koslowsky, 2000; Yukl, 1998)

Practical Applications

Practically, this study benefited managers by describing the optimal situation for the use of certain leader behaviors. This study should help HR professionals including leadership development trainers and executive coaches provide better guidance for when certain leader behaviors will be most effective at increasing subordinate performance.

Leaders should be encouraged to develop professional respect, the most powerful moderator of the leader behavior and performance relationship, regardless of leader behavior category. Professional respect was needed for relations-oriented behavior to effectively influence performance and its inclusion as a moderator showed a larger effect size change than affect, loyalty, or contribution. Leaders should remember that the professional respect a subordinate has for them is based on their abilities in their specific line of work. For this reason, leaders should be encouraged to attend learning events and take their own personal development seriously. Leaders also should be encouraged and provided opportunities to give accurate and timely feedback to employees. Creating a feedback-rich environment and being viewed as a credible source of information has been shown to eventually raise employee performance (Kinicki, Prussia, Wu, & McKee-Ryan, 2004).

Leaders should exhibit more task-oriented behaviors at the start of a relationship until they are confident there is a high-level of professional respect. Although it is possible that a subordinate may enter a reporting relationship with high professional respect for the leader due to a leader's reputation or previous contact with the leader, it is likely that this professional respect would need to be developed. Relations-oriented behaviors would lead to higher performance, but only once this professional respect is established. Task-oriented behaviors will lead to higher performance as long as there is at least a high-level of affect, loyalty, perceived contribution, or professional respect. Leaders should therefore be conscious of their individual relationships with subordinates and may need to vary their behaviors based on relationship quality.

Organizations should do all they can to encourage the growth of high-quality LMX relationships and to train effective leader behaviors. After selection, it is the next thing

organizations can do to increase performance. The advantage of attempting to improve leader behaviors and relationships is that they likely have a lower correlation with subordinate ability or personality than other additional selection practices that could be enacted (see Schmidt & Hunter, 1998). Therefore, while the highest predictive validity of using both a measure of general mental ability and conscientiousness to predict performance is about .65 (R-squared = .42), adding a more orthogonal variable that is external to the subordinate such as leader behavior and leader-subordinate relationship quality after a person is hired could increase the ability of organizations to maximize individual performance beyond what selection practices alone can do.

REFERENCES

Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology, 89,* 127-136.

Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors the work environment for creativity: Perceived leader support. *Leadership Quarterly, 15,* 5-32.

Badin, I. J., (1974). Some moderator influences on relationships between consideration, initiating structure, and organizational criteria. *Journal of Applied Psychology, 59,* 380-382.

Bass, B. M. (1990). *Handbook of leadership: A survey of theory and research.* New York: Free Press.

Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd edition). Mahwah, NJ: Lawrence Erlbaum.

Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership. *Leadership Quarterly, 10,* 181-217.

Bauer, T. N., & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. *Academy of Management Journal, 39,* 1538-1567.

Bauer, T. N., & Green, S. G. (1998). Testing the combined effects of newcomer information seeking and manager behavior on socialization. *Journal of Applied Psychology, 83,* 72-83.

Bentler, P. M. (1990). Comparative fit indices in structural models. *Psychological Bulletin, 88,* 238-246.

Bernerth, J. B., Armenakis, A. A., Feild, H. S., Giles, W. F., & Walker, H. J. (2008). The influence of personality differences between subordinates and supervisors on perceptions of LMX: An empirical investigation. *Group & Organization Management, 33,* 216-240.

Bradbury, T. N., & Fincham, F. D. (1990). Attributions in marriage: Review and critique. *Psychological Bulletin, 107,* 3-33.

Bradbury, T. N., & Fincham, F. D. (1992). Attributions and behavior in marital interaction. *Journal of Personality and Social Psychology, 63,* 613-628.

Brehm, S. S., Kassin, S. M., & Fein, S. (2002). *Social psychology* (5th edition). Boston: Houghton Mifflin.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). New York: Sage.

Campbell, D. T., & Fiske, D. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56,* 81-105.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlational analysis for the behavioral sciences* (3rd edition). Mahwah, NJ: Lawrence Erlbaum.

Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology, 92,* 909-927.

Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations.* Thousand Oaks, CA: Sage.

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment, and personal need fulfillment. *Journal of Occupational Psychology, 53,* 39-52.

Crampton, S. M., & Wagner, J. A., III. (1994). Percept-percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology, 79,* 67-76.

Dansereau, F. Jr., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within the formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance, 13,* 46-78.

Deutsch, M. (1960). The effect of motivational orientation upon trust and suspicion. *Human Relations, 13,* 123-140.

Dienesch, R. M., & Liden, R. C. (1986). Leader-member exchange model of leadership: A critique and further development. *Academy of Management Review, 11,* 618-634.

Dunning, D., Johnson, K., Ehrlinger, J., & Kruger, J. (2003). Why people fail to recognize their own incompetence. *Current Directions in Psychological Science, 23,* 83-87.

Fisher, B. M., & Edwards, J. E. (1988). Consideration and initiating structure and their relationships with leader effectiveness: A meta-analysis. *Academy of Management Best Papers Proceedings,* 201-205.

Fleishman, E. A. (1953). The description of supervisory behavior. *Personnel Psychology, 37,* 1-6.

Fleishman, E. A. (1995). Consideration and structure: Another look at their role in leadership research. In F. Dansereau & F. J. Yammarino (Eds.), *Leadership: The multiple-level approaches* (pp. 51-60). Stamford, CT: JAI Press.

Ford, J. K., Kraiger, K., & Schechtman, S. L. (1986). Study of race effects in objective indices and subjective evaluations of performance: A meta-analysis of performance criteria. *Psychological Bulletin, 99,* 330-337.

Gabarro, J. (1978). The development of trust, influence, and expectations. In A. G. Athos & J. J. Gabarro (Eds.), *Interpersonal behavior: Communication and understanding in relationships* (pp. 290-303). Englewood Cliffs, NJ: Prentice Hall.

Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology, 82,* 827-844.

Giffin, K. (1967). The contribution of studies of source credibility to a theory of interpersonal trust in the communication department. *Psychological Bulletin, 68,* 104-120.

Gottman, J. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes.* Hillsdale, NJ: Erlbaum.

Graen, G. B. (2003). Interpersonal workplace theory at the crossroads: LMX and transformational theory as special cases of role making in work organizations. In G. B. Graen (Ed.), *Dealing with diversity* (pp. 145-182). Greenwich, CT: Information Age Publishing.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain approach. *Leadership Quarterly, 6,* 219-247.

Halpin, A. W., & Winer, B. J. (1957). A factorial study of the leader behavior descriptions. In R. M. Stogdill & A. E. Coons (Eds.), *Leader behavior: Its description and measurement.* Columbus, OH: Bureau of Business Research, Ohio State University.

Harris, M. M., & Schaubroeck, J. (1988). A meta-analysis of self-supervisor, self-peer, and peer-supervisor ratings. *Personnel Psychology, 1988,* 41-62.

Harvey, J. H., Pauwels, B. G., & Zickmund, S. (2005). Relationship connection: The role of minding in the enhancement of closeness. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 423-433). New York: Oxford University Press.

Hemphill, J. K., & Coons, A. E. (1957). Development of the leader behavior description questionnaire. In R. M. Stogdill & A. E. Coons (Eds.), *Leader behavior: Its description and measurement.* Columbus, OH: Bureau of Business Research, Ohio State University.

Herrnstein, R. J. (1970). On the law of effect. *Journal of Experimental Analysis of Behavior, 13,* 243-266.

Horne, P. J., & Lowe, C. F. (1993). Determinants of human performance on concurrent schedules. *Journal of the Experimental Analysis of Behavior, 59,* 29-60.

Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion.* New Haven, CT: Yale University Press.

Howell, J. P., & Dorfman, P. W. (1981). Substitutes for leadership: Test of a construct. *Academy of Management Journal, 24,* 714-728.

Javidan, M. (1992). Managers as leaders: Developing a profile of effective leadership in top management. In K. Clark, M. B. Clark, & D. P. Campbell (Eds.), *Impact of leadership* (pp. 47-58). Greensboro, NC: Center for Creative Leadership.

Jones, A. P., James, L. R., & Bruni, J. R. (1975). Perceived leadership behavior and employee confidence in the leader as moderated by job involvement. *Journal of Applied Psychology, 60,* 146-149.

Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology, 89,* 36-51.

Katz, D., & Kahn, R. L. (1952). Some recent findings in human-relations research in industry. In E. Swanson, T. Newcomb, & E. Hartley (Eds.), *Readings in social psychology* (pp. 650-665). New York: Holt.

Katz, D., Maccoby, N., & Morse, N. (1950). *Productivity, supervision, and morale in an office situation.* Ann Arbor, MI: Institute for Social Research.

Katz, D., Maccoby, N., Gurin, G., & Floor, L. (1951). *Productivity, supervision, and morale among railroad workers.* Ann Arbor, MI: Institute for Social Research.

Kim, H., & Yukl, G. (1995). Relationships of self-reported and subordinate-reported leadership behaviors to managerial effectiveness and advancement. *Leadership Quarterly, 6,* 361-377.

Kinicki, A. J., Prussia, G. E., Wu, B. J., & McKee-Ryan, F. M. (2004). A covariance structure analysis of employee's response to performance feedback. *Journal of Applied Psychology, 89,* 1057-1069.

Kozlowski, S. W. J., & Doherty, M. L. (1989). Integration of climate and leadership: Examination of a neglected issue. *Journal of Applied Psychology, 74,* 546-553.

Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life.* Glenview, IL: Scott Foresman.

Leana, C. R. (1987). Power relinquishment versus power sharing: Theoretical clarification and empirical comparison of delegation and participation. *Journal of Applied Psychology, 72,* 228-233.

Leana, C. R., Locke, E. A., & Schweiger, D. M. (1990). Fact and fiction in analyzing research on participative decision making: A critique of Cotton, Vollrath, Froggat, Lengnick-Hall, and Jennings. *Academy of Management Review, 15,* 137-146.

Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management, 24,* 43-72.

Lieberman, J. K. (1981). *The litigious society.* New York: Basic Books.

Locke, E. A. & Latham, G. P. (1990). *A theory of goal setting and task performance.* Englewood Cliffs, NJ: Prentice Hall.

Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly, 7,* 385-425.

Major, D. A., Kozlowski, S. W. J., Chao, G. T., & Gardner, P. D. (1995). A longitudinal investigation of newcomer expectations, early socialization outcomes, and moderating effects of role development factors. *Journal of Applied Psychology, 80,* 418-431.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20,* 709-734.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88,* 879-903.

Podsakoff, P. M., & Todor, W. D. (1985). Relationships between leader reward and punishment behavior and group processes and productivity. *Journal of Management, 11,* 55-73.

Podsakoff, P. M., Todor, W. D., Grover, R. A., & Huber, V. L. (1984). Situational moderators of leader reward and punishment behavior: Fact or fiction? *Organizational Behavior and Human Performance, 34,* 21-63.

Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance. *Organizational Research Methods, 12,* 762-800.

Rucci, A. J., Kirn, S. P., Quinn, R. T. (1998). The employee-customer-profit chain at Sears. *Harvard Business Review, 1,* 82-97.

Sagie, A., & Koslowsky, M. (2000). *Participation and empowerment in organizations.* Thousand Oaks, CA: Sage.

Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin, 124,* 262-274.

Schriesheim, C. A., Neider, L. L., & Scandura, T. A. (1998). Delegation and leader-member exchange: Main effects, moderators, and measurement issues. *The Academy of Management Journal, 41,* 298-318.

Sitkin, S. B., & Roth, N. L. (1993). Explaining the limited effectiveness of legalistic "remedies" for trust/distrust. *Organization Science, 4,* 367-392.

Spector, P. E. (2006). Method variance in organizational research: Truth or urban legend?. *Organizational Research Methods, 9,* 221-232.

Stogdill, R. M., Goode, O. S., & Day, D. R. (1962). New leader behavior description subscales. *Journal of Psychology, 54,* 259-269.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics.* New York: Allyn & Rose.

Thorndike, E. L. (1911). *Animal intelligence: Experimental studies.* New York: Macmillan.

Tucker, L. R., & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika, 38,* 1-10.

Vroom, V. H., & Jago, A. G., (1988). *The new leadership: Managing participation in organizations*. Englewood Cliffs, NJ: Prentice Hall.

Wakabayashi, M., Graen, G., Graen, M., & Graen, M. (1988). Japanese management progress: Mobility into middle management. *Journal of Applied Psychology, 73,* 217-227.

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal, 40,* 82-111.

Wikoff, M., Anderson, D. C., & Crowell, C. R. (1983). Behavior management in factory setting: Increasing work efficiency. *Journal of Organizational Behavior Management, 4,* 97-128.

Yukl, G. (1998). An evaluative essay on current conceptions of effective leadership. *European Journal of Work and Organizational Psychology, 8,* 33-48.

Yukl, G. (2006). *Leadership in organizations.* Upper Saddle River, NJ: Pearson-Prentice Hall.

Yukl, G., & Fu, P. P. (1999). Determinants of delegation and consultation by managers. *Journal of Organizational Behavior, 20,* 219-232.

Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half-century of behavior research. *Journal of Leadership and Organizational Studies, 9,* 15-32.

Yukl, G., & Van Fleet, D. (1982). Cross-situational, multi-method research on military leader effectiveness. *Organizational Behavior and Human Performance, 30,* 87-108.

Yukl, G., Wall, S., & Lepsinger, R. (1990). Preliminary report on validation of the managerial practices survey. In K. E. Clark & M. B. Clark (Eds.), *Measures of leadership* (pp. 223-238). West Orange, NJ: Leadership Library of America.

APPENDIX A

LEADER-MEMBER EXCHANGE MULTIDIMENSIONAL MEASURE

Currency	Items
Professional Respect	I am impressed with my supervisor's knowledge of his/her job
	I respect my supervisor's knowledge of and competence on the job
	I admire my supervisor's professional skills
Affect	I like my supervisor very much as a person
	My supervisor is the kind of person one would like to have as a friend
	My supervisor is a lot of fun to work with
Contribution	I do work for my supervisor that goes beyond what is specified in my job description
	I am willing to apply extra efforts, beyond those normally required, to further the interests of my work group
	My contributions are important to my supervisor
	My supervisor provides me with resources and opportunities to make a meaningful contribution
Loyalty	My supervisor defends my actions to superiors, even without complete knowledge of the issue in question
	My supervisor would come to my defense if I were "attacked" by others
	My supervisor would defend me to others in the organization if I made an honest mistake

APPENDIX B

PERFORMANCE MEASURE

Items
Overall, I have been effectively fulfilling my roles and responsibilities
Overall, I have been performing my job the way my supervisor would like it to be performed
I get my work done very effectively
If your supervisor had his/her way, he/she would change the manner in which you perform your job
All in all, I am a very competent employee
Please rate your overall level of performance by circling the appropriate number on the following scale: 1=Poor, 2=[no label], 3=Average, 4=[no label], 5=Superior

VITA

KURT L. OBORN
250 MGB Hampton Boulevard
Old Dominion University
Norfolk, VA 23529
koborn@odu.edu

EDUCATION:

2004	**B.S., Psychology** (summa cum laude), Minor: Human Resources Utah State University, Logan, Utah
2007	**M.S., Psychology** Old Dominion University Norfolk, Virginia First-year Project: "Leader-Member Exchange, Self-Management, and Teleworker Performance" Thesis: "Mediators of the Leader-Member Exchange and Performance Relationship"
2010	**Ph.D., Industrial-Organizational Psychology** Old Dominion University Norfolk, Virginia

MANUSCRIPTS IN PRESS

Morganson, V. J., Major, D. A., **Oborn, K. L.**, Verive, J. M., & Heelan, M. P. Comparing the outcomes of telework locations and traditional work arrangements: Differences in inclusion, work-life balance, and job satisfaction. *Journal of Managerial Psychology,* In press.

MANUSCRIPTS IN PREPARATION OR UNDER REVIEW

Oborn, K. L., & Major, D. A. A multilevel examination of leader-member exchange to work-family outcomes.

SELECT RESEARCH PRESENTED AT PROFESSIONAL MEETINGS:

Oborn, K. L., Selgrade, K. S., & Davis, D. D. (2007, August). *Leader-member exchange and self-management outcomes among teleworkers*. Poster session presented at the annual conference of the American Psychological Association, San Francisco, CA.

Oborn, K. L., & Major, D. A. (2008, March). *LMX and job stress: A multi-level examination of context effect.* Paper to be presented at the American Psychological Associations's seventh international conference on occupational stress & health, Washington, DC.

Oborn, K. L., & Major, D. A. (2008, April). *The effect of context: A multi-level model of LMX and work-family conflict*. In D. A. Major & K. L. Oborn (Co-chairs), *Multi-level and multi-perspective research in leader-member exchange.* Symposium conducted at the annual conference of the Society for Industrial and Organizational Psychology, San Francisco, California.

Oborn, K. L., & Davis, D. D. (2009, April). LMX beyond the dyad: Concepts and operations. A panel discussion to be presented at the 24th Annual Conference of the Society for Industrial and Organizational Psychology, New Orleans, LA. Chairs: Kurt L. Oborn & Donald D. Davis.