THE RELATIONSHIP BETWEEN LEADER-MEMBER EXCHANGE AND COMMITMENT AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR

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The leader-member exchange theory of leadership, which focuses on the twoway relationship between supervisors and subordinates, aims to maximize organization success by establishing positive interactions between the two. Results of the study detailed here suggests that a significant relationship exists between the quality of the supervisor-subordinate relationship and subordinates' commitment and altruistic organizational citizenship behavior. Recommendations are presented.

he concept of leadership has attracted an extensive body of literature, ranging from fiction and biographies to how-to manuals and scientific investigation. The influence of leadership is important in the military, politics, government, academia, and, indeed, in every profit or nonprofit organization. Leadership has been widely conceptualized and tested in behavioral psychology, business management, and military studies. The numerous research studies on leadership are hard to classify into categories of approaches (traits, behaviors, and styles).

The difficulties are illustrated by Stogdill (1974), who concludes that "There are almost as many different definitions of leadership as there are persons who have attempted to define the concept" (p. 7). Early research has defined leadership in terms of innate individual traits: some people are somehow born with an inborn quality to lead. Later research shifts emphasis on two behavioral functions of leaders: initiating structure (task direction) and consideration (employee-centered). Subsequently, Fiedler's contingency theory is introduced, wherein leaders exercise different leadership "styles" depending on the group-task situation and nature of the interpersonal relations between the leader and the followers.

But these early leadership theories have not been completely satisfactory, and the past two decades have produced several other theories. One of the more recent is leader-member exchange (LMX) theory; its central focus is the relationship and interaction (a dyadic exchange) between the supervisor and the subordinate, as opposed to the traits, behaviors, situational styles of the leader, or any other variables.

To survive the challenges of the highly competitive and ever-changing global market of the 21st century, corporations need to understand LMX and how it contributes to the survival and profitability of business operations. The research detailed here investigates the quality of the relationship between LMX on subordinate's commitment and organizational citizenship behavior (OCB). The conclusions might help policy-making management executives and human resource specialists to support initiatives such as employee training and leadership career development, and help positively shape the organization's future.

Previous studies examine the construct of citizenship behavior based on leaders' reports. Wayne and Green (1993) investigate the effects of LMX on employee citizenship behavior from the standpoint of the member rather than the leader. The research extends and builds on Wayne and Green's study by examining the relationship between LMX and the consequences of OCB, with the member as the source.

LEADER-MEMBER EXCHANGE

Leaders treat subordinates differently at varying degrees and levels contingent on whether the latter are part of the ingroup (high-quality relationship) or outgroup (low-quality relationship) (Graen and Scandura, 1987). The theory asserts that leaders do not interact with subordinates uniformly (Graen and Cashman, 1975) because supervisors have limited time and resources.

"In-group" subordinates perform their jobs in accordance with the employment contracts and can be counted on by the supervisor to perform unstructured tasks, to volunteer for extra work, and to take on additional responsibilities. Supervisors exchange personal and positional resources (inside information, influence in decision making, task assignment, job latitude, support, and attention) in return for subordinates' performance on unstructured tasks (Graen and Cashman, 1975). As a result, research shows mutual trust, positive support, informal interdependencies, greater job latitude, common bonds, open communication, high degree of autonomy, satisfaction, and shared loyalty exist (Dansereau, Graen, and Haga, 1975; Dienesch and Liden, 1986; Graen and Uhl-Bien, 1995).

In contrast, subordinates who perform only in accordance with the prescribed employment contract are characterized as "out-group" with limited reciprocal trust and support, and few rewards from their supervisors (Deluga, 1998). The exchange between the superior-subordinate (dyad), a two-way relationship, is the unique basic premise and the unit of analysis of LMX.

COMMITMENT

Commitment is an attitude of company loyalty exhibited by employees. It stems from the employees' combined belief that

the goals, objectives, and values of the organization are congruent with their own. As noted by Mowday, Porter, and Steers (1982), commitment is the "relative strength of an individual's identification with and involvement in the organization" in terms of values and goals. Ostroff (1992) reports that committed employees are associated with better organizational performance, have a low turnover rate, and have low absenteeism.

It is essential, therefore, that supervisors understand the significance of building a positive relationship with their respective subordinates. The supervisor should clearly state the goals, mission, and vision of the organization and, most important, the role each of the subordinates contributes to the business operations. An organizational culture that provides such awareness instills a sense of belonging and a positive feeling of identification with the organization, thus enhancing the subordinate's commitment to the organization.

ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Smith, Organ, and Near (1983) report a two-dimensional model of OCB: altruism and general compliance (also known as conscientiousness). Altruism is an individual's personal behavior—for example, being cooperative, helpful, and other instances of extra-role behavior (Smith, Organ, and Near, 1983). It is a behavior performed in helping a specific coworker, a customer or a supervisor, not normally expected of the employee since it is not part of the employment contract. Examples are being accommodating to new employees, sitting in for a sick coworker, or assisting supervisors and others.

Compliance is another behavior employees are expected to exhibit (e.g., arriving to work on time, not taking too many coffee breaks, taking only the required lunch time, or not leaving early). Organ (1988) and Schnake (1991) believe citizenship behaviors, although discretion-

ary, are necessary for they promote effective functioning of the organization. In a study of 218 people working in a Northeast paper mill, Podsakoff et al. (1997)

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find a positive correlation between citizenship behavior and the organization's output.

Citizenship behavior improves the effectiveness of the organization by the high degree of work group performance in terms of quantity and quality of work. Settoon, Bennett, and Liden (1996) postulate that in-group members receive formal and informal rewards from their subordinates. In exchange, the members seek out extra-role situations in the form of providing citizenship behavior to the supervisors who, in turn, give more reciprocal support and opportunities to the members. This cycle of "helping" behavior for mutual attainment of goals helps further intensify the quality of the supervisor-subordinate exchange (Scandura and Graen, 1984).

Additionally, Deluga (1994) reports a positive relationship between employee OCB and the quality of LMX in a study of 86 subordinate-supervisor dyads from a highly diversified organizational sample.

Likewise, a field study by Wayne and Green (1993) supports the relationship between LMX and employee citizenship behavior, specifically as it relates to altruism.

METHODS

SAMPLE

The sample consisted of 204 full-time employees in a highly specialized, information technology solutions company. The company acts as a support contractor and provides engineering, design, technical assistance, and systems and software information in weapon systems acquisition to various program management offices in a military installation in the Midwest.

All managers who supervise one to three subordinates were selected to par-

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ticipate. From those who supervise more than four subordinates, a simple random sample of four e mployees were asked to participate. A total of 162

subordinates were asked to answer the survey. Those subordinates answered to 59 supervisors; 17 of them were randomly selected to fill out a survey questionnaire as subordinates. The response rate of the supervisors was 61 percent; 57 percent of the subordinates responded.

The completed questionnaires were then paired between the subordinate's questionnaire and that of his or her supervisor to form a dyad. There were 126 usable matches or 63 dyads, yielding a response rate of 78 percent.

PROCEDURES AND DATA COLLECTION

Survey questionnaires reached the participants via the company's internal mail system. A pre-addressed return envelope provided by and addressed to the researcher was included in the questionnaire package. Enclosed with the supervisor's survey was a code list with the corresponding name(s) of the employee(s), and the survey was coded with a number so that supervisor and subordinate responses were matched (paired dyads) for statistical analyses. Similarly, the subordinate's survey was identified with a number corresponding to the supervisor's code list.

MEASURES

Three extensively pretested research instruments were used in the study: the leader-member exchange (LMX-7) scale for supervisors and subordinates, the organizational commitment questionnaire (OCO), and the OCB scale. Table 1 summarizes the instruments. In the Liden et al. (1997) meta-analysis review of 48 studies. 18 studies cited the LMX-7 scale as the instrument of choice to measure LMX. The leader form consists of seven questions (Including "How well do you know this employee's problems?" "How well do you recognize this employee's potential?" "How would you characterize your working relationship with this employee?"). The member form is the same basic set of questions with the employee as the referent.

The OCQ is a widely used instrument to measure employees' commitment ("I

Name of Instrument Description Variable Examined Source of Data LMX-7 Scale for Leader-member 7 questions, Supervisor Supervisor (MLMX) designed for exchange evaluates (Scandura and supervisors on a relationship with Graen, 1984) 5-point multiple his/her Subordinate choice range (dyadic exchange) LMX-7 Scale for 7 questions, with Leader-member Subordinate Subordinate (ELMX) subordinate as exchange evaluates (Scandura and referent, on a relationship with Graen, 1984) his/her Supervisor 4-point scale (dyadic exchange) Organizational 9 positively worded Organizational Subordinate Commitment items, on a 7-point commitment (self-reports) Questionnaire (OCQ) Likert-type scale (Mowday et al., 1982)

16 items: 3 negatively

worded on a 5-point

range with subscales:

altruism (6-item) and

compliance (8 item)

Table 1. Summary of Study Instruments

would accept almost any type of job assignment in order to keep working for this organization." "I am proud to tell others that I am part of this organization." "This organization really inspires the very best in me in the way of job performance." "I really care about the fate of this organization."). The response range is from "strongly disagree" (1), "neither disagree nor agree" (4), to "strongly agree" (7).

Organizational

Citizenship Behavior

(OCB) Scale

(Smith et al., 1983)

The OCB scale contains 16 questions with a five-point Likert scale containing the following anchors: "never" (1), "seldom" (2), "occasionally" (3), "often" (4), "almost always" (5). The OCB has two subscales. The first is altruism (e.g., helps others who have been absent; volunteers for things that are not required; orients

new people even though it is not required; helps others who have heavy workloads). The second is compliance (e.g., punctuality; attendance at work is above the norm; gives advance notice if unable to come to work; does not take extra breaks; does not spend time in idle conversations).

Subordinate

(self-reports)

ANALYSES

Organizational

citizenship behavior

and the subscales

of altruism and

general compliance

Table 2 summarizes the data analyses showing the instruments used as well as the statistical methods to answer the research questions and test the null hypotheses, with a criterion for rejection set at p < 0.05. A two-tailed test of significance is also computed to test whether the correlation coefficients are significantly different from zero.

Research Questions	Null Hypotheses	Instruments	Statistical Treatments	Test Statistics	Variables Independent/Dependent
Relationship between LMX and organizational commitment?	Ho ₁ and Ho ₃	LMX-7 scale (ELMX) and (MLMX) and OCQ	Correlation analysis and analysis of variance (ANOVA)	F test	LMX/OC (QSCORE)
Relationship between LMX and organizational citizenship behavior?	Ho₂ and Ho₄	LMX-7 scale (ELMX) and (MLMX) and OCB scale	Analysis of variance (ANOVA)	F test	LMX/OCB (BTOTAL) and subscales: ALTRUISM COMPLNC

Table 2. Summary of Data Analyses

FINDINGS

DESCRIPTIVE STATISTICS

The manager LMX-7 scale (MLMX) contains seven questions having a fivepoint Likert scale response format tailored to each question, and the employees LMX-7 scale (ELMX) with a four-point Likert scale. Both LMX-7 scales are scored by summing up the responses for all questions, respectively. The range of the total score for manager (MTOTAL) is 7 to 35. A high score represents a more positive relationship with the subordinate, as perceived by the employee's manager. The range of the total score for employee (ETOTAL) is 7 to 28. A high score represents a more positive relationship with the supervisor, as perceived by the employee.

The OCQ is scored by summing up responses for all questions (QTOTAL) and then dividing the number of questions (QSCORE) by nine to derive a summary indicator of commitment. The possible range of QTOTAL is 9 to 63, and the

possible range of QSCORE is 1 to 7. A high score represents a high degree of organizational commitment.

The OCB scale is scored by summing up responses for all questions (BTOTAL). The possible range of BTOTAL is 16 to 80. A high score represents a high display of organizational citizenship. The OCB scale contains two subscales which describe unique attributes of citizenship behavior: altruism and compliance. The altruism (ALTRUISM) subscale is calculated by summing up responses to questions 1, 3, 5, 7, 12, and 13 (range, 6 to 30). The compliance (COMPLNC) subscale is calculated by summing up responses to questions 2, 4 (reversed), 6, 9, 10 (reversed), 11, 14 and 16 (range is 8 to 40). Table 3 demonstrates a high level of internal consistency and reliability of the scales, with the exception of COMPLNC subscale.

Table 4 gives additional descriptive statistics, *n*, means, and standard deviations for all the scales totals.

Table 3.
Coefficient Alpha (Test of Internal Consistency and Reliability)

Test or Subtest	Coefficient		
MLMX	0.747		
ELMX	0.877		
OCQ	0.884		
OCB	0.718		
Altruism	0.746		
Compliance	0.560		

RESULTS

This study investigated two research questions and tests four null hypotheses.

Research question 1. Is there a relationship between the quality LMX and organizational commitment?

Ho₁: There is no significant positive relationship between high-quality

LMX and high organizational commitment.

Ho₃: There is no significant positive relationship between low-quality LMX and low organizational commitment.

The quality of LMX is defined as "high" when the total (sum) score for

Table 4. Summary Statistics

Variable	n	Mean	Standard Deviation
MTOTAL	63 dyads	28.714	3.289
ETOTAL	63 dyads	21.984	4.195
QTOTAL	63 dyads	47.206	9.366
QSCORE	63 dyads	5.245	1.041
BTOTAL	63 dyads	60.667	7.007
ALTRUISM	63 dyads	22.905	3.622
COMPLNC	63 dyads	30.746	4.337

MLMX (MTOTAL) and the ELMX (ETOTAL) are both greater than or equal to 24. Otherwise, the quality of the LMX is defined as "low." Since MTOTAL (range 7 to 35) and ETOTAL (range 7 to 28) have dissimilar scales, this analysis takes into account the disparate ranges of the scale and the correlation between QSCORE (organizational commitment questions) and ETOTAL. A new variable, LMX1, is the mean of MTOTAL and ETOTAL. Thus, high-quality LMX is defined as LMX1 greater than or equal to 24, low-quality is defined as LMX1 less than or equal to 23.

The analysis of variance (ANOVA) shows a *p* value (0.0429) commensurate with a significant relationship between quality of LMX and organizational commitment. The mean QSCORE for low-

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quality LMX is 4.81; the mean for the high-quality LMX is 5.41. The difference between these means, 0.59 (95 percent confidence interval [0.02,

1.17]), indicates with 95 percent confidence that, on average, those individuals with high level of LMX scored between 0.2 and 1.17 points higher on the QSCORE than those with low LMX. Therefore, null hypotheses Ho₁ and Ho₃ are rejected.

Research question 2. Is there a relationship between the quality of LMX and OCB?

Ho₂: There is no significant positive relationship between high-quality LMX and high OCB.

Ho₄: There is no significant positive relationship between low-quality LMX and low OCB.

The ANOVA results show a *p* value (0.0237) for the dependent variable BTOTAL, providing sufficient evidence of a significant relationship between quality of LMX and OCB. The mean BTOTAL for low-quality LMX is 57.41; the mean for the high-quality LMX is 61.87. The difference between these means, 4.46 (95 percent confidence interval [0.61, 8.30]), indicates with 95 percent confidence that, on average, those individuals with high-quality LMX scored between 0.6 and 8.3 points higher on the OCB than those with low-quality LMX.

The *p* value (0.0047) for the dependent variable ALTRUISM indicates there is a significant relationship between quality of LMX and altruistic citizenship behavior. The mean ALTRUISM score for low-quality LMX is 20.82; the mean for the high-quality LMX is 23.67.

The *p* value (0.2784) for the dependent variable COMPLNC shows that insufficient evidence is present to prove a significant relationship between quality of LMX and compliant citizenship behavior. The analysis supports rejection of null hypotheses Ho₂ and Ho₄, lends partial support for the altruism subscale, and fails to support the compliance subscale.

RECOMMENDATIONS AND CONCLUSUIONS

FUTURE RESEARCH

A similar study should be conducted in a federal agency with civil service employees to compare the findings of the results. Another interesting area for exploration would be to examine if a gender difference exists in reporting LMX. In addition, other variables that might add depth to the descriptive statistics are the demographic data of length of employment and age, which could be important factors in determining a subordinate's sense of commitment and display of citizenship behavior.

CONCLUSIONS

Organizations are always faced with the increasing threat of domestic and global competition in this fast-changing technological world. The study suggests that the quality of exchange relationships affect subordinates' commitment and good will. Since LMX is positively correlated with turnover (Ferris, 1985), support for innovation (Scott and Bruce, 1994), performance (Wayne, Shore, and Liden, 1997), and productivity (Graen, Novak, and Sommerkamp, 1982), it is important for organizations to initiate sound developmental programs in order to attain business success. The following recommendations are offered for practical applications.

Human resource managers and developmental specialists should conduct leadership training for all their employees. For the supervisors, leadership training that emphasizes the importance of mentoring, human relations skills, joint development of goals, and

- effective interpersonal communications would be helpful. Career planning and development seminars and workshops would benefit subordinates.
- Group interaction is a practical area in which to encourage high-quality exchange relationships. Team-building programs such as employee of the month, branch or division of the year, or threeday weekend passes reward employee performance, increase group morale, and improve office effectiveness.
- Building a corporate culture in which open two-way communication occurs at all levels is highly encouraged.
- Research literature states that organizational commitment is defined as a subordinate's identification with the mission, goals, and vision of the organization. Supervisors have the responsibility to emphasize to their subordinates their link and contribution to the success of the organization. Team meetings create a team environment where all the players are working toward jointly developed common goals.
- Supervisors are agents for change and act as role models and positive influences on their subordinates. As such, supervisors should pay particular attention to personal judgment not based on merit or performance, which is harmful to any success of business operations. Supervisors should provide equal training and career development plans to all subordinates, and recognize each employee's potential and capabilities to encourage an organizational culture

of growth and innovation. Subordinates should be afforded self-development training to increase their knowledge, skills, and self-confidence on the job.

 Supervisors should actively encourage subordinates to provide feedback and vice-versa. A plan of action, followup, and progress reports should also be established during feedback sessions. Open communication is necessary to establish a sense of trust in the exchange relationship.

Management might dismiss the findings and implications of this study as "touchy-feely." Yet the quantitative results of this and previous studies suggest that the quality of exchange relationships is significant, and organizations should address these areas, and strive to provide an environment wherein high-quality exchange relationships can thrive. The study suggests that improving the quality of LMX will increase subordinates' sense of commitment and citizenship behavior; development and maintenance of a mature dyadic relationship will benefit not only the supervisors and the subordinates, but also the organization as a whole in the achievement of organizational growth and success.



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