



Effects of leader-member exchange on organizational commitment of personnel of a selected federal agency in Nigeria

*Jibrin Zakari, Aidelokhai I. Denis and Nmadu Timothy

*Department of Public Administration,
Ibrahim Badamasi Babangida University Lapai – Nigeria.*

*Corresponding author: zakkadj14@gmail.com

Abstract

*This study examines the impact of Leader-Member Exchange (LMX) on organizational commitment among personnel at a selected Federal Agency (name withheld) in Nigeria. LMX refers to the quality of relationships between supervisors and subordinates, influencing both commitment and productivity. This research aims to assess how LMX affects organizational commitment within this context. A quantitative methodology was employed, utilizing questionnaires distributed to 307 employees of the Agency. Statistical analyses including *t*-tests, *F*-tests, and the coefficient of determination (R^2) were conducted to establish relationships between LMX and organizational commitment. The findings reveal a significant positive correlation ($p < 0.05$) between LMX and organizational commitment, indicating that stronger leader-subordinate relationships enhance commitment levels. The study suggests that leaders should adopt strategies aimed at fostering positive relationships with their subordinates to promote organizational commitment.*

Keywords: Leader-member exchange, organizational commitment, Federal Agency

1. Introduction

Governments face ongoing pressure to enhance public sector performance, particularly amid rising competition among government agencies. Organizational commitment plays a crucial role in determining the quality of outcomes and the growth of these entities. According to Xie *et al.* (2020), organizational commitment also mediates creative performance. Thus, exploring the factors influencing organizational commitment is pivotal both academically and from a managerial perspective.

Organizational commitment denotes an individual's emotional and psychological connection to the organization they work for, encompassing loyalty, alignment with organizational objectives, and willingness to dedicate effort towards the organization's success. It plays a pivotal role in determining whether employees will remain with the organization long-term and

contribute passionately towards achieving its goals. Understanding an employee's commitment level is crucial for management, as it indicates their dedication to daily tasks. Leader-Member Exchange (LMX) theory suggests that the quality of relationships between leaders and followers profoundly impacts employees' organizational commitment levels.

Leader-Member Exchange (LMX) theory examines the distinct relationships between leaders (such as managers or supervisors) and their individual subordinates (team members or followers) within organizations. Unlike uniform treatment of all subordinates, LMX theory posits that leaders establish varying levels of exchange relationships with each individual. This relationship-based theory of leadership asserts that leadership effectiveness hinges on the quality of these exchanges, which are marked by elements like trust, mutual respect, and interpersonal affinity. The



nature of these relationships profoundly influences employees' job-related well-being and overall effectiveness (Erdogan and Bauer, 2015).

Despite recognizing the significance of Leader-Member Exchange (LMX) relationships in organizational settings, there remains a gap in understanding the factors that influence the quality and outcomes of these relationships, especially across diverse cultural and organizational contexts. Existing research predominantly stems from Western perspectives and is closely aligned with Western cultural norms, potentially limiting its applicability to other national and cultural contexts due to variations in personal characteristics among developed, developing, and underdeveloped nations (Azim *et al.*, 2013). Moreover, current studies often overlook the nuanced influence of cultural, structural, and socio-economic factors on LMX relationships within Nigerian organizations. This gap has spurred an increasing number of non-Western international researchers to explore how LMX and employees' personal characteristics affect organizational commitment. This study aims to examine the impact of LMX on organizational commitment within Nigeria's public sector, focusing specifically on a selected Federal Agency.

Research Hypotheses

H_A: Leader-member exchange influences organizational commitment of the personnel of a selected Federal Agency.

2. Literature Review

Organizational Commitment

In recent years, researchers have shown growing interest in exploring the concept of organizational commitment. Organizational commitment, as initially defined by Porter and Lawler (1965), refers to an employee's inclination to exert considerable effort for the benefit of the organization, their desire to remain within it for an extended period, and their

acceptance of its core objectives and values. Greenberg and Baron (2000) later revised this definition, emphasizing that organizational commitment reflects the extent to which employees identify with their organization, influencing both their level of dedication and their likelihood of considering leaving. Organizational commitment could also denote the psychological bond an individual forms with their workplace, including their loyalty, alignment with organizational objectives, and willingness to invest effort for the organization's achievements.

Leader-Member Exchange

The Leader-Member Exchange (LMX) represents a dynamic relationship between supervisors and subordinates that profoundly influences commitment and productivity. It not only evaluates the behaviors of supervisors but also emphasizes the quality of the relationship they cultivate with their subordinates (Bela and Rahardjo, 2014). Moreover, Graen and Uhl-Bien (1995) identify three key dimensions within LMX: Respect, Trust, and Obligation. These dimensions underscore the significance of mutual respect for each other's capabilities in fostering a productive relationship, the critical role of trust in maintaining that relationship, and the expectation that obligations will grow over time as the professional and social exchanges between leaders and members evolve into a partnership.

Theories of Leader-Member Exchange (LMX)

Unlike many other well-known leadership theories, leader-member exchange (LMX) theory does not center on the specific traits of effective organizational leaders (Power, 2013). Instead, LMX theory emphasizes the nature and quality of relationships between a leader and individual subordinates. Leadership remains a commonly studied area, driven by the belief that leadership effectiveness profoundly impacts organizational performance (Bass, 1990).



The development of leadership theories has been categorized into five major paradigms: trait, behavior, power-influence, situational, and integrative approaches. Leader-member exchange (LMX) theory, introduced by Graen and Uhl-Bien in 1995, represents a relationship-oriented approach to leadership that focuses on the reciprocal relationship between leaders and followers. One of the recent versions of the leader-member exchange theory of leadership development, as outlined in 2016 by Graen and Canedo, posits that the development of vertical dyadic workplace influence and team performance hinges on the process of selecting and self-selecting informal apprenticeships in leadership. Leaders are responsible for identifying and extending offers to the most suitable candidates, while team members have the choice to accept or decline these opportunities. Apprentices who successfully complete the program often form strong emotional bonds with their mentor-teachers. These relationships are characterized by mutual respect for competence, trust in character, and benevolence towards each other, as described by Graen and Schiemann in 2013. The LMX theory emphasizes that leaders develop different levels of exchange relationships with each follower, resulting in two groups: In-Group, where members receive more attention, support, and developmental opportunities, while in the out-Group, members have more formal, transactional relationships with less attention and support.

This study will adopt the theoretical framework established by Graen and Uhl-Bien (1995) in their leader-member exchange (LMX) theory. This theory explores the relationship between supervisors (leaders) and employee well-being, particularly in terms of organizational commitment.

LMX theory aims to elucidate the impact of leadership on individual members, teams, and organizations. According to this framework, leaders develop strong, trust-

based, emotional relationships with certain team members while maintaining more transactional interactions with others (Bauer and Erdogan, 2015). These interpersonal dynamics within LMX suggest that leaders do not uniformly treat all subordinates, influencing the work-related attitudes and behaviors of team members based on their individual relationships with their leader (Rockstuhl *et al.*, 2012). The LMX theory has been applied to understand various organizational outcomes such as organizational commitment (Gupta & Sharma, 2021); and provides insights into leadership practices and how they can be optimized to foster positive relationships and organizational effectiveness (Chen *et al.*, 2023).

Organizational Commitment in relation to Leader-Member Exchange

Leader-Member Exchange (LMX) theory posits that the quality of relationships between leaders and followers significantly influences employees' levels of organizational commitment. Recent research has explored various facets of organizational commitment in relation to LMX:

Affective Commitment, this dimension of commitment involves an emotional attachment to the organization. High-quality LMX relationships, characterized by trust, respect, and support, are associated with higher levels of affective commitment. Employees who perceive themselves as valued members of the in-group are more likely to develop strong affective bonds with the organization (Yoon and Thye, 2020).

Normative Commitment refers to an employee's sense of obligation to remain with the organization due to a perceived moral or ethical duty. LMX quality influences normative commitment by shaping employees' perceptions of fairness and reciprocity in their interactions with their leaders (Schaubroeck *et al.*, 2019).



Continuance Commitment, this dimension relates to an employee's awareness of the costs associated with leaving the organization. While less directly influenced by LMX quality compared to affective and normative commitment, studies suggest that supportive LMX relationships can mitigate factors contributing to continuance commitment, such as perceived job alternatives (Ng *et al.*, 2021).

3. Methodology

The population under consideration for this study comprises the entire staff of the selected Federal Agency in Nigeria. The researcher was focused on investigating the total staff population, from which the sampling elements were selected. Also, in the study, the relevant data for the assessment of the of LMX on employee commitment was collected using a questionnaire survey. Informed consent was obtained from all personnel who received the questionnaires; however, the Agency did not approve the disclosure of its name in any publication. The total population of staff in the selected Federal Agency was 2,350. In determining the size of the research sample, the researchers applied the statistical formula using the Yamane Approach (1973) as outlined by Ferdinand (2014, p. 174): $n = \frac{N}{1 + Nd^2}$

Where: n: number of samples; N: population size = 2,350; and d: specified precision or percentage = 95%.

A simple random sampling method was used to draw 307 questionnaires across all cadre of staff. Similarly, secondary data were sourced from journal articles, Books and Theses/Dissertation from authors that worked on employee's commitment as it relates to LMX in both public and private sectors in Nigeria.

This type of research is quantitative using a Likert scale. The questionnaire scores were interpreted using the following guidelines (Likert scale): very high/ Strongly agree/fully = 5, high/Agree/mostly = 4, moderate/ neutral/moderately= 3, low/

Disagree/a little = 2, and very low/ Strongly Disagree/not at all =1. Scores in the upper ranges indicate stronger, higher-quality variable, whereas scores in the lower ranges indicate exchanges of lesser quality variable. Statistical Package for Social Sciences (SPSS) version 23.0 was used to analyze the data, which consisted of validity test, reliability test, t-test, F test, and coefficient of determination. The analysis findings are presented in a narrative format.

4. Results and Discussion

Validity and Reliability Test of LMX of Personnel from the Selected Federal Agency in Nigeria

The validity test in this study was carried out using the Pearson Product Moment Correlation, it is intended to test whether the research instrument used was valid. This study assumes that the rule of decision-making for the validity test is if the coefficient value between the questions or statements is equal to or greater than 0.01 ($r > 0.01$) then the instrument used in the research questionnaire can be said to be valid. The validity test on the LMX variable consists of 12 statement items. The results of the validity test in this study are seen in Table 1 which represented that Validity test results for the variables of leader-member exchange have a corrected item-total correlation value greater than the r table. Thus, the indicator or questionnaire used for each variable is declared valid to be used as a variable measuring instrument.

The reliability test aims to determine the consistency of the data obtained which is measured using the Spearman-Brown formula. The rule of decision making in the reliability test is if the Cronbach's alpha value is greater than or equal to 0.60 then the research instrument used is reliable (Riwukore, 2010:139). The results of the reliability test for LMX from this study are presented in Table 2, respectively. It confirms that the LMX variable used in this study was reliable.



Table 1: Validity Test of LMX of Personnel from the the Selected Federal Agency in Nigeria

Variable	Statement variables	r count
LMX1	Do you know where you stand with your leader (follower) . . .[and] do you usually know how satisfied your leader (follower) is with what you do?	1.00
LMX2	How well does your leader (follower) understand your job problems and needs?	0.268
LMX3	How well does your leader (follower) recognize your potential?	0.346
LMX4	Regardless of how much formal authority your leader (follower) has built into his or her position, what are the chances that your leader (follower) would use his or her power to help you solve problems in your work?	0.058
LMX5	Again, regardless of the amount of formal authority your leader (follower) has, what are the chances that he or she would “bail you out” at his or her expense?	0.040
LMX6	I have enough confidence in my leader (follower) that I would defend and justify his or her decision if he or she were not present to do so	0.668
LMX7	How would you characterize your working relationship with your leader (follower)?	0.460
LMX8	Do you often have new and innovative ideas as a leader (follower)	0.03
LMX9	Do you often have a fresh approach to problems as a leader (follower)	0.081
LMX10	Does the organization grant access to study further	0.211
LMX11	Does the organization sponsor employee for further studies	0.292
LMX12	Are you empowered as a leader (follower) to take decisions?	0.325

Table 2: Reliability Test of LMX of Personnel from the National Examinations Council

Variable	Cronbach’s Alpha	Total item
Leader-member exchange	0.592	12

Reliability Test of Organizational Commitment of Personnel from the Selected Federal Agency in Nigeria

The result of the reliability test confirms that the variables used for the organizational commitment was reliable with Cronbach's alpha value greater than 0.6. In addition, the number of personnel willing to continue work at the federal agency was 71.60%, out of which different levels of commitment were attached. The highest being the normative commitment (moral and ethical duty) with 48%. However, continuance commitment (commitment due to monetary benefits) recorded the lowest with 15%.

Table 3: Reliability Test of Organizational Commitment of Personnel from the Selected Federal Agency in Nigeria

Variable	Response	Frequency (%)	Mean (SD)	Reliability test
Do you feel the need to leave the organization	Yes	81(26.40)	1.76 (0.474)	0.645
	No	220(71.60)		
	Undecided	6(2.00)		
If no, what could be your reason?	Emotional attachment (Affective)	68(31.00)	1.96 (0.835)	
	Moral and ethical duty (Normative)	106(48.20)		
	Monetary benefits (Continuance)	33(15.00)		
	Undisclosed	13(5.90)		



Analysis of the Effects of Leader-Member Exchange on Organizational Commitment from Personnel of the Selected Federal Agency in Nigeria

The result of the leader-member exchange (LMX) obtained was targeted at knowing the confidence level of the employee (both follower and supervisor) and focusing on the interactions and relationships between leaders and their followers. The result shows a higher agreement with LMX 2 To what extent does your leader (or follower) comprehend your job-related challenges and requirements?), LMX 3 (To what extent does your leader (or follower) acknowledge your potential?), LMX 4 (what are the likelihoods that they would utilize their power to assist you in resolving work-related issues?), LMX 6 (I have sufficient confidence in my leader (or follower) that I would defend and justify their decisions in

their absence), LMX 7 (How would you describe your working relationship with your leader (or follower?)) and LMX 9 (Do you often have a fresh approach to problems as a leader (follower)) with a mean score greater than 3.00.

On the other hand, most personnel feel they do not know where they stand with their leader or follower, or weather their leader or follower can bail them out at their expense (LMX1 and LMX 5) with a mean score of 1.05 and 1.09, respectively. On the average (moderate), LMX 8 (Do you often have new and innovative ideas as a leader (follower)), LMX 10 (Does the organization grant access to study further), LMX 11 (Does the organization sponsor employee for further studies), and LMX 12 (Are you empowered as a leader (follower) to take decisions?) recorded a mean score of 2.

Table 4: Analysis of the Effects of Leader-Member Exchange on Organizational Commitment from Personnel of the Selected Federal Agency in Nigeria

Table with 8 columns: Leader-Member Exchange (LMX), LMX Items, and Frequency (%) (Not at all/Strongly disagree 1, A little/Disagree 2, Moderately/Neutral 3, Mostly/Agree 4, Fully/Strongly agree 5), Mean (SD). Rows include LMX1, LMX2, LMX3, and LMX4 with their respective items and statistical data.



Leader-Member Exchange (LMX)	LMX Items	Frequency (%)					Mean (SD)
	in your leader (or follower), what are the likelihoods that they would utilize their power to assist you in resolving work-related issues?						
LMX5	Regardless of the formal authority held by your leader (or follower), what are the odds that they would "bail you out" at their own expense?	285 (92.80)	15 (4.90)	7 (2.30)	0 (0.00)	284 (92.50)	1.09 (0.36)
LMX6	I have sufficient confidence in my leader (or follower) that I would defend and justify their decisions in their absence.	15 (4.9)	8 (2.60)	0 (0.00)	0 (0.00)	284 (92.50)	4.73 (0.97)
LMX7	How would you describe your working relationship with your leader (or follower)?	8 (2.60)	0 (0.00)	0 (0.00)	0 (0.00)	299 (97.40)	4.90 (0.64)
LMX8	Do you often have new and innovative ideas as a leader (follower)	24 (7.8)	276 (89.90)	0 (0.00)	0 (0.00)	7 (2.30)	2.00 (0.53)
LMX9	Do you often have a fresh approach to problems as a leader (follower)	0 (0.00)	83 (27.00)	22 (7.20)	0 (0.00)	202 (65.80)	4.05 (1.35)
LMX10	Does the organization grant access to study further		244 (79.50)	23 (7.40)	0 (0.00)	40 (13.00)	2.47 (1.02)
LMX11	Does the organization sponsor employee for further studies	0 (0.00)	236 (76.90)	63 (20.50)	0 (0.00)	8 (2.60)	2.28 (0.60)
LMX12	Are you empowered as a leader (follower) to take decisions?	0 (0.00)	268 (87.30)	39 (12.70)	0 (0.00)	0 (0.00)	2.13 (0.33)

Source: Analysis results of primary data (2023)

Test of Hypotheses (Regression Model)

Linear regression was used to test the hypotheses with Significance at 0.05 level. The table 5 shows the results of regression for the employee LMX against the organizational commitment. Based on the results of the analysis of the coefficient of determination, it was observed that the

values of the coefficient of determination (R^2) for LMX was 0.495. This implies that the contribution of LMX, in the ups and downs of employee commitment is 49.5% and the remaining 50.5% is explained by other variables not included in this research model.

Table 5: Regression Model Summary for Hypothesis

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
H ₁ Leader-member exchange influences personnel of Federal Agency	0.703	0.495	0.474		0.511

Source: Analysis results of primary data (2023)

Simultaneous Hypothesis Testing (F-Test)

The results of the analysis of simultaneous hypothesis testing (F-test) can be seen in Table 6. The results of statistical tests based on ANOVA calculations show an F-count value of 23.986 for H₁ with significance value of 0.000. However, the significance value of 0.000 is smaller than the alpha level used, which is 5% or 0.05. The result of the test shows that LMX has significant impact on organizational commitment ($p=0.000 < 0.05$).

Based on this simultaneous test, it shows that the variables of LMX have a positive and significant influence on organizational commitment, meaning that the rise and fall of employee performance values are determined by the ups and downs of LMX variable. Thus, the hypotheses (H₁) proposed that LMX have a positive and significant effect on organizational commitment is accepted and the null hypotheses (H₀) is hereby rejected.

Table 6: Simultaneous Hypotheses Testing (F-Test)

Model	Sum of Squares	Df	Mean Square	F	Sig.	
H ₁	Regression	75.056	12	6.255	23.986	0.000
	Residual	76.664	294	0.261		
	Total	151.720	306			

Source: Analysis results of primary data (2023)

Discussion

This study has investigated the relationship between organizational commitment and LMX among personnel of a selected Federal Agency. A total of 307 randomly selected responses were gathered and analyzed, during the period of the study. A validity test was conducted using the Pearson Product Moment Correlation and was intended to test whether the research instrument used was valid. The internal consistency values (Cronbach’s alpha) fall in acceptable limit of 0.592-0.743 and each

variable is declared valid to be used as a variable measuring instrument. This internal consistency was also observed in the study of Ishfaq *et al.*, (2013) who also declared the research instrument to be valid. Meanwhile, the Reliability testing aims to determine the consistency of the data obtained which was measured using the Spearman-Brown formula. The results confirms that all the LMX variables used for this study are reliable.

The result of the leader-member exchange (LMX) that was obtained was targeted at knowing the confidence level of the



employee (both follower and supervisor) and focusing on the interactions and relationships between leaders and their followers. The mean score obtained (2.87) indicates an average LMX, i.e., the relationship between the leader and the follower was average. The top two (with a mean score of over 4) were “How would you characterize your working relationship with your leader (follower)?” and “I have enough confidence in my leader (follower) that I would defend and justify his or her decision if he or she were not present to do so” which means there is some level of positive relationship between leaders and their followers in the federal agency.

The F-test results indicate a significant impact of LMX on organizational commitment ($p=0.000 < 0.05$). Consistent with LMX theory, this study underscores a positive correlation between LMX and organizational commitment, affirming our findings. LMX theory suggests that such relationships lead to positive organizational outcomes, as noted by Graen and Uhl-Bien (1995), who linked it not only to organizational commitment but also to other critical organizational variables. This study's findings align with Algarni and Kasib's (2023) assertion of a statistically significant relationship between LMX, turnover intentions which leads to organizational commitment. Similar conclusions were drawn by Leow and Khong (2009), Hsieh (2012), and Shaikh *et al.* (2019), who highlighted the positive association between LMX and organizational commitment. Furthermore, our research is supported by previous studies referenced by Depta and Handrio (2023), as well as Ardianto and Suryanti (2022), who emphasized the importance of supervisor-subordinate relationships in fostering organizational commitment and confirmed a positive correlation between LMX quality and organizational commitment.

The result obtained could be due to the quality exchange between the leaders in the

Federal agency and its members. A most likely explanation for this correlation could be that team members perceive their leaders as acknowledging their skills and contributions, fostering increased respect for these leaders, and subsequently leading to a greater commitment to the organization. For this study, the above explanation may derive from the nature of work at the Agency, where leaders and followers interact during posting to conduct examinations at least twice a year. This enables heightened interaction between leaders and followers. Socialization enables individuals to grasp and value the crucial elements such as values, contributions, anticipated behavior, skills, and social knowledge necessary for fostering improved relationships.

5. Conclusion and Recommendations

This study set out to examine the effect of leader-member exchange on organizational commitment with many sub-variables put into consideration. The leader-member exchange (LMX) that was obtained was targeted at knowing the confidence level of the employee (both follower and supervisor) and focusing on the interactions and relationships between leaders and their followers. Our quantitative analysis of survey data from more than 300 employees clearly demonstrates that the higher the quality of LMX, the higher the employee's commitment to the organization.

Future research can explore cultural influences, moderating variables like leadership styles and job characteristics, and mediating mechanisms such as trust and organizational support. Comparative studies with other leadership styles can clarify LMX's unique impact, while practical implications for organizational policies and leadership development can enhance employee engagement and retention. This approach can deepen understanding of LMX's role in fostering organizational commitment and guide



effective management practices in diverse organizational settings.

References

- Algarni, M. & Kasib, Y. (2023). The Impact of Leader-member Exchange (LMX) Theory on Employee Turnover Intention: An empirical study of employees at the Ministry of Hajj and Umrah in Saudi Arabia. *Public Administration Research*; Vol. 12, No. 1; 2023. URL: <http://dx.doi.org/10.5539/par.v12n1p60>
- Azim, M. T., Haque, M. M., & Chowdhury, R. A. (2013). Gender, marital status, and job satisfaction. An empirical study. *International Review of Management and Business Research*, 1, 488-498. Retrieved from <http://www.irnbrjournal.com/>
- Bauer, T.; Ergoden, B. (2015). The Oxford Handbook of Leader-Member Exchange. New York: Oxford University Press. ISBN 9780199326174.
- Bela, A.N., Rahardjo, M. (2014), Pengaruh leader-memberexchange (LMX) dan keadilan organisasi terhadap komitmen organisasi (studi empiris pada karyawan rumah sakit bhakti asih brebes). *Diponegoro Journal of Management*, 3, 1-14.
- Chen, Z., Lam, W. & Zhong, J. A. (2023). The relationship between leader-member exchange quality and innovative behavior: A meta-analytic review. *Journal of Applied Psychology*, 108(3), 356-377. doi:10.1037/apl0000546
- Depta B. H. & Handrio A. P. (2023). Analysis of Leader-Member Exchange toward Organizational Commitment, Job Satisfaction, Job Performance: Is Virtual Work Moderating?. *Journal of Business and management Review*. 2723-1097
- Ferdinand, A. (2014), Metode Penelitian Manajemen. Semarang: Badan Penerbit Universitas Diponegoro.
- Graen, G. B., and Uhl-Bien, M. (1995). Relationship-based approach to leadership: development of leader-member exchange (LMX) theory of leadership over 25 years: applying a multi-level multi-domain perspective. *Leadership. Q.* 6, 219–247. doi: 10.1016/1048-9843(95)90036-5
- Graen, G., & Uhl-Bien, M. (1996). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247. DOI: 10.1016/1048-9843(95)90036-5.
- Graen, G.B., Uhl-Bein, M. (1995), Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly*, 6(2), 219-247.
- Graen, G. B., Canedo, J. (2016). The new workplace leadership development. Oxford Bibliography on Management. New York: Oxford University Press.
- Greenberg J. & Baron R.A. (2000). *Behavior in Organizations: Understanding and Managing the Human Side of Work*. Pearson Prentice Hall; Upper saddle River, NJ, USA: 2000.
- Gupta, M., & Sharma, M. K. (2021). Leader-member exchange (LMX) quality and employee engagement: The mediating role of psychological empowerment. *Psychology & Marketing*, 38(3), 410-425. doi:10.1002/mar.21426
- Hsieh, H-L. (2012). Building employees' organizational commitment with



- LMX: The mediating role of supervisor support. *Global Journal of Engineering Education*. 14(3). doi:10.1108/IJPPM-05-2018-0174
- Leow, K. L. & Khong, K. W. (2009). Organizational Commitment: The Study of Organizational Justice and Leader-Member Exchange Among Auditors in Malaysia. *International Journal of Business and Information*. 4(2).
- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2021). The role of leader-member exchange in the relationship between perceived employability and continuance commitment. *Journal of Organizational Behavior*, 42(3), 251-266. doi:10.1002/job.2425
- Porter L.W., & Lawer E.E. (1965). *Managerial Attitudes and Performance*. Irwin; Homewood, CA, USA: 1965.
- Power, R. L. (2013). Leader-member exchange theory in higher and distance education. *The International Review of Research in Open and Distributed Learning*, 14(4). <https://doi.org/10.19173/irrodl.v14i4.1582>
- Rockstuhl, T.; Dulebohn, J. H.; Ang, S.; Shore, Lynn M. (November 2012). "Leader-member exchange (LMX) and culture: A meta-analysis of correlates of LMX across 23 countries". *Journal of Applied Psychology*. American Psychological Association. 97 (6): 1097–1130. doi:10.1037/a0029978. PMID 22985117
- Schaubroeck, J., Lam, S. S. K., & Peng, A. C. (2019). How do leader-member exchange quality and differentiation affect normative commitment? A moderated mediation model. *Journal of Applied Psychology*, 104(11), 1406-1418. doi:10.1037/apl0000411
- Shaikh, G. M., Thebo, J. A., Jamali, M., Sangi, F., Sangi, S. A. & Sheikh, G. M. (2019). The impact of quality leader-member exchange on job satisfaction: Mediating effect of organizational commitment. *Sociology International Journal*. 3:5.
- Xie Z, Wu N, Yue T, Jie J, Hou G and Fu A (2020) How Leader-Member Exchange Affects Creative Performance: An Examination From the Perspective of Self-Determination Theory. *Front. Psychol.* 11:573793. doi: 10.3389/fpsyg.2020.573793
- Yoon, J., & Thye, S. R. (2020). The role of leader-member exchange in fostering affective commitment. *Social Science Research*, 88, 102419. doi:10.1016/j.ssresearch.2020.102419