Role of Leader-Member-Exchange (LMX) in Improving Teacher Creativity

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Abstract:
This research examines the role of LMX in improving teacher creativity conducted by principals by using LMX theory. This research studies whether the principals show their maximal role in LMX and participate, empower, and collaborate with teachers to improve and increase school quality. So far, there are no apparent effects of LMX on teacher creativity. We will examine the relationship between creativity and the role of LMX as a source of relations for teachers. The data were collected from 165 teachers and 19 principals in the Education Office in Bandung City, Indonesia. The statistical analysis used in this study is Partial Least Square (PLS) with smartPLS 3.0 software. We found out that LMX still has adverse effects when the principals have regulated and limited their participation, empowerment, and collaboration in LMX, so they have obstacles in showing their creativity. Through this research, we expect that the LMX practices based on professional effect, loyalty, contribution, and respect will greatly benefit teacher creativity; thus, principals must improve their communication and setting of shared works. Results of this research propose that friendship, mutual shares with good interpersonal communication, participation, empowerment, and collaboration are essential aspects for principals to stimulate creativity.

Keywords: Creativity, Exchange, Leader, Member, Teacher

Abstrak:
Penelitian ini meneliti peran LMX dalam meningkatkan kreativitas guru yang dilakukan oleh kepala sekolah dengan menggunakan teori LMX. Penelitian ini meneliti lebih mendalam apakah para kepala sekolah menunjukkan peran mereka yang maksimal dalam LMX dan apakah mereka juga mempartisipasikan, memberdayakan, dan berkolaborasi dengan guru dalam perbaikan dan peningkatan mutu sekolah. Sejauh ini, Efek LMX pada kreativitas guru masih belum jelas. Kami berupaya meneliti hubungan antara kreativitas, dan peran LMX sebagai sumber relasional bagi para guru. Data dikumpulkan dari 165 guru dan 19 kepala sekolah pada Dinas Pendidikan Kota Bandung, Indonesia. The statistical analysis used in this study is Partial Least Square (PLS) with smartPLS 3.0 software. Kami menemukan bahwa LMX masih menyisakan pengaruh negative tatap kepalas sekolah terlalu mengatur dan membatasi partisipasi, pemberdayaan, dan kolaborasi dalam LMX sehingga mereka memiliki kendala dalam menunjukkan kreativitasnya. Dengan penelitian ini, kami telah menunjukkan bahwa praktik LMX yang didasari affect, loyalty, kontribusi, dan respek profesional sangat
bermanfaat bagi kreativitas guru, oleh karena itu kepala sekolah harus memperbaiki cara berkomunikasi dan pengaturan kerja bersama. Hasil dari penelitian ini mengusulkan bahwa silaturahmi, saling berbagi dengan komunikasi interpersonal yang baik, mempartisipasikan, memberdayakan, dan berkolaborasi adalah penting bagi kepala sekolah yang dapat memicu banyak kreatifitas yang dapat diwujudkan.

Kata Kunci: Kreativitas, Pertukaran, Pemimpin, Anggota, Guru

Please cite this article in APA style as:

INTRODUCTION

Developing innovation and maintaining the spirit to create for teachers is challenging work for principals. It requires compactness and solidarity between principals and teachers; it is beyond the substance of communication, which must emphasize an idea to be creative. Many principals then do all management work since involving teachers; some agendas will be gradually completed and harder.

The conceptual challenges of leadership that emphasize collegial relationships continue to burden many leaders in their practical application. Although easy to articulate, this has proven challenging to implement, primarily when the leadership culture is still rooted in feudal paradigms and top-down hierarchical structures. In the 21st-century leadership era, the relationship between leaders and team members has become a center of attention in leadership literature. One concept that receives special attention is Leader-Member Exchange (LMX), or the exchange between a leader and team members. LMX refers to the quality of interpersonal relationships between a leader and his team members.

However, in many current leadership practices, the relationship between leaders and team members has yet to develop fully into a collegial relationship. Often, relationships veer toward authoritarianism, where the leader maintains dominant control over team members, and decisions are usually made unilaterally.

Manadin (2023) emphasized that the LMX concept has yet to be fully realized. The idea of leadership, ideally a dynamic process in which leaders and team members influence and interact with each other, is often only a one-way relationship that fails to build quality bonds between them. Many leaders still adhere to a strong hierarchical structure, placing them in authoritative positions that emphasize the obedience of team members. Marwan's (2023) research shows that leaders who adopt a good LMX approach tend to foster a more cooperative and supportive work environment. However, the challenge lies in transforming the authoritarian paradigm, which still dominates many organizations today, into a more inclusive and collaborative relationship focused on mutually beneficial exchanges between leaders and team members.

The relationship between principals and teachers is not seen as a relationship between superiors and subordinates but a guided collegial relationship between a leader and their leader. It has characteristics of directing, guiding, empowering, and stimulating teachers to be a person with leadership characteristics. Such a relationship must involve them in decision-making or program implementation. One factor influencing employee behavior is the relationship between leaders and team members, known as Leader-Member Exchange (LMX). LMX refers to the quality of interpersonal relationships between...
leaders and team members involving mutual trust, support, and respect. The LMX theory focuses on a dyadic relationship, namely a relationship between a leader and each follower personnel, and each relation between a leader and member has a different quality (Nirmala, 2020).

Several studies are showing that employee creativity is influenced by leader-member exchange (LMX). For example, it is research taken by YlkIlmaz & Sürücü, (2021), Li (2021), and Liao (2023) states that leader-member exchange encourages innovative behavior, which assists in higher lever organizational performance. Suppose a leader uses more intensive communication to influence the responsibilities of organizational members. In that case, the members will have more precise descriptions of their duties related to work performance. Creative behavior serves as a demand for a higher level of work since it involves uncertainty. Thus, teacher creativity is expected to be improved based on work resources obtained through high interaction with principals. One factor that influences teacher creativity is the relationship between the leader and team members, known as the Leader-Member Exchange (LMX). LMX refers to the quality of interpersonal relationships between leader and team members involving mutual trust, mutual support, and mutual respect.

A good relationship between principals and teachers will significantly influence work climate and situation, which leads to the ease of achieving school goals at the ten. This good relationship is built by good communication between both parties. Otherwise, there will be disharmony caused by less good relationships, miscommunication, gaps, friction, and burnout situations by teachers. Less good relationships between leaders and members will lead to incomplete work and decreasing quality of productivity (Komariah, 2022). A good relationship between principals and teachers will be meaningful in the success of work settlement (Pinontoan, 2023). According to the researchers' opinion, a good relationship between principals and teachers will have a significant influence on work effectiveness. This opinion is in line with (Rurkikhum, 2018) stating that Leader-member exchange plays a significant role in creating employee and organizational performance. Thus, the central relationship at work directing organizational effectiveness is a relationship between leaders and their leaders, called Leader-Member-Exchange (LMX) (Buengeler et al., 2021).

Social theory (Exchange theory) confirms that a strong and solid relationship is essential to achieving organizational goals, such as a positive attitude toward work and a suitable work method (Adriani et al., 2023). The underlying principle of leadership exchange theory is the theory of social exchange. First, it substantiates that they are involved in high-quality exchange to obtain access to other resources and benefits and respond by showing behaviors that, in the end, benefit the organization and leaders (Estel et al., 2019). Relatedness between leader-member exchange (LMX) and creativity started from leader trust in participating, empowering, and collaborating to realize the policies into programs. Such trust leads to a cozy and peaceful work life.

To achieve a peaceful life at the workplace is such a life present. Not all people can feel the comfort of their working life. There are many conflicts, pressures, and veiled hostility. Creating a good work atmosphere requires a
willingness to interact well with others. Mutual respect, mutual coordination, and collaboration with partners are also necessary. Principals developing good quality relationships with teachers serve as an essential source of information and knowledge for others and show a high level of social status and superiority, which gradually turns out to be a high level of strength and capacity for mutual influence (Salk & Brannen, 2000).

LMX researchers see that a circle of leaders and employees in the form of think-thank is considered a "favorite employee," Not all people will like this term (Yuan et al., 2023). It may also happen in the relationship of principals and teachers. On the other hand, researchers record that teachers who are frequently invited and included in the principal's work team perceive that they gain many new experiences and insights that are helpful for their careers and especially lead to many innovations at work (Kurniadi, 2022). The reason is that they associate and have a good relationship with their leader (Ylkllmaz & Sürücü, 2021b). Previous studies revealed a strong and positive correlation between LMX quality and increased employee work creativity (Zhou & Hoever, 2014).

In contrast, other researchers have shown that creativity is obstructed when employees face fear, change, and criticism (Yang Y et al., 2020). The gap in these findings implies that research linking LMX with employee creativity is still uncertain and needs further investigation (Reinholt et al., 2011). To this extent, the gap in this study is based on two reasons. First, the think-tank team formed by the principal is sometimes based on the principal's interest rather than competence and career development necessity. Second, the quality of LMX could be better because teacher engagement is based on directive work execution rather than collaborative teamwork.

It is essential to investigate the role of LMX that can improve teacher work creativity to verify further how to avoid authoritative and directive LMX practices. This is based on LMX theory, which theorizes that leaders can guide and develop their followers' creativity through empathic communication (Komariah, 2022). However, not many reconfirm this because they do not know how the status of LMX conducted by principals is either directive-authoritative or participative-collaborative. Therefore, this study aims to analyze the relationship between the role of LMX and the creation of teacher creativity.

The primary purpose of this study is to analyze the role of LMX in developing teacher creativity and to broaden the literature on this subject. This research primarily contributes to the literature in three ways. First, this educational research seeks to improve the quality of school services by facilitating the development of teacher creativity. Second, research on creativity has generally focused on learning, while research on overall teacher creativity is limited. Furthermore, empirical research is needed for LMX (Xu et al., 2017). In this context, this study extends the literature on creativity. Finally, the findings are anticipated to draw the attention of education managers within the teaching service.

The new school curriculum policy requires teachers to make many innovations in learning (Hauerwas, 2023). The principal's ability as a leader is to improve and maintain quality learning services, and the greatest expectation is teachers' creative behavior. For this reason, principals who successfully develop
and stimulate employee creativity are successful (Surucu & Sesen, 2019). Nonetheless, there are some barriers to teacher creativity. The literature considers the lack of information to demonstrate and show the process of creativity in learning and the lack of respect and concern about rejecting the creative process as the three main barriers to creativity (Meirawan, 2022). Given the barriers to creativity, it is clear that principals are essential actors in activating teachers’ creativity potential. How can teachers produce new products or original ideas, insights, restructuring, inventions, or works of art that are accepted by experts as having a scientific, aesthetic, social, or technological value that previously did not exist and was not done by someone (Mesra, 2022)

Turning on employee creativity is done by developing empathic communication through the implementation of LMX roles in leadership practices (Yıklımaş & Sürücü, 2023). The attitude and behavior of principals in participating, empowering, and collaborating with teachers, as shown by principals, play an essential role in solving problems teachers face during the creative process and creating the atmosphere needed for creativity (Yang, 2020). Referring to the opinion (Crossan & Apaydin, 2010), who studied creativity and innovation conducted in the last 27 years and emphasized the importance of leadership. Leaders play a crucial role in promoting employee creativity.

The degree of the leader in plain sight is in his creativity and innovation (Komariah, 2022; Yang et al., 2020). This refers to the opinion of (Crossan & Apaydin, 2010), who studied creativity and innovation conducted over the last 27 years and emphasized the importance of leadership. Leaders play a crucial role in promoting employee creativity.

The degree of the leader in plain sight is in his creativity and innovation (Komariah, 2022). Innovative and creative leaders are leaders with high LMX who can do three things, namely: 1) able to move, namely moving people and goods to their proper place according to capacity, capability, and appropriateness with the principle of merit system; 2) able to change or substitute, namely changing mindset and behavior from complete of power to sharing of power, from one-way communication to multi-directional, from antipathy to empathy, from autocratic to democratic, from transactive to transformative; 3) being able to add, namely increasing knowledge and skills that are constantly changing by approaching the nodes where knowledge is learned, such as hanging out with fellow teachers and lecturers, bureaucrats, politicians, practitioners, to increase knowledge and knowledge, in addition to of course improving qualifications (Komariah, 2022). Measurement of Employee Creativity uses six indicators (Halakova, 2007): fluency, flexibility, originality, sensitivity, redefinition, and elaboration.

Under the demands of 21st-century competencies that touch on communication, collaboration, creativity, innovation, and problem-solving with critical thinking, 21st-century principal leadership must have characteristics according to these demands. The characteristics of school principal leadership according to the 21st century are those that have a style of uniting with teachers through compact teamwork (Komariah, 2022), which is based on mutual trust and is constructive. Such a leadership style falls into the LMX category. LMX allows the leader to become an actual transformer by changing the leadership style from
a classic style to a collaborative style, supporting cooperation, participation, and creativity (Gobillot, 2010). Leader-member exchange is a model of leadership practice that is very concerned about the quality of the reciprocal relationship between leaders and employees in an organization (Patoni, 2020).

Liao et al. (2023) argue that there is a significant positive relationship between LMX and creativity. LMX is defined as the extent to which employees perceive their relationship with their superiors based on mutual trust, respect, and obligation, which produce influence between employees and their superiors. LMX focuses on the relationship between superiors and each of their subordinates, which aims to increase organizational success by creating a positive relationship between superiors and subordinates (Yıkılmaz & Sürücü, 2023). LMX is not only limited to work relationships, but this theory also supports both leaders and employees to provide feedback to each other (Patoni, 2020). Leader-member exchange is a reciprocal relationship involving communication between leaders and employees through familiarity, contributing to mutual loyalty and respect between individuals. LMX measurement uses four indicators (Liden & Maslyn, 1998) namely Affect, Contribution, Loyalty, and Professional Respect. In line with the existing literature, the following hypotheses have been developed in this research.

H1: LMX has positive and significant influences on Teacher Creativity

![Figure 1: Conceptual Framework](Source: Authors, 2023)

- Af-Affect
- Co-Contribution
- Lo-Loyalty
- PR-Professional Respect
- Fl-Fluency
- Fx-Flexibility
- Or-Originality
- Sn-Sensitivity
- Rd-Redefinition
- El-Elaboration

RESEARCH METHODS
This research uses a quantitative approach focusing on hypothesis testing to find the truth (Sugiyono, 2015). This research was conducted at the Education Office, Bandung City, West Java, Indonesia. In this study, there were 184 samples of 165 teachers and 19 principals using a probability sampling technique, namely purposive sampling, in which the sampling technique was carried out with specific considerations or criteria. The measurement scale in this study uses a Likert scale, namely a scale of 1-5. The analysis technique uses (1) calculation of the respondent’s tendency score and descriptive analysis, (2) analysis of requirements testing, data normality test, data homogeneity test, and data linearity test, and (3) hypothesis testing using Partial Least Square (PLS) with the help of smartPLS 3.0 software.

Leader-member exchange (LMX) was measured on a four-item Likert-type five-point scale (Graen & Uhl-Bien, 1995; Liden & Maslyn, 1998). Teachers were asked to provide feedback on the quality of their relationship with their respective principals. Sample items include: "Does the principal demonstrate a democratic working relationship with you?" and "Does the Principal give full confidence in delegating work to you?". The scale items range from (1 = “very suboptimal”, 5 = “very optimal”).

Teacher creativity is measured with a six-item Likert five-point scale (Tierney et al., 1999). Principals were asked to provide their responses for each teacher. Sample items included “Teachers are focused on demonstrating originality in their work” and “Teacher-generated ideas are innovative for student learning.”

RESULTS AND DISCUSSIONS

Based on the results of the research and data processing that has been carried out, an overview of the LMX of school principals and teacher creativity is described as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>Scale</th>
<th>Total score</th>
<th>Ideal score</th>
<th>Percentage</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 2 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Affection</td>
<td>0 0</td>
<td>22 100 62</td>
<td>776</td>
<td>920</td>
<td>84.35%</td>
</tr>
<tr>
<td>2</td>
<td>Contribution</td>
<td>4 7</td>
<td>40 87 46</td>
<td>716</td>
<td>920</td>
<td>77.82%</td>
</tr>
<tr>
<td>3</td>
<td>Loyalty</td>
<td>1 10</td>
<td>33 85 55</td>
<td>714</td>
<td>920</td>
<td>77.60%</td>
</tr>
<tr>
<td>4</td>
<td>Professional respect</td>
<td>1 11</td>
<td>35 79 58</td>
<td>734</td>
<td>920</td>
<td>79.78%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6 28</td>
<td>127 352 223</td>
<td>2940</td>
<td>3680</td>
<td>79.87%</td>
</tr>
</tbody>
</table>

Sources: Author, (2023)

Based on the calculation results in the table above, it is obtained the percentage by 79.87% for the respondents’ responses to the LMX variable with medium category.
Table 2. Description of Teacher Creativity

<table>
<thead>
<tr>
<th>No.</th>
<th>Questions</th>
<th>Scale</th>
<th>Total score</th>
<th>Ideal score</th>
<th>Percentage</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fluency</td>
<td>0 0</td>
<td>36 98 50</td>
<td>750 920</td>
<td>82%</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Flexibility</td>
<td>0 0</td>
<td>49 88 47</td>
<td>734 920</td>
<td>80%</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>Originality</td>
<td>0 0</td>
<td>40 88 56</td>
<td>752 920</td>
<td>82%</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>Sensitivity</td>
<td>0 0</td>
<td>64 74 46</td>
<td>718 920</td>
<td>78%</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>Redefinition</td>
<td>0 0</td>
<td>57 66 61</td>
<td>740 920</td>
<td>80%</td>
<td>Medium</td>
</tr>
<tr>
<td>6</td>
<td>Elaboration</td>
<td>0 0</td>
<td>36 99 49</td>
<td>749 920</td>
<td>81.95%</td>
<td>High</td>
</tr>
</tbody>
</table>

Total 0 0 282 513 309 4443 5520 80% Medium

Sources: Author, (2023)

Based on the calculation results in the table above, it is obtained the percentage by 80% for the respondents’ responses to the teacher Creativity variable with the medium category.

Table 3. Validity Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicators</th>
<th>Factor Loading</th>
<th>AVE</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader Member Exchange</td>
<td>AF</td>
<td>0.932</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO</td>
<td>0.959</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LO</td>
<td>0.984</td>
<td>0.982</td>
<td>0.982</td>
</tr>
<tr>
<td></td>
<td>PR</td>
<td>0.986</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Creativity</td>
<td>EL</td>
<td>0.969</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FL</td>
<td>0.970</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FX</td>
<td>0.970</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>0.967</td>
<td>0.986</td>
<td>0.986</td>
</tr>
<tr>
<td></td>
<td>RD</td>
<td>0.942</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN</td>
<td>0.945</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Author, (2023)

The results of the validity test of each item of the questionnaire question have a good score (valid) because it has met the requirement, namely the score of loadings factor is more than 0.50, and the reliability test of each latent variable meets the requirements. Namely, the score for composite reliability is more than 0.70 (Ghozali & Latan, 2015).
Figure 1. Structural model  
Sources: Author, (2023)

Table 4. Fit of Model

<table>
<thead>
<tr>
<th>Fit of Model</th>
<th>Estimated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRMR</td>
<td>0.027</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>779.882</td>
</tr>
<tr>
<td>NFI</td>
<td>0.819</td>
</tr>
</tbody>
</table>

Table 4. Fit of the Model describes that Leader-Member Exchange is the significant model to the Teacher Creativity based on the fit of model SRMR= 0.027 < 0.05; Chi-Square= 799.882; NFI= 0.819 the model has met the requirements so that the mode is said to be fit.

Figure 2. Measurement Model Test  
Sources: Author, (2023)

Figure 2 shows the influence contribution of each indicator to the latent variable and describes the extent of influences obtained by each indicator, which can be described in Table 5 and Table 6.
Table 5. Contribution of Leader Member Exchange (LMX) Reflective Variable

<table>
<thead>
<tr>
<th>Indicators of (Leader Member Exchange)</th>
<th>Loading Factor (LMX)</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF</td>
<td>0.932</td>
<td>0.000</td>
</tr>
<tr>
<td>CO</td>
<td>0.959</td>
<td>0.000</td>
</tr>
<tr>
<td>LO</td>
<td>0.984</td>
<td>0.000</td>
</tr>
<tr>
<td>PR</td>
<td>0.986</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Sources: Author, (2023)

Table 5. The contribution of the Leader-Member Exchange (LMX) variable has positive and significant influences on each indicator, namely the affective indicator with a positive effect of 0.932 and a significant one with P-values of 0.000 < 0.05; the contribution indicator has a positive effect of 0.959 and a significant one with P-values by 0.000 < 0.05; the loyalty indicator has positive effect by 0.984 and significant one with P-values by 0.000 < 0.05; Professional Respect indicator has positive effect by 0.986 and significant one with P-values by 0.000 < 0.05.

Table 6. Contribution of Teacher Creativity Reflective Variable

<table>
<thead>
<tr>
<th>Indicators of (Teacher Creativity)</th>
<th>Loading Factor (LMX)</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>El</td>
<td>0.969</td>
<td>0.000</td>
</tr>
<tr>
<td>Fl</td>
<td>0.970</td>
<td>0.000</td>
</tr>
<tr>
<td>Fx</td>
<td>0.970</td>
<td>0.000</td>
</tr>
<tr>
<td>Or</td>
<td>0.967</td>
<td>0.000</td>
</tr>
<tr>
<td>Rd</td>
<td>0.942</td>
<td>0.000</td>
</tr>
<tr>
<td>Sn</td>
<td>0.945</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Sources: Author, (2023)

Table 6. The contribution of the Teacher Creativity variable has positive and significant influences on each indicator, namely the elaboration indicator with a positive effect of 0.969, and significant one with P-values of 0.000 < 0.05; the Fluency indicator has a positive effect of 0.970 and a significant one with P-values by 0.000 < 0.05; the Flexibility indicator has positive effect by 0.970 and significant one with P-values by 0.000 < 0.05; Originality indicator has positive effect by 0.967 and significant one with P-values by 0.000 < 0.05. The redefinition indicator has a positive effect of 0.942 and a significant one with P-values of 0.000 < 0.05. The sensitivity indicator has a positive effect of 0.945 and a significant one with P-values of 0.000 < 0.05.

Table 7. Determination Coefficient of Teacher Creativity variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Creativity</td>
<td>0.896</td>
</tr>
</tbody>
</table>

Sources: Author, (2023)

Table 7. The determination Coefficient of the Teacher Creativity variable describes that contribution on Leader-Member Exchange independent variable (Affection, contribution, loyalty, and professional respect) by 89.6% ($R^2=0.896$)
have been described by Teacher Creativity variable and by 10.4% described by other caused beyond the Teacher Creativity.

### Table 8. Hypotheses Test

<table>
<thead>
<tr>
<th>Inter-Variable Relation</th>
<th>T statistics</th>
<th>P-values</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMX → Teacher Creativity</td>
<td>121.035</td>
<td>0.000</td>
<td>Significant, Hypothesis is accepted</td>
</tr>
</tbody>
</table>

Sources: Author, (2023)

Table 8. The Hypotheses test shows that P-Value is less than 0.05 namely, 0.000, it means that LMX has positive and significant effects on teacher creativity.

There is excellent convincing clarity about LMX's influence on teacher creativity. School as an educational institute functions as a place to educate life, which requires many creative teachers. Such creative teachers are essential in supplying students with expected abilities. Results from research (Liao, 2023) are based on the phenomena in the learning process in which teachers must keep producing creative ideas to achieve educational goals. (Ata-Akturk & Sevimli-Celik, 2023) Exposed that creativity is a source of innovation and reliable scientific findings to be used as the core of classroom activities and teaching.

Based on the tests conducted in the study, it has been found that LMX influences teacher creativity. This is supported by the description of respondents' answers to the LMX variable of school leaders included in the score category above sufficient with a frequency of 79.87%. This shows that the application of LMX in school leadership has been carried out and must continue to improve its existence with empathic communication interactions. Likewise, the description of respondents' answers to the variable teacher creativity in the Bandung City education office is in the medium score category with a frequency of 80%. The existence of creativity for teachers to learn is essential in this 4.0 era. The 4C demands, namely creativity, communication, collaboration, and critical thinking, require high teacher creativity. Thus, LMX must be studied for its effectiveness and applied to build teacher creativity.

LMX has a very high contribution to teacher creativity. LMX is very important in school leadership practices. Activities that show a high level of LMX include participating, empowering, and collaborating to develop a solid team, mutual respect, and mutual trust. With such LMX, teachers will develop their knowledge, understanding, and skills. Robbins & Judge (2011) suggested LMX is the interaction between leaders and members (subordinates); leaders implicitly categorize their subordinates as "in the group" or "out-group" and that such a relationship will be relatively stable for a more extended period.

Teacher creativity is formed according to the relationship between teachers and their leaders. Teachers who establish a good relationship, maintain quality communication with the leader, cooperate, trust each other, and aim to give their best for the leader will, in turn, develop a good working climate, and there will be teacher-principal transformation. This transformation occurs because there is a comfortable climate to exchange knowledge and develop ideas for the best results (Yıkılmaz & Sürücü, 2023). This perspective states that employees who form strong trust relationships (high LMX) with their leaders will have more creative
ideas and perform more actively (Park & Jo, 2018). High-quality LMX relationships give employees more decision-making opportunities and capabilities, positively correlated with creativity and innovation (Kim et al., 2020). Social exchange theory, which supports the literature, states that employees will work hard and show high creativity in return for leaders' support, trust, and other resources (e.g., autonomy) (Meng, 2017).

**Practical Contribution to The Science of Islamic Education Management**

Leader-member exchange (LMX) and teacher creativity significantly contribute to the development of Islamic education management science. One of the verses in the Qur'an that describes the importance of collegial or deliberative-based leadership principles justifies the importance of applying research findings on LMX as a collegial and collaborative concept. This is in line with Surah Ali-Imran (3) verse 159, which reads:

فِي مَا رَحْمَةٌ مِّنَ اللَّهِ لَّهُمْ وَلَوْ كَنْتُمْ فَظِّينَ فَاغْفِلُوا مِّنْ حَوْلِكَ وَٱسْتَغْفِرُوا لِلَّهِ وَشَاوِرُوهُمْ فِي ٱلَّمْرِ إِذَا عَزَمْتَ فَوَكَّلْهُ عَلَى ٱللَّهِ إِنَّ ٱللَّهَ يُبُّ ٱلْمُتَوَلِّينَ

“So by mercy from Allāh, [O Muḥammad], you were lenient with them. Moreover, if you had been rude [in speech] and harsh in heart, they would have disbanded from about you. So pardon them, ask for forgiveness, and consult them in the matter. Moreover, when you have decided, then rely upon Allāh. Indeed, Allāh loves those who rely [upon Him].”

This research contains conclusions about the importance of LMX in leadership, clarifying, explaining, and justifying the importance of deliberation, consultation, and collaboration in leadership to achieve calm, grace, and success in every endeavor. This shows that the principle of collegial leadership is one of the essential foundations in Islam for achieving reasonable goals and obtaining blessings from Allah SWT.

**CONCLUSION**

LMX has positive and significant influences on teacher creativity. The existence of LMX practices applied by principals will stimulate the creation of teacher creativity to serve in teacher learning and task completion with a high level of creativity. LMX contributes to teacher creativity, namely the LMX, which stimulates professional respect, loyalty, and affection. LMX is applied by principals based on professional respect given by competent and experienced principals. LMX, based on principal loyalty, is the characteristic of consistently committing to participate, empower, and collaborate to improve school quality with teachers. LMX, based on contribution, is the principals who always try to contribute their insights and work together to develop school quality by creating a conducive work climate. LMX, based on the effects, serves a central role in the LMX process with authentic leadership characteristics, namely influencing others to know about doing good deeds, contributing, and being loyal to improve educational quality.
There will be good creativity if there is an exemplary LMX implementation. Creative teachers perform highly in Elaboration, Fluency, Flexibility, Originality, redefinition, and sensitivity. Teachers who can elaborate can build on and expand the principal's ideas when implementing the program. Fluency teachers are very fluent in developing many ideas and can implement them well. Flexibility teachers are highly adaptable and flexible in rapidly changing situations. Originality teachers have original ideas when implementing school and learning programs. Teachers with redefinition skills are teachers with a good level of critical thinking in implementing school programs and learning. Sensitivity teachers are teachers who are sensitive to the situation and conditions of the school, especially regarding student learning issues and their students. They can detect signals of problems and opportunities for ideas that inspire new ideas in improving and upgrading learning.

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