STRENGTHENING EMPOWERMENT, SELF-EFFICIENCY, AND MOTIVATION IN EFFORTS TO INCREASE TEACHER CREATIVITY

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KEYWORDS

emnowerment, self-efficiency, motivation, teacher.

ABSTRACT

This research aims to identify and analyze the strengthening of Empowerment, self-efficacy, and motivation to increase teacher creativity. The method used in this research is quantitative research using survey methods. Data analysis techniques in this study use path analysis techniques (path analysis). The population in this study was 414 teachers spread across 134 institutions in 40 districts of Bogor Regency. The results showed a significant relationship between Empowerment, self-efficacy, motivation, and creativity of kindergarten teachers in the Bogor Regency area. This research implies that to increase teachers' creativity in Kindergartens accredited B in Bogor Regency, it is necessary to strengthen Empowerment, self-efficacy, and motivation. Empowerment can be done through giving authority, building self-confidence, authority in decision-making, sharing knowledge, and increasing a sense of contribution. Self-efficacy can be increased by increasing self-confidence, motivation to complete tasks, commitment, high performance, and resilience in facing problems. Motivation can be increased through internal and external factors that affect the drive to work effectively.

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INTRODUCTION

Education development in Indonesia is proliferating increasingly high science and technology. This has consequences in the form of demands for adaptation to the world of Education at all levels of Education, especially at the level of early childhood education, which forms the basis of preschool Education. Growth and development in early childhood apply a child-centered learning system with a fun concept, namely playing while learning (Holis, 2017).

The Ministry of Education, Culture, Research, and Technology has a policy for implementing learning with the concept of independent learning. The independent learning program is implemented at all levels of Education, from early childhood to tertiary Education, at the formal and informal levels (Suhandi, 2023). Independent learning provides novelty for early childhood educators at the formal level, namely kindergarten. In this case, educators have the independence to develop learning tools and apply them in the learning process. Independence in implementing learning will provide free space and time for creativity and innovation in learning development to make the learning process fun.

The series of independent learning programs include the development of learning tools, in this case, a series of curricula, learning media, and teaching methods which become a series by adjusting to learning outcomes through the growth and development of early childhood in a holistic, integrative manner. For this reason, in seeking fun learning in early childhood education, teachers are expected to be able to express their creativity.
Teachers face unique challenges in providing services in early childhood education, considering some of the characteristics of early childhood. Sri Wasis, in the Journal of Pedagogy - Vol 9 No 2 of 2022, entitled The Importance of Implementing Independent Learning in Early Childhood, states that early childhood has several characteristics, including: 1) Early childhood is unique. Every child is different from one another. Children have unique learning styles, interests, and family background learning; 2) Early childhood is a potential period or golden age; 3) Early childhood is relatively spontaneous. Early childhood acts as it is and is not good at pretending; 4) Early childhood tends to be careless and uncalculated. They do not consider whether or not an action is dangerous; 5) Early childhood is active and energetic. They tend to move and never tire; 6) Early childhood is egocentric. They tend to see everything from their point of view. They consider the objects around them theirs; 7) Early childhood has an intense curiosity, so they often ask questions about things around them (Wasis, 2022).

Teacher creativity is an absolute thing that must be owned and developed by an early childhood teacher to facilitate the development, interests, and needs of early childhood (Adam, 2019). Teachers who can generate and develop creative ideas and innovations will make children more interested in participating in learning. PAUD teachers play an important role in facilitating optimal aspects of child development because children whose development is optimally stimulated will have a good impact in their next life (Yuniarni, 2016). Thus, it is necessary to have awareness in the teacher to develop his creativity to produce a broad-minded generation with good morals.

However, from a study of the 2015 and 2017 Teacher Competency Tests, it is clear that teacher creativity, in general, still needs to be improved. The results of the 2015 Teacher Competency Test, as presented by the Directorate General of Teachers and Education Personnel (GTK) Kemdikbudristek Nunuk Suryani at the XIII National Teacher Scientific Meeting (TING), were stated to be lacking. The average teacher competency score is 50.64 points. The competency scores of PNS teachers are below those of permanent foundation teachers who teach in private schools. In detail, the competence score for PNS teachers who are undergraduates is 51.43 points; foundation permanent teachers get a score of 52.82 points, regional honorary teachers (Honda) score 48.21 points, and non-permanent teachers (GTT) have a score of 49.19 points (Jawapos, 2021). The UKG assessment, which is still below the average, does not necessarily mean that the teacher's creativity is low. However, at least this can illustrate the lack of teacher competence, especially pedagogic competence, one of the UKG test materials. Several things are related to teacher creativity in organizing teaching and learning activities within the pedagogical competence itself.

The results of research conducted by Irna, S.TP, M.Pd from PG PAUD STKIP Muhammadiyah Bogor about the Challenges and Resilience of PAUD Teachers during the Covid-19 Pandemic are quoted from ISSN Journal: 2716-3334 FASCHO. 11(1), 71-87, states that of the 14 teachers studied, ten teachers experienced difficulties in using devices during learning during the Covid 19 period (Irna, 2021). The difficulties experienced include using devices, getting quotes, and teachers needing to have devices.

The results of the initial research conducted by researchers on 21-25 November 2022 with 32 kindergarten teachers as respondents in Bogor Regency show that teacher creativity still needs to be improved. Initial research results on creativity show the following results:

1. There are 27% of teachers who are not optimal in generating new ideas, which can be seen from the teachers in this study who are included in the "Never" and "Never" categories using new learning strategies and methods, designing new learning tools, doing icebreaking and brainstorming when start learning, create new games and modify songs for learning.
2. There are 25% of teachers who are not yet optimal in showing open-mindedness, which can be seen from the teachers in this study who are included in the "Ever" and "Never" categories having discussions with colleagues, accepting new things that have not been mastered, caring about important information, convey thoughts to improve learning, learn new things, consider risks, provide opportunities for students to express opinions and reflect after learning.

3. There are 41% of teachers who are still not optimal in utilizing technology, which can be seen from the teachers in this study who are included in the "Ever" and "Never" categories in using internet technology, attending training on technology, participating in discussion forums, utilizing e-books, making learning videos, conducting class discussions, and utilizing the latest applications for learning.

4. As many as 27% of teachers have not been optimal in terms of persistence, namely, the ability to survive amid pressure and difficulties, which can be seen from the teachers in this study who are included in the "Ever" and "Never" categories in assisting if students experience difficulties, easily give up if they experience problems. difficult, exploring students' talents and interests, looking for alternative problem-solving, setting an example to students, and developing an interactive learning atmosphere.

5. As many as 33% of teachers are still not optimal in being proactive, namely, the existence of initiatives in completing their work; where this can be seen from the teachers in this study who are included in the "Never" and "Never" categories to take the initiative to provide additional learning to students who need, do research, collecting assignments given earlier, developing teaching and learning media with creative techniques.

The results of the National Teacher Competency Test, previous research, and initial surveys indicate that teacher creativity still needs to be optimally manifested. Hence, researchers need to examine the obstacles to realizing teacher creativity in kindergartens more deeply.

For this reason, researchers believe that research on teacher creativity, especially for kindergarten teachers, is still essential. Moreover, there needs to be more research on the creativity of kindergarten teachers linking the three independent variables. So the purpose of this research is to find out and analyze the strengthening of Empowerment, self-efficacy, and motivation to increase teacher creativity. Moreover, the expected benefits of this research are to complete the gaps in previous research (state of the art) and the existence of novelty for further research to increase teacher creativity.

METHODS

The type of research used in this research is quantitative research using survey methods. Data analysis techniques in this study used path analysis techniques. The research will be conducted in 55 kindergartens spread across ten sub-districts in Bogor Regency. The overall research time will last 10 (ten) months, from September 2022 to June 2023, from submitting the title to the final stage of the research report. The population of this study consists of kindergarten teachers in Bogor Regency, whose institution has been accredited B according to deposit data from the District Education Office. Bogor in 2022, namely 414 teachers spread across 134 institutions in 40 sub-districts of Bogor Regency.

The sampling technique used in this study used proportional random sampling with the calculation of sample size using the Slovin equation at a margin of error of 5%. The number of samples in the formula calculation is 112 people. The analysis technique used in this research is hypothesis testing.
RESULTS AND DISCUSSION

Hypothesis test

a. First Hypothesis Testing
The first hypothesis is tested by testing the direct effect of Empowerment ($X_1$) on teacher creativity ($Y$). To test that Empowerment ($X_1$) directly affects teacher creativity ($Y$), the first hypothesis is tested as follows.

$$H_0: \beta_{y1} \leq 0$$
$$H_1: \beta_{y1} > 0$$

The calculation results obtained path coefficient ($\beta_{y1}$) = 0.260 and Sig = 0.005 < 0.05. At the same time, $t_{count} = 2.886$ and $t_{table}$ at the fundamental level $\alpha = 0.05$, $t_{table} = 1.98$, $t_{count} > t_{table}$ means that $H_0$ is rejected and $H_1$ is accepted. Thus, the empowerment variable ($X_1$) directly affects teacher creativity ($Y$). That is, more vital Empowerment will increase the creativity of kindergarten teachers in the Bogor Regency area.

b. Second Hypothesis Testing
The second hypothesis tests the direct effect of self-efficacy ($X_2$) on teacher creativity ($Y$). To test that self-efficacy ($X_2$) directly affects teacher creativity ($Y$), the hypotheses are tested as follows.

$$H_0: \beta_{y2} \leq 0$$
$$H_1: \beta_{y2} > 0$$

Path coefficient ($\beta_{y2}$) = 0.202 and Sig = 0.014 < 0.05 from the calculation results obtained. In comparison, $t_{count} = 2.501$ and $t_{table}$ at the absolute level $\alpha = 0.05$, $t_{table} = 1.98$, $t_{count} > t_{table}$ means that $H_0$ is rejected and $H_1$ is accepted. Thus, the self-efficacy variable ($X_2$) directly affects teacher creativity ($Y$). That is, stronger self-efficacy will increase the creativity of kindergarten teachers in the Bogor Regency area.

c. Third Hypothesis Testing
The third hypothesis is tested by testing the direct effect of motivation ($X_3$) on teacher creativity ($Y$). To test that motivation ($X_3$) directly affects teacher creativity ($Y$), the hypotheses tested are as follows.

$$H_0: \beta_{y3} \leq 0$$
$$H_1: \beta_{y3} > 0$$

Path coefficient ($\beta_{y3}$) = 0.404 and Sig = 0.000 < 0.05 from the calculation results obtained. In comparison, $t_{count} = 4.434$ and $t_{table}$ at the fundamental level $\alpha = 0.05$ obtained $t_{table} = 1.98$, then $t_{count} > t_{table}$ means that $H_0$ is rejected and $H_1$ is accepted. Thus, the motivational variable ($X_3$) directly affects teacher creativity ($Y$). That is, the stronger the teacher's motivation will increase the creativity of kindergarten teachers in the Bogor Regency area.

d. Fourth Hypothesis Testing
The fourth hypothesis is tested by testing the direct effect of Empowerment ($X_1$) on teacher motivation ($X_3$). To test that Empowerment ($X_1$) directly affects teacher motivation ($X_3$), the hypotheses are tested as follows.

$$H_0: \beta_{31} \leq 0$$
$$H_1: \beta_{31} > 0$$

Path coefficient ($\beta_{31}$) = 0.518 and Sig = 0.000 < 0.05 from the calculation results obtained. In comparison, $t_{count} = 6.433$ and $t_{table}$ at the absolute level $\alpha = 0.05$ obtained $t_{table} = 1.98$, then $t_{count} > t_{table}$ means that $H_0$ is rejected and $H_1$ is accepted. Thus, the empowerment variable ($X_1$) directly affects teacher motivation ($X_3$). That is, the stronger the Empowerment, the higher the motivation of kindergarten teachers in the Bogor Regency area.
e. Fifth Hypothesis Testing

The fifth hypothesis tests the direct effect of self-efficacy ($X_2$) on teacher motivation ($X_3$). To test that self-efficacy ($X_2$) directly affects teacher motivation ($X_3$), the hypotheses tested are as follows.

\[ H_0 : \beta_{32} \leq 0 \]
\[ H_1 : \beta_{32} > 0 \]

Path coefficient ($\beta_{32}$) = 0.285 and Sig = 0.001 < 0.05 from the calculation results obtained. While $t_{\text{count}} = 3.531$ and $t_{\text{table}}$ at the fundamental level $\alpha = 0.05$ obtained $t_{\text{table}} = 1.98$, then $t_{\text{count}} > t_{\text{table}}$ means that $H_0$ is rejected and $H_1$ is accepted. Thus, the self-efficacy variable ($X_2$) directly affects teacher motivation ($X_3$). That is, stronger self-efficacy will increase the motivation of kindergarten teachers in the Bogor Regency area.

f. Sixth Hypothesis Testing

The sixth hypothesis is carried out by testing the direct effect of Empowerment ($X_1$) on teacher self-efficacy ($X_2$). To test that Empowerment ($X_1$) directly affects teacher self-efficacy ($X_2$), the hypotheses tested are as follows.

\[ H_0 : \beta_{21} \leq 0 \]
\[ H_1 : \beta_{21} > 0 \]

Path coefficient ($\beta_{21}$) = 0.562 and Sig = 0.000 < 0.05 from the calculation results obtained. In comparison, $t_{\text{count}} = 7.119$ and $t_{\text{table}}$ at the fundamental level $\alpha = 0.05$ obtained $t_{\text{table}} = 1.98$, then $t_{\text{count}} > t_{\text{table}}$ means that $H_0$ is rejected and $H_1$ is accepted. Thus, the empowerment variable ($X_1$) directly affects teacher self-efficacy ($X_2$). That is, the stronger the Empowerment, the self-efficacy of kindergarten teachers in the Bogor Regency area will increase.

g. Seventh Hypothesis Testing

Hypothesis testing is carried out by testing the indirect effect of Empowerment ($X_1$) on teacher creativity ($Y$) through motivation ($X_3$). The statistical hypothesis tested is as follows.

\[ H_0 : \beta_{y31} \leq 0 \]
\[ H_1 : \beta_{y31} > 0 \]

The results of the calculation of the hypothesis are as follows.

\[ \beta_{y31} = \beta_{31} \times \beta_{y3} = 0.518 \times 0.404 = 0.209 \]
\[ S_{31} = 0.086 \]
\[ S_{y3} = 0.111 \]
\[ S_g = \sqrt{\frac{(n_{31}-1)S_{31}^2 + (n_{y3}-1)S_{y3}^2}{n_{31}+n_{y3}-2}} = 0.100 \]
\[ t_{\text{count}} = \frac{\beta_{y31}}{S_g} = \frac{0.209}{0.100} = 2.098 \]
\[ t_{\text{table}} \text{ for } \alpha = 0.05 \text{ and } dk = n-k-1 = 112-2-1 = 109 \text{ 2 party test is } 1.982. \]

The path coefficient of 31 = 0.209 is obtained from the calculation results. The test results obtained a $t_{\text{count}}$ of 2.098, a $t_{\text{table}}$ (dk = 109, with $\alpha = 0.05$) of 1.982, and a $t_{\text{table}}$ (dk = 109, with $\alpha = 0.01$) of 2.622. The $t_{\text{count}} > t_{\text{table}}$ is obtained based on the calculation results. Thus, it can be concluded that Empowerment has a positive and significant indirect effect on teacher creativity through motivation.

h. Eighth Hypothesis Testing

Hypothesis testing is carried out by testing the indirect effect of self-efficacy ($X_2$) on teacher creativity ($Y$) through motivation ($X_3$). The statistical hypothesis tested is as follows.
H0: \( \beta_{y32} \leq 0 \)
H1: \( \beta_{y32} > 0 \)

The results of the calculation of the hypothesis are as follows.
\[
\beta_{y32} = \beta_{32} \times \beta_{y3} = 0.285 \times 0.404 = 0.115
\]
\( S_{32} = 0.098 \)
\( S_{y3} = 0.111 \)
\( S_g = \sqrt{\frac{(n_{y32} - 1)S_{y3}^2 + (n_{y32} - 1)S_{y3}^2}{n_{y32} + n_{y32} - 2}} = 0.105 \)
\( t_{\text{count}} = \frac{\beta_{y32}}{S_g} = \frac{0.115}{0.105} = 1.095 \)

\( t_{\text{table}} \) for \( \alpha = 0.05 \) and \( dk = n - k - 1 = 112 - 2 - 1 = 109 \) 2 party test is 1.982.

From the calculation results obtained path coefficient \( \beta_{y32} = 0.115 \). The test results obtained a \( t_{\text{count}} \) of 1.095, a \( t_{\text{table}} \) (\( dk = 109 \), with \( \alpha = 0.05 \)) of 1.982, and a \( t_{\text{table}} \) (\( dk = 109 \), with \( \alpha = 0.01 \)) of 2.622. Based on the results of the calculation as shown, \( t_{\text{count}} < t_{\text{table}} \). Thus it can be concluded that there is a positive indirect effect that is not significant self-efficacy on teacher creativity through motivation.

### i. Ninth Hypothesis Testing

Hypothesis testing is carried out by testing the indirect effect of Empowerment (X₁) on creativity (Y) through self-efficacy (X₂). The statistical hypothesis tested is as follows.

H0: \( \beta_{21} \leq 0 \)
H1: \( \beta_{21} > 0 \)

The results of the calculation of the hypothesis are as follows.
\[
\beta_{21} = \beta_{21} \times \beta_{y3} = 0.562 \times 0.285 = 0.160
\]
\( S_{21} = 0.069 \)
\( S_{32} = 0.098 \)
\( S_g = \sqrt{\frac{(n_{21} - 1)S_{21}^2 + (n_{y2} - 1)S_{y2}^2}{n_{21} + n_{y2} - 2}} = 0.085 \)
\( t_{\text{count}} = \frac{\beta_{y32}}{S_g} = \frac{0.160}{0.085} = 1.881 \)

\( t_{\text{table}} \) for \( \alpha = 0.05 \) and \( dk = n - k - 1 = 112 - 2 - 1 = 109 \) 2 party test is 1.982.

The path coefficient of \( 21 = 0.160 \) is obtained from the calculation results. The test results obtained a \( t_{\text{count}} \) of 1.881, a \( t_{\text{table}} \) (\( dk = 109 \), with \( \alpha = 0.05 \)) of 1.982, and a \( t_{\text{table}} \) (\( dk = 109 \), with \( \alpha = 0.01 \)) of 2.622. Based on the results of the calculation as shown, \( t_{\text{count}} < t_{\text{table}} \). Thus it can be concluded that a positive indirect effect is not significant in empowering the teacher's creativity through self-efficacy.

### Calculation of Direct and Indirect Effects Between Variables

#### a. Substructure-1

1) Direct and Indirect Effects of X₁ on Y
   a) The direct effect of X₁ on Y is \( \beta_{y1} = 0.260 \)
   b) Indirect effect of X₁ on Y through X₂: \( (\beta_{y3}) (\beta_{y3}) = (0.518) (0.404) = 0.209 \)
   c) Total direct and indirect effects of X₁ on Y: 0.260+0.209 = 0.469

2) Direct and Indirect Effects of X₂ on Y
   a) The direct effect of X₂ on Y is \( \beta_{y2} = 0.202 \)
   b) Indirect effect of X₂ on Y through X₃: \( (\beta_{y3}) (\beta_{y3}) = (0.285) (0.404) = 0.115 \)
   c) Total direct and indirect effects of X₂ on Y: 0.202+0.115 = 0.317
3) Direct and Indirect Effects of $X_3$ on $Y$
   a) The direct effect of $X_3$ on $Y$ is $\beta_{Y3} = 0.404$
   b) no indirect effect of $X_3$ on $Y = 0$
   c) Total direct and indirect effects of $X_3$ on $Y$: $0.404 + 0 = 0.404$

b. Substructure-2

1) Direct and Indirect Effects of $X_1$ on $X_3$
   a) The direct effect of $X_1$ on $X_3$ is that $\beta_{31} = 0.518$
   b) Indirect effect of $X_1$ on $X_3$: $(\beta_{21}) (\beta_{32}) = (0.562) (0.285) = 0.160$
   c) Total direct and indirect effects of $X_1$ on $X_3$: $0.518 + 0.160 = 0.678$

2) Direct and Indirect Effects of $X_2$ on $X_3$
   a) The direct effect of $X_2$ on $X_3$ is $\beta_{32} = 0.285$
   b) There is no indirect effect of $X_2$ on $X_3 = 0$
   c) Total direct and indirect effects of $X_2$ on $X_3$: $0.285 + 0 = 0.285$

c. Substructure-3

1) The direct and indirect influence of $X_1$ on $X_2$
   a) The direct effect of $X_1$ on $X_2$ is $\beta_{21} = 0.562$
   b) no indirect effect of $X_1$ on $X_2 = 0$
   c) Total direct and indirect effects of $X_1$ on $X_2$: $0.562 + 0 = 0.562$

Discussion of Direct and Indirect Effects Between Variables

a. Direct And Indirect Influence On Teacher Creativity ($Y$)

The direct and indirect influence on teacher creativity can be seen in the following table.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Influence</th>
<th>Direct</th>
<th>Indirect $X_1$</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment ($X_1$)</td>
<td></td>
<td>0.260</td>
<td>0.209</td>
<td>0.469</td>
</tr>
<tr>
<td>Self-Efficacy ($X_2$)</td>
<td></td>
<td>0.202</td>
<td>0.115</td>
<td>0.317</td>
</tr>
<tr>
<td>Motivation ($X_3$)</td>
<td></td>
<td>0.404</td>
<td>0</td>
<td>0.404</td>
</tr>
<tr>
<td>Amount</td>
<td></td>
<td>0.866</td>
<td>0.324</td>
<td>1.19</td>
</tr>
</tbody>
</table>

The results above show that Empowerment directly affects teacher creativity at 26%, with an indirect effect through motivation at 20.9%. Self-efficacy directly affects creativity by 20.2% and indirectly through motivation by 11.5%. Motivation has a direct effect on teacher creativity by 40.4%. Thus, teacher creativity is directly influenced by Empowerment, self-efficacy, and motivation by 86.6%, which means other factors still influence it, and overall, the direct and indirect influence is 119%.

b. Direct And Indirect Influence On Teacher Motivation ($X_3$)

The direct and indirect influence on teacher motivation can be seen in the following table.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Influence</th>
<th>Direct</th>
<th>Indirect $X_2$</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment ($X_1$)</td>
<td></td>
<td>0.518</td>
<td>0.160</td>
<td>0.678</td>
</tr>
<tr>
<td>Self-Efficacy ($X_2$)</td>
<td></td>
<td>0.285</td>
<td>0</td>
<td>0.285</td>
</tr>
<tr>
<td>Amount</td>
<td></td>
<td>0.803</td>
<td>0.160</td>
<td>0.963</td>
</tr>
</tbody>
</table>

The results above show that Empowerment directly affects teacher motivation at 51.8%, with an indirect effect through self-efficacy of 16%. Self-efficacy has a direct effect on teacher motivation by 28.5%. Thus, teacher motivation is directly influenced by Empowerment and self-efficacy at
80.3%, which means it is still influenced by other factors and overall direct and indirect effects of 96.3%.

c. Direct And Indirect Influence On Teacher Self-Efficacy (X₂)

The direct and indirect influence on teacher self-efficacy can be seen in the following table.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direct</th>
<th>Influence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment (X₁)</td>
<td>0.562</td>
<td>0</td>
<td>0.562</td>
</tr>
<tr>
<td>Amount</td>
<td>0.562</td>
<td>0</td>
<td>0.562</td>
</tr>
</tbody>
</table>

The results above can be interpreted that Empowerment directly affects teacher self-efficacy by 56.2%. This condition indicates that other factors influence 43.8% of teacher self-efficacy.

Discussion of Research Results

a. The Direct Effect of Empowerment (X₁) on Teacher Creativity (Y)

The path coefficient value (β Y₁) = 0.260 and Sig = 0.005 <0.05 is obtained based on the calculation results. While tcount = 2.886 and table at a significant level α = 0.05 obtained ttable = 1.98, count> ttable means H₀ is rejected, and H₁ is accepted. Thus, creativity directly influences the empowerment variable (X₁) on teacher innovation (Y). That is, more vital Empowerment will increase the creativity of kindergarten teachers in the Bogor Regency area. The results of this study were corroborated by previous research, which concluded that there was a positive relationship between teacher empowerment and creativity with a correlation coefficient of r = 0.796 (Makhrus et al., 2022).

In teacher empowerment, adding authority, authority in decision-making, and sharing knowledge can increase teacher confidence in making decisions and taking appropriate actions (Wardan, 2019). This can increase teacher creativity in generating new ideas that are innovative and effective in dealing with challenges in the classroom or outside the classroom. In addition, with an open mind and a willingness to utilize technology, teachers can utilize various available resources to improve the quality of teaching and learning (Waluyo, 2021).

Empowerment has a significant effect on teacher creativity. Teachers who are given the power and authority to make decisions, share knowledge, and utilize technology can improve the quality of learning (NIM & Syukri, 2013). This can help increase teachers' self-confidence and motivation in generating innovative ideas to increase learning effectiveness.

In addition, Empowerment can also help teachers to think creatively and find more creative solutions in dealing with challenges in their work environment. With Empowerment, teachers can feel more motivated to explore new and innovative ideas. In the long term, Empowerment can also help improve the quality of teachers and increase their confidence in facing challenges in their work environment.

This is by what Robin and Judge said that two things cause creativity, namely the existence of creative potential and a creative environment (Judge & Robbins, 2017). Someone needs to be in a creative environment to encourage creativity. An environment that supports creativity allows employees to express opinions and make decisions. Empowerment is considered a very influential factor in creativity. Structural Empowerment (in which the structure of the work unit allows sufficient employee freedom) and psychological Empowerment (which allows individuals to feel personality enabled to decide) are related to employee creativity.
b. Direct Effect of Self-Efficacy (X2) on Teacher Creativity (Y)

The path coefficient value ($\beta_{y2}$) = 0.202 and Sig = 0.014 <0.05 is obtained from the calculation results. While tcount = 2.501 and ttable at a significant level $\alpha = 0.05$ obtained ttable = 1.98, tcount > ttable means H0 is rejected, and H1 is accepted. Thus, the self-efficacy variable (X2) directly affects teacher creativity (Y). That is, stronger self-efficacy will increase the creativity of kindergarten teachers in the Bogor Regency area. This research aligns with previous research, which states a positive relationship between self-efficacy and creativity with a correlation coefficient of $r = 0.772$ (Darma & Didik Noto... [2021]). In line with other studies, it has been concluded that self-efficacy and creativity have a positive relationship, with a correlation coefficient of $r = 0.489$ (Wargo et al., 2020).

Strengthening self-efficacy has a direct influence on increasing creativity. This is based on a theory that states that two things cause creativity, namely the potential for creativity (creative potential) and the environment that shapes a person to be creative (creative environment) (Judge & Robbins, 2017). Personality factor as part of creative potential related to creativity. "Self-efficacy (belief in your capabilities) and positive affect also predict an individual creativity." Self-efficacy (belief in one's abilities) encourages creativity (Yu, 2013).

Research shows that a person's self-efficacy or self-belief in their abilities influences their creativity. In this case, teacher self-efficacy can influence how creative in teaching and finding creative solutions to problems that arise in class. Teachers with high levels of self-efficacy tend to have more confidence in their ability to generate new ideas and explore alternative approaches to teaching. They are more likely to try different approaches and innovate their teaching methods.

In contrast, teachers with low levels of self-efficacy may need more confidence in their abilities to generate new ideas and develop creative teaching approaches. This can stifle their creativity and make them tend to rely on familiar and familiar teaching methods. Therefore, Education needs to help teachers increase their self-efficacy through training, support, and professional development. This can increase teacher creativity and provide a better learning experience for students.

c. Direct Effect of Motivation (X3) on Teacher Creativity (Y)

The path coefficient value ($\beta_{y3}$) = 0.404 and Sig = 0.000 <0.05 is obtained from the calculation results. While tcount = 4.434 and ttable at a significant level $\alpha = 0.05$ obtained ttable = 1.98, tcount > ttable means H0 is rejected, and H1 is accepted. Thus, the motivational variable (X3) directly affects teacher creativity (Y). That is, the stronger the teacher's motivation will increase the creativity of kindergarten teachers in the Bogor Regency area.

Teacher motivation has a strong influence on teacher creativity. This is consistent with the theory that motivation has a vital role in increasing creativity because potential alone is not enough to create creativity (Colquitt et al., 2014). An environment that motivates a person to be creative also needs to be realized so that it will encourage creativity. Most of us have creative potential; we can learn to apply it, but as important as creative potential is, it is not enough. We need to be in an environment where creative potential can be realized. Of the many environmental factors, the most important is motivation, or the desire to work on something because of its engaging, exciting, satisfying, and challenging, which correlates very strongly with creative outcomes.

High motivation can help teachers be engaged and excited about new ways to teach and facilitate student learning. This can increase teachers' creativity as they are more open to new ideas and more confident in trying new approaches to learning. Conversely, a lack of motivation can inhibit teacher creativity. When teachers lose their passion and interest in their work, they may be
less interested in finding new ways to teach or enhance student learning. This can stifle teachers' creativity and make them more likely to use older, less innovative teaching methods. Therefore, school leaders and teacher supervisors must help increase teacher motivation in various ways, such as giving awards or providing opportunities for self-development. Increasing teacher motivation will increase their creativity, and the quality of student learning can be improved (Nurcahya & Hadijah, 2020).

d. The Direct Effect of Empowerment (X₁) on Teacher Motivation (X₃).

The path coefficient value (β₁₃) = 0.518 and Sig = 0.000 <0.05 is obtained from the calculation results. While tcount = 6.433 and ttable at a significant level α = 0.05 obtained ttable = 1.98, then count > ttable means H₀ is rejected and H₁ is accepted. Thus, the empowerment variable (X₁) directly affects teacher motivation (X₃). The stronger the Empowerment, the more motivated kindergarten teachers in the Bogor Regency area will be.

Strengthening Empowerment can increase motivation. This is consistent with the theory, which states that an employee with a transformational leader tends to have high performance and a higher membership bond. Why does this happen (Colquitt et al., 2014). This can happen because they have vital Empowerment, are more confident, and set more goals for themselves. Transformational leaders tend to empower their subordinates. With this, it is suspected that Empowerment has an effect on employee motivation.

By being empowered, teachers can feel a greater sense of responsibility for the success of their students and gain control over their teaching environment and practices. This can increase their sense of ownership and responsibility for the results of their work and thereby increase their motivation to do their best. Empowerment can also increase teachers’ confidence in their ability to teach. By feeling more confident in their ability to make decisions and manage their class, teachers can feel more motivated to teach and improve their performance.

Empowerment can provide space for innovation and creativity in teaching. By having some control over their teaching environment and practices, teachers can explore new ideas and develop more innovative approaches to their teaching. This can increase their motivation and make the teaching experience more exciting and meaningful. Empowerment can give teachers a sense of satisfaction and intrinsic motivation in their work. By being empowered, teachers can feel that they have more influence on the success of their students. This can increase their intrinsic motivation to teach and positively contribute to Education.

However, it is essential to remember that Empowerment must be adequately done to increase teacher motivation effectively. Empowerment that is inappropriate or ineffective can worsen teacher motivation and make them feel overwhelmed. Therefore, education management needs to develop appropriate and sustainable teacher empowerment programs.

e. Direct Effect of Self-Efficacy (X₂) on Teacher Motivation (X₃)

The path coefficient value (β₂₃) = 0.285 and Sig = 0.001 <0.05 is obtained from the calculation results. While tcount = 3.531 and ttable at a significant level α = 0.05 obtained ttable = 1.98, count > ttable means H₀ is rejected, and H₁ is accepted. Thus, the self-efficacy variable (X₂) directly affects teacher motivation (X₃). That is, stronger self-efficacy will increase the motivation of kindergarten teachers in the Bogor Regency area.

Strengthening efficacy can have a direct effect on increasing motivation. This is to the theory presented by Bandura, which states that self-efficacy regulates human function through four main processes: cognitive, motivational, affective, and selection (Abdullah, 2019). Regarding motivation, self-efficacy plays a crucial role in setting motivation-efficacy-activated processes. Efficacy beliefs
regulate human functioning through four major processes. They include cognitive, motivational, affective, and selection processes. These different processes usually operate in concert rather than in isolation. In the ongoing regulation of human functioning motivational processes, efficacy beliefs play a vital role in the self-regulation of motivation.

The effect of self-efficacy on teacher motivation is very significant. Self-efficacy is a person's belief in his own ability to achieve specific goals (Zagoto, 2019). Meanwhile, teacher motivation is the drive or desire to do their job effectively and motivate their students to learn (Manizar, 2015). Teachers who have high self-efficacy tend to be more motivated to achieve their goals, face challenges more positively, and look for ways to solve problems that arise. In an educational context, teachers who feel confident in their abilities to teach, motivate students, and manage the classroom, will be more motivated to do well in these tasks.

In research, teacher self-efficacy has been linked to higher teacher motivation, including intrinsic motivation, which arises from personal satisfaction in doing their job, and extrinsic motivation, which comes from being rewarded or recognized for their work. Therefore, teachers need to develop and maintain high levels of self-efficacy to increase their motivation in their work as teachers.

f. The Direct Effect of Empowerment (X₁) on Teacher Self-Efficacy (X₂)

The path coefficient value (β₂₁) = 0.562 and Sig = 0.000 <0.05 is obtained from the calculation results. While tcount = 7.119 and ttable at a significant level α = 0.05 obtained ttable = 1.98, then tcount > ttable means H0 is rejected and H1 is accepted. Thus, the empowerment variable (X₁) directly affects teacher self-efficacy (X₂). That is, the stronger the Empowerment, the self-efficacy of kindergarten teachers in the Bogor Regency area will increase.

Strengthening Empowerment has a direct influence on Self-Efficacy. This is to the theory of McShane and Von Glinow, which states that the feedback given by superiors to subordinates makes subordinates know whether he has achieved the set performance (McShane & Von Glinow, 2013). Feedback or feedback influences members by explaining their roles regarding the roles, skills, and knowledge of employees. Feedback-information that lets us know whether we have achieved the goal or are appropriately directing our efforts toward it—is a critical partner with goal setting. Feedback contributes to motivation and performance by clarifying role perceptions, improving employee skills and knowledge, and strengthening self-efficacy.

Empowerment can affect teacher self-efficacy by giving teachers the confidence and skills to effectively manage their classrooms and teach. Empowerment also gives teachers more control over their work and allows them to make more independent decisions.

Research shows that Empowerment has a significant positive effect on teacher self-efficacy. When teachers feel empowered, they feel more empowered and more motivated to do their jobs well. Empowerment can give teachers confidence in their ability to overcome challenges, manage the classroom, and provide them with the skills necessary to teach effectively (Jihad, 2013). This can increase teacher self-confidence and self-efficacy.

Empowerment can function as a tool to increase teacher self-efficacy. Educational institutions can provide sufficient support, training, and resources to improve teachers' abilities in teaching and managing classes and provide freedom in making decisions and managing their tasks (Fajrin, 2018). This can give teachers a feeling of Empowerment and increase their self-efficacy, improving teacher performance and student learning outcomes.
**g. Indirect Effect of Empowerment (X₁) on Teacher Creativity (Y) Through Motivation (X₃)**

Empowerment has a positive and significant indirect effect on teacher creativity through motivation, as evidenced by the path coefficient value of $\beta_{32} = 0.209$. The test results obtained a $t_{\text{count}}$ of 2.098, a $t_{\text{table}}$ ($dk = 109$, with $\alpha = 0.05$) of 1.982, and a $t_{\text{table}}$ ($dk = 109$, with $\alpha = 0.01$) of 2.622.

Increasing Empowerment through motivation influences teacher creativity. This is in line with the theory, which states that the emergence of creativity is caused by creative potential and an environment that
and motivate them to increase creativity in teaching and learning (Susanto, 2016).

**h. Indirect Effect of Self-Efficacy (X₂) on Teacher Creativity (Y) Through Motivation (X₃)**

There is a positive indirect effect that is not significant self-efficacy on teacher creativity through motivation, as evidenced by the value of the path coefficient $\beta_{32} = 0.115$. The test results obtained a $t_{\text{count}}$ of 1.095, a $t_{\text{table}}$ ($dk = 109$, with $\alpha = 0.05$) of 1.982, and a $t_{\text{table}}$ ($dk = 109$, with $\alpha = 0.01$) of 2.622. Based on the analysis that has been done, motivation as an intervening variable in this study is not strong enough to support the effect of Empowerment on teacher creativity. Self-efficacy has not played a significant role as a mediator, where the direct effect is stronger than the indirect effect. In other words, self-efficacy has a more significant direct effect without going through motivation.

High teacher self-efficacy can affect teacher creativity indirectly through forms a creative environment (Robbins et al., 2018). Two factors, namely, form the potential for creativity (creative potential), factors of intelligence (intelligence), and personality. There are five personalities related to creativity, namely, a person who is proactive, confident, daring to take risks (risk taking), the spirit of tolerance (tolerance), and diligent (perseverance). In addition, self-efficacy is also seen as one of the personalities associated with creativity. At the same time, environmental factors (creative environment) include motivation and Empowerment.

Empowerment and motivation are two critical factors in increasing teachers' creativity in doing their work. Empowerment refers to giving teachers the authority, knowledge, and resources needed so they can make decisions independently and improve their performance (Latifah et al., 2022). Meanwhile, motivation influences a person's drive or desire to do their job effectively (Hutabarat, 2022).

Research has shown that Empowerment positively and significantly affects teacher creativity. When teachers feel empowered with adequate authority and resources, they feel more empowered and motivated to seek creative solutions to challenges in their work. This can enhance teachers' creativity in developing new teaching methods, creating exciting learning environments, and finding innovative solutions to emerging problems.

In addition, motivation also plays a vital role in increasing teacher creativity. Motivation can encourage the development of new ideas and exploring different teaching methods (Mardhiyana & Sejati, 2016). Through motivation, teachers can seek additional resources, learn from experience, and interact with other teachers to develop their creativity.

In this context, Empowerment does not directly affect teacher creativity but can be through motivation. When teachers feel empowered, they feel more motivated to achieve their goals. When teachers' motivation increases, they are more likely to develop creativity. Therefore, educational institutions must provide adequate support and resources to teachers motivation. However, several factors can influence this relationship and make self-efficacy not indirectly affect teacher creativity through motivation. One of the factors is the need for more support from the work environment.
Even though teachers have a high level of self-efficacy, if the work environment is not supportive such as limited or lack of freedom to make decisions, then the teacher's motivation to develop creativity in their work will decrease. Teachers need more support to develop new ideas and be motivated to develop creativity.

In addition, low levels of motivation can also affect the relationship between teacher self-efficacy and teacher creativity (Sudrajat et al., 2020). Although high teacher self-efficacy can increase motivation, if teacher motivation is low, then high self-efficacy will also not encourage creativity. Low motivation can be caused by fatigue, lack of appreciation, or lack of support from school leaders.

Finally, the lack of skills in developing creativity can also affect the relationship between teacher self-efficacy and creativity. Even though teachers have a high level of self-efficacy and sufficient motivation, if they lack skills in developing creativity, then self-efficacy will not indirectly affect creativity through motivation. In this context, it is essential for educational institutions to provide sufficient support and resources to teachers and motivate them to do their work to increase self-efficacy and creativity in learning (Afrina, 2019). This should also be followed by skills training to develop teacher creativity.

i. **Indirect Effect of Empowerment (X₁) on Teacher Creativity (Y) Through Self-Efficacy (X₂)**

There is a positive indirect effect that is not significant Empowerment on teacher creativity through self-efficacy, as evidenced by the value of the path coefficient of $21 = 0.160$. The test results obtained a $t_{count}$ of 1.881, a $t_{table}$ ($dk = 109$, with $\alpha = 0.05$) of 1.982, and a $t_{table}$ ($dk = 109$, with $\alpha = 0.01$) of 2.622. Based on the analysis that has been done, self-efficacy as an intervening variable in this study is not strong enough to support the effect of Empowerment on teacher creativity. The teacher's self-efficacy has not played a major role as a mediator, where the direct effect is stronger than the indirect effect.

This indirect effect is likely caused by other factors that affect teacher creativity, such as experience, knowledge, motivation, and work environment. Even though the Empowerment given by the principal is weak, if the teacher has good experience and knowledge in producing creativity, the teacher will naturally feel compelled to produce something new in learning. The experience obtained, for example, from training, seminars, and others, will motivate teachers to apply creativity in learning in the classroom. In addition, a conducive work environment will encourage the emergence of good creativity even though the teacher's self-efficacy is low. A work environment accustomed to upholding creativity will likely only work with solid encouragement from self-efficacy. So, the objective of this research is to understand and analyze the strengthening of empowerment, self-efficacy, and motivation in order to enhance teacher creativity.

**CONCLUSION**

The conclusion from this analysis is that the results of this study indicate that teacher empowerment, self-efficacy, and motivation have an essential role in increasing creativity and innovation in learning. Developing an environment that supports teacher empowerment, increasing teacher self-confidence, and high motivation can be essential in increasing learning effectiveness and teacher quality in the Bogor Regency area.
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