



Promoting knowledge workers' task performance: A social exchange perspective

Xiaoli Che¹, A. Fakhrorazi², Loke Wei-Kit³, Qinyuan Chen⁴

¹Ghazali Shafie Graduate School of Government (GSGSG), Universiti Utara Malaysia, Malaysia

²Director of Ghazali Shafie Graduate School, Universiti Utara Malaysia, Malaysia

³School of Tourism Management Studies, Reliance College Penang, Malaysia

⁴Department of Psychiatry and Medical Psychology, Ghent University, Belgium

How to cite: Che, X., Fakhrorazi, A., Wei-Kit, L., & Chen, Q. (2021). Promoting knowledge workers' task performance: A social exchange perspective. *Social Behavior and Personality: An international journal*, 49(7), e10312

In this study we aimed to promote Chinese public sector development and reduce the difficulty of management and motivation of knowledge workers (k-workers) in the public sector. We investigated if servant leadership influences leader–member exchange (LMX) and if k-workers' LMX influences their task performance, as well as examining the mediating role of organizational citizenship behavior (OCB). We collected questionnaires from 383 k-workers in 10 Chinese public sectors via a self-administered survey, and used partial least squares structural equation modeling for data analysis. Results show that servant leadership had a positive relationship with LMX, LMX was positively related to OCB and task performance, and OCB had a mediating effect in the LMX–task performance relationship. Our results have theoretical implications, and our practical suggestions for managing, motivating, and inspiring k-workers will help promote the organizational performance of the Chinese public sector.

Keywords

knowledge workers;
servant leadership;
leader–member
exchange; organizational
citizenship behavior; task
performance

Drucker (1994) proposed the concept of *knowledge workers* (k-workers), defining them as people who master and apply symbols and concepts, and work with knowledge and information. K-workers are usually highly educated with professional knowledge and skills that are in high demand, and they are critical to their organization. These skills may include symbolic analysis (Despres & Hiltrop, 1995; T. W. Lee & Maurer, 1997; Yang et al., 2006); information analysis, distribution abilities, and production capacity (Banerjee, 2006); and the ability to use tools or techniques (Kubo & Saka, 2002). The definition of k-worker is cross-cultural, as it has also been applied in the Chinese working population. Yang et al. (2006) defined *Chinese knowledge workers* as being highly educated with professional skills, and the ability to apply such skills to identify and solve problems.

For the past 20 years, k-workers, who apply their knowledge to promote organizational development, have been the most valuable assets of most organizations (Henard & McFadyen, 2008). Thus, the improvement of k-workers' task performance is the key to enhancing the core competitiveness of the public sector and better serving of the public (Mei et al., 2014). Previous researchers have shown that an increase in leader–member exchange is an effective way to improve task performance (Byun et al., 2017; A. Lee et al., 2019). However, there has been little scholarly attention paid to the k-worker leader–member exchange–task performance relationship in the public sector, and knowledge of the mechanism underlying this relationship is limited.

CORRESPONDENCE A. Fakhrorazi, Ghazali Shafie Graduate School of Government, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Darul Aman, Malaysia. Email: fakhrorazi@uum.edu.my, or Xiaoli Che, Ghazali Shafie Graduate School of Government, Universiti Utara Malaysia, 06010 UUM Sintok, Kedah, Darul Aman, Malaysia. Email: 394572006@qq.com

Mládková et al. (2015) showed that misdirected motivation can negatively influence the performance of k-workers, although they are usually responsible professionals. These authors identified motivational or behavioral factors that may influence k-workers' task performance, and as many of these factors concern the k-worker-supervisor relationship, this relationship is a crucial factor that can motivate and influence k-workers' performance. Mládková et al. found that leadership style significantly impacted on the relationship between supervisors and followers, thereby affecting their behavior and performance. Therefore, from the social exchange perspective, we examined if servant leadership affects k-workers' leader-member exchange and their task performance (Yi & Ma, 2020).

In our investigation of the relationships among servant leadership, k-workers' leader-member exchange, OCB, and task performance, we have contributed to the literature by providing a theoretical model to explain if servant leadership influences k-workers' leader-member exchange and how leader-member exchange affects k-workers' behavior and impacts on their task performance. We have also provided practical implications for the public sector on how to manage and motivate k-workers to promote organizational performance. The theoretical framework is shown in Figure 1.

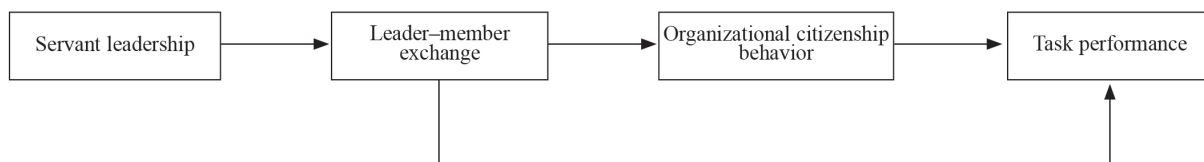


Figure 1. *Theoretical Framework*

Literature Review and Hypothesis Development

Servant Leadership and Leader-Member Exchange

Servant leadership emphasizes serving others and recognizes that the role of organizations is to create people who can improve their organization (Eva et al., 2019). In addition, servant leadership can provide numerous solutions to help solve the challenges of the 21st century, as servant leadership is associated with positive attributes such as respect, caring, and altruism (Parris & Peachey, 2013). Greenleaf (2002) noted that a servant leader is focused on bringing out the best in their followers. As the key component of servant leadership is that, by serving followers, a leader is more like a servant, servant leadership is different from other styles (Black, 2010).

Leader-member exchange (LMX) refers to the quality of exchange relationship between a leader and followers, and illustrates how leaders form an exchange relationship with followers in a group over time (Dansereau et al., 1975). Subordinate positions and LMX efficiency comprise two categories: in-group and out-group (C. Wang, 2016). The former is characterized by high-quality LMX with high trust, and formal or informal incentives. In-group members receive more feedback, and have a greater degree of freedom to contribute work outside their formal responsibilities (Liden & Graen, 1980). In contrast, out-group members have low-quality LMX with low trust and support, and lack of care. As they are confined to their employment contract requirements, they engage only in routine daily activities and interact formally with their supervisor (A. Lee et al., 2019). Servant leaders develop high-quality LMX by creating empathy with their followers, building trust, and focusing on their developmental needs (Mostafa & El-Motalib, 2019; Newman et al., 2017). Thus, through high-quality LMX, servant leaders have a mutually beneficial relationship with their followers (van Dierendonck & Nuijten, 2011).

Empirical researchers have also demonstrated the servant leadership–LMX relationship. For example, Mostafa and El-Motalib (2019) used structural equation modeling to show that servant leadership and proactive behavior had a positive relationship with LMX in the Egyptian public health sector. In addition, Chiniara and Bentein (2018) highlighted the significant impact of servant leadership on LMX, and associated these factors with high performance and organizational well-being among 229 employees. In their examination of the relationship between servant leadership and LMX in the Chinese context, Newman et al. (2017) found that proactive personality moderated the indirect effect of servant leadership on OCB through LMX and psychological empowerment among 446 supervisor–subordinate dyads. Thus, we proposed the following hypothesis:

Hypothesis 1: Servant leadership and leader–member exchange will be positively related.

Leader–Member Exchange and Organizational Citizenship Behavior

Bateman and Organ (1983) introduced the concept of *organizational citizenship behavior*, which Organ (1988) defined as individual behavior that is not directly or explicitly recognized by the formal reward system. OCB promotes overall organizational effective functioning, which includes activities or acts perceived to be extrarole (vs. in-role) and discretionary, that is, they are not a mandatory requirement (Indarti et al., 2017; Organ, 1997).

The LMX–OCB relationship can be explained according to the norm of reciprocity of social exchange theory (Blau, 1964), in which it is suggested that social interaction is built on trust, and the hope that one individual will reciprocate another’s act of goodwill. When a supervisor’s actions are perceived positively by their followers (high-quality LMX), these actions evoke feelings of obligation (Chow et al., 2015; Harris et al., 2014), such that the followers then engage in extrarole behavior (e.g., OCB) to fulfil their perceived duty.

Empirical researchers have also demonstrated an LMX–OCB relationship. For example, Bowler et al. (2019) found a positive relationship between LMX and OCB among 529 working adults matched with their supervisor. In addition, Y. Lee (2019) examined the relationship between LMX and OCB among 653 employees of senior hospitals in Seoul and Kyeong-In in South Korea, and found that the two variables were positively related. Further, Anand et al. (2018) found a significant relationship between LMX and OCB among 245 employees. Therefore, we proposed the following hypothesis:

Hypothesis 2: Leader–member exchange and organizational citizenship behavior will be positively related.

Organizational Citizenship Behavior and Task Performance

Task performance refers to workers’ duties officially accepted as being part of their job. These actions contribute to the organization’s overall performance both directly (e.g., executing part of a technological process) and indirectly (e.g., supplying required materials or services; Borman & Motowidlo, 1993). He et al. (2019) found that through the promotion of employee performance metrics, such as task performance, OCB can improve organizational performance measures, such as cooperation and teamwork. Further, Hanafi et al. (2018) suggested that this behavior improves employees’ motivation, facilitates social communication, reduces disputes, improves work efficiency, and, ultimately, improves employees’ performance.

Empirical researchers have also found a positive OCB–task performance relationship. For example, He et al. (2019) found a positive relationship between LMX and OCB among 96 employees in the hospitality sector. Rapp et al. (2013) investigated 212 employees and 41 supervisors and demonstrated a positive relationship between OCB and task performance, accounting for the moderating role of time management skill. Therefore, we proposed the following hypothesis:

Hypothesis 3: Organizational citizenship behavior and task performance will be positively related.

Leader–Member Exchange and Task Performance

The relationship between LMX and task performance can be explained according to the norm of reciprocity of social exchange theory (Blau, 1964). Leaders provide tangible and intangible benefits to followers in a high-quality leader–member relationship (Kuvaas & Buch, 2018). Tangible benefits (e.g., resources and money) promote better performance by providing followers with profit and wealth, whereas intangible benefits (e.g., favors and appreciation) motivate followers to reciprocate by making an extra effort or dedicating themselves to their work (Kuvaas & Buch, 2018).

Empirical researchers have generally supported the relationship between LMX and task performance. For instance, A. Lee et al. (2019) found a positive relationship between these two variables among 320 employees. In addition, Breevaart et al. (2015) investigated 847 Dutch police officers and demonstrated a significant positive relationship between LMX and task performance. Further, Young et al. (2021) used 21 original meta-analyses to build a correlation matrix illustrating the LMX–task performance relationship. Therefore, we proposed the following hypothesis:

Hypothesis 4: Leader–member exchange and task performance will be positively related.

Leader–Member Exchange, Organizational Citizenship Behavior, and Task Performance

High-quality LMX involves an emotional connection and generally unstated, shared expectations of reciprocity. In a high-quality exchange relationship, supervisors cater to the higher social needs of followers by guiding them to prioritize collective benefits over individual satisfaction in the short term. As employees with higher OCB are more willing to pursue collective interests, those with high-quality LMX are more committed to demonstrating OCB to promote organizational development in return (Chow et al., 2015).

As OCB is typically voluntary and unpaid, employees demonstrating OCB tend to exhibit altruism, organizational commitment, and conscientiousness (LePine et al., 2002), which are positively related to task performance (Rapp et al., 2013). Therefore, we proposed the following hypothesis:

Hypothesis 5: Organizational citizenship behavior will mediate the relationship between leader–member exchange and task performance.

Method

Participants and Procedure

As Yang et al. (2006) defined k-workers as having at least a bachelor's degree level of education, we chose this as an inclusion criterion for our participants. Our initial target population comprised 600 people from 10 Chinese public sectors. After we had collected the 600 questionnaires, we removed 216 participants based on Yang et al.'s (2006) definition of a non-k-worker, and were left with a final population of 383 k-workers, of whom 255 (66.6%) were women and 128 (33.4%) were men ($M_{\text{age}} = 33.7$ years, $SD = 6.5$, range = 22–53). Regarding level of education, 230 (60.1%) had a bachelor's degree and 153 (39.9%) had a master's degree or above.

Participants were asked to complete the questionnaires within 10 minutes. We conducted this survey online using the Wenjuanxing platform, and posted the research statement in the questionnaires to ensure that every participant acknowledged that they were involved in social science research. Only upon acceptance of this statement could the questionnaire be completed. No compensation was provided to the participants. The entire survey was anonymous and the research protocol was approved by Universiti Utara Malaysia. The data collection period lasted for 64 days.

Measures

As the items were adopted from previous studies, reliability and validity had been confirmed. All items were assessed on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Servant Leadership

We measured servant leadership with the six-item short form of the original 35-item Servant Leadership Behavior Scale (Sendjaya et al., 2019; $\alpha = .85$). Sample items are “My supervisor uses power in service to others, not for their ambition,” “My supervisor enhances my capacity for moral actions,” and “My supervisor helps me to generate a sense of meaning out of everyday life at work.”

Leader–Member Exchange

We assessed LMX with Graen and Uhl-Bien’s (1995; $\alpha = .89$) seven-item LMX measure. Sample items are “I usually know how satisfied my supervisor is with what I do” and “My supervisor recognizes my potential.”

Organizational Citizenship Behavior

We measured OCB using Smith et al.’s (1983; $\alpha = .81$) 16-item scale. Sample items are “I help other employees with their work when they have been absent” and “I volunteer to do things not formally required by the job.”

Task Performance

We assessed task performance with Koopmans et al.’s (2014; $\alpha = .87$) seven-item task performance scale from the Individual Work Performance Questionnaire. Sample items are “I manage to plan my work so that it is done on time” and “I keep in mind the results that I have to achieve in my work.”

Data Analysis

Data from the self-administered questionnaires were analyzed with partial least squares structural equation modeling. Partial least squares analysis facilitates the examination of a set of interrelated research questions by modeling the relationships among multiple constructs (Anderson & Gerbing, 1988). We used SmartPLS 2.0 M3 software and SPSS 21.0.

Results

Composite Reliability and Convergent Validity

We tested composite reliability, for which a value of over .70 is acceptable (Hair et al., 2014). As shown in Table 1, the composite reliability value for each variable was over .70, thus meeting the convergent validity requirement.

Table 1. *Composite Reliability Results*

Model construct	Items	CR
Servant leadership	6	.87
Leader–member exchange	7	.97
Organizational citizenship behavior	16	.94
Task performance	7	.96

Note. CR = composite reliability.

In addition, Hair et al. (2014) noted that for acceptable convergent validity to be established, factor loadings must exceed .50, and average variance extracted (AVE) values must exceed .50. We found that the factor

loadings of the 36 items for the four variables all exceeded .50 (servant leadership: .66–.77, LMX = .82–.93, OCB = .61–.76, task performance = .82–.93). In addition, the AVE of each variable exceeded .50 (servant leadership = .52, LMX = .81, OCB = .50, task performance = .77). These results show that each variable had acceptable convergent validity.

Discriminant Validity and Correlation Analysis

Discriminant validity requires that the observed values are distinguishable when different constructs are measured via different methods. This criterion was met for each construct (see Table 2); thus, acceptable discriminant validity was established. Correlations among the variables are shown in Table 2.

Table 2. *Discriminant Validity of Constructs*

Construct	<i>M</i>	<i>SD</i>	1	2	3	4
1. Servant leadership	2.90	1.05	.519			
2. Leader–member exchange	3.03	1.34	.303**	.808		
3. Organizational citizenship behavior	3.10	0.99	.241**	.801**	.496	
4. Task performance	3.23	1.27	.355**	.490**	.445**	.767

Note. Average variance extracted values are shown on the diagonal in **boldface**.

** $p < .01$.

Structural Equation Modeling

R^2 values can be used to evaluate the quality of each variable in the structural model. If R^2 is within the range of 0–1, it is acceptable (Hair et al., 2014). Figure 2 shows that OCB and TP as the endogenous variables were at a substantial level: 64.5% and 59.1%, respectively. The R^2 value of LMX was 9.4%, which is low but still acceptable. The cross-loading results between each variable are also shown in Figure 2.

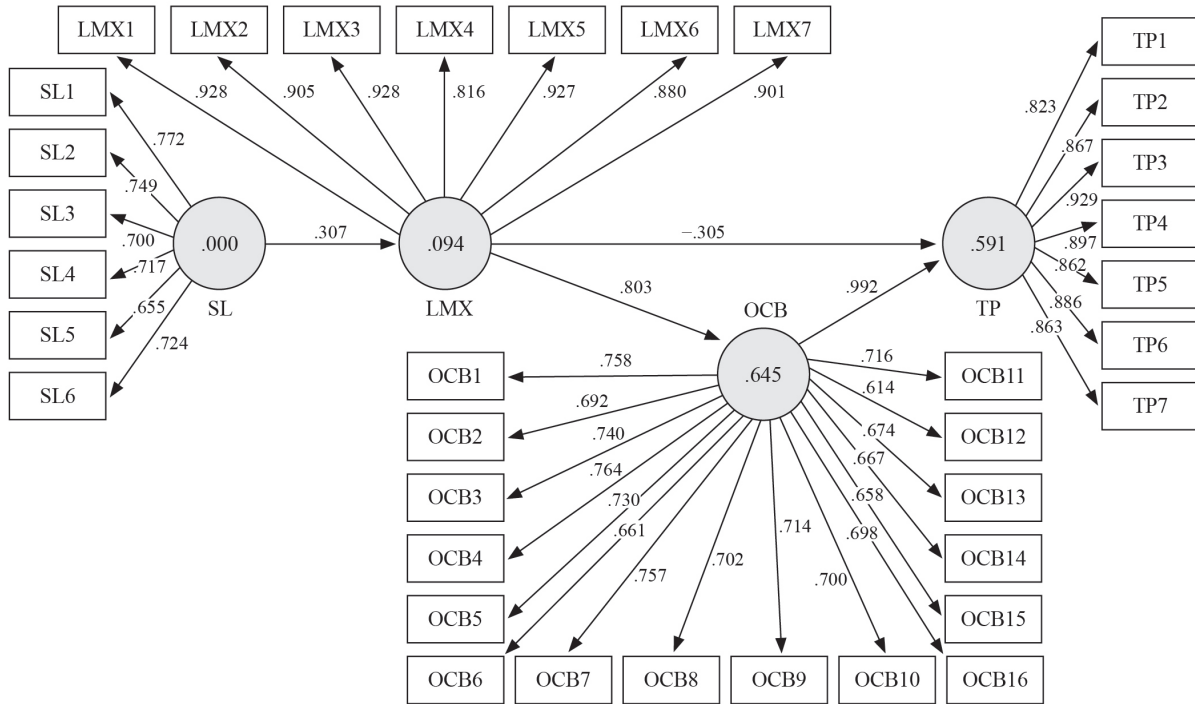


Figure 2. *Structural Equation Model for Latent Variables*

Note. SL = servant leadership; LMX = leader–member exchange; OCB = organizational citizenship behavior; TP = task performance.

Hypothesis Testing

We tested the hypotheses using bootstrapping analysis with 5,000 resamples, which involves repeated random sampling and replacement of the original sample to create a bootstrapped sample. We used the resulting standard error to verify each hypothesis. The PLS-bootstrapping method for the model is presented in Figure 3.

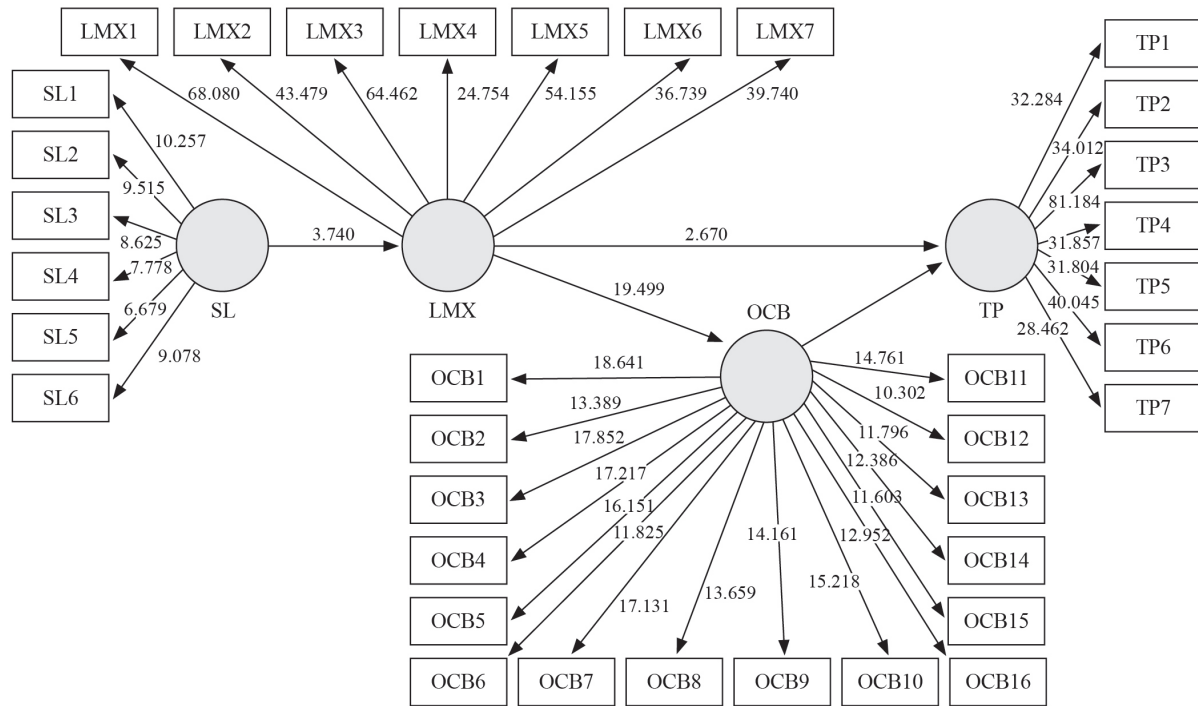


Figure 3. Hypothesis Testing of the Model

Note. SL= servant leadership; LMX = leader–member exchange; OCB = organizational citizenship behavior; TP = task performance.

The hypothesized structural relationships among servant leadership, LMX, OCB, and task performance are shown in Table 3. A 1% significance level for the two-tailed test requires a t value of at least 2.58 ($p < .01$). Servant leadership was significantly related to LMX, $t(df) = 3.740, p < .01$, 95% confidence interval (CI) [0.226, 0.549]. In addition, LMX was significantly related to OCB, $t(df) = 19.499, p < .01$, 95% CI [0.532, 0.649], and task performance, $t(df) = 2.670, p < .01$, 95% CI [0.355, 0.573], whereas OCB was significantly related only to task performance, $t(df) = 10.107, p < .01$, 95% CI [0.844, 0.971]. Thus, Hypotheses 1, 2, 3, and 4 were supported.

Table 3. Hypothesis Testing Results

Hypothesized relationship	SE	t	Confidence interval	Supported
1. SL–LMX	0.08	3.740*	[0.226, 0.549]	Yes
2. LMX–OCB	0.04	19.499*	[0.532, 0.649]	Yes
3. OCB–TP	0.10	10.107*	[0.844, 0.971]	Yes
4. LMX–TP	0.09	2.670*	[0.355, 0.573]	Yes

Note. SL = servant leadership; LMX = leader–member exchange; OCB = organizational citizenship behavior; TP = task performance. Results are significant at $p < .01$ for a two-tailed t value of 2.58.

To test the mediating effect of OCB on the relationship between LMX and task performance, we evaluated the variance accounted for (VAF). The levels are as follows: VAF < 0.20 indicates no mediating effect; VAF = 0.20–0.80 indicates partial mediation; VAF > 0.80 indicates full mediation. On the basis of the calculation, the VAF value of the LMX–OCB–task performance relationship was $(0.803 \times 0.992)/(0.803 \times 0.992 - 0.305) = 1.620$. Thus, Hypothesis 5 was supported.

Discussion

We used k-workers in 10 Chinese public sectors as participants, and analyzed the data collected from a survey to examine the relationships among servant leadership, LMX, OCB, and task performance from theoretical and empirical perspectives. Our results show there was a positive relationship between servant leadership and LMX, which is consistent with the findings of Chiniara and Bentein (2018) and Mostafa and El-Motalib (2019). This result indicates that servant leadership had a positive effect on the management of k-workers as it improved the relationship between leaders and followers. Thus, leaders from the Chinese public sector should employ servant leaders to fairly manage and create a harmonious relationship with k-workers, rather than giving orders with absolute authority.

The results also demonstrate a positive reciprocal relationship between LMX and OCB, which is consistent with the findings of Chow et al. (2015) and Harris et al. (2014). To maintain this social exchange relationship, followers work harder and even undertake tasks beyond their job requirements. In addition, the significance of the LMX–OCB relationship is that in a high-quality exchange relationship, the leader offers incentives for followers (e.g., rewards, promotion, allowances), including a reward when they go beyond formal duties (Harris et al., 2014). Therefore, followers are more likely to perform extrarole behavior to preserve a balanced or equal exchange relationship (Huang et al., 2014). A good relationship between leaders and k-workers in the public sector is, thus, important to motivate k-workers to demonstrate extrarole behavior.

Further, we found that k-workers' OCB mediates the relationship between LMX and task performance in the Chinese public sector. This finding is consistent with that of H. Wang et al. (2005), who reported that OCB mediated the relationship between LMX and follower performance in 162 supervisor–subordinate dyads. Thus, our result shows that managers need to establish and maintain a harmonious relationship with followers. When LMX between leaders and k-workers is of high quality, k-workers are more likely to engage in OCB, which promotes their task performance and, ultimately, benefits organizational performance. LMX and OCB should also be included in performance evaluations as they are directly related to k-workers' task performance.

There are some limitations in this study. First, owing to time constraints, we measured all predictor variables (e.g., servant leadership), independent variables (e.g., LMX), and the mediator (i.e., OCB) from only 10 public sectors. Thus, the generalizability of our sample is limited. For better accuracy, future researchers should expand the data collection and include more organizations. In addition, as the 10 public sectors belonged to public school and government sectors, hospitals were not included. Therefore, results may differ with the inclusion of hospitals, as doctors' and nurses' work involves bacteria and viruses in a high-risk environment. Second, as we adopted the scale from Graen and Uhl-Bien (1995) to test the k-worker participants' degree of LMX, follower participants only filled in the questionnaires, and we did not consider the situation of supervisor–subordinate dyads. Future researchers could examine different supervisor–subordinate dyads and samples to enhance further research.

References

- Anand, S., Vidyarthi, P., & Rolnicki, S. (2018). Leader-member exchange and organizational citizenship behaviors: Contextual effects of leader power distance and group task interdependence. *The Leadership Quarterly*, 29(4), 489–500.
<https://doi.org/10.1016/j.leaqua.2017.11.002>

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411–423.
<https://doi.org/10.1037/0033-2909.103.3.411>
- Banerjee, D. (2006). Information technology, productivity growth, and reduced leisure: Revisiting “end of history.” *WorkingUSA*, *9*(2), 199–213.
<https://doi.org/10.1111/j.1743-4580.2006.00102.x>
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee “citizenship.” *Academy of Management Journal*, *26*(4), 587–595.
<https://doi.org/10.5465/255908>
- Black, G. L. (2010). Correlational analysis of servant leadership and school climate. *Journal of Catholic Education*, *13*(4), 437–466.
<https://doi.org/10.15365/joce.1304032013>
- Blau, P. M. (1964). *Exchange and power in social life*. Wiley.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71–98). Jossey-Bass.
- Bowler, W. M., Paul, J. B., & Halbesleben, J. R. (2019). LMX and attributions of organizational citizenship behavior motives: When is citizenship perceived as brownnosing? *Journal of Business and Psychology*, *34*(2), 139–152.
<https://doi.org/10.1007/s10869-017-9526-5>
- Breevaart, K., Bakker, A. B., Demerouti, E., & van den Heuvel, M. (2015). Leader-member exchange, work engagement, and job performance. *Journal of Managerial Psychology*, *30*(7), 754–770.
<https://doi.org/10.1108/JMP-03-2013-0088>
- Byun, G., Dai, Y., Lee, S., & Kang, S. (2017). Leader trust, competence, LMX, and member performance: A moderated mediation framework. *Psychological Reports*, *120*(6), 137–1159.
<https://doi.org/10.1177/0033294117716465>
- Chiniara, M., & Bentein, K. (2018). The servant leadership advantage: When perceiving low differentiation in leader-member relationship quality influences team cohesion, team task performance and service OCB. *The Leadership Quarterly*, *29*(2), 333–345.
<https://doi.org/10.1016/j.leaqua.2017.05.002>
- Chow, C. W. C., Lai, J. Y. M., & Loi, R. (2015). Motivation of travel agents’ customer service behavior and organizational citizenship behavior: The role of leader-member exchange and internal marketing orientation. *Tourism Management*, *48*, 362–369.
<https://doi.org/10.1016/j.tourman.2014.12.008>
- Dansereau, F., Jr., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Performance*, *13*(1), 46–78.
[https://doi.org/10.1016/0030-5073\(75\)90005-7](https://doi.org/10.1016/0030-5073(75)90005-7)
- Despres, C., & Hiltrop, J.-M. (1995). Human resource management in the knowledge age: Current practice and perspectives on the future. *Employee Relations*, *17*(1), 9–23.
<https://doi.org/10.1108/01425459510146652>
- Drucker, P. F. (1994). The theory of the business. *Harvard Business Review*, *72*, 95–104.
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*, *30*(1), 111–132.
<https://doi.org/10.1016/j.leaqua.2018.07.004>

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219–247.
[https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)

Greenleaf, R. K. (2002). *Servant leadership: A journey into the nature of legitimate power and greatness*. Paulist Press.

Hair, F. J., Jr., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. SAGE.

Hanafi, A., Soebyakto, B. B., & Afriyanti, M. (2018). The effect of organizational citizenship behavior (OCB) and quality of work life (QWL) on the employee work performance with motivation as an intervening variable at industrial affairs of South Sumatera province. *International Journal of Scientific Research Management*, 6(9), 676–685.
<https://doi.org/10.18535/ijstrm/v6i9.em03>

Harris, T. B., Li, N., & Kirkman, B. L. (2014). Leader–member exchange (LMX) in context: How LMX differentiation and LMX relational separation attenuate LMX's influence on OCB and turnover intention. *The Leadership Quarterly*, 25(2), 314–328.
<https://doi.org/10.1016/j.leaqua.2013.09.001>

He, J., Zhang, H., & Morrison, A. M. (2019). The impacts of corporate social responsibility on organization citizenship behavior and task performance in hospitality. *International Journal of Contemporary Hospitality Management*, 31(6), 2582–2598.
<https://doi.org/10.1108/IJCHM-05-2018-0378>

Henard, D. H., & McFadyen, M. A. (2008). Making knowledge workers more creative. *Research-Technology Management*, 51(2), 40–46.
<https://doi.org/10.1080/08956308.2008.11657494>

Huang, J., Wang, L., & Xie, J. (2014). Leader-member exchange and organizational citizenship behavior: The roles of identification with leader and leader's reputation. *Social Behavior and Personality: An international journal*, 42(10), 1699–1711.
<https://doi.org/10.2224/sbp.2014.42.10.1699>

Indarti, S., Solimun, A. A. R. F., & Hakim, W. (2017). The effect of OCB in relationship between personality, organizational commitment and job satisfaction on performance. *Journal of Management Development*, 36(10), 1283–1293.
<https://doi.org/10.1108/JMD-11-2016-0250>

Joo, B.-K. (2010). Organizational commitment for knowledge workers: The roles of perceived organizational learning culture, leader–member exchange quality, and turnover intention. *Human Resource Development Quarterly*, 21(1), 69–85.
<http://doi.org/10.1002/hrdq.20031>

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., van Buuren, S., van der Beek, A. J., & de Vet, H. C. W. (2014). Improving the Individual Work Performance Questionnaire using Rasch analysis. *Journal of Applied Measurement*, 15(2), 160–175.

Kubo, I., & Saka, A. (2002). An inquiry into the motivations of knowledge workers in the Japanese financial industry. *Journal of Knowledge Management*, 6(3), 262–271.
<https://doi.org/10.1108/13673270210434368>

Kuvaas, B., & Buch, R. (2018). Leader-member exchange relationships and follower outcomes: The mediating role of perceiving goals as invariable. *Human Resource Management*, 57(1), 235–248.
<https://doi.org/10.1002/hrm.21826>

Lee, A., Thomas, G., Martin, R., & Guillaume, Y. (2019). Leader-member exchange (LMX) ambivalence and task performance: The cross-domain buffering role of social support. *Journal of Management*, 45(5), 1927–1957.

<https://doi.org/10.1177%2F0149206317741190>

Lee, T. W., & Maurer, S. D. (1997). The retention of knowledge workers with the unfolding model of voluntary turnover. *Human Resource Management Review*, 7(3), 247–275.

[https://doi.org/10.1016/S1053-4822\(97\)90008-5](https://doi.org/10.1016/S1053-4822(97)90008-5)

Lee, Y. (2019). A study on the effect of authentic leadership of hospital organization on organizational commitment and organizational citizenship behavior: Focusing on the mediating effect of LMX. *The Journal of Industrial Distribution & Business*, 10(3), 73–83.

<https://doi.org/10.13106/ijidb.2019.vol10.no3.73>

LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, 87(1), 52–65.

<https://doi.org/10.1037/0021-9010.87.1.52>

Liden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, 23(3), 451–465.

<https://doi.org/10.5465/255511>

Mei, Z., Yang, B., & Jin, S. (2014). Study on the mechanism of the influence of leader-member exchange on organizational ownership behavior and job performance [In Chinese]. *Journal of Management*, 11(5), 675–682.

<https://doi.org/10.3969/j.issn.1672-884x.2014.05.008>

Mrádková, L., Zouharová, J., & Nový, J. (2015). Motivation and knowledge workers. *Procedia - Social and Behavioral Sciences*, 207, 768–776.

<https://doi.org/10.1016/j.sbspro.2015.10.163>

Mostafa, A. M. S., & El-Motalib, E. A. A. (2019). Servant leadership, leader–member exchange and proactive behavior in the public health sector. *Public Personnel Management*, 48(3), 309–324.

<https://doi.org/10.1177/0091026018816340>

Newman, A., Schwarz, G., Cooper, B., & Sendjaya, S. (2017). How servant leadership influences organizational citizenship behavior: The roles of LMX, empowerment, and proactive personality. *Journal of Business Ethics*, 145(1), 49–62.

<https://doi.org/10.1007/s10551-015-2827-6>

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington Books.

Organ, D. W. (1997). Organizational citizenship behavior: It's construct clean-up time. *Human Performance*, 10(2), 85–97.

https://doi.org/10.1207/s15327043hup1002_2

Parris, D. L., & Peachey, J. W. (2013). A systematic literature review of servant leadership theory in organizational contexts. *Journal of Business Ethics*, 113(3), 377–393.

<https://doi.org/10.1007/s10551-012-1322-6>

Rapp, A. A., Bachrach, D. G., & Rapp, T. L. (2013). The influence of time management skill on the curvilinear relationship between organizational citizenship behavior and task performance. *Journal of Applied Psychology*, 98(4), 668–677.

<https://doi.org/10.1037/a0031733>

Sendjaya, S., Eva, N., Butar, I. B., Robin, M., & Castles, S. (2019). SLBS-6: Validation of a short form of the Servant Leadership Behavior Scale. *Journal of Business Ethics*, 156(4), 941–956.

<https://doi.org/10.1007/s10551-017-3594-3>

Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology, 68*(4), 653–663.

<https://doi.org/10.1037/0021-9010.68.4.653>

van Dierendonck, D., & Nuijten, I. (2011). The Servant Leadership Survey: Development and validation of a multidimensional measure. *Journal of Business and Psychology, 26*(3), 249–267.

<https://doi.org/10.1007/s10869-010-9194-1>

Wang, C. (2016). *Benevolent leadership and task performance relationship by LMX* (Unpublished master's thesis). INTI International University, Malaysia.

Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *Academy of Management Journal, 48*(3), 420–432.

<https://doi.org/10.5465/amj.2005.17407908>

Yang, J., Ling, W. Q., & Fang, L. L. (2006). A study on the classification of knowledge work based on subjective perception analysis [In Chinese]. *Studies in Science of Science, 24*(1), 98–105.

Yi, B., & Ma, X. (2020). The influence of servant leadership on employee job engagement: The role of leader-member exchange relationship and proactive personality [In Chinese]. *Journal of Jilin Industrial and Commercial University, 36*(2), 59–64, 71. <https://bit.ly/3tSvrz7>

Young, H. R., Glerum, D. R., Joseph, D. L., & McCord, M. A. (2021). A meta-analysis of transactional leadership and follower performance: Double-edged effects of LMX and empowerment. *Journal of Management, 47*(5), 1255–1280.

<https://doi.org/10.1177%2F0149206320908646>