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How personality and self-identity impact the effects of leader member exchange on role stressors and organizational outcomes

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How Personality and Self-Identity Impact the Effects of Leader Member Exchange on Role Stressors and Organizational Outcomes

by

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for my family…

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ABSTRACT

This study investigated how followers' personality and self-identity moderated their leader's ability to influence organizational outcomes through management of role stressors experienced by the follower. Data was obtained through large group testing (n = 232), with performance measures being provided by supervisors (43% return rate). Results demonstrated that while Leader Member Exchange (LMX) had a linear relationship with role ambiguity and role conflict, it had a curvilinear relationship with role overload. Thus providing evidence that under certain conditions leadership can lead to negative outcomes. Furthermore, it was demonstrated that LMX indirectly influences both affective and cognitive variables through role stressors. No evidence was found to suggest that personality moderates the relationship between LMX and role stressors. This study demonstrates the need for further research into the complexities of LMX. Practical recommendations were put forth emphasizing the importance of developing high quality LMX relationships.

Introduction

Leadership is a universal human phenomenon that has been contemplated for millennia (Bass, 1990). Its empirical investigation is a societal necessity because leaders disproportionally possess influence, including those within work organizations. Although conceptualizations vary by theory, "leadership" involves the general ability to express desirable goals or end-states and then motivate followers to obtain those outcomes. Having the capability to influence both the direction and intensity of followers' energy, leaders provide organizations with a means to augment performance. Successful leaders create a competitive advantage by maximizing their organization's human capital (McCall, 1998; Vicere & Fulmer, 1998) and thus, it is important to understand variables that impact effective leadership.

Since the 1900s, leadership research has gone through several paradigm shifts. Initial research attempted to isolate universal traits that differentiated successful from unsuccessful leaders (House & Aditya, 1997). Although research discovered significant relationships, findings seldom replicated (Gibb, 1947; Jenkins, 1947; Stogdill, 1948). There have been a number of explanations put forth to explain empirical inconsistencies. At the time, personality constructs had yet to be empirically validated. Research that was intended to uncover universal traits examined constructs that varied both conceptually and operationally between studies. Furthermore, most studies relied on samples of adolescents and low-level supervisors and managers (House & Aditya, 1997). Since then, research literature has emphasized the value of obtaining samples consisting of

individuals in meaningful leadership positions (Zaleznik, 1977). In addition, the trait paradigm failed to recognize that there are individual differences in the ability to accurately express traits, as well as that the expression of the trait consistent behavior is not always appropriate (Bem & Allen, 1974; Mischel, 1973).

Beginning in the 1950s, the trait paradigms fell out of favor as the behaviorism zeitgeist swept over psychology. Researchers turned to examining the behaviors of individuals in authority and then relating those observations to effectiveness criteria (For review see, Bowers & Seashore, 1966). However, many of the limitations that plagued trait theories were also problematic for this new behavioral paradigm. For example, studies continued to use samples composed of low-level supervisors and managers. The developed models were primarily inductive and atheoretical, which limited the validity of constructed measures (Schriesheim, House, & Kerr; 1976). Ultimately, limited consideration for role demands, situational context, and congruence between leader and follower dispositions resulted in researchers' inability to find behaviors that were consistently linked to managerial effectiveness (House, 1971; House & Aditya, 1997; Larson, Hunt, & Osborn, 1974).

Researchers' inability to discover universal traits or behavioral predictors brought about another paradigm shift in the 1970s. In order to remedy criticisms of the previous paradigms, researchers examined leader effectiveness through the influence of situational variables' interaction with traits and behaviors. The result was the advancement of several none too parsimonious theories. For example, Vroom and Yetton (1973) developed a prescriptive model based on the Decision Process Theory meant to aid leaders in making high-quality decisions that subordinates will support. The current

model, a 12- stage decision tree, is for all practical purposes untestable with millions of possible attribute combinations (Vroom & Jago, 1988). The Path-Goal Theory of Leader Effectiveness had to employ several boundary conditions to reduce the scope of the theory that ultimately limited applicability (House, 1971; House & Mitchell, 1974; Wofford & Liska, 1993). In the end, the complexity of the theories and resulting models was detrimental to the paradigm.

During the 1970s and 1980s, leadership research declined as several prominent studies demonstrated that leadership explained only a trivial amount of performance variability. Several authors even proposed abandoning the field entirely (Brown, 1982; Meindl, Ehrlich, & Dukerich, 1985; Pfeffer, 1977). Later investigation found that methodological flaws had deflated leadership's impact on performance variability. Research since that time has discovered that up to 50% of the variability in organizational performance may be attributed to leadership (Thomas, 1988). The revival of leadership research came with a shift from broad encompassing models to examining the effects of leaders on their followers and the relationships that they share. For example, charismatic theories focus on the ability of a leader to achieve high levels of follower commitment and performance through the use of symbolic and emotional appeal (House & Aditya, 1997). Implicit leadership theories examine the cognitive processes underlying perceptions of leadership and leader evaluation (Lord, Binning, Rush, & Thomas, 1978; Lord, DeVader, & Alliger, 1984). Leader-member exchange (LMX) theory adopted a dyadic perspective by focusing on the unique exchange relationships that develop between a leader and follower (Schriesheim, Castro, & Cogliser, 1999).

Interestingly, as the scientific study of leadership progressed from trait to behavioral to situational perspectives, a disproportionate amount of attention has examined the favorable effects that leaders have. However, many of the traits (e.g., need for power) and behaviors (e.g., dominance and power) associated with leaders may in fact have detrimental effects on followers. This possibility has not been widely recognized until more recently (e.g., Conger, 1990; Maccoby, 2000). For example, Conger (1990) coined the phrase "dark side of leadership" to describe this study of the negative effects of leadership. The purpose of this study is to expand and elaborate on the dark side of leadership by examining conditions in which high quality LMX relationships result in negative outcomes. Such an aim runs counter to the contemporary view because most scholars have argued that high quality exchanges between leaders and followers are desirable because they lead to, for example, better job performance and lower withdrawal (Gerstner & Day, 1997).

Understanding LMX is important because, unlike other leadership theories, the relationship between the leader and follower is the primary focus. Arguably, leadership cannot exist without a leader and follower and thus, a dyad represents the most basic—and appropriate—unit of analysis (Schiesheim, Castro, & Cogliser, 1999). For instance, it is through the leader that followers view their organization (Gerstner & Day, 1997). Thus, understanding leader-follower exchanges is important for learning about exchanges between organization and their members. Furthermore, it is through the changes in the follower that leader effectiveness is understood (Lord & Brown, 2004). The emphasis on dyadic relationships is substantiated by research demonstrating the quality of the leader–

follower relationship is an important predictor of attitudinal, affective, and behavioral outcomes (For review see, Graen & Uhl-Bien, 1995).

In accordance with recommendations put forth by Gerstner and Day (1997), this study will broaden understanding of the effect of LMX on organizational outcomes, such as health, commitment, satisfaction, and performance. First, this study tested whether followers' perceptions of themselves and their environment moderated relationships between LMX and role stressors. Past meta-analyses have provided strong evidence for organizationally-friendly linear relationships between LMX and organizational criteria (Gerstner & Day, 1997). However, the overemphasis on simple linear relationships may have stymied the discovery of more complex effects. Role theory suggests that it is followers' subjective interpretations of leaders' role demands that create psychological distress, which in turn leads to negative outcomes. Therefore, traits that affect perception are likely to influence one's subjective evaluation of role demands. For example, contrasting past research, Hochwarter and Byrne (2005) found that LMX had no influence on stress when the participant was characterized as having low positive affect. By examining LMX in conjunction with perception-altering moderators, it is possible that unique, previously-unobserved relationships may be found.

Second, this study tested whether role stressors mediated the effects of LMX on organizational criteria. At present, research treats LMX as a direct cause of follower change. Yet, LMX is founded on role theory which stresses that it is the followers' interpretation of leaders' behaviors, not the behaviors itself, that leads to outcomes. Thus, by superimposing LMX onto role theory framework, a mechanism for understanding the causal relationship between LMX and organizational criteria might be identified (Kahn,

Wolfe, Quinn, & Snoek, 1964). To foreshadow, I suspected that too little LMX *and* too much LMX are associated with higher levels of role stressors. In the following section, LMX and its ties to role theory are described.

Leader-Member Exchange (LMX)

Leader Member Exchange (LMX) has its roots in role and exchange theories, as well as the norm of reciprocity (Blau, 1964; Gouldner, 1960). The basic premise is that leaders develop unique relationships with members (or followers) through repeat interactions. As trust and mutual respect between the two develops, the leader is more likely to assign premiere work roles (Hochwarter & Byrne, 2005; Uhl-Bien, Graen, & Scandura, 2000). In high-quality LMX relationships, leaders provide multiple advantages to members, including desirable work assignments, resources, emotional support, favors, rewards, increased communication, and latitude in determining their working approach (Kacmar, Witt, Zivnuska, & Gully, 2003; Liden & Graen, 1980; Townsend, Da Silva, Mueller, Curtin, & Tetrick, 2002; Wayne, Shore, & Liden, 1997). Furthermore, the leader is likely to remove contextual obstacles in order to aid members' performance (Hochwarter & Byrne, 2005). In exchange, leaders expect superior task performance, extra-role performance, commitment, and organizational citizenship behaviors (OCB) from members (Eisenberger, Fasolo, & Davis-LaMastro, 1990; Harris & Kacmar, 2006). The member in turn feels obligated to increase in-role and extra-role performance to meet the leader's expectations (Gouldner, 1960). In contrast, in low quality LMX relationships leaders and members work within a simple exchange relationship in which labor is exchanged for wages (Bauer & Green, 1996). Meta-analytical results provide evidence that subordinates in high-quality LMX relationships are perceived as performing better

than those subordinates in low quality LMX relationships. Subordinates in high-quality LMX relationships also show higher levels of commitment and supervisor-directed OCBs (Gerstner & Day, 1997; Masterson, Lewis, Goldman, & Taylor, 2000; Settoon, Bennett, & Liden, 1996; Wayne, Shore, & Liden, 1997).

Role Theory and LMX

Role theory provides a framework to explain how LMX behaviors translate into psychological and behavioral consequences for the focal person. According to role theory, individuals (*role sender*) will develop beliefs and attitudes of what activities (*role*) constitute a position (*role expectation*) when the consequences are personally meaningful. It has been demonstrated that expectations develop quickly, typically within a few days (Hollander & Offermann, 1990; Liden, Wayne, & Stilwell, 1993). Role expectations are then directly or indirectly communicated (*sent role*) to the focal person. Communication in high-quality LMX relationships has been shown to occur more frequently and is more effective than communication in low quality LMX relationships (Kacmar et al., 2003). Furthermore, Fairhurst, Rogers, and Sarr (1987) found a negative correlation between LMX and the use of communication to emphasize dominance. In another study, Fairhurst (1993) demonstrated that supervisors in high-quality LMX relationships utilize communication styles based on relationship building and positive affect, while supervisors in low quality LMX relationships have styles that are antagonistic and adversarial.

Each sent role is an influence attempt (*role pressure*) meant to elicit conformity to role expectations. The focal person will then have a psychological reaction *(role force)* to the role pressure. A significant role force may lead to psychological and physiological

strain and be expressed as various coping responses such as compliance, negotiation of role expectations, and use of defense mechanisms that distort reality of the situation (House & Rizzo, 1972). Finally, behavioral indicators of conformity are evaluated by the role sender creating a feedback loop (Kahn et al., 1964).

LMX and Role Stressors

In the 1990s, researchers began to theorize conditions in which leadership would result in negative organizational outcomes. Conger (1990) identified several skill areas such as a leader's strategic vision, communication and impression-management skills, and general management practices as having the potential to result in negative organizational outcomes. Luthans, Peterson, and Ibrayeva (1998) applied the concept of "the dark side of leadership" in their discussion of how communist cultures are vulnerable to exploitation by transformational leaders. Other work has examined the pros and cons of narcissistic leaders in the workforce. Such leaders tend to be both naturally charismatic and confident in their strategic vision. However, a narcissistic leaders' lack of empathy, competitiveness, dogmatism, and poor mentoring skills ultimately lead to negative organizational outcomes (Maccoby, 2000; Sankowsky, 1995).

It was not until the 21st century that researchers began to experimentally investigate conditions in which leadership would lead to negative follower outcomes. Some of this research has focused on LMX due to its unique emphasis on the leader-follower relationships and its relationships with meaningful organizational criteria. Because LMX involves the negotiating of roles between leaders and their followers, it is possible that role-related problems may arise (Hochwarter & Byrne, 2005). Furthermore, the reciprocal nature of LMX both creates and eliminates conditions that influence the

intensity of role-related problems. For example, at the highest levels of LMX the greatest levels of responsibility, obligation, and extra-role behavior are likely to be placed on the follower (Blau, 1964; Gouldner, 1960; Liden & Graen, 1980). Although this typically leads to enhanced performance and greater rewards for the follower, there is likely a point at which subordinates begin to experience distress because of increased role stressors. Thus, at the highest levels of LMX, effective subordinate functioning may be hindered (Harris & Kacmar, 2006; Hochwarter & Byrne, 2005; Morrow, Suzuki, Crum, Ruben, & Rautsch, 2005). Such research provides evidence that the relationship between leadership and role stressors is complex and may result in negative or curvilinear relationships in addition to positive linear relationships historically found. In the sections below, I explain possible ways in which LMX may influence various role stressors, specifically role conflict, role overload, and role ambiguity.

Role Conflict. At times, followers will experience conflicting role pressures leading to role conflict. This may arise from incompatible role requirements judged relative to a set of standards or inconsistent behavioral demands from roles in different domains (O'Driscoll, Ilgen, & Hildreth, 1992). Kahn et al. (1964) posit that the magnitude of role conflict is the inverse function of the strength difference between role pressures. High-quality LMX relationships have several characteristics that lower the follower's subjective feelings of role conflict. Members in high-quality LMX relationships are likely to receive numerous work role pressures from their leader increasing the difference in role pressures between role sets. Furthermore, the reciprocal nature of high-quality LMX strengthens followers' feelings of obligation to conform to role pressures, maximizing the difference between role pressures and decreasing one's

role conflict. In addition, increased emotional support and latitude in determining one's working approach provides the follower a means to decrease non-work role pressures. Empirical research has supported these theoretical links. For instance, Singh (1991) found that a follower's latitude in determining one's working approach was negatively related to role conflict. A meta-analysis conducted by Gerstner and Day (1997) demonstrated a moderate negative relationship between LMX and role conflict (ρ = -.26). Therefore, it is expected that there will be a negative linear relationship between LMX and role conflict.

Role Overload. A related role stressor to role conflict is role overload. Although it is often collapsed into a single role stressor with role conflict there are meaningful differences that make it distinct (Ilgen & Hollenbeck, 1991; Naylor, Pritchard, & Ilgen, 1980; O'Driscoll, Ilgen, & Hildreth, 1992; Rizzo, House, & Lirtzman, 1970). For role overload, multiple role senders have legitimate role expectations that do not necessarily conflict, but due to constraints with time or resources, the expectations are difficult or impossible to accomplish.

It is expected that there will be a U-shaped curvilinear relationship between LMX and role overload. In low-quality LMX relationships, followers do not receive the same resources or support granted to followers in high-quality LMX relationships. Role overload will begin to decrease as leaders begin providing advantages to their followers such as resources, emotional support, favors, and latitude in determining their working approach (Kacmar et al., 2003; Lagace, Castleberry, & Ridnour, 1993; Liden & Graen, 1980; Townsend et al., 2002; Wayne, Shore, & Liden, 1997). However, at the highest levels of LMX the leader's expectations of superior in-role performance and OCBs may

actually increase role overload in the follower (Eisenberger, Fasolo, & Davis-LaMastro, 1990; Harris & Kacmar, 2006). It has been demonstrated that a leader's emphasis on task accomplishments along with emotional support for the subordinate, similar to high-quality LMX relationships, has a positive relationship with role overload (Singh, 1991). Furthermore, leaders and followers in high-quality LMX relationships are likely to develop close relationships. Such relationships are typically associated with an increase in interactions and require effort to maintain. Followers also become more active in decision making processes further increasing their time commitments (Andrews & Kacmar; 2001). On the job time demands have been shown positively related to job related interference that arises because "concerns, demands, emergencies, and commitments in one area of life interfere(s) with the fulfillment of goals and responsibilities in the other domain" (O'Driscoll, Ilgen, & Hildreth, 1992). Therefore, it is expected that there will be a U-shaped curvilinear relationship between LMX and role overload.

Role Ambiguity. All individuals have an innate need to understand and effectively manipulate their environment (Deci, 1975; White, 1959). In order to do so, an individual must be able to (a) anticipate consequences of his or her own actions; (b) accurately estimate the probability of event antecedents; and (c) depend on the stability of surrounding conditions. If these conditions are not satisfied, physiological and psychological strain may result. Role ambiguity is an inadequacy, being either unclear or inconsistent, of a sent role to convey the necessary information to predict the outcome of the focal person's behavior. Role ambiguity is the difference between one's state of knowledge and "that which would provide satisfaction of his personal needs" (Kahn et

al., 1964). It may result from a failure to know what the role expectations are or actions necessary to conform to those expectations.

LMX has been repeatedly demonstrated to be negatively related to role ambiguity. Gerstner and Day's (1997) meta-analysis suggests a significant negative relationship between LMX and role ambiguity (ρ = -.34). Increased communication and interaction associated with high-quality LMX relationship provides followers with multiple opportunities for clarification and feedback. Furthermore, communication has the benefits of positively influencing follower's personal adjustment and emotional well-being (Kahn et al., 1964). Also, through multiple interactions trust and mutual respect is likely to develop between leader and follower. This provides the leader freedom to allow the follower latitude in determining his or her working approach.

However, there are also theoretical reasons to suggest that LMX and role ambiguity will have an inverted U-shaped curvilinear relationship. In low-quality LMX relationships, leaders and followers engage in contractual exchanges (Liden, Sparrowe, & Wayne, 1997). In these exchanges, followers complete often monotonous tasks specified in the work contract in exchange for a wage (Townsend et al., 2002). Followers in low-quality LMX relationships do not feel obligated to complete extra role tasks, nor do leaders feel obligated to provide extra advantages to the follower (Gouldner, 1960; Harris & Kacmar, 2006). Due to the structure inherent in the exchange contract, followers in low-quality LMX relationships should experience minimal role ambiguity. Therefore, for both individuals in low quality and high quality LMX relationships there will be little ambiguity about role expectations or compensation criteria. It is those individuals in medium-quality LMX relationships who will experience confusion about supervisor role

expectations and criteria for compensation. Thus, it is expected that there will be an inverted U-shape curvilinear relationship between LMX and role ambiguity.

Hypothesis 1: LMX and role ambiguity have an inverted U-shaped curvilinear relationship.

Hypothesis 2: LMX and role conflict have a negative relationship.

Hypothesis 3: LMX and role overload have a U-shaped curvilinear relationship.

Individual Differences and LMX

A central premise of LMX is that leaders share unique exchanges with followers, who themselves are different. As such, it is likely that employees will respond differently to exchanges with their supervisors. In accordance with role theory, constructs that shape one's subjective evaluation of external events may have significant impact on the focal person's role force. Such perspective changing constructs influence the way an individual acts, feels, and thinks (Brockner, 1988). Below are descriptions of six individual difference variables that are expected to impact the magnitude of role-related stress experienced by employees as a result of LMX.

Affective Disposition. Affective disposition represents a broad higher-order personality dimension that reflects the individual's tendency to experience certain emotional states over time and across situations. It has been demonstrated to be both stable and robust (Watson & Clark, in press-b). Affective disposition is composed of two traits: positive affectivity (PA) and negative affectivity (NA). Positive and negative affect are orthogonal dimensions and often have unique influences on organizational outcomes (Meyer & Shack, 1989; Tellegen, 1985; Tellegen, Lykken, Bouchard, Wilcox, Segal, & Rich, 1988; Watson & Clark, 1984; Watson & Pennebaker, 1989). Certain emotions are primarily driven by only one of the two traits (e.g., excitement is influenced by PA, while

distress is influenced by NA) whereas other emotions are the combined influence of both (e.g., depression is associated predominantly with low PA but also with high NA) (Tellegen, 1985; Watson, Clark, & Carey, 1988).

Individuals tend to perceive, think, and behave in a manner consistent with their affective disposition. Individuals high in positive affect tend to have an overall sense of well-being and view themselves as active and self-efficacious. These individuals find pleasure in engaging interpersonally and striving for achievement. In contrast, individuals with low positive affect have a weaker sense of overall well-being and may have somewhat of a depressive orientation. These individuals are characterized as having lower self-efficacy and are prone to non-pleasurable disengagement. Individuals high in negative affect have an overall negative orientation towards themselves and their environment. They tend to view themselves as unpleasurably engaged and are distressed by their thoughts and behaviors. Individuals with low negative affect tend not to view conditions as upsetting and stressful and are less likely to experience negative affective states (Tellegen, 1985; Tellegen et al., 1988; Watson & Clark, 1984; Watson, Clark, & Carey, 1988; Watson & Pennebaker, 1989). Hochwarter and Byrne (2005) found that affective disposition moderated the relationship between LMX and job tension. Although they only theorized *post hoc*, they speculated that the differential effect of affective disposition on role stressors may provide an explanation for their findings.

Individuals with low positive affect are characterized as having low self-efficacy and are prone to non-pleasurable disengagement. These characteristics may aggravate, or at least hinder the reduction of, the experience of role stressors as the individual doubts his or her ability and fails to fully maximize benefits provided in high-quality LMX

relationships. In contrast, individuals characterized by high positive affect should benefit the most from high-quality LMX relationships. Role stressors should rapidly decrease as the individual, who already has high beliefs in their ability, maximize the benefits available to them in high-quality LMX relationships.

Individuals high in negative affect have a general pessimistic view of their environment. They perceive most situations with distain and feelings of distress leading to destructive emotions (Hochwarter & Bryne, 2005). For such individuals, leaders will have minimal impact on the follower's experience of distress due to role stressors regardless of the quality of the LMX relationship. In contrast, individuals with low negative affect do not have this diffused negative perspective of their environment. These individuals are more likely to experience distress in reaction to environmental conditions. Thus, the leader's ability to manage role stressors experienced by the follower will have a greater impact on individuals low in negative affect.

> *Hypothesis 4- 6: Positive affective disposition will moderate the relationship between LMX and (H4) role conflict, (H5) role ambiguity, and (H6) role overload. Specifically, these relationships will be stronger for employees who report high (vs. low) positive affectivity.*

> *Hypothesis 7-9: Negative affective disposition will moderate the relationship between LMX and (H7) role conflict, (H8) role ambiguity, and (H9) role overload. Specifically, these relationships will be stronger for employees who report low (vs. high) negative affectivity.*

Personality. When one's personality is incongruent with their environmental setting adverse consequences are likely to occur (Emmons, Diener, & Larsen, 1986). For instance, Hochwarter and Bryne (2005) found that when one's affective disposition was incongruent with their leader-follower relationship there were negative consequences for the follower. Although a significant finding in its own right, affectivity is just one of facet

of a wider array of personality dimensions. While facets have high fidelity, they lack the broad generalizability of broader higher-order personality dimensions. Broad dimensions have been shown to be related to numerous organizational outcomes including work behaviors (Barrick & Mount, 1991, 1993; Barrick, Mount, & Strauss, 1993), psychological well-being (McCrae & Costa, 1991), health (Smith & Williams, 1992), and turnover (Yarnold & Mueser, 1989; Zellars, 1999).

Five Factor Models. A useful framework for understanding personality is the five factor model. Five factor models have been found to be robust across different emotional frameworks, instruments, cultures, rating sources, and samples utilizing various research designs, including cross-cultural, longitudinal, and self-report (see Barrick & Mount, 1991 for review). The five factors that have become the "standard" are: extraversion, agreeableness, conscientiousness, neuroticism (also referred to as emotional stability), and openness to experience (also referred to as culture or intellect). Briefly, extraversion and agreeableness are the interpersonal factors of personality. Conscientiousness describes task behavior and "socially prescribed impulse control". Neuroticism describes someone's propensity for psychological distress. Finally, openness to experience refers to the depth and quality of a person's mental and experimental life (John, 1990, pg. 71). For the purpose of this study, only the moderating effects of agreeableness and extraversion will be assessed. It would be redundant to measure extraversion and neuroticism because of their multicollinearity with affective disposition. Specifically, positive affectivity forms the core of extraversion, while negative affectivity forms the core of neuroticism (Clark & Watson, 1991; Digman, 1990; Tellegen, 1985). The moderating effect of openness to experience will also not be examined. Although research has shown

openness to experience to influence role stressors, there are few theoretical reasons to expect that it moderates relationships between LMX and role stressors.

Agreeableness. Agreeableness is an interpersonal personality dimension. Digman (1990) described agreeableness as containing the "more humane aspects of humanity-altruism, nurturance, caring, and emotional support at the one end of the dimension", while hostility, indifference to others, self-centeredness, spitefulness, and jealousy lies at the other end of the continuum. Furthermore, agreeableness refers to an individual's behavioral tendency to agree and cooperate with others (John, 1990). Individuals high in agreeableness are characterized as being sympathetic, kind, appreciative, affectionate, soft-hearted, cooperative, generous, and trusting. In contrast, individuals low in agreeableness are considered cold, fault-finding, unfriendly, and quarrelsome (John, 1990).

Individuals high in agreeableness are described as personally charming and tend not to exhibit hostile behaviors (McCrae, Costa, & Busch, 1986). Perhaps because of this, they are more likely to interact with other individuals. Zellars (1999) found that nurses high in agreeableness where more likely to make use of both emotional and instrumental social support. The difference being that emotional social support pertains more to the affective components, while instrumental social support refers to tangible assistance such as physical resources or advice of a social support network. Fenlason, Johnson, and Beehr (1997) posited that instrumental social support directly helps with managing stressors, while emotional social support has a greater influence on perceived stress. In addition, nurses high in agreeableness reported less role ambiguity than their less agreeable coworkers. This may be a benefit of increased interaction. During periods of

communication individuals high in agreeableness have additional opportunities to receive clarification concerning their roles. Furthermore, individuals high in agreeableness desire consensus and cooperation and are more likely to trust others (Costa, McCrae, & Dye, 1991).

It is expected that agreeableness will moderate the relationship between LMX and role overload. Individuals high in agreeableness are more social than individuals low in the dimension. Interpersonal facets, such as kindness and being affectionate, endear these individuals to others. Zellars (1999) found that nurses high in agreeableness were more likely to make use of peripheral social support. Therefore, these individuals will be less dependent on the benefits provided in high quality LMX relationships than individuals low in agreeableness. Furthermore, without a social network to convey information, individuals low in agreeableness are more dependent on the leader to clarify role ambiguities.

> *Hypothesis 10-12: Agreeableness will moderate the relationship between LMX and (H10) role conflict, (H11) role ambiguity, and (H12) role overload. Specifically, these relationships will be stronger for employees who report low (vs. high) agreeableness.*

Extraversion. Extraversion is one of the most common dimensions between the various five-factor models. Extraversion is an interpersonal factor describing a person's ambition (initiative, surgency, and impetuous) and sociability (sociable, exhibitionist, and expressive) (Hogan, 1986). Individuals high in Extraversion are likely to engage in interpersonal activities and are considered people-oriented. These individuals are described as talkative, assertive, active, energetic, outgoing, enthusiastic, cheerful, optimistic, outspoken, dominant, and forceful. In contrast, individuals low in extraversion are characterized as quiet, reserved, shy, silent, and withdrawn (John, 1989, 1990).

Extraversion has been shown to be stable across both time and situations (Scheier & Carver, 1985).

Chen, Popovich, and Kogan (1977) found that individuals high in Extraversion are more likely to communicate with supervisors, coworkers, family, and friends. Furthermore, their conversations are more likely to have a positive tone. Duckitt (1984) found that individuals high in Extraversion were more sensitive to variations in social support. A subsequent finding by Brown (1985) found that individuals high in Extraversion were more likely to benefit from the support in their social network. Zellars (1999) found individuals high in Extraversion were more likely to utilize both emotional and instrumental social support. The difference being that emotional social support pertains more to the affective components, while instrumental social support refers to tangible assistance such as physical resources or advice of a social support network. Fenlason, Johnson, and Beehr (1997) posited that instrumental social support directly helps with managing stressors, while emotional social support has a greater influence on perceived stress. In addition, individuals high in Extraversion tend to be optimistic and perceive the world as positive and upbeat (Zellars, 1999). Furthermore, optimistic individuals have been found to report less work strain. Chen, Popovich, and Kogan (1997) suggest this is because optimistic individuals are more likely to perform activities that decrease stressful situations.

It is expected that individuals high in Extraversion are more likely to utilize social support structures within their environment (Brown, 1985). Thus, the advantages provided in high quality LMX relationships will be less valuable. Furthermore, because individuals high in Extraversion tend to be optimistic, thus they should have greater

confidence in their ability to finish tasks regardless of the quality of the LMX relationship. Therefore, when Extraversion is high the relationship between LMX and role conflict and role overload will be small. In contrast, when Extraversion is low the relationship between LMX and role overload will be greater.

Research to date suggests a simple negative linear relationship exists between LMX and role ambiguity (Gerstner & Day, 1997). As the quality of the LMX relationship improves, communication becomes more likely and role ambiguity decreases. However, individuals high in Extraversion are more social than individuals low in the dimension. They are characterized as being talkative, outgoing, enthusiastic, and cheerful (John, 1989, 1990). Furthermore, individuals high in Extraversion have been shown to communicate more frequently with, coworkers, family, and friends. Increased communication these peripheral others provides additional opportunities to clarify ambiguity in their role. Therefore, it is expected that individuals high in Extraversion will benefit less from communicating with their leader because they can obtain role information from other sources. In contrast, individuals low in Extraversion are characterized as quiet, reserved, shy, silent, and withdrawn (John, 1989, 1990). These individuals will have less social outlets to obtain information to eliminate role ambiguity. Therefore, it is likely that individuals low in extraversion will receive greater benefit from high-quality LMX relationships.

> *Hypothesis 13-15: Extraversion will moderate the relationship between LMX and (H13) role conflict, (H14) role ambiguity, and (H15) role overload. Specifically, these relationships will be stronger for employees who report low (vs. high) extraversion.*

Self-identity. The self-concept is composed of one's attitudes, beliefs, intentions, norms, roles, and values. It has been conceptualized as being both dynamic (i.e., state-like; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and stable (Bakan, 1966; Gilligan, 1982; Markus & Kitayama, 1991; Sampson, 1989, Trafimow, Triandis, & Goto, 1991; Triandis, 1989). An individuals' self-concept can exist at multiple levels, where each level entails different sources of assessment and self-worth (Brewer & Gardner, 1996). The individual identity level is the internal assessment of the self by the self (Triandis, 1989). Individuals with an individual identity perceive themselves as being unique, independent of both the social context and other individuals (Kashima & Hardie, 2000). Furthermore, they emphasize dimensions or attributes that are personally important and that highlight their uniqueness from others (Engle & Lord, 1997; Lord & Brown, 2004). It is through inter-individual comparisons that self-evaluation occurs (Brewer & Gardner, 1996; Triandis, 1989). People with individual self-identities base self-evaluations on their personal skills and abilities, often taking pride in ways that they outperform others. Basic social motivation is driven by self-interest with priority given to individual goals.

The relational identity is elicited when meaningful role relations represent the primary focus of the individual (Kashima et al, 1995). This level of self-identification emphasizes inter-individual relatedness, intimacy, and interdependency (Baumeister & Leary, 1995; Kashima & Hardie, 2000). For these individuals the basis of self-evaluation is reflected appraisal, or belief, of how others perceive them (Mead, 1934; Shrauger & Schoneman, 1979). Lord and Brown (2004) posited that reflected appraisals are an important medium for signaling potential benefits of a social exchange to both role

parties. These signals are assimilated into affective evaluations of the other party and into evaluations of the value of dyadic exchange. When an individual has a relational identity, the basis of self-evaluation will be on role relationships. Specifically, self-worth is enhanced when such individuals successfully uphold their obligations and duties to specific others, such as a supervisor or spouse. Positive self-evaluation are derived through complementing relevant others and seeing to their goal attainment (Brewer & Gardner, 1996).

Another level of social-self categorization is the collective-self (Prentice, Miller, & Lightdale, 1994). While one's relational-self is based on bonds with other group members, the collective-self is based on a common collective identity (Kashima et al, 1995; Prentice, Miller, & Lightdale, 1994). One's collective identity emphasizes group affiliation, in-group norms, and collectively defined roles and status (Hofstede, 1980, Kluckhohn & Strodtbeck, 1961; Triandis, 1995). Positive self-evaluation is derived from matching the group's prototype (Lord and Brown, 2004). However, because the focus of this study is on *dyadic* relationships among organizational members, this identity level is not included in the hypotheses.

It is expected that employees' levels of self-identity moderate LMX–stressor relationships. Individuals with chronic individual identities define themselves as being autonomous and independent from others. An individual with an individual self-identity will be focused on minimizing the experience of role stressors. In terms of role theory, the relationship with the role sender is less important and therefore the role pressure will be weaker. In contrast, individuals with a relational-self identity focused on their

relatedness with others. These individuals are sensitive to role stressors because they provide information concerning the quality of leader follower relationship.

> *Hypothesis 16-18: Individual self-identity will moderate the relationship between LMX and (H16) role conflict, (H17) role ambiguity, and (H18) role overload. Specifically, these relationships will be weaker for employees who report high (vs. low) chronic individual levels.*
>
> *Hypothesis 19-21: Relational self-identity will moderate the relationship between LMX and (H19) role conflict, (H20) role ambiguity, and (H21) role overload. Specifically, these relationships will be stronger for employees who report high (vs. low) chronic relational levels.*

Organizational Outcomes of LMX

Research has demonstrated significant relationships between LMX and role stressors, as well as between LMX and a variety of organizational criteria (Gerstner & Day, 1984; House & Rizzo, 1972). For instance, role conflict has been related to organizational outcomes such as job performance, psychological distress, job satisfaction, affective commitment, withdrawal behavior, turnover, health risks, and life satisfaction (Frone, Russell, & Cooper, 1997; Higgins, Duxbury, & Irving, 1992; O'Driscoll, Ilgen, & Hildreth, 1992). Role overload has been shown to be positively related to turnover and burnout, and negatively related to job satisfaction (Bacharach & Bamberger, 1972). Role ambiguity has been shown to increase tension and feelings of futility, as well as decrease self-confidence, and trust and respect in the role sender (Kahn et al., 1964). Also, role ambiguity has been shown to be negatively related with various forms of satisfaction, including pay, advancement, recognition, and intrinsic job satisfaction as well as perceived organizational effectiveness (House & Rizzo, 1972).

A meta-analysis conducted by Örtqvist and Wincent (2006) provide a concise analysis of role stressors influence on various organizational outcomes. In their study, the

influence of role conflict, role ambiguity, and role overload on depersonalization, emotional exhaustion, job satisfaction, affective commitment, performance, personal accomplishment, propensity to quit, and tension was assessed. For the purpose of this study, only job satisfaction, affective commitment, performance, and tension will be analyzed. Örtqvist and Wincent (2006) found significant negative relationships role conflict and job satisfaction (ρ = -.40), affective commitment (ρ = -.36), and performance (ρ = -.08), as well as a positive relationship with tension (ρ = .43). Role overload had significant relationships with job satisfaction (ρ = -.07), affective commitment (ρ = -.12), and tension (ρ = -.26). Both role conflict and role overload had a small, but significant, effect on performance. This is not surprising considering the negative relation with conflicting roles would negate the extra performance obtained. Finally, role ambiguity had the strongest relationships with organizational criteria. Role ambiguity had negative linear relationships with job satisfaction (ρ = -.39), affective commitment (ρ = -.48), and performance (ρ = -.18), as well as a positive relationship with tension (ρ = .35).

Despite the array of criteria that role stressors relate to, the process by which it does so is the same. Role stressors are the subjective evaluation of role forces sent by the role set. The resulting influence on organizational criteria is the consequence of the individual's attempt to relieve the role forces, which detracts from in-role and extra-role performance and may foster negative job attitudes. For instance, Hochwarter and Byrne (2005) argued that the negative effects of moderate LMX on job tension for employees high in negative affect is due to role ambiguity. Given the theoretical and empirical evidence presented, it is reasonable to hypothesize that role stressors will mediate the relationship between LMX and organizational outcomes.

Hypothesis 22: Role stressors will mediate the relationship between LMX and tension.

Hypothesis 23: Role stressors will mediate the relationship between LMX and global job satisfaction.

Hypothesis 24: Role stressors will mediate the relationship between LMX and satisfaction with one's supervisor.

Hypothesis 25: Role stressors will mediate the relationship between LMX and in role performance behavior.

Hypothesis 26: Role stressors will mediate the relationship between LMX and organizational citizenship behavior directed at the organization.

Hypothesis 27: Role stressors will mediate the relationship between LMX and organizational citizenship behavior directed at fellow employees.

Hypothesis 28: Role stressors will mediate the relationship between LMX and affective commitment.

Present Study

This study will expand understanding of LMX's influence on health, commitment, satisfaction, and performance. In order to do so, this study will investigate how followers' personality and self-identity moderate their leader's ability to influence organizational outcomes through management of role stressors experienced by the follower. First, the proposed study will test whether followers' personality and self-identity moderates the relationships between LMX and role stressors. It is expected that perception altering variables, such as having a positive affective disposition or individualistic self-identity, will modify the general negative linear relationship between LMX and role stressors. Second, this study will test if role stressors mediate the effects of LMX on organizational criteria. This is consistent with role theory, which stresses that it is in reaction to the subjective experience of role stressors, not the leader's behaviors directly, that leads to outcomes. The results of this research have both theoretical and

practical significance. Theoretically, supported hypotheses will add to the research literature and push for further research into the complexity of the leadership construct.

Method

Participants

Participants (N = 232) were recruited from two sources. The first source was from a large public university located in the southeast US. These employed students received extra credit in exchange for participating. As a prerequisite to participation the student must have been employed at least part-time. This student sample consisted of 144 individuals and was characterized by unskilled to low skilled jobs. Typical positions reported included cashier, restaurant server, stocker, and various types of assistants. This sample was composed of 82.6% females. Ethnicity was dichotomized into majority and minority groups. The majority group included only Caucasians, while the minority group included individuals of Asian, African, and Hispanic descent, as well as an *Other* category. Overall, majority members represented 55.6% of the sample, while 41.7% reporting a minority ethnicity. A small proportion of the participants (2.7%) did not report their ethnicity. These individuals were grouped with the minority group for the remaining analyses. The mean age of sample was 21.52 years (sd = 5.23 years). In relation to the workplace, the mean tenure was 21.12 months (sd = 24.36 months) with participants working a mean 22.54 hours per week (sd = 9.72 hours per week). Supervisees reported working with their supervisor a mean of 14.41 hours per week (sd = 9.81 hours per week) with a mean dyad tenure of 14.73 months (sd = 18.37 months).

The second source came from several companies within the southeastern US geographic region. The CEOs of these companies received a technical report with

summary statistics of the organizational related criteria. This applied sample consisted of 88 individuals. These participants reported working a diverse array of medium skill to highly skilled positions. Example positions include teacher, secretary, security personnel, and attorney. The sample consisted of 47.7% females and 50% males (2.3% did not report their gender). The sample was primarily Caucasian (51.6%), with 36.4% reporting a minority ethnicity. A meaningful proportion of the participants (12.5%) failed to report any ethnicity. Again, these participants were grouped with the minority dichotomy for the remaining analyses. The mean age of sample was 36.96 years (*sd* = 14.35 years). In relation to the workplace, the mean tenure was 32.3 months (*sd* = 45.32 months) with participants working a mean 37.22 hours per week (*sd* = 11.65 hours per week). Supervisees reported working with their supervisor a mean of 16.83 hours per week (*sd* = 16.50 hours per week) with a mean dyad tenure of 21.34 months (*sd* = 26.43 months).

Demographic information was also collected from the participants' supervisors. Overall, 100 supervisors (43%) provided supervisee performance ratings. The sample consisted of 53% females and 44% males (3% did not report their gender). The sample was primarily Caucasian (66%), with 23% reporting a minority ethnicity. A proportion of the participants (11%) failed to report any ethnicity. In relation to the workplace, supervisors reported working with their supervisees a mean of 17.93 hours per week (*sd* = 15.87 hours per week) with a mean dyad tenure of 25.84 months (*sd* = 36.34 months). There was a modest correlation between supervisor and supervisee reports on the amount of time per week they worked together ($r = .35$, $n = 86$, $p < .001$). In addition, there was a strong correlation between supervisor and supervisee reports on dyad tenure ($r = .71$, $n = 87$, $p < .001$). Paired sample t-tests were conducting to examine if supervisors and

supervisee reported significantly different dyad times. Neither hours worked together per week (t [85] = 1.20, $p > .05$) or dyad tenure (t [86] = 1.61, $p > .05$) were significantly different between groups.

Measures

Control variables. Several control variables were examined in this study. These included gender, race dichotomized as majority or minority member, age, and position tenure. Gender was initially included because research has shown that women are more likely to have a stronger relational self-identity than men (Cross & Madison, 1997; Gilligan, 1982; Kashima & Hardie, 2000; Kashima, Yamaguchi, Kim, Choi, Gelfand, & Yuki, 1995; Miller, 1986). Race, age, and position tenure were examined because these variables have been shown to influence job performance ratings and other organizational outcomes (Kacmar et al., 2003; Turban & Jones, 1988). In the analysis to investigate meaningful control variables, race was dichotomized into minority = 0 and majority = 1 members. In addition, gender was coded as female = 0 and male = 1. Although there were several significant relationships, only position tenure showed a consistent significant relationship across role stressors, personality variables, and criteria (see Table 1 in Appendix A).

Leader member exchange. Leader-member exchange was assessed through a seven item Likert-type scale (LMX7; Graen, Novak, & Sommerkamp, 1982; Appendix B). LMX7 focuses on the general working relationship dyad. Although there have been several versions of the scale, the seven item scale has demonstrated the strongest psychometric properties (Gerstner & Day, 1997; Schriesheim, Castro, & Cogliser, 1999). In this study LMX7 had a coefficient alpha at .90.

Role stressors. Role conflict and role ambiguity were assessed using scales developed by Rizzo, House, and Lirtzman (1972) (Appendix C). Both measures were on a 5-point scale ranging from *Very False* (1) to *Very True* (5). The role conflict measure is eight items (α = .70) and measures feelings of incompatible expectations from the perspective of the focal person. Sample items include "I work under incompatible policies and guidelines" and "I receive incompatible requests from two or more people." The role ambiguity measure consists of six items (α = .70) and assesses the clarity of behavioral requirements and predictability of outcomes to one's responses. Sample items include "I know what my responsibilities are" and "I know what is expected of me."

Role overload was measured using a three item subscale (α = .76) from the Job Role Quality questionnaire (Marshall, Barnett, Baruch, & Pleck, 1991).; Appendix D). The items were placed on a five point scale ranging from *Not at All* (1) to *Extremely* (5) with higher scale scores indicating a greater degree of role overload. Specifically, the items asked the participant to rate feelings of "Having too much to do," "The job's taking too much out of you." and "Having to deal with emotionally difficult situations."

Affective disposition. Affective disposition was measured utilizing the Positive and Negative Affect Scale (PANAS, Watson, Clark, & Tellegen, 1998) (Appendix E). The scale is composed of two orthogonal dimensions of positive affect (PA) and negative affect (NA). Each scale is consists of ten items, which asks respondents to rate how they feel specific adjectives (e.g. PA- attentive, enthusiastic, NA- jittery, nervous), describes them. Responses range from V*ery Slightly* or *Not at All* (1) to *Extremely* (5). This study demonstrated high coefficient alphas for both scales at .92 and .86 for positive and negative affect, respectively.

Personality. Agreeableness and extraversion were measured utilizing the Big Five Personality Inventory (BFI) (John & Srivastava, 1999) (Appendix F). The BFI has been shown to have adequate convergent validity with other five factor personality measures. Each scale begins with the stem of "I see myself as someone who…" followed by a characteristic. Items were anchored on a five point scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). An example characteristic for agreeableness is "likes to cooperate with others", while an example extraversion characteristic for extraversion is "is talkative". The coefficient alphas for agreeableness and extraversion were .76 and .80, respectively.

Self-identity. Self-identity was assessed using the Levels of Self-Concept Scale (LSCS; Selenta & Lord, 2005; Appendix G). The measure consists of three 5- item scales. For this study, only the individual and relational self-identity scales were used. Items were anchored on a five point scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). A sample item measuring individual self-identity is "I often compete with my friends." In contrast, a sample item measuring relational self identity is "I value friends who are caring, empathic individuals." Both scales have been shown to be reliable and valid in past research (Selenta & Lord, 2005; Johnson, Selenta, & Lord, 2006). In this study, the internal consistency for individualistic self-identity was .79 and .71 for relational self-identity.

Performance. Performance was assessed using supervisor ratings with a composite measure created by Williams and Anderson (1991) (Appendix H). The measure is composed of three 7-item scales measuring employees in-role performance behaviors (IRB), organizational citizenship behavior whose target is a specific individual

(OCBI), and organizational citizenship behavior that benefits the organization (OCBO). IRB refers to those behaviors that are explicitly stated as part of one's job duties and is directly recognized by the formal reward system. Sample items for in-role performance include "Adequately completes assigned duties" and "Fulfills responsibilities specified job descriptions." OCBI represent those extra role behaviors directed at specific individuals and is composed of two dimensions: altruism and courtesy. Sample items for OCBI include "Helps others who have been absent" and "Goes out of the way to help new employees." In contrast, OCBO represents those extra role behaviors directed at the organization and is composed of three dimensions: civic virtue, conscientiousness, and sportsmanship. Sample items for OCBO include "Conserves and protects organizational property" and "Takes undeserved work breaks <reverse scored>." Items were anchored on a five point scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5). This study demonstrated coefficient alphas of .91, .90, and .86 for IRB, OCBI, and OCBO, respectively.

Satisfaction. Satisfaction was assessed with the Cammann, Fichman, Jenkins, and Klesh (1979) global job satisfaction subscale from the Michigan Organizational Assessment Questionnaire (Appendix I), as well as the supervisor satisfaction subscale of the Job Satisfaction Survey (JSS; Spector, 1985; Appendix J). Cammann et al. (1979) global job satisfaction scale consists of three items, while the JSS supervisor subscale consists of four. A characteristic item on the global job satisfaction subscale is "In general, I like working here." A sample item from the JSS supervisor subscale is "I like my supervisor." Both scales are on a 5-point scale ranging from *Strongly Disagree* (1) *to*

Strongly Agree (5). In this study, global job satisfaction scale coefficient alpha was .90, while supervisor satisfaction subscale of the Job Satisfaction Survey was .79.

Affective commitment. Affective commitment was measured using a 15 item scale developed by Mowday, Steers, and Porter (1979) (Appendix K). The scale has been demonstrated to have convergent, discriminant, and predictive validity across various samples (Mowday, Steers, & Porter, 1979). The measure consists of a series of statement that expresses how the individual may feel towards their organization. Each item is on a five point scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (2). An example item is "I really care about the fate of this organization." In this study the measure demonstrated a coefficient alpha of .86.

Tension. Tension was measured utilizing the Work Tension Scale (House and Rizzo, 1972) (Appendix L). This subscale has seven items that asks respondents to rate how stressful are fulfilling their job's requirements. Each item is on a 5- point scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5) with higher scale scores indicating a greater degree of the tension. A sample item from this scale is one of the scale's items states "Problems associated with my job have kept me awake at night." This scale has demonstrated strong psychometric properties in the past (Cropanzano, Howes, Grandey, & Toth, 1997; Harris & Kacmar, 2006; Miles & Perreault, 1976). In this study, the coefficient alpha was .85.

Procedure

For the student sample, surveys were administered utilizing large group testing. Participants were provided with written informed consent documents as well as verbally informed of the general nature of the research. In addition, participants were provided

with an addressed stamped envelope containing the performance measures to be given and completed by their supervisor. The participants were informed that extra course credit was non-conditional on return of the performance measure, however they were strongly encouraged to give the measure to their supervisor.

In the applied sample, the CEOs dispersed a memo explaining the nature of the study and encouraging employees to participate. In this memo, the CEO explicitly stated participation was voluntary. All employees received the complete written informed consent as well as an abridged version emphasizing confidentiality. Again, supervisors were provided with addressed stamped envelopes containing the performance measure. Contact information was provided to both supervisee and supervisor in case questions or concerns arose.

Results

The data set was examined for potential outliers and influential data points as described in Tabachnick and Fidell (2001). Based on the recommended procedures no data necessitated removal. Table 1 provides the descriptive statistics and intercorrelations among the variables. In concurrence with Gerstner and Day (1997), LMX was significantly correlated with role conflict (r = -.30, p < .001) and role ambiguity (r = -.45, p < .001). Similar to Jackson and Schuler (1985), role stressors were found to be significantly correlated with the criteria variables. For role conflict this included being significantly correlated with satisfaction (global r = -.38, p < .001; supervisor r = -.28, p < .001), tension (r = .47, p < .001), and affective commitment (r = -.29, p < .001), while not being significantly related to performance (IRB r = -.07, p > .05; OCBI r = .05, p > .05; OCBO r = -.03, p > .05). For role ambiguity this included being significantly correlated with satisfaction (global r = -.45, p < .001; supervisor r = -.30, p < .001), tension (r = .31, p < .001), and affective commitment (r = -.35, p < .001), while not being significantly related to performance (IRB r = -.01, p > .05; OCBI r = .18, p > .05; OCBO r = .02, p > .05). Although neither Gerstner and Day (1997) or Jackson and Schuler (1985) reported meta-analytic estimates for role overload, it related to variables in a similar manner as the other role stressors. Role overload was significantly correlated with LMX (r = -.24, p < .001), satisfaction (global r = -.35, p < .001; with supervisor r = -.28, p < .001), tension (r = .60, p < .001), and affective commitment (r = -.19, p < .001),

while not being significantly related to performance (IRB r = -.07, p > .05; OCBI r = .11, p > .05; OCBO r = .02, p > .05).

Linear and Curvilinear Relationships

Hierarchical regression analysis was conducted in order to investigate the relationships between LMX and role stressors. In the first step the covariates of age, gender, position tenure, and race were entered. Position tenure was significantly related to both role conflict (β = .005, p < .001) and role overload (β = .008, p < .001). There was also a notable relationship between age and role overload, although it was non-significant (β = -.01, p = .08). No other covariates were significant. Linear and quadratic LMX terms were then entered into the second and third steps, respectively. These terms were centered in order to reduce multicollinearity. Table 2 (see Appendix A) contains the results of the hierarchical regression analyses for all three role stressors.

Hypothesis 1. It was theorized that LMX would have an inverted, U-shaped relationship with role ambiguity. In step 2 the linear LMX term was found to be significant (β = -.39, p < .001). In the third step, the quadratic power term was non-significant and failed to improve the model (β = .03, ΔR^2 = .00, *ns*, see Figure1 in Appendix A). Therefore, a curvilinear relationship between LMX and role ambiguity was not supported.

Hypothesis 2. It was theorized that LMX would have a negative linear relationship with role conflict. In the second step the linear LMX term was entered into the model and was significant (β = -.30, p < .001). In the third step, the quadratic LMX power term was entered into the model. The quadratic term was non-significant and

failed to improve the model (β = .03, ΔR^2 = .00, *ns*, see Figure 2 in Appendix A). Therefore, a negative linear relationship between LMX and role conflict was supported.

Hypothesis 3. It was theorized that LMX would have a U-shaped, curvilinear relationship with role overload. In the second step the linear LMX term was found to be significant (β = -.31, $p < .001$). The quadratic power term was then entered in the third step and was also found significant (β = .20, $p < .001$, see Figure 3 in Appendix A). Correspondingly, the quadratic power term significantly improve the model (Adj. ΔR^2 = .03, $p < .01$). Therefore, a curvilinear relationship between LMX and role overload was supported. In order to investigate the possibility of a more complex relationship, the LMX cubic term was entered in a fourth step. This power term was non- significant and failed to improve the model (β = -.02, ΔR^2 = .00, *ns*).

Moderated Relationships

Several moderated hierarchical regression analyses were conducted to examine if personality and self-identity moderated relationships between LMX and role stressors. In each moderation analysis the covariates of position tenure, age, gender, and race were entered into the first step. In the second step, LMX was entered into the model and was significant for each role stressor: role ambiguity (β = -.39, $p < .01$), role conflict (β = -.30, $p < .01$), and role overload (β = -.32, $p < .01$). In the third step the focal moderator variable was entered. Finally, the interaction term was entered into the fourth step. The results for the third and fourth steps for each moderator criterion paring are presented below.

Hypothesis 4-6. Positive affect will moderate the relationship between LMX and (*H4*) role conflict, (*H5*) role ambiguity, and (*H6*) role overload. Specifically, these

relationships would be stronger for employees who reported high (vs. low) positive affect. To test this prediction, the main effect for positive affect was added in the third step, while the interaction term was entered into the fourth. Results demonstrated a trend for the main effect between positive affect and role ambiguity ($\beta = -.09$, $p = .08$). There were no significant interactions in the fourth step. Thus, results did not support this series of hypotheses (see Table3 in Appendix A).

Hypothesis 7-9. Negative affect will moderate the relationship between LMX and (*H7*) role conflict, (*H8*) role ambiguity, and (*H9*) role overload. Specifically, these relationships would be stronger for employees who reported low (vs. high) negative affect. To test this prediction, the main effect for negative affect was added into third step, while the interaction term was entered into the fourth step. Results demonstrated a significant main effects for role conflict ($\beta = .23$, $p < .01$) and role overload ($\beta = .33$, $p < .01$), but not for role ambiguity. No significant interactions were found in the fourth step. Thus, results did not support this series of hypotheses (see Table 4 in Appendix A).

Hypothesis 10-12. Agreeableness will moderate the relationship between LMX and (*H10*) role conflict, (*H11*) role ambiguity, and (*H12*) role overload. Specifically, these relationships will be stronger for employees who reported low (vs. high) agreeableness. To test this prediction, the main effect for agreeableness was added as a third step to the general model presented above, while the interaction term was entered into step four. Results demonstrated a significant main effect for role conflict ($\beta = -.20$, $p < .05$), but not for the other role stressors. No significant interactions were found in the fourth step. Thus, results did not support this series of hypotheses (see Table 5 in Appendix A).

Hypothesis 13-15. Extraversion will moderate the relationship between LMX and (*H13*) role conflict, (*H14*) role ambiguity, and (*H15*) role overload. Specifically, this relationship would be stronger for employees who report low extraversion than high. To test this prediction, the main effect for extraversion was added as a third step to the general model presented above, while the LMX extraversion interaction term was entered into the fourth step. Results failed to show a significant main effect for extraversion or interaction. Thus, results did not support this series of hypotheses (see Table 6 in Appendix A).

Hypothesis 16-18. Individual self-identity will moderate the relationship between LMX and (*H16*) role conflict, (*H17*) role ambiguity, and (*H18*) role overload. Specifically, it was theorized that the relationship between LMX and role stressors would be greater when individuals were low in individual self-identity than high. To test this prediction, the main effect for individualist self-identity was added as a third step to the model, while the LMX by individual self-identity interaction term was entered into the step four. Results demonstrated that a marginally significant main effect for role conflict ($\beta = .10$, $p = .078$), but not for the other role stressors. No significant interactions were found in the fourth step. Thus, results did not support this series of hypotheses (see Table 7 in Appendix A).

Hypothesis 19-21. Relational self-identity moderates the relationship between LMX and (H19) role conflict, (H20) role ambiguity, and (H21) role overload. Specifically, it was theorized that the relationship between LMX and role stressors would be greater when individuals were high in relational self-identity than low. To test this prediction, the main effect for relational self-identity was added as a third step to the

model, while the LMX relational self-identity interaction term was entered into step four. Results demonstrated significant main effects for role ambiguity (β = -.18, p = .086) and role overload (β = .30, p = .075), but not for role conflict. No significant interactions were found in the fourth step. Thus, results did not support this series of hypotheses (see Table 8 in Appendix A).

Mediated Relationships

Mediation was tested utilizing a multiple mediation analysis procedure advocated by Preacher and Hayes (2008). The authors cited four reasons why such an analysis is superior to conducting a series of simple mediations when examining several mediators. First, it allows the researcher to examine the collective influence of a set of mediators. Since all three role stressors are an inherent part of the workplace examining them as a set is appropriate. Second, it is possible to determine the influence of a specific mediator in the presence of other potential mediations. Third, when a series of simple mediations are conducted, omitted variables may lead to biased parameter estimates. Finally, when multiple mediators are assessed in a single model it permits for competing theories to be "pitted" against one another.

There are several statistical methods by which one may test for mediation. One of the most common is the causal steps approach outlined by Baron and Kenny (1986). In this technique, mediation is inferred if (a) the independent variable *X* is significantly related to the dependent variable *Y* (referenced as *path c*), (b) *X* is significantly related to the mediator *M* (referenced as *path a*), (c) *M* is significantly related to *Y* (referenced as *path b*), and (d) the effect of *X* on *Y* decreases when controlling for *M* (referenced as *path c'*). However, Preacher and Hayes (2008) argued that the causal steps approach is a weak

statistical method for determining simple mediation and is inappropriate for multiple mediation. To begin with, the causal step approach fails to directly test if the indirect effect is not different from zero or in the expected direction. Furthermore, when examining multiple mediators it is possible for one variable to mediate the relationship, while a second variable to act as a suppressor variable (MacKinnon et al. 2000; Preacher & Hayes, 2008).

Another method by which mediation may be tested is the product of coefficients strategy, also referred to as the Sobel test. The Sobel test compares the strength of the indirect effect to the null hypothesis that it equals zero (Sobel, 1982). In this procedure, the indirect effect of *X* on *Y* is estimated as the product of the standard errors taken from *path a* and *path b* (*ab*). Conventionally, this estimate is then compared against the normal theory standard error. The benefit of this method is that it directly tests the presence or absence of an indirect effect. However, this strategy is based on the assumption that the sampling distribution of the indirect effects is normally distributed. This assumption is often violated with the distribution being skewed and leptokurtic (Preacher & Hayes, 2004). Therefore, Preacher and Hayes (2008) advocated testing the significance of indirect effects utilizing bootstrapped confidence intervals. This method has several advantages over the previously referenced techniques. First, the emphasis is placed on the size and direction of the main effects thus overcoming limitations inherent in the causal step approach. Also, fewer inferential tests are necessary reducing the probability of committing a decision error. Second, using bootstrapped confidence intervals does not make assumptions concerning the shape of the *ab* distribution. Furthermore, it has been demonstrated that biased corrected and accelerated bootstrap confidence intervals result

in fewer Type I errors and improve power. However, it should be noted that mediation is not the same as a significant indirect effect. In mediation there is an assumption that *x* causes *y* (*total effect*), while with indirect effects there is no such assumption (Preacher and Hayes, 2004).

In the following sections both classic mediation (i.e., Baron & Kenny, 1986) and indirect effects (i.e., Preacher & Hayes, 2004) are discussed. The significance of the total and specific indirect effects were established by comparing the estimate of the indirect effect to the biased corrected and accelerated confidence intervals created through bootstrapping (*BCa* CI; Preacher and Hayes, 2008). Also note that the covariates of age, gender, position tenure, and race were entered into each model. The beta weight and significance for each covariate is listed on each model's corresponding table.

Hypothesis 22. Role stressors, as a set, were shown to fully mediate the relationship between LMX and tension. Initial evidence was provided as the total effect of LMX on tension ($\beta = -.31$, $p < .001$) became non-significant when role stressors were controlled (*direct effect* $\beta = -.09$, $p > .05$; see Table 9 in Appendix A). Further evidence was provided as the confidence interval surrounding the total indirect effect did not contain zero (*indirect effect* = -.22, *BCa* $CI_{(95\%)}$ (-..33, -.13); see Table 10 in Appendix A). Finally, the *a* and *b* pathways were theoretically consistent with higher LMX leading to fewer role stressors experienced by the supervisee, which in turn results in less tension for the supervisee. Thus, the hypothesis that role stressors mediate the relationship between LMX and tension was supported.

Inspection of the specific indirect effects indicated that LMX influenced tension through both role conflict (*indirect effect* = -.09, *BCa* $CI_{(95\%)}$ (-.16, -.03)) and role

overload (*indirect effect* = -.14, *BCa* $CI_{(95\%)}$ (-.23, -.08)). The specific indirect effect through role ambiguity was not supported. The casual step approach indicated that role ambiguity could not act as an indirect pathway as the relationship between it and tension was non-significant ($\beta = .04$, $p > .05$). Inspection of the pairwise contrasts of the specific indirect effects showed that the specific indirect effect through role overload was significantly greater than that through role ambiguity (*pairwise contrast* = .13, *BCa* $CI_{(95\%)}$ (.03, .24)).

Hypothesis 23. Role stressors were shown to partially mediate the relationship between LMX and job satisfaction. In accordance with Baron and Kenny (1986) causal step approach, the total effect of LMX on job satisfaction ($\beta = .59$, $p < .001$) decreased in significance when role stressors were controlled ($\beta = .39$, $p < .001$; see Table 11 in Appendix A). Yet because the direct effect was still significant only partial mediation was supported. In addition, the total indirect effect of the role stressors set was found to be significant (*indirect effect* = -.22, *BCa* $CI_{(95\%)}$ (.10, .32); see Table 21 in Appendix A). Overall the *a* and *b* pathways were theoretically consistent. Higher LMX leads to the supervisees experiencing fewer role stressors, which in turn results in increased job satisfaction. Thus, the hypothesis that role stressors mediate the relationship between LMX and job satisfaction was partially supported.

When examining the specific indirect effects only role overload was significant (*indirect effect* = -.06, *BCa* $CI_{(95\%)}$ (.10, .32)). The Baron and Kenny (1986) casual step approach suggests that role conflict cannot mediate the relationship as it is not significantly related to job satisfaction ($\beta = -.15$, $p > .05$). However, the casual step approach does not provide such clear evidence for role ambiguity as the *b* pathway was

not significant (β = -.17, p = .06). Inspection of the pairwise contrasts of the indirect effects failed to find significant differences between role stressors.

Hypothesis 24. Role stressors, as a set, partially mediated the relationship between LMX and one's satisfaction with their supervisor (SupSat). This was demonstrated as the total effect of LMX on SupSat (*total effect* = .74, p < .001) decreased in significance when role stressors were controlled (*direct effect* = .66, p < .001; see Table 13 in Appendix A). Yet, because the direct effect was still significant only partial mediation may be claimed. The total indirect effect of the role stressors set was non-significant (*indirect effect* = .08, *BCa* $CI_{(95\%)}$ (.00, .17)). Thus, the hypothesis that role stressors mediate the relationship between LMX and tension was partially supported.

LMX was also shown to indirectly influence SupSat though role conflict and role overload. Specifically, the indirect effect through role conflict equaled .05 (*BCa* $CI_{(95\%)}$ (.01, .11)) and the indirect effect through role overload was .04 (*BCa* $CI_{(95\%)}$ (.01, .09)). Pairwise contrasts failed to find significant differences between specific role stressors (see Table 14 in Appendix A). Overall these *a* and *b* pathways are consistent with theory. Higher LMX leads to supervisees experiencing less role conflict and role overload. This in turn results in increased satisfaction with one's supervisor.

Hypothesis 25. Role stressors failed to mediate the relationship between LMX and IRB. The causal step approach demonstrated the impossibility for mediation as neither LMX or the individual role stressors were significantly related to IRB (see Table 15 in Appendix A). In addition, neither the total or specific indirect effects were found to be non-significant (see Table 16 in Appendix A).

Hypothesis 26. Role stressors failed to mediate the relationship between LMX and OCBO. The causal step approach demonstrated that mediation was not possible as neither LMX nor the individual role stressors were not significantly related to OCBO (see Table 17 in Appendix A). In addition, the total and specific indirect effects were non-significant (see Table 18 in Appendix A).

Hypothesis 27. Results for role stressors as mediators of the LMX–OCBI relationship were mixed. While the causal step approach demonstrated that mediation is not possible as LMX was not significantly related to OCBI ($\beta = .13$, $p > .05$; see Table 19 in Appendix A), there was a significant indirect effect of LMX on OCBI through the role stressors, specifically through role ambiguity. The total indirect effect for the role stressor set was -.10 (*BCa* $CI_{(95\%)}$ (-.23, -.01) ; see Table 20 in Appendix A), while the specific indirect effect for role ambiguity was -.12 (*BCa* $CI_{(95\%)}$ (-.28, -.01)). Indirect effects though role conflict and role overload was not possible as they had non-significant *b* pathways. Inspection of the pairwise contrasts indicated that the indirect effect through role ambiguity was significantly greater than that through role overload (p*airwise contrast* = -13, *BCa* $CI_{(95\%)}$= -.33, -.01).

Hypothesis 28. Results for role stressors as mediators of the LMX–commitment relationship were mixed. While the causal step approach demonstrated that mediation was not possible as the relationships between the role stressors and organization commitment were non-significant (see Table 21 in Appendix A), there was a significant indirect effect of LMX on affective commitment through the role stressors set. The total indirect effect equaled .08 and was significant as the confidence interval did not contain zero (*BCa* $CI_{(95\%)}$ (.01, .16)). Thus, the hypothesis that LMX influenced organization

commitment through role stressors was supported though not by mediation. Indirect effects through role conflict, role ambiguity, and role overload were non-significant (see Table 22 in Appendix A).

Discussion

This study extended past research in several ways. Initially, it challenged assumptions concerning relationships of LMX with role stressors. While this study supported past findings of negative linear relationships between LMX and role conflict and role ambiguity, a curvilinear relationship was observed for role overload. Role overload was more prevalent when LMX is low (e.g., subordinates who have poor relations with their supervisors lack the necessary resources and support to complete their work) and high (e.g., subordinates who enjoy privileged relations are expected to do too much), which fit the expected U-shape pattern. Thus, it was demonstrated that under certain situations "too much" LMX can have detrimental consequences. This study also examined the manner in which LMX influences personal and organizationally relevant criteria. Role theory suggests that role demands from the leader manifest themselves in the follower as role stressors which lead to psychological and physiological coping responses (House & Rizzo, 1972; Kahn et al., 1964). Thus, the relationship between LMX and several personal and organization criteria were examined with role stressors acting as the mediator set. There is strong evidence to suggest that LMX does indeed influence relevant criteria through role stressors. However, this finding was limited to affective and cognitive outcomes and did not extend to performance criteria. Finally, this study examined if followers' perceptions of themselves and their environment moderated the relationship between LMX and role stressors. Role theory suggests that it is followers' subjective interpretations of their leaders' role demands that create

psychological distress. Therefore, personality traits that effect ones perceptions are likely to influence their subjective evaluation of role demands. For instance, it was theorized that employees high in agreeableness would have a larger support system and thus would be less dependent on their supervisor to minimize role ambiguity. This study failed to find evidence in support of these moderation hypotheses.

Linear and Curvilinear Relationships

This study parallels current research in that it moved beyond linear relationships between LMX and various criteria, and instead examined more complex relationships (Harris & Kacmar, 2006; Hochwarter & Byrne, 2005; Morrow et al., 2005). Originally it was posited that role conflict would have a linear relationship with LMX, while role ambiguity and role overload would have curvilinear relationships. Support for this series of hypotheses was mixed. Results concerning role conflict and role ambiguity were consistent with Gernster and Day (1997) meta-analytic finding of negative linear relationships between LMX and these role stressors. Thus the linear relationship with role conflict was supported, while the curvilinear relationship with role ambiguity was not. However, I would contend that while the relationships are similar the mechanisms behind these relationships differ. Identifying process differences are important as it allows investigation into which benefits decreases specific role stressors. This would allow the leader to provide benefits and create policies to target specific problem areas.

The work by Kahn et al. (1964) provides two theoretical premises concerning role conflict. First, role conflict arises from incompatible role requirements or inconsistent behavioral demands from roles in different domains. Second, the magnitude of role conflict is the inverse function of the strength difference between role pressures. Being in

a high quality LMX relationship inherently impacts both premises. In such relationships the leader provides numerous benefits to the follower, such as increased emotional support, latitude in determining working approach, praise and recognition, mentorship, and career advancement opportunities. In return the leader receives superior performance and positive affective responses. The reciprocal nature of this relationship causes the leader and follower to become codependent. The benefits received by the follower reinforce feelings of obligation to conform to role pressures. The leader, in turn, comes to rely on the follower for successful completion of important tasks. In addition, the leader is likely to place additional role pressures on trusted reliable followers. These two aspects strengthen the role pressures from the leader, while decreasing the role pressure from others. Finally, increased resources and latitude in determining working approach provides the follower with a means to complete seemingly incompatible tasks further reducing role conflict.

While role conflict deals with management of role tasks, role ambiguity is concerned with clarification. Kahn et al. (1964) described role ambiguity as an inadequacy, being either unclear or inconsistent, of a sent role to convey the necessary information to predict the outcome of the focal person's behavior. This may be a result from a failure to know what the role expectations are or actions necessary to conform to those expectations. Role ambiguity was expected to have an inverted U-shaped relationship with LMX. Specifically, it was predicted that followers in both low and high LMX relationships would experience less role ambiguity. In low quality LMX relationships the leader and follower would engage in contractual exchanges that left little room for ambiguity (Liden, Sparrowe, & Wayne, 1997). In high quality LMX

relationships increased communication would provide the followers with multiple opportunities for clarification and feedback. Therefore, it would be those individuals in medium quality LMX relationships that would experience uncertainty about their supervisor's expectations and compensation criteria. However, this study did not support a curvilinear relationship between LMX and role ambiguity. The decrease in role ambiguity was negative and linear raising doubts of the equivalence of low quality LMX relationships and "contractual" employment relationships. Lagace (1990) described such contractual employees as "hired hands" characterized by rare meetings with supervisors, limited performance feedback, and often assigned to monotonous tasks. It is likely these are two distinct concepts and that high quality LMX relationship can reduce role ambiguity regardless of jobs characteristics.

In addition, this study investigated the relationship between LMX and role overload. Role overload results when multiple role senders have legitimate role expectations that do not necessarily conflict, but due to time or resource constraints are difficult or impossible to accomplish (Kahn et al., 1964). In this study, LMX and role overload demonstrated a U-shaped curvilinear relationship as predicted. Thus, both low and high quality LMX were associated with the follower feelings overwhelmed with work tasks. It is theorized that in low-quality LMX relationships followers do not receive the same resources or support granted to followers in high-quality LMX relationships. As the quality of the LMX relationship develops the leader begins to provide benefits to the follower, such as additional resources, emotional support, and latitude in determining working approach. These benefits result in reduced role overload. Conceptually, those benefits dealing directly with flexibility of working assignments and working approach

should have the greatest impact minimizing role overload. However, a leader only has a finite amount of resources and advantages that can be bestowed. Once those resources have been exhausted role overload should stop decreasing. Yet, the norm of reciprocity suggests that the follower would still feel obligated to provide additional productivity. Also, the leader is likely to assign additional duties and important work tasks to these superior reliable performers. Finally, these followers are likely to become active in decision making processes further increasing their time commitments (Andrews & Kacmar; 2001). Such aspects could explain the rise in role overload demonstrated in high LMX relationships.

Taken collectively, the development of high quality LMX relationships lowers the experience of role conflict and role ambiguity for the follower. In other words, LMX is associated with fewer incompatible or inconsistent role demands, as well as increased clarity of the necessary actions to conform to role expectations. Through past and present research, the linear relationships between LMX and these prominent role stressors have been well documented. Thus, future research needs to move beyond investigating the magnitude of these relationships to addressing questions concerning the process by which LMX reduces these role stressors. For instance, it is assumed that the increased communication and interaction associated with high quality LMX relationships is the driving mechanism behind decreased role ambiguity. However, such assertions have not been specifically tested. Research linking unique benefits to the reduction of specific role stressors would provide the leader with tools tailored to change specific organizational characteristics. This study also demonstrated a U-shaped curvilinear relationship between LMX and role overload. Thus in both low and high quality LMX relationships followers

experienced increased sensations of being overwhelmed with work tasks. Further research is necessary to validate this finding. Such studies should not only investigate for curvilinear relationships, but also investigate the process by which LMX influences role overload. This is crucial because if the curvilinear relationship is found to be stable, those elements that lead to increased role overload need to be identified. Until then leaders should be conscientious not to overwhelm followers with work tasks. This is important as role overload is associated with several negative outcomes and does not increase IRB.

Mediated Relationships

Research to date has demonstrated that LMX has substantial influence on role stressors. However, role stressors represent process variables which derive their value from their ability to influence other key criteria. In other words, the reduction of role stressors is desirable because it represents a means to influence affective, cognitive, physiological, and behavioral criteria relevant to the individual and organization. The focus of this study was to investigate the process by which LMX influences these types of criteria. It was theorized that LMX operates within a role theory framework. If this premise is correct then role stressors should mediate the relationship between LMX and other meaningful criteria. Gerstner and Day (1997) provided initial evidence by establishing significant relationships between LMX and role stressors (*path a*), as well as other important criteria (*path c*). Jackson and Schuler (1985) and Örtqvist and Wincent (2006) provided the necessary supplementary evidence by demonstrating significant relationships between role stressors and relevant criteria (*path b*). However, no study had taken the final step and assessed the indirect effects of LMX (*path c'*). This study

provided evidence that LMX is indeed indirectly related to important criteria through role stressors as predicted by role theory.

The chief finding of this study was that LMX indirectly influenced affective and cognitive criteria through role stressors. This is consistent with role theory which focuses on the internal processes of the focal person. Of interest was that indirect effects went primarily through role conflict and role overload. It was demonstrated that role stressors fully mediated the relationship between LMX and tension. Similar results were demonstrated for measures of job satisfaction. This is not surprising as several authors have perceived that tension and job satisfaction share a common ground. Both represent a psychological reaction to the presence or absence of noxious stimuli in the work environment (Rhoads, Singh, & Goodell, 1994; Walker, Churchhill,& Ford, 1975). However, satisfaction was only partially mediated. Also, the relationship was stronger for job satisfaction than satisfaction with one's supervisor. This suggests that the presence of role stressors degrades one's overall satisfaction. It is interesting that role stressors did not influence satisfaction with one's supervisors to a greater extent considering the strength of the relationship between LMX and role stressors. LMX was also shown to indirectly influence affective commitment through role stressors.

Yet, mediation was limited to affective and cognitive criteria and did not readily extend to performance criteria. Overall, mediation was unlikely because LMX was not related to performance. Gerstner and Day (1997) commented that the relationship between LMX and performance is complex. First, LMX ratings differ significantly based on the source with a corrected mean sample-weight correlation of .37 between leader and follower. In this study LMX ratings were obtained from the employee. This was done as

the theoretical basis of the study was role theory which focuses on the internal processes of the focal person. Furthermore, Gerstner and Day demonstrated that the relationship of LMX with performance is a function of the source of the leadership rating. LMX ratings provided by the leader have a corrected mean sample-weighted correlation of .55 with task performance, while it was .30 for follower LMX. In this study, performance was assessed through subjective ratings provided by the supervisor. Subjective performance ratings allowed data collection across a wide array of positions. Furthermore, obtaining performance measures from the supervisor remove potential leniency biases of self-ratings. Gerstner and Day also conducted a moderation analysis. Results suggest the potential for moderators. It is possible that the lack of relationship between LMX and performance in this study is a result of unmeasured moderating variables not taken into account.

The noted exception was a weak indirect effect between LMX and OCBI. Results suggest that LMX indirectly influences OCBI primarily through role ambiguity. An indirect effect was possible as it does not require a significant relationship between predictor and criteria at the outset. However, the nature of the relationship was unusual. Specifically, LMX decreased OCBI by decreasing role ambiguity. Thus this finding is dependent on a positive relationship between role ambiguity and OCBI. It is possible that uncertainty concerning position responsibilities results in performing additional, extra-role work tasks. However, a general increase in extra-role work tasks should increase both OCBI and OCBO, not just OCBI as demonstrated in this study. Additional research is needed to investigate the matter.

Results provide evidence that LMX operates within a role theory framework in regards to affective and cognitive criteria, as well as OCBI. It also has important repercussions in the applied setting. The benefits of developing high quality relationships are shown to diffuse to several personal and organizationally relevant criteria. In addition, changes to organizational policies that minimize role stressors will influence a wide range of criteria. However, leaders should be conscientious of the complexities concerning role overload. Most of the positive effects were shown to go through role overload. Because LMX has a curvilinear relationship with role overload it is possible that high quality LMX relationships can inadvertently dampen the positive benefits of high quality LMX relationships. Specifically, LMX was demonstrated to influence tension, job satisfaction, and supervisor satisfaction through role overload.

Moderated Relationships

It was postulated that certain personality traits would make the follower more dependent on their leader to regulate role stressors. This study failed to find any evidence to support this series of hypotheses. There were several direct relationships between personality traits and role stressors. For example, negative affectivity was positively related to role conflict and overload, relational identity was negatively related to role ambiguity and overload, and agreeableness was negatively related to role conflict. Thus, although these traits did not moderate relationship between LMX and role stressors, they are still relevant when considering role stressors.

Based on inspection of initial results I theorized that personality may influence the development of high quality LMX relationships and, by extension, followers' experiences of role stressors. Thus, personality may indirectly influence role stressors through LMX.

There were several pieces of evidence that justified further exploration. First, several of the assessed personality traits were significantly related to both LMX and role stressors (Table 1). Second, there are numerous studies to suggest that follower characteristics are a primary antecedent in developing high quality LMX relationships. A few of the investigated characteristics include growth-need strength, optimism, self-efficacy, and internal locus of control (Graen et al., 1982; Scandura & Graen, 1984, Scandura & Graen, 1984, Vasudevan, 1993). Third, Gerstner and Day's (1997) meta-analytic estimates demonstrated significant relationships between LMX and role stressors (*path b*). This established the necessary prerequisite of significant relationship between the mediator and criteria variables. Thus, an exploratory analysis was conducted. Results demonstrated that positive affect (point estimates RA = -.10, RC = -.08, RO = -.09), negative affect (point estimates RA = .10, RC = .07, RO = .07), and agreeableness (point estimates RA = -.16, RC = -.11, RO = -.14) indirectly influenced all three role stressors through LMX. In addition, relational self-identity indirectly influenced role ambiguity (point estimate RA = -.10) through LMX. The consistency of the results across role stressors lends credibility to this finding. However, as this is an *ad hoc* analysis it should be interpreted with caution.

Overall, results suggested that personality does not moderate LMX's influence on role stressors. Rather personality, whether directly or indirectly, influences followers' experiences of role stressors. One way this may happen is that followers' personality shape their perceptions of their environment, such as negative affectivity creates a pessimistic bias when interpreting ambiguous events. However, not all of the personality traits assessed in this study influenced role stressors. It is possible that LMX is a strong

situation factor that overshadows the impact of certain personality traits. This would suggest that high quality LMX relationships represent a powerful force in the workplace. Therefore, high quality LMX relationships should be cultivated. A second way that personality may influence role stressors is that followers' personalities shape their environment. For instance, followers high in agreeableness are more likely to develop high quality LMX relationships. That relationship in turn influences the work environment. In which case, leaders should be conscious of biases that hinder development of high quality LMX relationships with "difficult" individuals. Additional research is necessary to develop a framework of how and which personality traits influence role stressors.

Limitations

This study suffered from several limitations common in leadership research. For instance, it is impossible to establish causality from a cross sectional design. There is also the possibility that common method variance inflated coefficients. Furthermore, the concepts of leader and supervisor were confounded. Specific limitations were a result of the small sample obtained for the performance measures and the exclusion of certain scales, which I discuss below.

A series of problems were created by the relatively small sample obtained for the performance measures. The initial return rate for the supervisor survey was an acceptable 43% (n = 100). However inclusion of covariates reduced the sample to 76 participants. To overcome this limitation a BaC bootstrap method was utilized to examine LMX's indirect influence on performance. Preacher and Hayes (2008) advocated this procedure to minimize error rates and maximize power. However, a bootstrap methodology raises

its own concerns. Such a methodology utilizes confidence intervals created through multiple iterations of parameter estimates. Thus the confidence interval may fluctuate slightly between running when dealing with small effect sizes. In order to minimize the potential Type I and Type II error rates, rerunning analyses were kept to a minimum. However, to assess the costs of utilizing a smaller sample employing covariates the analyses were conducted a second time without covariates. The results of the study did not change significantly based on their exclusion. Therefore, the initial analyses which employed covariates were retained. This was done to maintain consistency across analyses and aid interpretation.

A second limitation was created by the exclusion of certain scales. In retrospect, it would have been beneficial to obtain supervisor ratings of LMX and supervisee ratings of effort. While neither scale is directly implied by LMX they would have been immensely valuable in investigating the link between LMX and performance. Their inclusion could have been easily justified based on value added versus the low cost of collection. Supervisor ratings of LMX would have confirmed a relationship between LMX and performance existed in this sample. Research has shown that the relationship between LMX and performance is moderated by the source of the leadership rating (Gerstner & Day, 1997). When the supervisor rates both LMX and performance the relationship is significantly greater than when the employee rates the LMX relationship. This make intuitive sense as supervisors distribute benefits based on their perceptions of employee performance. Employees' self-ratings of effort should have also been collected. While LMX is based on supervisors perceiving superior performance, in reality employees only have the ability to manipulate the effort they put into work behaviors. Thus, followers'

perceptions of high quality LMX relationships should have lead to an increase of effort, not necessarily an increase in the subjective ratings of performance by the supervisor.

Future Research

Results from this study reveal several avenues for future research. A preliminary recommendation is that the inclusion of role overload needs to become standard. Its exclusion is uncalled and inhibits investigation into both itself and role stressors as a set. Its omission is evident as both Jackson and Schuler (1985) and Gerstner and Day (1997) failed to derive meta-analytic estimates for role overload. This may be attributed to either a lack of base studies or the authors' judgment that role overload did not warrant investigation. A later meta-analysis by Örtqvist and Wincent (2006) derived point estimates for role overload using as few as two studies. This study demonstrated that role overload is important and investigation is justified. This is evident by its unique curvilinear relationship with LMX or its prominence as a mediator between LMX and affective and cognitive criteria.

Research should continue to explore the complexity of the LMX construct. Research has already demonstrated the potential for non-traditional relationships between LMX and other criteria. For instance, role stressors have proved a fertile ground for curvilinear relationships (Harris & Kacmar, 2006; Hochwarter & Byrne, 2005; Morrow et al., 2005). Such information is not only of interest on a theoretical level but also has practical implications. Theoretically, this type of research is necessary to create a unified causal model. Practically, research into the complexity of LMX will provide leaders with the tools necessary to implement change within the organization giving it a competitive advantage.

There are several elements of a potential causal model already in place. Research to date suggests that personality is an antecedent to LMX (Graen et al., 1982; Scandura & Graen, 1984, Scandura & Graen, 1984, Vasudevan, 1993). LMX in turn indirectly influences personal and organizational criteria through role stressors. However, a causal model would also need to address causality, potential moderators, and investigate additional criteria. Causality may be established utilizing a longitudinal study. There is a host of potential moderators that could be investigated including the individual who provides the LMX or performance ratings, objective versus subjective criteria, and the cognitive complexity of the position. There are also numerous alternative criteria that could be investigated including involvement, turnover, satisfaction with characteristics of the job (pay, promotion, etc.), perceived justice, and objective physiological indicators of stress to name a few.

Research is also needed into the mechanisms by which LMX impacts criteria. While significant relationships have been well documented, research into which specific benefits influence criteria is lacking. Such research has strong practical implications as it would provide the leader with a tool box of specific benefits to remedy troubles. For instance, it is possible that by providing latitude in determining working approach the leader would be able to decrease role overload. By doing so the leader would indirectly increase satisfaction and decrease tension, without sacrificing performance.

Future research will also need to investigate LMX's influence on OCBI. At present there are seemingly contradictory findings. A positive relationship was established through correlation coefficients and beta weights (Table 1 & 19). Yet, the Preacher and Hayes (2008) methodology to detect indirect effects suggests that low

quality LMX indirectly increases OCBI through role stressors (Table 20). This contradiction will need to be investigated and explained in the future. It is also of interest to determine how LMX influences the diffusion of OCBI behaviors across different populations within the organization. Intuitively, it seems likely that LMX would lead to the greatest increase in OCBI directed towards the supervisor. However, there are other populations that may be affected such as supervisees or fellow coworkers.

One of the most definitive findings was that role stressors fully mediated the relationship between LMX and tension. However, this study relied on a self report measure of tension. Future research should replicate using both self report and objective criteria. There has been some research in the domain of role stressors that has included objective criteria. Such indices include heart rate and blood pressure (Caplan & Jones, 1975; French & Caplan, 1970, 1972; Ivancevich et al, 1982). However, the extension of this research calls for the inclusion of measures of leadership and role overload. If the implications from the study hold, leaders will need to be conscious of the burdens placed on their followers. Not only do role stressors fail to increase in role performance, but they are also detrimental to employees' health. In addition, longitudinal studies into this matter have the potential to be extremely valuable. If leadership is shown to decrease serious physiological conditions such as high blood pressure, cardiovascular illness, or ulcers leadership training programs would provide organizations a means to decrease health care costs.

Conclusion

This study demonstrated that high-quality LMX may be negatively related to favorable outcomes under certain conditions. Furthermore, it was shown that LMX was

indirectly related to criteria through role stressors. Strong evidence was put forth justifying the inclusion of role overload in future studies. Practical recommendations included emphasizing the importance of developing high quality LMX relationships and not to neglect those employees with abrasive personality types. At the same time it is necessary for leaders to be aware of the unintended of consequences of high-quality LMX relationships that may result from perceptions of high role overload. Finally, ideas were presented for future research which emphasized the investigation of the impact of LMX on performance and cognitive criteria.

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Appendices

Appendix A: Tables and Figures

Table 1

Descriptive statistics and correlations for Leader member exchange, role stressors, personality variables, and outcome variables.

Variable	Mean (*SD*)	1	2	3	4	5	6	7	8	9	10
01. Leader member exchange	3.82 (*.83*)	(.90)									
02. Role conflict	2.11 (*.73*)	-.30**	(.70)								
03. Role ambiguity	2.01 (*.66*)	-.45**	.56**	(.70)							
04. Role overload	2.14 (*.98*)	-.24**	.40**	.26**	(.76)						
05. *PANAS* (Positive affect)	3.72 (.84)	.26**	-.14*	-.27**	-.09	(.92)					
06. *PANAS* (Negative affect)	1.66 (*.62*)	-.19**	.28**	.18**	.32**	-.20**	(.86)				
07. Individual self-identity	3.11 (*.93*)	-.03	.15*	.01	.07	.05	.03	(.79)			
08. Relational self-identity	4.61 (*.48*)	.07	-.07	-.23**	.12	.20**	.02	.16*	(.71)		
09. Agreeableness	4.05 (*.40*)	.26**	-.30**	-.25**	-.10	.42**	-.33**	-.16*	.27**	(.76)	
10. Extraversion	3.52 (*.56*)	.03	-.05	-.09	-.09	.46**	-.13*	.16*	.25**	.32**	(.80)
11. Job satisfaction	4.09 (*1.03*)	.45**	-.38**	-.45**	-.35**	.52**	-.33**	-.02	.14*	.33**	.28**
12. Satisfaction w/ supervisor	4.14 (*.89*)	.60**	-.28**	-.30**	-.28**	.14*	-.13	-.04	.03	.26**	-.06
13. In-role performance behavior	4.34 (*.77*)	.06	-.07	-.01	-.07	.19	-.12	-.12	.02	.18	.07
14. OCB-I	3.92 (*.76*)	.20*	.05	.18	.11	.15	.04	-.12	.14	.14	.11
15. OCB-O	4.30 (*.77*)	.08	-.03	.02	.02	.21*	-.00	-.10	.10	.30**	.01
16. Affective commitment	3.51 (*.71*)	.39**	-.29**	-.35**	-.19**	.52**	-.23**	-.00	.15*	.37**	.25**
17. Tension	1.95 (*.90*)	-.24**	.47**	.31**	.60**	-.00	.33**	-.10	.10	-.16*	.01
18. Subordinate age	27.44 (*12.40*)	.10	.05	.02	-.06	.17**	-.07	-.17	-.08	.08	-.09
19. Subordinate position tenure	25.44 (*36.73*)	.12	.23**	.11	.27**	.01	.14*	-.07	-.02	-.14*	-.17*
20. Subordinate gender	(N/A)	.01	-.09	.01	.07	-.02	.09	-.07	.18**	.06	.15*
21. Subordinate race	(N/A)	.06	-.01	.02	.05	.00	.02	.02	.02	-.01	.04

Note. Coefficient alphas are indicated in parenthesis. Race dichotomized with 0 = males and 1 = females.

N = 100 for performance measures. N ranged from 230 to 232 due to missing data for the remaining variables.

* $p < .05$.

** $p < .01$.

Table 1 (continued)

Variable	11	12	13	14	15	16	17	18	19	20	21
01. Leader member exchange											
02. Role conflict											
03. Role ambiguity											
04. Role overload											
05. *PANAS* (Positive affect)											
06. *PANAS* (Negative affect)											
07. Individual self-identity											
08. Relational self-identity											
09. Agreeableness											
10. Extraversion											
11. Job satisfaction	(.90)										
12. Satisfaction w/ supervisor	.41**	(.79)									
13. In-role performance behavior	.24*	.24*	(.91)								
14. OCB-I	.10	.18	.66**	(.90)							
15. OCB-O	.27*	.25*	.75**	.60**	(.86)						
16. Affective commitment	.73**	.34**	.23*	.23*	.25*	(.86)					
17. Tension	-.31**	-.34**	-.09	.14	.07	-.11	(.85)				
18. Subordinate age	.07	.03	-.02	-.01	.13	.23**	.08	(N/A)			
19. Subordinate position tenure	-.09	.08	.24*	.27**	.19	.02	.29**	.34**	(N/A)		
20. Subordinate gender	.03	-.12	.20	.52**	.22*	-.06	-.02	-.34**	.04	(N/A)	
21. Subordinate race	.02	.04	.04	.10	.06	.06	.20**	.03	-.07	.03	(N/A)

Note . Coefficient alphas are indicated in parenthesis. Race dichotomized with 0 = males and 1 = females.

N = 100 for performance measures. N ranged from 230 to 232 due to missing data for the remaining varia

* $p < .05$.

** $p < .01$.

Table 2

Results of the hierarchical regression analyses examining the relationship between LMX and role stressors.

	Role Ambiguity	Role Conflict	Role Overload
Step	β	β	β
Step 1			
Age	.00	-.01	-.01†
Gender	-.02	-.20	.01
Position tenure	.00	.01**	.01**
Race	.03	-.03	.09
R-square	.01	.07	.09
F	.63	3.79**	4.66**
Step 2			
LMX	-.39**	-.30**	-.32**
Δ R-square	.25	0.11	.07
Δ *F*	63.76**	26.29**	16.55**
Step 3			
Quadratic LMX term	.03	.03	.20**
Δ R-square	.00	.00	.03
Δ *F*	.60	.24	8.05**
Step 4	N/A	N/A	
Cubic LMX term			-.02
Δ R-square			.00
Δ *F*			.13

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 3

Results of the hierarchical regression analyses examining the relationship between LMX and positive affect (PANAS).

	Role Ambiguity	Role Conflict	Role Overload
Step	β	β	β
Step 1			
Age	.00	-.01	-.01†
Gender	-.02	-.20	.01
Position Tenure	.00	.01**	.01**
Race	.03	-.03	.09
R-square	.01	.07	.09
F	.63	3.79**	4.66**
Step 2			
LMX	-.39**	-.30**	-.32**
Δ R-square	.25	0.11	.07
Δ *F*	63.76**	26.29**	16.55**
Step 3			
Postive affect	-.09†	-.02	-.02
Δ R-square	.01	.00	.00
Δ *F*	3.10†	.11	.05
Step 4			
LMX x Pos. affect	.02	.06	.10
Δ R-square	.00	.01	.01
Δ *F*	.19	1.07	1.44

Note. $N = 200$.
† $p < .10$.
* $p < .05$.
** $p < .01$.

Table 4

Results of the hierarchical regression analyses examining the relationship between LMX and negative affect (PANAS).

	Role Ambiguity	Role Conflict	Role Overload
Step	β	β	β
Step 1			
Age	.00	-.01	-.01†
Gender	-.02	-.20	.01
Position Tenure	.00	.01**	.01**
Race	.03	-.03	.09
R-square	.01	.07	.09
F	.63	3.79**	4.66**
Step 2			
LMX	-.39**	-.30**	-.32**
Δ R-square	.25	.11	.07
Δ *F*	63.76**	26.29**	16.55**
Step 3			
Negative affect	.06	.23**	.33**
Δ R-square	.00	.04	.04
Δ *F*	.97	9.25**	10.01**
Step 4			
LMX x Neg. affect	-.02	.02	-.07
Δ R-square	.00	.00	.00
Δ *F*	.05	.04	.31

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 5

Results of the hierarchical regression analyses examining the relationship between LMX and agreeableness.

	Role Ambiguity	Role Conflict	Role Overload
Step	β	β	β
Step 1			
Age	.00	-.01	-.01†
Gender	-.02	-.20	.01
Position Tenure	.00	.01**	.01**
Race	.03	-.03	.09
R-square	.01	.07	.09
F	.63	3.79**	4.66**
Step 2			
LMX	-.39**	-.30**	-.32**
Δ R-square	.25	0.11	.07
Δ *F*	63.76**	26.29**	16.55**
Step 3			
Agreeableness	-.07	-.20*	.06
Δ R-square	.00	.02	.00
Δ *F*	.81	5.26*	.26
Step 4			
LMX x Areeableness	-.03	.08	-.09
Δ R-square	.00	.00	.00
Δ *F*	.11	.86	.60

Note. $N = 200$.
† $p < .10$.
* $p < .05$.
** $p < .01$.

Table 6

Results of the hierarchical regression analyses examining the relationship between LMX and extraversion.

	Role Ambiguity	Role Conflict	Role Overload
Step	β	β	β
Step 1			
Age	.00	-.01	-.01†
Gender	-.02	-.20	.01
Position Tenure	.00	.01**	.01**
Race	.03	-.03	.09
R-square	.01	.07	.09
F	.63	3.79**	4.66**
Step 2			
LMX	-.39**	-.30**	-.32**
Δ R-square	.25	0.11	.07
Δ *F*	63.76**	26.29**	16.55**
Step 3			
Extraversion	-.01	.03	-.10
Δ R-square	.00	.00	.03
Δ *F*	.01	.09	.65
Step 4			
LMX x Extraversion	.11	.08	-.18
Δ R-square	.01	.00	.01
Δ *F*	1.77	.53	1.71

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 7

Results of the hierarchical regression analyses examining the relationship between LMX and individual self-identity.

Step	Role Ambiguity β	Role Conflict β	Role Overload β
Step 1			
Age	.00	-.01	-.01†
Gender	-.02	-.20	.01
Position Tenure	.00	.01**	.01**
Race	.03	-.03	.09
R-square	.01	.07	.09
F	.63	3.79**	4.66**
Step 2			
LMX	-.39**	-.30**	-.32**
Δ R-square	.25	0.11	.07
Δ *F*	63.76**	26.29**	16.55**
Step 3			
Individual self- identity	.02	.10†	.05
Δ R-square	.00	.01	.00
Δ *F*	.22	3.15†	.44
Step 4			
LMX x Ind. self-identity	.04	-.01	.03
Δ R-square	.00	.00	.00
Δ *F*	.88	.04	.17

Note. $N = 200$.
† $p < .10$.
* $p < .05$.
** $p < .01$.

Table 8

Results of the hierarchical regression analyses examining the relationship between LMX and relational self-identity.

	Role Ambiguity	Role Conflict	Role Overload
Step	β	β	β
Step 1			
Age	.00	-.01	-.01†
Gender	-.02	-.20	.01
Position Tenure	.00	.01**	.01**
Race	.03	-.03	.09
R-square	.01	.07	.09
F	.63	3.79**	4.66**
Step 2			
LMX	-.39**	-.30**	-.32**
Δ R-square	.25	0.11	.07
Δ *F*	63.76**	26.29**	16.55**
Step 3			
Relational self- identity	-.18†	-.08	.30†
Δ R-square	.01	.00	.01
Δ *F*	2.97†	.43	3.21†
Step 4			
LMX x Rel. self-identity	.14	.17	.26
Δ R-square	.01	.01	.01
Δ *F*	1.79	1.83	2.33

Note. $N = 200$.
† $p < .10$.
* $p < .05$.
** $p < .01$.

Table 9

Baron and Kenny (1986) causal step approach examining role stressors potential for mediation between LMX and tension.

Step 1: Total effect of IV on DV (c path)			
Age	.00		
Gender	-.09		
Position tenure	.01**		
Race	.40**		
LMX	-.31**		
Step 2: IV to mediators (a paths)			
	Role ambiguity	Role conflict	Role overload
Age	.00	-.01	-.01†
Gender	-.01	-.19†	.02
Position tenure	.00*	.01**	.01**
Race	.04	-.02	.10
LMX	-.39**	-.30**	-.32**
Step 3: Direct effects of mediators on DV (b paths)			
Age	.01		
Gender	-.04		
Position tenure	.00		
Race	.37**		
Role ambiguity	.04		
Role conflict	.32**		
Role overload	.41**		
Step 4: Direct effect of IV on DV (c' path)			
Age	.01		
Gender	-.04		
Position tenure	.00		
Race	.37		
Role ambiguity	-.01		
Role conflict	.32		
Role overload	.40		
LMX	-.09		

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 10

Bootstrapped point estimates and confidence intervals for the total and specific indirect effects of LMX on tension as well as contrasts between specific indirect effects.

	Product of Coefficients				Bootstrap (1,000 iterations)					
					Percentile 95% CI		BC 95% CI		BCa 95% CI	
	Point estimate	Boot	Bias	*SE*	Lower	Upper	Lower	Upper	Lower	Upper
Indirect effects										
Total	-.22	-.22	< .00	.05	-.33	-.12	-.32	-.11	-.33	-.13
Role ambiguity	.00	.00	< .00	.04	-.09	.09	-.08	.09	-.08	.10
Role conflict	-.09	-.09	< .00	.03	-.17	-.03	-.18	-.04	-.16	-.03
Role overload	-.14	-.13	< .00	.04	-.21	-.05	-.21	-.06	-.23	-.08
Contrasts										
Role conflict vs. ambiguity	-.09	-.10	< .00	.07	-.23	.02	-.24	.02	-.25	.02
Role conflict vs. overload	.04	.03	< .00	.05	-.07	.14	-.07	.14	-.07	.14
Role ambiguity vs. overload	.13	.13	< .00	.06	.00	.25	.01	.26	.01	.24

Note. $N = 200$.

BC = bias corrected; BCa = bias corrected and accelerated.

Partial effect of age ($\beta = .00$, $se = .00$, $p > .05$).

Partial effect of gender ($\beta = -.04$, $se = .12$, $p > .05$).

Partial effect of position tenure ($\beta = .00$, $se = .00$, $p > .05$).

Partial effect of race ($\beta = .37$, $se = .10$, $p < .01$).

Table 11

Baron and Kenny (1986) causal step approach examining role stressors potential for mediation between LMX and job satisfaction.

Step 1: Total effect of IV on DV (c path)			
Age	.01*		
Gender	.12		
Position tenure	-.01**		
Race	.02		
LMX	.59**		
Step 2: IV to mediators (a paths)			
	Role ambiguity	Role conflict	Role overload
Age	.00	-.01	-.01†
Gender	-.01	-.19†	.02
Position tenure	.00*	.01**	.01**
Race	.04	-.02	.10
LMX	-.39**	-.30**	-.32**
Step 3: Direct effects of mediators on DV (b paths)			
Age	.01		
Gender	.10		
Position tenure	.00		
Race	.06		
Role ambiguity	.46**		
Role conflict	-.17		
Role overload	-.28**		
Step 4: Direct effect of IV on DV (c' path)			
Age	.01		
Gender	.10		
Position tenure	.00		
Race	.04		
Role ambiguity	-.24†		
Role conflict	-.15		
Role overload	-.19**		
LMX	.39**		

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 12

Bootstrapped point estimates and confidence intervals for the total and specific indirect effects of LMX on job satisfaction as well as contrasts between specific indirect effects.

	Product of Coefficients				Bootstrap (1,000 iterations)					
					Percentile 95% CI		BC 95% CI		BCa 95% CI	
	Point estimate	Boot	Bias	*SE*	Lower	Upper	Lower	Upper	Lower	Upper
Indirect effects										
Total	.22	.20	< .00	.06	.10	.31	.09	.31	.10	.32
Role ambiguity	.09	.09	< .00	.05	-.01	.21	-.01	.21	-.01	.21
Role conflict	.05	.05	< .00	.04	-.03	.13	-.02	.13	-.02	.13
Role overload	.06	.06	< .00	.03	.01	.14	.01	.14	.01	.14
Contrasts										
Role conflict vs. ambiguity	-.05	-.05	< .00	.08	-.20	.10	-.19	.11	-.19	.11
Role conflict vs. overload	-.02	-.01	< .00	.05	-.13	.08	-.13	.08	-.13	.08
Role ambiguity vs. overload	.03	.03	< .00	.07	.10	.17	-.11	.16	-.11	.16

Note. $N = 200$.

BC = bias corrected; BCa = bias corrected and accelerated.

Partial effect of age ($\beta = .01$, $se = .01$, $p > .05$).

Partial effect of gender ($\beta = .10$, $se = .15$, $p > .05$).

Partial effect of position tenure ($\beta = .00$, $se = .00$, $p > .05$).

Partial effect of race ($\beta = .04$, $se = .12$, $p > .05$).

Table 13

Baron and Kenny (1986) causal step approach examining role stressors potential for mediation between LMX and satisfaction with one's supervisor.

Step 1: Total effect of IV on DV (c path)			
Age	.00		
Gender	.02		
Position tenure	.00		
Race	-.01		
LMX	.73**		
Step 2: IV to mediators (a paths)			
	Role ambiguity	Role conflict	Role overload
Age	.00	-.01	-.01†
Gender	-.01	-.19†	.02
Position tenure	.00*	.01**	.01**
Race	.04	-.02	.10
LMX	-.39**	-.30**	-.32**
Step 3: Direct effects of mediators on DV (b paths)			
Age	-.01		
Gender	.00		
Position tenure	.01**		
Race	.04		
Role ambiguity	-.36**		
Role conflict	-.20*		
Role overload	-.21**		
Step 4: Direct effect of IV on DV (c' path)			
Age	.00		
Gender	-.01		
Position tenure	.00		
Race	-.01		
Role ambiguity	.03		
Role conflict	-.17*		
Role overload	-.12*		
LMX	.66**		

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 14

Bootstrapped point estimates and confidence intervals for the total and specific indirect effects of LMX on satisfaction with one's supervisor as well as contrasts between specific indirect effects.

	Product of Coefficients				Bootstrap (1,000 iterations)					
					Percentile 95% CI		BC 95% CI		BCa 95% CI	
	Point estimate	Boot	Bias	*SE*	Lower	Upper	Lower	Upper	Lower	Upper
Indirect effects										
Total	.08	.08	< .00	.04	-.01	.16	.00	.17	.00	.17
Role ambiguity	-.01	-.01	< .00	.04	-.09	.06	-.09	.06	-.09	.06
Role conflict	.05	.05	< .00	.03	.01	.10	.01	.10	.01	.10
Role overload	.04	.04	< .00	.02	.01	.08	.01	.09	.01	.09
Contrasts										
Role conflict vs. ambiguity	.06	.06	< .00	.04	-.03	.17	-.03	.17	-.03	.17
Role conflict vs. overload	.01	.01	< .00	.03	-.06	.08	-.06	.08	-.06	.08
Role ambiguity vs. overload	-.05	-.05	< .00	.04	-.13	.03	-.13	.03	-.13	.03

Note. $N = 200$.

BC = bias corrected; BCa = bias corrected and accelerated.

Partial effect of age ($\beta = -.01$, $se < .01$, $p > .05$).

Partial effect of gender ($\beta = -.01$, $se = .12$, $p > .05$).

Partial effect of position tenure ($\beta = .00$, $se < .00$, $p > .05$).

Partial effect of race ($\beta = .06$, $se = .10$, $p > .05$).

Table 15

Baron and Kenny (1986) causal step approach examining role stressors potential for mediation between LMX and in role performance behavior.

Step 1: Total effect of IV on DV (c path)			
Age	.00		
Gender	.14		
Position tenure	.00†		
Race	.07		
LMX	.03		
Step 2: IV to mediators (a paths)			
	Role ambiguity	Role conflict	Role overload
Age	.00	-.01	-.01†
Gender	-.01	-.19†	.02
Position tenure	.00*	.01**	.01**
Race	.04	-.02	.10
LMX	-.39**	-.30**	-.32**
Step 3: Direct effects of mediators on DV (b paths)			
Age	-.06		
Gender	.14		
Position tenure	.31*		
Race	.02		
Role ambiguity	.05		
Role conflict	-.09		
Role overload	-.15		
Step 4: Direct effect of IV on DV (c' path)			
Age	.00		
Gender	.13		
Position tenure	.00*		
Race	.12		
Role ambiguity	.12		
Role conflict	-.07		
Role overload	-.15		
LMX	.03		

Note. $N = 79$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 16

Bootstrapped point estimates and confidence intervals for the total and specific indirect effects of LMX on in role performance behavior as well as contrasts between specific indirect effects.

	Product of Coefficients				Bootstrap (1,000 iterations)					
					Percentile 95% CI		BC 95% CI		BCa 95% CI	
	Point estimate	Boot	Bias	*SE*	Lower	Upper	Lower	Upper	Lower	Upper
Indirect effects										
Total	.00	.00	< .00	.07	-.13	.13	-.13	.13	-.14	.12
Role ambiguity	-.05	-.06	< .00	.08	-.27	.07	-.25	.08	-.24	.08
Role conflict	.02	.02	< .00	.04	-.03	.15	-.04	.13	-.05	.10
Role overload	.03	.03	< .00	.04	-.01	.18	-.01	.18	-.02	.15
Contrasts										
Role conflict vs. ambiguity	.07	.07	< .00	.11	-.09	.38	-.11	.34	-.12	.32
Role conflict vs. overload	-.02	-.02	< .00	.05	-.13	.09	-.14	.07	-.14	.07
Role ambiguity vs. overload	-.08	-.09	-.01	.11	-.39	.05	-.34	.06	-.33	.07

Note. $N = 79$.

BC = bias corrected; BCa = bias corrected and accelerated.

Partial effect of age ($\beta = -.00$, $se < .00$, $p > .05$).

Partial effect of gender ($\beta = .13$, $se = .19$, $p > .05$).

Partial effect of position tenure ($\beta = .00$, $se < .00$, $p < .05$).

Partial effect of race ($\beta = .12$, $se = .16$, $p > .05$).

Table 17

Baron and Kenny (1986) causal step approach examining role stressors potential for mediation between LMX and organization focused organizational citizenship behavior.

Step 1: Total effect of IV on DV (c path)

Age	.01†
Gender	.29†
Position tenure	.00
Race	-.04
LMX	.01

Step 2: IV to mediators (a paths)

	Role ambiguity	Role conflict	Role overload
Age	.00	-.01	-.01†
Gender	-.01	-.19†	.02
Position tenure	.00*	.01**	.01**
Race	.04	-.02	.10
LMX	-.39**	-.30**	-.32**

Step 3: Direct effects of mediators on DV (b paths)

Age	.01†
Gender	.28
Position tenure	.00
Race	-.03
Role ambiguity	.11
Role conflict	-.02
Role overload	-.03

Step 4: Direct effect of IV on DV (c' path)

Age	.01†
Gender	.26
Position tenure	.00
Race	-.03
Role ambiguity	.14
Role conflict	-.02
Role overload	-.02
LMX	.06

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 18

Bootstrapped point estimates and confidence intervals for the total and specific indirect effects of LMX on organizational focused organizational citizenship behavior as well as contrasts between specific indirect effects.

	Product of Coefficients				Bootstrap (1,000 iterations)					
					Percentile 95% CI		BC 95% CI		BCa 95% CI	
	Point estimate	Boot	Bias	*SE*	Lower	Upper	Lower	Upper	Lower	Upper
Indirect effects										
Total	-.05	-.05	< .00	.06	-.18	.06	-.18	.06	-.18	.06
Role ambiguity	-.06	-.06	< .00	.07	-.21	.07	-.20	.07	-.21	.07
Role conflict	.00	.00	< .00	.04	-.07	.10	-.07	.10	-.06	.10
Role overload	.01	.01	< .00	.03	-.05	.08	-.04	.10	-.03	.10
Contrasts										
Role conflict vs. ambiguity	.06	.07	.01	.10	-.11	.28	-.12	.25	-.11	.28
Role conflict vs. overload	.00	.00	< .00	.05	-.11	.10	-.11	.10	-.11	.10
Role ambiguity vs. overload	-.06	-.07	-.01	.08	-.25	.08	-.24	.09	-.25	.08

Note. $N = 79$.

BC = bias corrected; BCa = bias corrected and accelerated.

Partial effect of age ($\beta = .01$, $se < .00$, $p = .07$).

Partial effect of gender ($\beta = .26$, $se = .19$, $p > .05$).

Partial effect of position tenure ($\beta = .00$, $se < .00$, $p > .05$).

Partial effect of race ($\beta = -.03$, $se = .17$, $p > .05$).

Table 19

Baron and Kenny (1986) causal step approach examining role stressors potential for mediation between LMX and individual focused organizational citizenship behavior.

Step 1: Total effect of IV on DV (c path)

Age	.00
Gender	.83**
Position tenure	.00
Race	.11
LMX	.13†

Step 2: IV to mediators (a paths)

	Role ambiguity	Role conflict	Role overload
Age	.00	-.01	-.01†
Gender	-.01	-.19†	.02
Position tenure	.00*	.01**	.01**
Race	.04	-.02	.10
LMX	-.39**	-.30**	-.32**

Step 3: Direct effects of mediators on DV (b paths)

Age	.00
Gender	.83**
Position tenure	.00
Race	.13
Role ambiguity	.16
Role conflict	-.01
Role overload	-.07

Step 4: Direct effect of IV on DV (c' path)

Age	.00
Gender	.76**
Position tenure	.00
Race	.14
Role ambiguity	.30*
Role conflict	-.02
Role overload	-.04
LMX	.24**

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 20

Bootstrapped point estimates and confidence intervals for the total and specific indirect effects of LMX on individual focused organizational citizenship behavior as well as contrasts between specific indirect effects.

	Product of Coefficients				Bootstrap (1,000 iterations)					
					Percentile 95% CI		BC 95% CI		BCa 95% CI	
	Point estimate	Boot	Bias	*SE*	Lower	Upper	Lower	Upper	Lower	Upper
Indirect effects										
Total	-.10	-.11	< .00	.06	-.24	-.06	-.23	-.00	-.23	-.01
Role ambiguity	-.12	-.12	< .00	.07	-.28	.01	-.28	.01	-.28	-.01
Role conflict	.00	.00	< .00	.03	-.06	.06	-.05	.07	-.05	.07
Role overload	.01	.00	< .00	.02	-.03	.06	-.04	.08	-.02	.09
Contrasts										
Role conflict vs. ambiguity	.12	.12	< .00	.09	-.06	.31	-.04	.34	-.04	.36
Role conflict vs. overload	-.01	.00	< .00	.03	-.08	.06	-.08	.06	-.08	.07
Role ambiguity vs. overload	-.13	-.13	< .00	.00	-.31	.01	-.33	.00	-.33	-.01

Note. $N = 79$.

BC = bias corrected; BCa = bias corrected and accelerated.

Partial effect of age ($\beta = .00$, $se = .01$, $p > .05$).

Partial effect of gender ($\beta = .76$, $se = .14$, $p < .01$).

Partial effect of position tenure ($\beta = .00$, $se = .001$, $p > .05$).

Partial effect of race ($\beta = .14$, $se = .12$, $p > .05$).

Table 21

Baron and Kenny (1986) causal step approach examining role stressors potential for mediation between LMX and affective commitment.

Step 1: Total effect of IV on DV (c path)			
Age	.01**		
Gender	.01		
Position tenure	.00*		
Race	.05		
LMX	.32**		
Step 2: IV to mediators (a paths)			
	Role ambiguity	Role conflict	Role overload
Age	.00	-.01	-.01†
Gender	-.01	-.19†	.02
Position tenure	.00*	.01**	.01**
Race	.04	-.02	.10
LMX	-.39**	-.30**	-.32**
Step 3: Direct effects of mediators on DV (b paths)			
Age	.01**		
Gender	-.01		
Position tenure	.00		
Race	.07		
Role ambiguity	-.25**		
Role conflict	-.13		
Role overload	-.03		
Step 4: Direct effect of IV on DV (c' path)			
Age	.01**		
Gender	-.01		
Position tenure	.00		
Race	.05		
Role ambiguity	-.11		
Role conflict	-.12		
Role overload	.00		
LMX	.24**		

Note. $N = 200$.

† $p < .10$.

* $p < .05$.

** $p < .01$.

Table 22

Bootstrapped point estimates and confidence intervals for the total and specific indirect effects of LMX on affective commitment as well as contrasts between specific indirect effects.

	Product of Coefficients				Bootstrap (1,000 iterations)					
					Percentile 95% CI		BC 95% CI		BCa 95% CI	
	Point estimate	Boot	Bias	*SE*	Lower	Upper	Lower	Upper	Lower	Upper
Indirect effects										
Total	.08	.08	< .00	.04	.01	.16	.01	.16	.01	.16
Role ambiguity	.04	.05	< .00	.04	-.02	.12	-.03	.11	-.03	.11
Role conflict	.04	.03	< .00	.02	-.01	.08	.00	.09	.00	.09
Role overload	.00	.00	< .00	.02	-.04	.04	-.03	.04	-.04	.04
Contrasts										
Role conflict vs. ambiguity	-.01	-.01	< .00	.05	-.11	.08	-.09	.09	-.09	.10
Role conflict vs. overload	.04	.04	< .00	.03	-.03	.10	-.02	.11	-.02	.11
Role ambiguity vs. overload	.04	.05	< .00	.04	-.03	.13	-.03	.12	-.04	.12

Note. $N = 200$.

BC = bias corrected; BCa = bias corrected and accelerated.

Partial effect of age ($\beta = -.01$, $se < .00$, $p < .05$).

Partial effect of gender ($\beta = -.01$, $se = .11$, $p > .05$).

Partial effect of position tenure ($\beta = .00$, $se < .00$, $p > .05$).

Partial effect of race ($\beta = .05$, $se = .09$, $p > .05$).

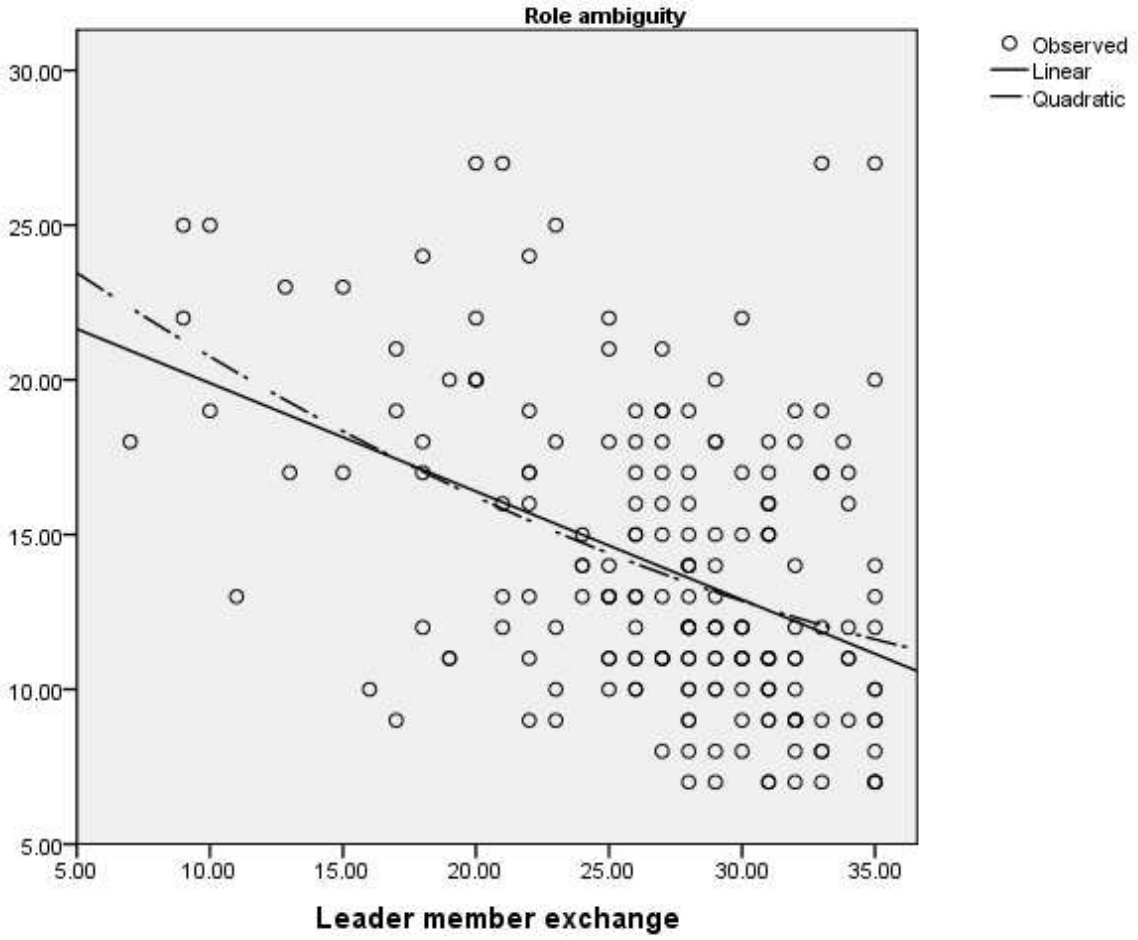

Figure 1. Graphed relationship between LMX and role ambiguity.

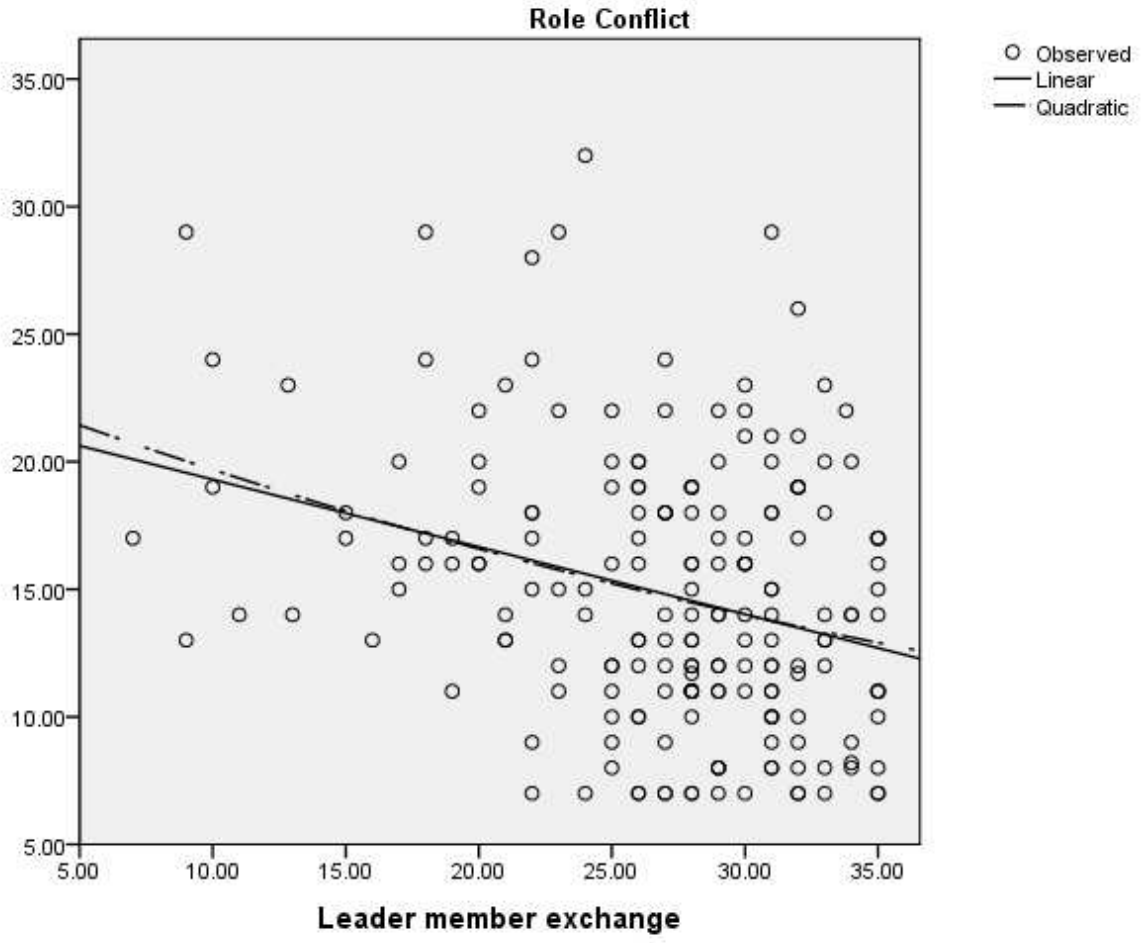

Figure 2. Graphed relationship between LMX and role conflict.

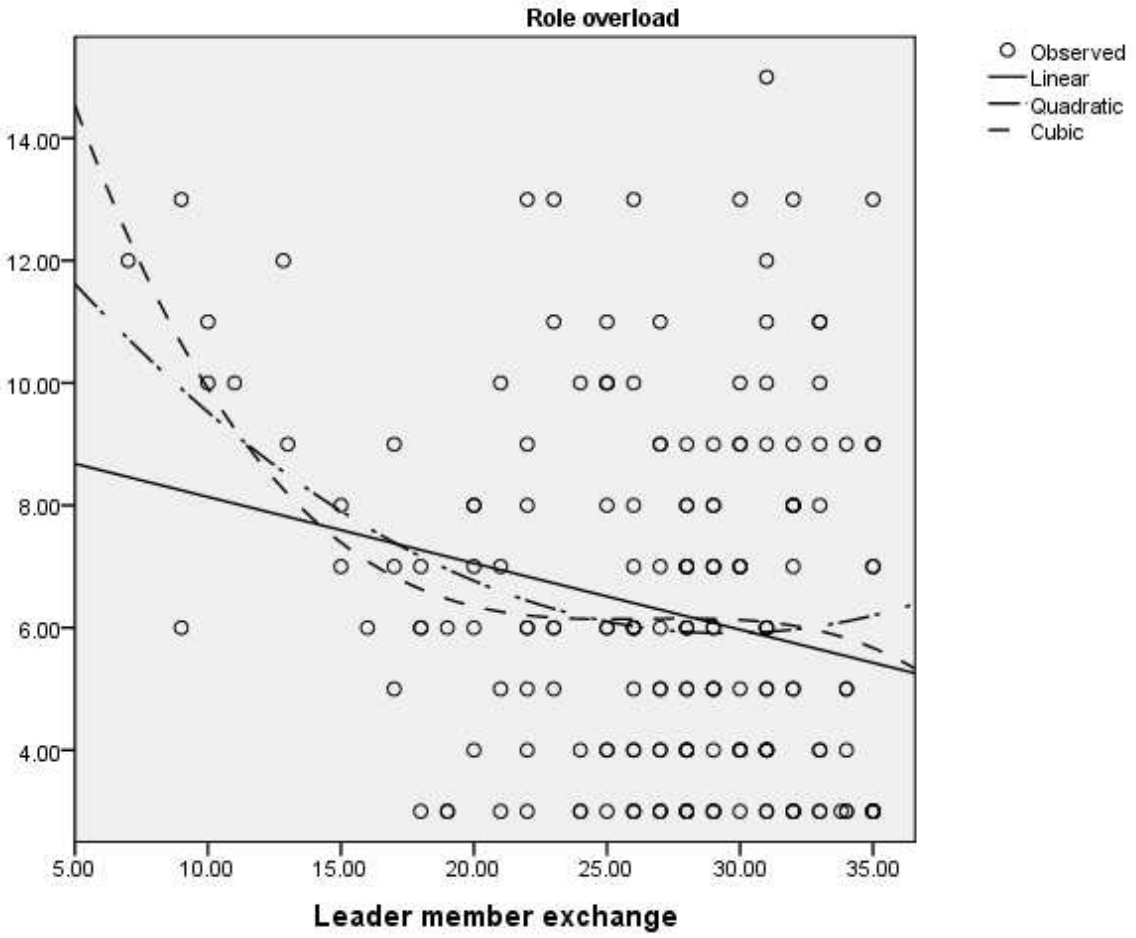

Figure 3. Graphed relationship between LMX and role overload.

Appendix B

Leader Member Exchange (LMX-7)
Scandura, Graen, & Novak (1986)

INSTRUCTIONS: Please circle the one number for each question that comes closest to reflecting your opinion about it.

1. Do you usually feel that you know where you stand…do you usually know how satisfied your immediate supervisor is with what you do?

Never know where I stand	Seldom know where I stand	Sometimes know where I stand	Usually know where I stand	Always know where I stand
1	2	3	4	5

2. How well do you feel that your immediate supervisor understands your problems and needs?

Not at all	Some but not enough	Enough	Well enough	Completely
1	2	3	4	5

3. How well do you feel that your immediate supervisor recognizes your potential?

Not at all	Some but not enough	Enough	As much as the next person	Fully
1	2	3	4	5

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

Certainly not	Probably not	Might or might not	Probably would	Certainly would
1	2	3	4	5

5. Again, regardless of the amount of formal authority your immediate supervisor has, to what extent can you count on him or her to "bail you out" at his or her expense when you really need it?

Certainly not	Probably not	Might or might not	Probably would	Certainly would
1	2	3	4	5

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

Certainly not	Probably not	Might or might not	Probably would	Certainly would
1	2	3	4	5

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

Less than average	About average	Average	Better than average	Extremely effective
1	2	3	4	5

Appendix C

Role Stressors Scale
House, Rizzo, and Lirtzman (1970)

INSTRUCTIONS: Please circle the one number for each question that comes closest to reflecting your opinion about it.

False	Somewhat false	Neutral	Somewhat true	True
1	2	3	4	5

01. I have to do things that should be done differently.	1	2	3	4	5
02. I feel certain about how much authority I have.	1	2	3	4	5
03. I receive an assignment without the manpower to complete it.	1	2	3	4	5
04. Clear, planned goals and objectives for my job.	1	2	3	4	5
05. I have to buck a rule or policy in order to carry out an assignment.	1	2	3	4	5
06. I know that I have divided my time properly.	1	2	3	4	5
07. I work with two or more groups who operate quite differently.	1	2	3	4	5
08. I know what my responsibilities are.	1	2	3	4	5
09. I receive incompatible requests from two or more people.	1	2	3	4	5
10. I know exactly what is expected of me.	1	2	3	4	5
11. I do things that are apt to be accepted by one person and not accepted by others.	1	2	3	4	5
12. Explanation is clear of what has to be done.	1	2	3	4	5
13. I work on unnecessary things.	1	2	3	4	5
14. I receive an assignment without adequate resources and materials to execute it.	1	2	3	4	5

Appendix D

Job Role Quality Scale
Marshall et al. (1991).

Please circle the one number for each question that comes closest to reflecting your opinion about it.

Less than once per month or never	Once or twice per month	Once or twice per week	Once or twice per day	Several times per day
1	2	3	4	5

1. Having too much to do	1	2	3	4	5
2. The job's taking too much out of you	1	2	3	4	5
3. Having to deal with emotionally difficult situations	1	2	3	4	5

Appendix E

Positive and Negative Affect Scale
Watson, Clark, and Tellegen (1988)

INSTRUCTIONS: This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to that word. Indicate to what extent you have felt this way *during the past week*.

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
01. Interested	1	2	3	4	5
02. Distressed	1	2	3	4	5
03. Excited	1	2	3	4	5
04. Upset	1	2	3	4	5
05. Strong	1	2	3	4	5
06. Guilty	1	2	3	4	5
07. Scared	1	2	3	4	5
08. Hostile	1	2	3	4	5
09. Enthusiastic	1	2	3	4	5
10. Proud	1	2	3	4	5
11. Irritable	1	2	3	4	5
12. Alert	1	2	3	4	5
13. Ashamed	1	2	3	4	5
14. Inspired	1	2	3	4	5
15. Nervous	1	2	3	4	5
16. Determined	1	2	3	4	5
17. Attentive	1	2	3	4	5
18. Jittery	1	2	3	4	5
19. Active	1	2	3	4	5
20. Afraid	1	2	3	4	5

Appendix F

Level of Self-Concept Scale
Selenta and Lord (2005)

INSTRUCTIONS: Please circle the one number for each statement that comes closest to reflecting your opinion about it.

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

1. I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people.	1	2	3	4	5
02. I have a strong need to know how I stand in comparison to my coworkers.	1	2	3	4	5
03. I often compete with my friends.	1	2	3	4	5
04. I feel best about myself when I perform better than others.	1	2	3	4	5
05. I often find myself pondering over the ways that I am better or worse off than others around me.	1	2	3	4	5
06. If a friend was having a personal problem, I would help him/her even if it meant sacrificing my time or money.	1	2	3	4	5
07. I value friends who are caring, empathic individuals.	1	2	3	4	5
08. It is important to me that I uphold my commitments to significant people in my life.	1	2	3	4	5
09. Caring deeply about another person such as a close friend or relative is important to me.	1	2	3	4	5
10. Knowing that a close other acknowledges and values the role that I play in their life makes me feel like a worthwhile person.	1	2	3	4	5
11. Making a lasting contribution to groups that I belong to, such as my work organization, is very important to me.	1	2	3	4	5
12. When I become involved in a group project, I do my best to ensure its success.	1	2	3	4	5
13. I feel great pride when my team or group does well, even if I'm not the main reason for its success.	1	2	3	4	5
14. I would be honored if I were chosen by an organization or club that I belong to, to represent them at a conference or meeting.	1	2	3	4	5
15. When I'm part of a team, I am concerned about the group as a whole instead of whether individual team members like me or whether I like them.	1	2	3	4	5

Appendix G

The Big Five Inventory (BFI)
John and Srivastava (1999)

INSTRUCTIONS: Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number to each statement to indicate the extent to which you agree or disagree with that statement.

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

I see Myself as Someone Who…

01. Is talkative	1	2	3	4	5
02. Tends to find fault with others	1	2	3	4	5
03. Is reserved	1	2	3	4	5
04. Is helpful and unselfish with others	1	2	3	4	5
05. Is full of energy	1	2	3	4	5
06. Starts quarrels with others	1	2	3	4	5
07. Generates a lot of enthusiasm	1	2	3	4	5
08. Has a forgiving nature	1	2	3	4	5
09. Tends to be quiet	1	2	3	4	5
10. Is generally trusting	1	2	3	4	5
11. Has an assertive personality	1	2	3	4	5
12. Can be cold and aloof	1	2	3	4	5
13. Is sometimes shy, inhibited	1	2	3	4	5
14. Is considerate and kind to almost everyone	1	2	3	4	5
15. Is outgoing, sociable	1	2	3	4	5
16. Is sometimes rude to others	1	2	3	4	5
17. Likes to cooperate with others	1	2	3	4	5
18. Is easily distracted	1	2	3	4	5

Appendix H

Performance
L. J. Williams and S. E. Anderson (2001)

INSTRUCTIONS: Using the scale below, please rate *the job performance of the subordinate who gave you this survey*. Remember, responses will remain anonymous, so please be as candid and accurate as possible (particularly if the subordinate's performance is less than optimal).

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

1. Adequately completes assigned duties.	1	2	3	4	5
2. Fulfills responsibilities specified in job description.	1	2	3	4	5
3. Performs tasks that are expected of her/him.	1	2	3	4	5
4. Meets formal performance requirements of the job.	1	2	3	4	5
5. Engages in activities that positively affect her/his performance evaluation.	1	2	3	4	5
6. Neglects aspects of the job that she/he is obligated to perform.	1	2	3	4	5
7. Fails to perform essential duties.	1	2	3	4	5
8. Helps others who have been absent.	1	2	3	4	5
9. Helps others who have heavy workloads.	1	2	3	4	5
10. Assists you with your work (even when not asked).	1	2	3	4	5
11. Takes time to listen to others' problems and worries.	1	2	3	4	5
12. Goes out of way to help new employees.	1	2	3	4	5
13. Takes a personal interest in other employees.	1	2	3	4	5
14. Passes along information to co-workers.	1	2	3	4	5
15. Attendance at work is above the norm.	1	2	3	4	5
16. Gives advance notice when unable to come to work.	1	2	3	4	5
17. Takes undeserved work breaks.	1	2	3	4	5
18. Great deal of time spent with personal phone conversations.	1	2	3	4	5
19. Complains about insignificant things at work.	1	2	3	4	5
20. Conserves and protects organizational property.	1	2	3	4	5
21. Adheres to informal rules devised to maintain order.	1	2	3	4	5

Appendix I

Michigan Organizational Assessment Questionnaire
Global Job Satisfaction subscale
Cammann, Fichman, Jenkins, and Klesh (1979)

INSTRUCTIONS: Please circle the one number for each statement that comes closest to reflecting your opinion about it.

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

01. In general, I don't like my job.	1	2	3	4	5
02. All in all, I am satisfied with my job.	1	2	3	4	5
03. In general, I like working here.	1	2	3	4	5

Appendix J

Job Satisfaction Survey
Satisfaction with Supervisor subscale
Spector (1985)

INSTRUCTIONS: Please circle the one number for each statement that comes closest to reflecting your opinion about it.

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

01. My supervisor is quite competent in doing his/her job.	1	2	3	4	5
02. My supervisor is unfair to me.	1	2	3	4	5
03. My supervisor shows too little interest in the feelings of subordinates.	1	2	3	4	5
04. I like my supervisor.	1	2	3	4	5

Appendix K

Organizational Commitment Questionnaire (OCQ)
Mowday, Steers, and Porter (1979)

INSTRUCTIONS: Listed below are a series of statements that represent possible feelings that individuals might have about the company or organization for which they work. With respect to your own feelings about the particular organization for which you are now working (company name) please indicate the degree of your agreement or disagreement with each statement by checking one of the seven alternatives below each statement.

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

01. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	1	2	3	4	5
02. I talk up this organization to my friends as a great place to work for.	1	2	3	4	5
03. I feel very little loyalty to the organization.	1	2	3	4	5
04. I would accept almost any type of job assignment in order to keep working for this organization.	1	2	3	4	5
05. I find that my values and the organization's values are very similar.	1	2	3	4	5
06. I am proud to tell others that I am a part of this organization.	1	2	3	4	5
07. I could just as well be working for a different organization as long as the type of work was similar.	1	2	3	4	5
08. This organization really inspires the very best in me in the way of job performance.	1	2	3	4	5
09. It would take very little change in my present circumstances to cause me to leave this organization.	1	2	3	4	5
10. I am extremely glad that I chose this organization to work for over others I was considering at the time.	1	2	3	4	5
11. There's not too much to be gained by sticking with this organization indefinitely.	1	2	3	4	5
12. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.	1	2	3	4	5
13. I really care about the fate of this organization.	1	2	3	4	5
14. For me this is the best of all possible organizations for which to work.	1	2	3	4	5
15. Deciding to work for this organization was a definite mistake on my part.	1	2	3	4	5

Appendix L

Work Tension Scale
House and Rizzo (1972)

INSTRUCTIONS: Please circle the one number for each statement that comes closest to reflecting your opinion about it.

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

01. My job tends to directly affect my health	1	2	3	4	5
02. I work under a great deal of tension	1	2	3	4	5
03. I have felt fidgety or nervous as a result of my job	1	2	3	4	5
04. If I had a different job, my health would probably improve	1	2	3	4	5
05. Problems associated with my job have kept me awake at night	1	2	3	4	5
06. I have felt nervous before attending meetings in the company	1	2	3	4	5
07. I often "take my job home with me" in the sense that I think about it when doing other things	1	2	3	4	5

About the Author

Edward Rickamer Hoover was born in Ashtubula, Ohio March 5th, 1980 to Patricia and Franklin Hoover. He was the youngest of their six children. He and his family moved to Augusta, GA in 1985. He was enrolled in the Hephzibah school district where he graduated Cum Laude in spring 1998. In fall 1998, he began his attendance at the University of Georgia. He graduated Magna Cum Laude with a Bachelor of Science in Psychology in 2001. In 2002, Edward began his graduate studies the University of South Florida for Industrial Organizational Psychology. He received his Master of Arts in 2007. In 2009, he received his Doctor of Philosophy in Industrial Organizational Psychology under the guidance of Dr. Russell Johnson.