

Supportive leadership and employee creativity: Will Leader-Member Exchange mediate the relationship?

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Abstract

Purpose: Purpose: This study proposes to integrate supportive leadership, leader-member exchange (LMX), and employee creativity. It suggests that LMX can play a role as a mediator.

Research methodology: A total of 200 participants were included in this study. They were working for a tobacco company located in a district in Kulon Progo, Yogyakarta, Indonesia. Analysis for hypotheses was done in SPSS and AMOS.

Results: It was found that supportive leadership was positively related to leader-member exchange (LMX) and employee creativity. Leader-member exchange (LMX) was positively related to employee creativity. Finally, leader-member exchange (LMX) mediated the relationship between supportive leadership and employee creativity.

Limitations: The participants of this study were taken from one company. This might lower the generalizability of the results. Another limitation of this study is the use is a cross-sectional method in the data collection which might result in a common method variance. Future studies could employ other data collection methods. For example, a multi-wave of data collection can remedy the problem.

Contribution: The study suggests that a supportive leadership style is necessary to implement because it can promote a higher quality of the relationship between employees and their supervisors. More importantly, this aligns with the organizational effort to foster employee creativity.

Novelty: The study found that supportive leadership can promote leader-member exchange (LMX) quality. Since the dyad relationship quality characterized by leader-member exchange (LMX) is necessary for team effectiveness, the investigation of the link may provide an understanding of the factors that may influence leader-member exchange (LMX).

Keywords: *Supportive Leadership, Leader-Member Exchange (LMX), Employee Creativity*

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1. Introduction

Scholars believe that changes in the environment should have a positive impact on changes in managerial functions including the human resource management (HRM) function. Recently, Covid-19 has challenged all organizations to adapt radically to the ways businesses operate to increase their survival levels (Mulyana, Ridaryanthi, Faridah, Umarella, & Endri, 2022; Putra & Istiyani, 2022). To move forward in such a difficult environment and situation, business institutions should rely on the

behavioral shifts of the employees. One crucial aspect of the effort is to increase employee creativity (Cooke, Schuler, & Varma, 2020). Behavioral scientists have argued that innovation must be preceded by creativity (Janssen, 2000; Wijaya, 2016). As innovation will come after creativity and significantly promote organizational survival (Cooke et al., 2020; Janssen, 2000; Shih & Susanto, 2017; Wijaya, 2016), improving employee creativity is a mandatory task for companies. Creativity is the ability to produce novel, unusual, and outboxed ideas to improve the organizational process and product/service that may be critical to the development of the overall quality for consumers and performance (Tierney & Farmer, 2011; Zhou, 2003). Unsurprisingly, a significant number of researchers have put their efforts into the observation of factors impacting creativity in the past decades (Farmer, Tierney, & Kung-McIntyre, 2003; Shih & Wijaya, 2017; Zhou & George, 2003). Within the extant works exploring the antecedents of creativity, scholars have observed the impact of supportive leadership (Yaping, Tae-Yeol, Deog-Ro, & Jing, 2013) and leader-member exchange (Atwater & Carmeli, 2009; Pan, Sun, & Chow, 2012; Putra & Istiyani, 2022). However, since in this study supportive behavior of leaders can promote the quality of the leader-member relationship, it is necessary to establish an empirical fact on how supportive leadership can affect the leader-member exchange (LMX) relationship, in turn, employee creativity. To add to the significant contribution of the extant works, the current study develops a model incorporating supportive leadership, leader-member exchange (abbreviated as “LMX” in some parts), and employee creativity. Figure 1 depicts the research framework. Supportive leadership and creativity are treated as independent variables and independent variables, respectively while leader-member exchange plays as a moderator between the two variables.

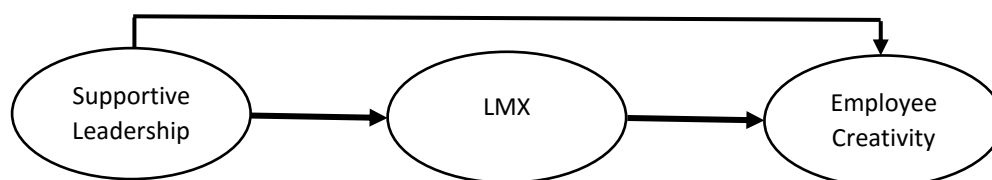


Figure 1. Research Model

2. Literature Review

2.1 Underlying Theories: Supportive Leadership and Leader-Member Exchange

Supportive leadership is one of the effective leadership styles that characterize leadership supportive behavior in job-demand issues and non-job-demand issues for subordinates (Simorangkir, Karnati, & Abdullah, 2019). Cullen (2014) suggests that a supportive working environment is more favorable rather than the non-supportive one in developing desirable behavior and performance. As such, employees who enjoy support from their supervisors will reciprocate with productive behaviors and show higher performance in the workplace (Makambe & Moeng, 2020). Extant literature in this field has demonstrated the ability of this leadership style to affect employee job satisfaction (Mwaisaka, K'Aol, & Ouma, 2019), well-being (Farid, Iqbal, Saeed, Irfan, & Akhtar, 2021), and a variety of performance measures (Elsaied, 2019; Khalid, Zafar, Zafar, Saqib, & Mushtaq, 2012). The supportive leadership concept may be related to other leadership concepts, for example, the participative leadership perspective (Huang, 2012). Participative leadership is a leadership approach that seeks subordinates' suggestions to make better decisions while the supportive leadership approach emphasizes the leaders' support in all related problems that may affect employee effectiveness. Both approaches can increase employee satisfaction (Chan, 2019; Mwaisaka et al., 2019). Simorangkir et al. (2019) suggest that such a leadership can promote a friendly and pleasing work environment, which in turn, makes the work environment more interesting. Supportive leadership, on the contrary, can lead employees to perceive the work environment as being stressful (Khalid et al., 2012; Kim et al., 2021; Simorangkir et al., 2019), boring or dangerous (Simorangkir et al., 2019).

Leader-member exchange (LMX) theory has played an important role in explaining the effects of the leader-follower relationship on the follower behavior related to various performances (Liden, Erdogan, Wayne, & Sparrowe, 2006; Liden, Wayne, & Sparrowe, 2000). The basic tenets of this theory are: (1) a leader may differentiate the levels of the dual relationship among his/her subordinates; (2) employees in the subordinate role may perceive the quality of the relationship

between them and their leaders; and (3) the levels of the relationships can influence attitudes and behavior in the workplace. Most scholars have agreed that the higher the quality of the relationship, the more favourable the relational situation felt by the employees and it may relate to some positive work outcomes. In the current work, the concepts of supportive leadership and leader-member exchange (LMX) are used to conceptualize the effects of supportive supervisors and leader-member exchange (LMX) on employee creativity.

2.2 Supportive Leadership and Employee Creativity

Supportive leadership is a form of informal organizational support (Simorangkir et al., 2019) and is considered important to help employees achieve optimal work outcomes (e.g., Kim et al., 2021). Meanwhile, creativity refers to employees' ability to create novel ideas to improve existing goods/services and processes (Shih & Wijaya, 2017). Creativity can generate new business models or products, which are produced by organizational members. In a conducive environment promoted by supportive leadership (Kim et al., 2021), employees can enjoy a friendly work environment that stimulates the willingness to learn for creativity (Klijn & Tomic, 2010). In such a situation, as supportive leaders emphasize environmentally encouraging well-being (Farid et al., 2021), employees also strongly sense a safe circumstance in expressing their new ideas (Elsaied, 2019; Kim et al., 2021). If employees enjoy a supportive climate due to the existence of supportive leaders (Kim et al., 2021), they may also perceive more sympathy and care, as well as a strong feeling of being listened to. Such a condition can be characterized as environmentally safe for more expressions (Edmondson, 1999; Elsaied, 2019), including creativity. Since creativity is more likely to perform in positive psychological states (Kark & Carmeli, 2009; Shih & Wijaya, 2017), employee creativity is likely to stimulate a nurturing climate provided in the workplace supervised by supportive leaders. It is suggested that supportive leadership has a direct positive effect on creativity. Thus, the first hypothesis in this research is as follows:

H1: Supportive leadership is positively related to creativity

2.3 Supportive Leadership and Leader-Member Exchange (LMX)

Studies which demonstrate the link between supportive leadership and leader-member exchange (LMX) are rare, especially studies validating the ability of the leadership approach to cultivate a high-quality relationship in teams (Kim et al., 2021). The researchers found that supportive leadership can promote a positive social exchange among team members (TMX) through the development of a supportive climate. Supportive leadership measures the level of recognition, respect, and supportive behavior given to subordinates by supervisors, such as providing feedback (Lam, Huang, & Snape, 2007). It is likely that supportive leadership can maintain a supportive climate in teams (Kim et al., 2021), and make a supportive environment for employees to build cooperation with their intermediate supervisors (Lam et al., 2007). Recently, a study found that supportive leadership also leads to employees' well-being in unfavorable situations (i.e., psychological, social, and physical well-being during the Covid-19 pandemic, Farid et al., 2021). It is therefore posited in this study that supportive leadership can encourage a higher quality of leader-member exchange (LMX) relationship. Since supportive leadership is related to the enhancement of a supportive climate, employee well-being, and conducive employee-supervisor interconnection (Banks et al., 2014; Liden, Wayne, & Stilwell, 1993), the leadership style can promote social-based reciprocities between the parties (Liden et al., 1993; Wayne, Shore, & Liden, 1997). It seems that supportive leadership can support the development of leader-member exchange (LMX) quality. Thus, the second hypothesis in this research is proposed:

H2: Supportive leadership is positively related to leader-member exchange (LMX).

2.4 Leader-Member Exchange (LMX) and Employee Creativity

Leader-member exchange (LMX) refers to the reciprocal relationship between managers and subordinates that aims to improve organizational success by creating positive relationships among managers and subordinates (Graen & Uhl-Bien, 1995; Liden et al., 2006; Liden et al., 2000; Liden et al., 1993). Leader-member exchange (LMX) is one form of a social exchange relationship in organizations. Unlike economic exchange relationship that emphasizes economic forms of reciprocity (e.g., rewards for performance), social exchange relationship puts more emphasis on the mutually beneficial exchange of support, caring, and empathy (Banks et al., 2014; Coyle-Shapiro, M., & Shore,

2007; Cropanzano & Mitchell, 2005). Extant studies have revealed the importance of leader-member exchange (LMX) in the enhancement of employee creativity (Atwater & Carmeli, 2009; Pan et al., 2012; Qu, Janssen, & Shi, 2017). There is a process underlying how leader-member exchange (LMX) can develop employee creativity. First, leader-member exchange (LMX) can develop a mutual social exchange relationship and reciprocity between an employee and his/her supervisor. Second, the high quality of the social exchange relationships between two parties can boost constructive sharing. Third, a conducive learning environment can turn the willingness and ability of the employee to create new ideas. Thus, the third hypothesis in this research is proposed:

H3: Leader-member exchange (LMX) is positively related to employee creativity.

2.5 The Mediation Effect of Leader-Member Exchange (LMX)

It is proposed that leader-member exchange (LMX) can mediate the relationship between supportive leadership and employee creativity. As previously discussed, supportive leadership is capable of promoting social exchange relationships between employee and their immediate supervisors. When employees see that their supervisors practice various supportive behaviors toward them, their perception of quality relationships will develop (Lam et al., 2007). As suggested before, the quality of leader-member exchange (LMX) will in turn enhance the willingness of employees to get involved in creative-related tasks (Atwater & Carmeli, 2009). It is suggested that supportive leadership may promote leader-member exchange (LMX) quality, which will be followed by increased employee creativity. Therefore, the last hypothesis in this research is as follows:

H4: Leader-member exchange (LMX) mediates the relationship between supportive leadership and creativity.

3. Research Methodology

3.1 Participants and Profiles

The participants of this study were employees of a tobacco processing company located in a district in Kulon Progo, Yogyakarta, Indonesia. A paper-based survey was conducted because all participants work in the same location. The data collectors could also provide a brief explanation of the survey and respond to the difficulties in interpreting the questionnaire items. Finally, a total of 200 samples were collected from the survey. The following table shows the respondents' profiles. Most respondents were male (72%) and the rest (28%) were female; they were within the age range of 18 – 30 years (94%) and (6%) of the respondents were between 30 and 40 years old. In terms of education, most respondents (67%) have graduated from high school. In terms of income, they mainly earned less than Rp2 million per month (89%) and the rest earned more than Rp2 million per month (11%).

Table 1. Respondents' Profile

Identity	Sub Identity	Frequency	Percentage (%)
Gender	Male	144	72
	Female	56	28
Age (years)	18-30	188	94
	>30-40	12	6
	>40	0	0
Highest Education	High School	134	67
	Others	66	33
Income (in Indonesian Currency, Rp)	< Rp2,000,000	177	89
	≥ Rp2,000,000	23	11

Source: The collected data, N = 200.

3.2 Study Instruments and Analytical Procedure

This research used a questionnaire, which is a list of questions or items used to gather data from respondents about their attitudes, experiences, or opinions. The participants were required to fill out all of the items by choosing their agreement levels on each item ranging from 1 (strongly disagree) to 5 (strongly agree). The data were analysed through three stages, including (1) validity and reliability assessment of the instruments, (2) correlation analysis, and (3) regression analysis for evaluating the

proposed hypotheses. Most assessments were conducted using SPSS (Statistical Package for the Social Sciences) statistics. Finally, a supplementary analysis was also conducted using AMOS (Analysis of Moment Structure) to validate the results obtained from the previous analysis using SPSS.

Supportive Leadership. The respondents were asked to measure the extent to which their direct supervisors applied supportive leadership behavior. Oldham and Cummings (1996) proposed an 8-item scale of supportive leadership. In this study, the scale was modified to be appropriately used in the research context. This updated scale consists of 6 items. One sample item is “My supervisor personally stays with his/her subordinates to maintain a good connection with them”.

Leader-Member Exchange (LMX). The respondents were asked to measure the LMX quality between them and their direct supervisors. LMX was assessed by using the modified psychometric property validated by Putri (2018). This scale consists of 6 items. One sample item is “I respect my supervisor’s knowledge and competence in performing his/her tasks.”

Employee Creativity. The respondents were asked to measure the extent to which they performed creativity in the workplace. Employee creativity was assessed by using the modified psychometric property validated by Sari (2019). This scale consists of 8 items. One sample item is “I promote and champion my new ideas to others in this organization.”

3.3 Preliminary Evaluation for the Study Instruments

An exploratory factor analysis (EFA) was performed for the three variables. It was found that two items of leader-member exchange (LMX) and two items of employee creativity were cross-loaded. Therefore, those items were then deleted. The validity of a measurement item by evaluating the loading value of the item. A loading value is expected to be 0.70 or more (Hair, Black, Babin, & Anderson, 2010). Loadings for supportive leadership ranged from 0.78 to 0.86 (see Table 2). Loadings for LMX ranged from 0.79 to 0.90. Finally, loadings for creativity ranged from 0.77 to 0.85. Thus, all items of the measures were valid. The square root AVEs for each construct were all higher than the correlations of each variable (Table 3). The study variables were different from each other. To conclude, convergent and discriminant validity were reached. The reliability analysis showed that Cronbach’s alphas were 0.91, 0.89, and 0.90 for supportive leadership, leader-member exchange (LMX), and employee creativity, respectively. Based on the results, the measurement scales were all reliable.

Table 2. Validity and Reliability Assessment Results

Indicator	Item Statement	Loading	AVE	α
SL1	My supervisor helps me to improve my performance at work.	0.85	0.70	0.91
SL2	My supervisor supports me to produce better outputs.	0.83		
SL3	My supervisor motivates his/her subordinates to improve.	0.85		
SL4	My supervisor personally stays with his/her subordinates to maintain a good connection with them.	0.86		
SL5	My supervisor monitors subordinates’ performance at the schedule.	0.78		
SL6	My supervisor provides feedback and constructive evaluation for better performance.	0.81		
LMX1	I admire my supervisor’s professionalism.	0.87	0.74	0.89
LMX2	I respect my supervisor’s knowledge and competence in performing his/her tasks.	Dropped		
LMX3	Sometimes, my supervisor can be so humorous.	0.90		
LMX4	My supervisor can treat me as a friend.	0.89		

LMX5	A lot of people give respect to my boss.	Dropped		
LMX6	I do not mind if my supervisor offers me to do some extra effort at work.	0.79		
EC1	I can produce new ideas that improve work performance.	0.84	0.67	0.90
EC2	I can explore alternative ways to create a better product.	0.79		
EC3	I create creative ideas.	Dropped		
EC4	I promote and champion my new ideas to others in this organization.	0.81		
EC5	I show my creativity in performing my jobs.	0.77		
EC6	I develop novel ideas in promoting new methods of doing a thing.	Dropped		
EC7	I usually have new insights for this company.	0.83		
EC8	I offer advice to leaders related to the work process.	0.85		

Source: The collected data, N = 200. Note: SL = supportive leadership, LMX = leader-member exchange, EC = employee creativity, AVE = Average Variance Extracted, the Cronbach's alpha of each variable was obtained by entering the valid items of the variable.

4. Results and Discussions

4.1 Correlation Analysis

Table 3 shows means, standard deviations, and correlations among variables. As presented in the table, each variable was positively correlated with the others.

Table 3. Means, Standard Deviations, and Correlations

Variable	Mean	SD	1	2	3
1. Supportive Leadership	4.24	0.53	0.83		
2. Leader-Member Exchange	4.27	0.56	.70**	0.86	
3. Employee Creativity	4.35	0.49	.78**	0.80**	0.82

Source: The collected data, N = 200. Note: the bolded and italicized numbers in the diagonal are the square root AVEs.

4.2 Regression Analysis

Support for the Direct Relationship Hypotheses. Hypothesis 1 (H1) expected that supportive leadership is positively related to creativity. Table 4 shows that the coefficient of the link was 0.78 ($p < 0.001$). H1 was supported. Hypothesis 2 (H2) expected that supportive leadership is positively related to LMX. Consistent with this expectation, the coefficient was 0.70 ($p < 0.001$). H2 was supported. Finally, Hypothesis 3 (H3) expected that leader-member exchange (LMX) is positively related to creativity. The coefficient was 0.80 ($p < 0.001$). H3 was also supported.

Table 4. Regression of Direct Relationships

Independent Variable	Dependent Variable	
	LMX (H2)	Creativity (H1 & H3)
Supportive leadership	0.70***	0.78***
LMX		0.80***

Source: The collected data, N = 200. Note: *** $p < 0.001$.

Support for the Mediating Relationship Hypothesis. Hypothesis 4 (H4) expected the mediating effect of leader-member exchange (LMX) in the relationship between supportive leadership and employee creativity. Based on Baron and Kenny's (1986) view, there are some conditions to evaluate to check the existence of mediating effect among variables (i.e., independent, mediating, and dependent variables). First, the independent variable must significantly account for the dependent variable. Second, the independent variable must significantly account for the mediating variable. Third, the mediating variable must significantly account for the dependent variable. From the previous analysis, the three conditions were met. The last condition is to confirm the existence of

the mediating effect. The independent and mediating variables were regressed simultaneously to the dependent variable. It was found that the coefficient of the supervisor-creativity link was 0.44 ($p < 0.001$) and the coefficient of the leader-member exchange (LMX)-creativity link was 0.49 ($p < 0.001$). The supervisor-creativity in the later analysis was less in magnitude but still significant. Therefore, the mediating effect of leader-member exchange (LMX) existed. The mediating type was partial. Finally, H4 was supported.

4.3 Supplementary Analysis: Validating the Results

To validate the findings of the prior testing, a structural equation modeling in the AMOS program was performed. Following Hayes (2009), a bootstrapping method was conducted. This method allows the estimation of a population by replicating small data samples used in an analysis. Results showed that the standardized coefficient estimates of the supportive leadership \rightarrow employee creativity link was 0.46 ($p < 0.001$, SE = 0.09, CR = 5.60), the supportive leadership \rightarrow LMX link was 0.77 ($p < 0.001$, SE = 0.09, CR = 9.52), and the LMX \rightarrow employee creativity link was 0.51 ($p < 0.001$, SE = 0.08, CR = 6.19). Therefore, H1, H2, and H3 were all reconfirmed. The indirect effect of supportive leadership on employee creativity via LMX was 0.56 ($p < 0.001$, 95% CI = [0.21, 0.60]). H4 suggesting the mediating role of LMX in the relationship between supportive leadership and employee creativity was also reconfirmed. In addition, the results of the goodness-of-fit indices were $\chi^2 = 228.44$, $\chi^2/df = 2.26$, TLI = 0.93, and CFI = 0.94. The model achieved a satisfactory goodness-of-fit. The mediational effect type was partial, meaning the effect of supportive leadership on employee creativity can be straightforward or via LMX.

4.4 Discussion

Individual creativity has significant impacts on organizational performance and survival (Brundrett, 2022; Khalili, 2018; Wajdi, 2018). The current study proposes that supportive and leader-member exchange (LMX) can support the effort to increase employee creativity to perform in the workplace. The combination of supportive leadership and leader-member exchange (LMX) could offer insights into organizational behavior knowledge and practices.

The findings of this study suggest that supportive leadership is necessary for the development of LMX and employee creativity. In addition, it is suggested that LMX could promote individual creativity. Although previous research has demonstrated the importance of LMX for creativity (Volmer, Spurk, & Niessen, 2012), it has been undeclared about how supportive leadership can promote the perception of LMX, in turn, creativity. Obviously, this work explains the ability of LMX to play a role as a mediator.

The main contribution of this work is the evidence that supportive leadership can develop the LMX perception. Supportive leadership is a leadership style that involves specific traits; it characterizes leadership behaviors as sociable, approachable, and supportive of all subordinates' situations (Dayanti et al., 2022). Leaders with this leadership style are inclined to do small but impactful things for their employees in the workplace (as reciprocal feedback), the employees support with positive performance, such as performing more creativity. All these kinds of leadership behavior can improve employees' perception of LMX quality. As LMX can stimulate work conditions (Vasudevan et al., 2019), it can enhance creativity within teams.

In practice, this work offers some insights to managers. First, managers can practice the leadership style in their work teams (see also other leadership concepts in Bans-Akutey & Ebem, 2023; Chow, 2020 for further review; Virgiawan, Riyanto, & Endri, 2021). Not all managers do not possess such inherent characteristics in them. However, organizations can stimulate this by conducting the related leadership skills. Organizations can provide various pieces of trainings for stimulating leadership behaviors. Organizations can help employees who have roles as leaders list their present leadership profile, evaluate them, and let them make plans for developments (see Kirkbride, 2006 for a review). Second, it is believed that a high-quality LMX is required in promoting performance and positive behavior in work groups or teams. Therefore, in improving the LMX quality, the practice of

supportive leadership is considered necessary. Moreover, since LMX quality is needed to cultivate a conducive cooperative environment in teams (Lam et al., 2007; Liao, Liu, & Loi, 2010), which in turn may lead to various positive employee outcomes, the organizational leaders should link the leadership traits with the social exchange relationship quality between employees and their supervisors. In relation to the context of this study, managers should understand that leadership style and LMX are associated with members' creativity.

Despite the importance of this study, some limitations should be taken into account in interpreting and using the findings in a real context. First, it seems that the correlation coefficients among the study variables are significant. Future research should be cautious in reusing the measurements. Second, the data set was taken from one company. This can cause a lack of generalizability of the findings. Future research should consider using a wider type of industry. To develop the study, future research can consider the effects of demographic variables that can shift the relational situation in the dyad relationships (Bakar & McCann, 2014; Tsui, Egan, & O'Reilly III, 1992; Tsui, Porter, & Egan, 2002). Future research can rely on the investigation of a multi-model framework. For example, a supportive supervisor can be regarded as a team-level variable that can influence the individual perception of LMX quality affecting creativity. In another arrangement, individual creativity can be aggregated into team creativity (de Vreede, Boughzala, de Vreede, & Reiter-Palmon, 2012; Han, Han, & Brass, 2014). Since creativity is one of the important measures of team performance, future research should aggregate those constructs into team-level variables. Lastly, we focus on the supportive leadership-creativity relationship link mediated by LMX. It is possible that other variables can be investigated. Future research should explain how supportive leadership can promote a climate for creativity. Another suggestion, future research can study the link between supervisor leadership and innovative work behavior (Afsar & Umrani, 2020). This construct is related but a broader concept than creativity. All suggestions mentioned will provide more fruitful findings in understanding the antecedents of creativity as well the impacts of supportive leadership.

5. Conclusion

Based on the findings, it can be concluded that supportive supervision has a positive effect on employee creativity, supportive supervision has a positive effect on the leader-member exchange (LMX) variable, and leader-member exchange (LMX) mediates the effect of supportive supervision on employee creativity.

5.1 Limitations

The use of a single company may decrease the generalizability of the results (see also Ooi & Teoh, 2021). The study used a single-rater, and the data was taken once at a time (i.e., a cross-sectional method). It may result in CMV (common method variance); the participants could perform uniformity in filling out the questionnaire. We may claim that the self-assessment was suitable for the context of this study. The respondents were eligible to assess their perception of their leaders (whether regarded as supportive or unsupportive leaders), the LMX quality, and their own creativity. Future research can employ a multi-wave or a multi-rater data collection method. Lastly, the respondents were mostly working as operators in the company. Probably, they did not have enough freedom to be creative in performing their tasks.

5.2 Suggestions

For improving the generalizability of the results, future research can replicate the findings by targeting more types of companies. Related to the CMV issue, future research can apply multi-waves in collecting data or multi-raters in assessing the scales or single raters with multi-times in data collection. In multi-wave data collection, for example, the independent and the moderator variable can be assessed at one time, but the dependent variable can be measured after the two variables are assessed with a time lag. In a multi-rate data collection method, other parties (colleagues or supervisors) can be involved in assessing employee creativity. Lastly, a replication study involving employees of higher levels might be necessary to investigate the possibly different patterns of relationships.

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References

- Afsar, B., & Umrani, W. A. (2020). Transformational leadership and innovative work behavior: The role of motivation to learn, task complexity and innovation climate. *European Journal of Innovation Management*, 23(3), 402-428.
- Atwater, L., & Carmeli, A. (2009). Leader-member exchange, feelings of energy, and involvement in creative work. *The Leadership Quarterly*, 20(3), 264-275.
- Bakar, H. A., & McCann, R. M. (2014). Matters of demographic similarity and dissimilarity in supervisor-subordinate relationships and workplace attitudes. *International Journal of Intercultural Relations*, 41, 1-16.
- Banks, G. C., Batchelor, J. H., Seers, A., O'Boyle, E. H., Pollack, J. M., & Gower, K. (2014). What does team-member exchange bring to the party? A meta-analytic review of team and leader social exchange. *Journal of Organizational Behavior*, 35(2), 273-295.
- Bans-Akutey, A., & Ehem, D. (2023). E-leadership and adaptation to technological development of telecommunication businesses in Ghana. *Annals of Management and Organization Research*, 3(4), 259-269.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Chan, S. C. H. (2019). Participative leadership and job satisfaction: The mediating role of work engagement and the moderating role of fun experienced at work. *Leadership Organization Development Journal*, 40(3), 319-333.
- Chow, T. W. (2020). Leader versus manager: Lessons from top business executives. *Annals of Management and Organization Research*, 2(1), 53-65.
- Cooke, F. L., Schuler, R., & Varma, A. (2020). Human resource management research and practice in Asia: Past, present and future. *Human Resource Management Review*, 30(4), 100778.
- Coyle-Shapiro, M., J. A., & Shore, L. M. (2007). The employee-organization relationship: Where do we go from here? *Human Resource Management Review*, 17(2), 166-179.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Cullen, K. L., Edwards, B. D., Casper, W. C., & Gue, K. R. (2014). Employees' adaptability and perceptions of change-related uncertainty: Implications for perceived organizational support, job satisfaction, and performance. *Journal of Business and Psychology*, 29(2), 269-280.
- de Vreede, T., Boughzala, I., de Vreede, G., & Reiter-Palmon, R. (2012, 4-7 Jan. 2012). *A Model and Exploratory Field Study on Team Creativity*. Paper presented at the System Science (HICSS), 2012 45th Hawaii International Conference on System Sciences.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
- Elsaied, M. M. (2019). Supportive leadership, proactive personality and employee voice behavior: The mediating role of psychological safety. *American Journal of Business*, 34(1), 2-18.
- Farid, T., Iqbal, S., Saeed, I., Irfan, S., & Akhtar, T. (2021). Impact of supportive leadership during Covid-19 on nurses' well-being: The mediating role of psychological capital. *Frontiers in Psychology*, 12, 695091.
- Farmer, S. M., Tierney, P., & Kung-McIntyre, K. (2003). Employee creativity in Taiwan: An application of role identity theory. *Academy of Management Journal*, 46(5), 618-630.
- 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.

- Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis: A Global Perspective* (Seventh Edition ed.). New Jersey: Prentice Hall.
- Han, J., Han, J., & Brass, D. J. (2014). Human capital diversity in the creation of social capital for team creativity. *Journal of Organizational Behavior*, 35(1), 54-71.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.
- Huang, X. (2012). Helplessness of empowerment: The joint effect of participative leadership and controllability attributional style on empowerment and performance. *Human Relations*, 65(3), 313-334.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73, 287-302.
- Kark, R., & Carmeli, A. (2009). Alive and creating: The mediating role of vitality and aliveness in the relationship between psychological safety and creative work involvement. *Journal of Organizational Behavior*, 30(6), 785-804.
- Khalid, A., Zafar, A., Zafar, M. A., Saqib, L., & Mushtaq, R. (2012). Role of supportive leadership as a moderator between job stress and job performance. *Information Management and Business Review*, 4(9), 487-495.
- Kim, K. Y., Atwater, L., Jolly, P., Ugwuanyi, I., Baik, K., & Yu, J. (2021). Supportive leadership and job performance: Contributions of supportive climate, team-member exchange (TMX), and group-mean TMX. *Journal of Business Research*, 134, 661-674.
- Kirkbride, P. (2006). Developing transformational leaders: the full range leadership model in action. *Industrial Commercial Training*, 38(1), 23-32.
- Klijn, M., & Tomic, W. (2010). A review of creativity within organizations from a psychological perspective. *Journal of Management Development*, 29(4), 322-343.
- Lam, W., Huang, X., & Snape, E. (2007). Feedback-seeking behavior and leader-member exchange: Do supervisor-attributed motives matter? *Academy of Management Journal*, 50(2), 348-363.
- Liao, H., Liu, D., & Loi, R. (2010). Looking at both sides of the social exchange coin: A social cognitive perspective on the joint effects of relationship quality and differentiation on creativity. *Academy of Management Journal*, 53(5), 1090-1109.
- Liden, R. C., Erdogan, B., Wayne, S. J., & Sparrowe, R. T. (2006). Leader-member exchange, differentiation, and task interdependence: Implications for individual and group performance. *Journal of Organizational Behavior*, 27(6), 723-746.
- Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology*, 85(3), 407-416.
- Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology*, 78(4), 662-674.
- Makambe, U., & Moeng, G. J. M. (2020). The effects of leadership styles on employee performance: a case of a selected commercial bank in Botswana. *Annals of Management and Organization Research*, 1(1), 39-50.
- Mulyana, A., Ridaryanthi, M., Faridah, S., Umarella, F. H., & Endri, E. (2022). Socio-emotional leadership style as implementation of situational leadership communication in the face of radical change. *Academic Journal of Interdisciplinary Studies*, 11(3), 150-161.
- Mwaisaka, D., K'Aol, G., & Ouma, C. (2019). Influence of supportive and directive leadership styles on employee job satisfaction in commercial banks in Kenya. *International Journal of Human Capital Management*, 3(2), 42-60.
- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39(3), 607-634.
- Ooi, T. P., & Teoh, K. B. (2021). Factors affecting the turnover intention among employees in Penang manufacturing industry. *Annals of Human Resource Management Research*, 1(1), 29-40.
- Pan, W., Sun, L.-Y., & Chow, I. H. S. (2012). Leader-member exchange and employee creativity: Test of a multilevel moderated mediation model. *Human Performance*, 25, 432-451.
- Putra, Y. S., & Istiyani, A. (2022). Developing organizational resilience with the mediating role of leader-member exchange. *Annals of Human Resource Management Research*, 2(1), 59-69.

- Putri, M. A. P. (2018). *Pengaruh leader-member exchange (LMX) terhadap kepuasan kerja dan kinerja dengan komitmen organisasi afektif sebagai variabel intervening pada BMT Bina Ikhsanul Fikri Yogyakarta*. (Undergraduate), Universita Muhammadiyah Yogyakarta, Yogyakarta. Retrieved from <http://repository.umy.ac.id/handle/123456789/22370>
- Qu, R., Janssen, O., & Shi, K. (2017). Leader-member exchange and follower creativity: The moderating roles of leader and follower expectations for creativity. *The International Journal of Human Resource Management*, 28(4), 603-626.
- Sari, N. I. A. (2019). *Pengaruh kepemimpinan transformational terhadap kreativitas karyawan melalui self-efficacy sebagai variabel mediasi (Studi pada karyawan Desa Wisata Batik Gulurejo dan Ngentakrejo di Kecamatan Lendah)*. (Undergraduate 2019-02-09), Universitas Muhammadiyah Yogyakarta, Yogyakarta. Retrieved from <http://repository.umy.ac.id/handle/123456789/27618>
- Shih, H.-A., & Susanto, E. (2017). Perceived identifiability, shared responsibility and innovative work behavior. *The International Journal of Human Resource Management*, 28(22), 3109-3127.
- Shih, H.-A., & Wijaya, N. H. S. (2017). Team-member exchange, voice behavior, and creative work involvement. *International Journal of Manpower*, 38(3), 417-431.
- Simorangkir, S. T., Karnati, N., & Abdullah, T. (2019). The effect of supportive leadership, learning culture, and responsibility on job performance of teacher in junior high schools of South Tangerang. *International Journal for Educational and Vocational Studies*, 1(2), 120-129.
- Tierney, P., & Farmer, S. M. (2011). Creative self-efficacy development and creative performance over time. *Journal of Applied Psychology*, 96(2), 277-293.
- Tsui, A. S., Egan, T. D., & O'Reilly III, C. A. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly*, 37(4), 549-579.
- Tsui, A. S., Porter, L. W., & Egan, T. D. (2002). When both similarities and dissimilarities matter: Extending the concept of relational demography. *Human Relations*, 55(8), 899-929.
- Virgiawan, A. R., Riyanto, S., & Endri, E. (2021). Organizational culture as a mediator motivation and transformational leadership on employee performance. *Academic Journal of Interdisciplinary Studies*, 10(3), 67-79.
- Volmer, J., Spurk, D., & Niessen, C. (2012). Leader-member exchange (LMX), job autonomy, and creative work involvement. *The Leadership Quarterly*, 23(3), 456-465.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82-111.
- Wijaya, N. H. S. (2016). *Enhancing Creativity and Innovative Behavior through Transformational Leadership and Psychological Empowerment: From the Lens of Self-Determination Theory*. (Doctoral), National Cheng Kung University, Taiwan.
- Yaping, G., Tae-Yeol, K. I. M., Deog-Ro, L. E. E., & Jing, Z. H. U. (2013). A multilevel model of team goal orientation, information exchange, and creativity. *Academy of Management Journal*, 56(3), 827-851.
- Zhou, J. (2003). When the presence of creative coworkers is related to creativity: Role of supervisor close monitoring, developmental feedback, and creative personality. *Journal of Applied Psychology*, 88(3), 413-422.
- Zhou, J., & George, J. M. (2003). Awakening employee creativity: The role of leader emotional intelligence. *The Leadership Quarterly*, 14(4-5), 545-568.