



## **Teacher Creativity in The 21st Century : An Analysis of The Influence of Principals' Leadership, School Culture, and Work Motivation**

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**Abstract:** This study aims to investigate the relationship between principal leadership, school culture, work motivation, and teacher creativity in private elementary schools located in the Central Bogor District, West Java. This study uses a quantitative approach with a survey method and data analysis using a Structural Equation Modeling approach with the Partial Least Squares (SEM PLS) method. The research sample consisted of 118 respondents, who were assessed using a rating scale for the variables of Teacher Creativity and Principal's Leadership, and a Likert scale for the variables of School Culture and Work Motivation. The results of this study show that the leadership of school principals has a significant role in encouraging teacher creativity in elementary schools. Additionally, the principal's leadership and school culture have been shown to enhance teachers' work motivation. However, work motivation does not directly contribute to increasing teacher creativity. It does not function as a mediator in the relationship between the principal's leadership or school culture and teacher creativity. The implications of this study suggest that there is a need for a leader who can apply a transformational and participatory leadership style, enabling teachers to feel more motivated to develop their skills. In addition, teachers need to actively manage their intrinsic motivation so that they exhibit curiosity, critical thinking, flexibility, a desire to create new ideas, and a practical problem-solving approach.

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## **Introduction**

In the era of Society 5.0, education is no longer just about transferring knowledge; it is also about fostering a sense of community and promoting social responsibility. Still, it must also develop the character and competence of students in line with the demands of the 21st century. Teachers need to improve their pedagogic competence through the use of active, creative, and innovative learning media. (Hasanah et al., 2022). This makes teacher creativity an essential aspect.

Teachers' creativity is essential for attracting students' interest and generating new ideas or products that support their role in the learning process (Harpeni Dewantara, 2020). Teacher creativity is also defined as the way teachers visualize, produce, and find valuable new ideas (Mahmud et al., 2022). According to Mahmud (2022), the indicators of a teacher's creativity include generating new ideas, introducing novel concepts, discovering previously unknown information, and creating original works. Meanwhile, according to Scarlet Witch (2020), Indicators of teacher creativity include learning new things, thinking flexibly, great curiosity, a positive classroom environment, and effective problem-solving. Therefore, teacher creativity is the action of teachers who think critically and flexibly to generate



original ideas, solve problems, and produce products through the implementation of their duties. This means that in teaching, teachers cannot rely solely on one learning method to create a conducive classroom atmosphere. The indicators of teacher creativity include curiosity, critical thinking, flexibility, generating new ideas, and effective problem-solving.

Based on the results of an initial survey conducted at seven private elementary schools in Central Bogor District, West Java Province, it was found that 43% of teachers need to increase their curiosity, 49% of teachers need to increase their critical thinking, 56% of teachers need to increase flexibility, 50% of teachers need to increase new ideas, and 57% of teachers need to improve their problem-solving methods. This condition encourages the need for an in-depth study of the factors that affect teachers' creativity.

Research Tanjung & Namora (2022). Concluding the importance of teachers' creativity in order to have several alternatives to overcome problems that arise during the learning process. Efendy & Rini (2021) conclude that a teacher's creativity in teaching plays a crucial role in fostering students' interest in learning. According to Apak et al. (2021), according to the *Deep International Journal of Information and Communication Technology Education* by Universiti Malaysia Sabah, it was found that teachers' behavior in developing their creativity affects their readiness in performing 21st-century classroom management.

According to Muhamad & Zulela (2021), the leadership of the principal is the ability of a functional teacher who is given the task of leading a school to mobilize all the available resources so that they can be used optimally to achieve the set goals. The person who becomes the principal must have the ability to manage the school's resources so that they can encourage voluntary cooperation within the school organization to achieve common goals. (Sunarya & Iskandar, 2022). The leadership of the principal is a motivator for self-compliance with the work discipline of teachers. (Haq et al., 2019).

Each principal has a distinct style for leading their school. Leadership style encompasses the understanding of a leader's behavior that relates to their ability to lead. (Kartini et al., 2020). The charismatic leadership style of the principal can enhance the creativity of teachers in their duties and work, enabling the principal to influence all school residents in achieving their goals. (Dwapatesty et al., 2021). Therefore, the leadership of the principal is the actions of the leader in communicating effectively, managing resources, making decisions, motivating, and supervising teachers, students, and all school residents to achieve the educational goals that have been set. The indicators of the principal's leadership are effective communication, resource management, decision-making, motivation, and supervision.

Additionally, school culture also has an impact on learning within the school. School culture is a value system, a habit in a school that is built from the result of a meeting between the values embraced by the principal and the values embraced by teachers and education staff in the school. (Umyati et al., 2019). According to Amelia & Ramadan (2021), school culture is a pattern that has an assumed basis for the development of a learning group as it learns to overcome problems that are considered valid.

According to Intan Nuraeni (2021), school culture is a set of values that underlie behaviors, traditions, daily habits, and symbols practiced by school principals, educators, education staff, students, and the surrounding community. Meanwhile, according to Triwijayanti et al. (2022), school culture can be understood as the atmosphere of school life in which all school residents interact with one another. Therefore, school culture is a set of school values that are established and agreed upon by all school residents to serve as a guide in creating a consistent understanding and behavior within the school environment. The

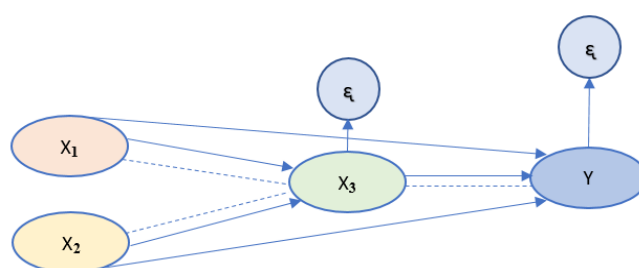
indicators in school culture are school grades, school standards, physical characteristics, and perspective.

To increase teacher creativity, there needs to be motivation in the process. According to Agustina et al. (2020), Work motivation is something that generates enthusiasm or work drive. Meanwhile, according to Ramdhona et al. (2022), Work motivation is a state or condition that encourages, stimulates, or motivates a person to take action or engage in an activity that enables them to achieve their goals. In education, teacher work motivation is an internal and external encouragement that drives and directs teacher behavior in cultivating a passion for work. (Sukmayanti et al., 2021). Therefore, work motivation encourages a person to take on commitment and responsibility in carrying out tasks, and to strive to develop themselves to achieve clear goals. The indicators are responsibility, self-development, Compensation, and social acceptance.

To gain a deeper understanding of the factors that increase teacher creativity, this study offers a scientific novelty in the form of an analysis of the direct and indirect relationships between principals' leadership, school culture, work motivation, and teachers' creativity, using path analysis. Another novelty is the research location that has different institutional and cultural characteristics compared to similar research locations. This study aims to analyze the relationship between principal leadership, school culture, and work motivation to teacher creativity in Private Elementary Schools in Central Bogor District, West Java. The results of this study are expected to be theoretically sound, providing scientific references on other variables related to teacher creativity. They may serve as a basis for further research on variables that have a positive and dominant relationship to teacher creativity.

## Research Method

This study uses a quantitative approach with a survey method and data analysis using a Structural Equation Modeling approach with the Partial Least Squares (SEM PLS) method. The relationship between independent variables and bound variables can be seen in the following models:



**Figure 1. Relationships Between Variables**

Information:

X1: Principal's Leadership

X2: School Culture

X3: Work Motivation

Y: Teacher Creativity

ε: Other Variables

The population of this study is Private Elementary School (SDS) teachers in Central Bogor District where there are seven Private Elementary Schools with the following details: 1) SD Al Ghazaly has 21 teachers; 2) SD BPK Penabur has 21 teachers; 3) SD Budi Mulia has 24



teachers; 4) SD Dian Harapan has 36 teachers; 5) SD Kristen Satu Bakti has nine teachers; 6) Regina Pacis Elementary School has 47 teachers; 7) SD Taman Siswa has eight teachers.

The sampling technique employed is a proportional random sampling method, utilizing the Taro Yamane formula, with an error rate and confidence level of 5%. Based on this formula, a sample of 118 respondents was obtained. Then the results of the sampling distribution were obtained as follows: (1) SD Al Ghazaly with 15 respondents; (2) SD BPK Penabur with a total of 15 respondents; (3) SD Budi Mulia with 17 respondents; (4) SD Dian Harapan with 26 respondents; (5) SD Kristen Satu Bakti with a total of 9 respondents; (6) SD Regina Pacis with 33 respondents; and (7) SD Taman Siswa with a total of 6 respondents.

Data collection was conducted using a closed questionnaire with multiple-choice answers, administered to respondents. The instrument used to measure Teacher Creativity is in the form of a questionnaire, compiled based on indicators of the research variables, namely curiosity, critical thinking, flexibility, generating new ideas, and problem-solving. The assessment uses a Rating Scale that describes the frequency with the answer options Always, Often, Sometimes, Ever, and Never. The instrument used to measure the Principal's Leadership ( $X_1$ ) is in the form of a questionnaire that is compiled based on indicators of the research variables, namely effective communication, resource management, decision-making, motivation, and supervision. The assessment uses a Rating Scale that describes the frequency with the answer options Always, Often, Sometimes, Ever, and Never.

The instrument used to measure School Culture ( $X_2$ ) is in the form of a questionnaire, compiled based on indicators of the research variables, including school scores, school standards, physical characteristics, and perspectives. The assessment uses the Likert Scale, which describes the frequency with answer choices ranging from Strongly Agree to Disagree Strongly. The instrument used to measure Work Motivation ( $X_3$ ) is in the form of a questionnaire, compiled based on indicators of the research variables: responsibility, self-development, Compensation, and social acceptance. The assessment uses the Likert Scale, which describes the frequency with answer choices ranging from Strongly Agree to Disagree Strongly.

## **Results and Discussion**

### **1) Teacher Creativity (Y)**

Based on the statistical description carried out, it was found that respondents provided answers with a lowest score of 88, a highest score of 143, and an average of 121.83. The most frequently recorded score was 121. There are eight classes in an interval with a length of 7 each. The interval of 88-94 has the lowest relative frequency percentage, at 0.85%, with only one respondent. In contrast, the interval of 123-129 recorded the highest frequency of 22.03%, with 26 respondents.

The Teacher Creativity variable instrument (Y) consists of 30 valid question items, allowing for a theoretical score range of 30 (lowest) to 150 (highest). The lowest empirical score in the research results was 88, and the highest was 143. When comparing the empirical median score ( $88 + 143 = 231$ ) with the theoretical median score ( $30 + 150 = 180$ ), it is evident that the empirical median score exceeds the theoretical median score. This indicates that the Teacher's Creativity (Y) is relatively high, as it exceeds 90, specifically at 115.5. The average score of each indicator is as follows: (1) curiosity – 4.05; (2) the criticality of the mind – 4.18; (3) flexibility – 4.15; (4) new ideas – 3.90; (5) how to solve the problem – 4.07.

Based on this data, the average score of the Teacher Creativity indicator reached 4.07. The indicator with the highest average is the criticality of the mind, with several values of



4.18. In contrast, the indicator with the lowest average is a new idea, with a value of 3.90. Overall, these results indicate that teachers possess good creativity, particularly in critical thinking, although there is still room for improvement in aspects related to generating new ideas.

## **2) Principal's Leadership (X<sub>1</sub>)**

Based on the statistical description carried out, it was found that respondents provided answers with a lowest score of 101 and a highest score of 173, with an average of 144.04. The most frequently recorded score was 172. There are 8 class intervals, each with a length of 9. The interval of 101-109 had the lowest relative frequency percentage, at 5.08%, with six respondents. In contrast, the interval of 164-173 recorded the highest frequency of 18.64%, with 22 respondents.

The Principal Leadership variable instrument (X<sub>1</sub>) consists of 35 valid questions, allowing for a theoretical score range of 35 (lowest) to 175 (highest). The lowest empirical score in the research results was 101, and the highest was 173. When comparing the empirical median score  $(101 + 173 : 2) = 137$  with the theoretical median score  $(35 + 175 : 2) = 105$ , it is evident that the empirical median score is greater than the theoretical median score. This indicates that the Principal's Leadership (X<sub>1</sub>) is relatively high, as it exceeds 105, specifically 137. The average score of each indicator is as follows: (1) communicating effectively – 4.26; (2) resource management – 3.98; (3) decision-making – 4.13; (4) motivation – 4.18; (5) supervision – 4.03.

Based on this data, the average score of the Principal's Leadership indicator reached 4.11. The indicator with the highest average is effective communication, with a value of 4.26, while the indicator with the lowest average is resource management, with a value of 3.98. Overall, these results indicate that the principal possesses good leadership, particularly in effective communication, although the aspect of resource management still requires improvement.

## **3) School Culture (X<sub>2</sub>)**

Based on the statistical description, it was found that respondents provided answers with a lowest score of 116, a highest score of 158, and an average of 140.81. The most frequently recorded score was 149. There are 8 class intervals, each with a length of 6. The interval of 116-121 has the lowest relative frequency percentage, at 6.78%, with a total of eight respondents. In contrast, intervals 134-139 and intervals 146-151 recorded the highest frequencies, at 16.95%, with 20 respondents in each.

The School Culture variable instrument (X<sub>2</sub>) consists of 32 valid questions, allowing for a theoretical score range of 32 (lowest) to 160 (highest). The lowest empirical score in the research results was 116, and the highest was 158. When comparing the empirical median score  $(116 + 158 : 2) = 137$  with the theoretical median score  $(32 + 160 : 2) = 96$ , it is evident that the empirical median score is greater than the theoretical median score. This shows that School Culture (X<sub>2</sub>) is relatively high, namely  $137 > 96$ . The average score of each indicator is as follows: (1) school score – 4.57; (2) school standards – 4.28; (3) physical characteristics – 4.47; (4) Perspective – 4.29.

Based on this data, the average score of the School Culture indicator reached 4.4. The indicator with the highest average is the School Score, with a score of 4.57, while the indicator with the lowest average is the school standard, with a score of 4.28. Overall, these results suggest that the school culture is relatively positive, particularly in terms of academic performance, although there is still room for improvement in the area of school standards.





#### **4) Work Motivation (X<sub>3</sub>)**

Based on the statistical description carried out, it was found that respondents provided answers with a lowest score of 115, a highest score of 168, an average of 143.55, and the most frequently recorded score was 161. There are 8 class intervals, each with a length of 7. The interval of 115-121 had the lowest relative frequency percentage, at 5.93%, with a total of seven respondents. In contrast, the interval of 136-142 recorded the highest frequency of 20.34%, with 24 respondents.

The Work Motivation variable instrument (X<sub>3</sub>) consists of 34 valid questions, allowing for a theoretical score range of 34 (lowest) to 170 (highest). The lowest empirical score in the research results was 115, and the highest was 168. When comparing the empirical median score  $(115 + 168 : 2) = 141.5$  with the theoretical median score  $(34 + 170 : 2) = 102$ , it is evident that the empirical median score is greater than the theoretical median score. This indicates that Work Motivation (X<sub>3</sub>) is relatively high, as 141.5 is greater than 102. The average score of each indicator is as follows: (1) responsibility – 4.31; (2) self-development – 4.39; (3) compensation – 3.86; (4) social acceptance – 4.20.

Based on this data, the average score of the Work Motivation indicator reached 4.20. The indicator with the highest average is self-development with a value of 4.39, while the indicator with the lowest average is Compensation with a value of 3.86. Overall, these results indicate that work motivation is relatively strong, particularly in the area of self-development, although the compensation aspect still requires improvement.

#### **I. Descriptive Analysis**

The descriptive analysis in this study utilized the frequency spread of each individual's responses as well as their average values. Based on the calculation of the length of the class interval, the classification of assessment categories for the average score calculated is as follows: 1 – 1.80 means very bad; 1.81 – 2.60 means not good; 2.61 – 3.40 means good; 3.41 – 4.20 means very good; 4.20 – 5.00 means very good.

The results of respondents regarding the Teacher Creativity variable (Y) obtained an average score of 4.07. This figure indicates that respondents generally possess a high level of creativity. The best-scoring indicator is Mind Criticality, while the lowest-scoring indicator is New Ideas. The respondents' responses to the Principal Leadership variable (X<sub>1</sub>) yielded an average score of 4.11. This figure indicates that respondents generally rate the principal as having good leadership skills. The best-rated indicator was Communicating Effectively, while the lowest-rated indicator was Resource Management. Additionally, the respondents' responses to the School Culture variable (X<sub>2</sub>) yielded an average score of 4.40. This figure shows that respondents generally rate their institution as having an excellent school culture. The indicator with the best score is School Score, while the indicator with the lowest score is School Standards. Meanwhile, the respondents' responses to the Work Motivation variable (X<sub>3</sub>) yielded an average score of 4.20. This figure indicates that respondents generally exhibit excellent work motivation. The best-rated indicator is Self-Development, while the lowest-rated indicator is Compensation.

#### **II. Data Analysis**

##### **1) Evaluation of the Outer Model**

Evaluation of the measurement model is a crucial step in assessing the validity and reliability of a construct. In this case, it includes Construct Validity Evaluation and Construct Reliability Evaluation.



**a) Convergent Validity Test**

Convergent Validity Testing is performed by considering the reliability of the item, which serves as a validity indicator through the value of the loading factor. In this study, the loading factor limit applied is 0.7, which is considered valid if it is greater than or equal to 0.7. Based on the results of the convergent validity test, it is evident that all indicators of each variable have a loading factor value of 0.7 or greater, indicating that they meet the validity criteria.

**b) Discriminant Validity Test**

*Discriminant Validity* is measured by evaluating the *cross-loading value* of the measurement construct. The *cross-loading value* reflects the degree of relationship between each construct and its indicators, as well as with indicators from other constructs. A measurement model is considered to have good discriminant validity if the relationship between the construct and its indicator is higher than the relationship with the indicator of another construct. Based on the results of the *cross-loading calculation in this study, the indicators of all variables produce a loading value that is greater than that* of the other variables. Thus, from the discriminant validity test, each indicator can measure the latent variables that correspond to its indicators.

**c) Construct Reliability**

The calculations that can be used to evaluate the reliability of constructs include Cronbach's alpha and composite reliability. Based on the calculation results, it was found that *Cronbach's alpha value* exceeded 0.6, *composite reliability* exceeded 0.7, and AVE value exceeded 0.5. Therefore, all indicators are declared reliable in measuring the variables in question

**2) Inner Model Evaluation**

Internal model analysis is a step taken to assess the suitability of the model, which includes determination coefficients, predictive relevance, and hypothesis testing.

**a) Coefficient of Determination ( $R^2$ )**

The Coefficient of Determination ( $R^2$ ) measures how much an endogenous variable explains the variation in an exogenous variable. The results of  $R^2$  can be found that the *R-square value* of the Teacher Creativity variable (Y) is 0.202 or 20.2% which means that the Teacher Creativity variable (Y) can be explained by exogenous variables, namely Principal Leadership (X1), School Culture (X2), Work Motivation (X3). The remaining 79.8% is attributed to factors outside the scope of this research model.

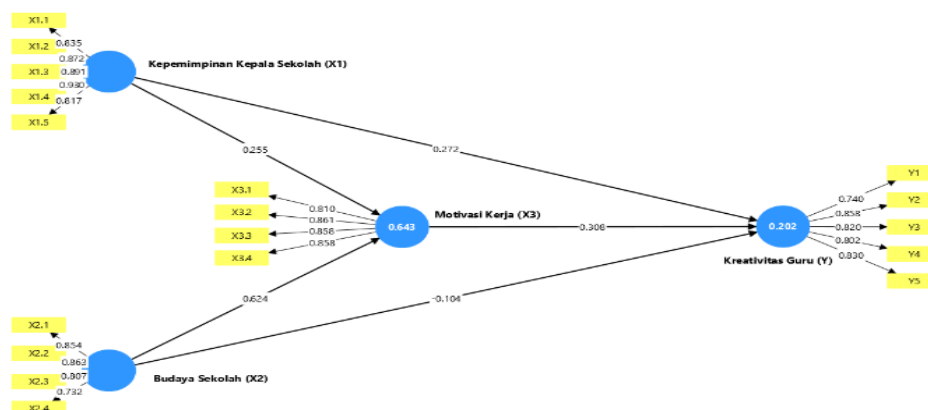
The Work Motivation variable (X3) has an *R-squared value* of 0.643, or 64.3%, indicating that the Work Motivation variable (X3) can be explained by exogenous variables in this research model, specifically Principal Leadership (X1) and School Culture (X2). The remaining 35.7% represents the contribution of other variables not discussed in this research model.

**b) Predictive Relevance ( $Q^2$ )**

This  $Q^2$  value can be used to assess the effectiveness of the observation results derived from the model and the estimation of its parameters. The results of the Predictive Relevance test ( $Q^2$ ) showed that the variables Teacher Creativity and Work Motivation showed a Predictive Relevance value ( $Q^2$ ) greater than 0 (zero), which means that the model has good predictive skills. Meanwhile, the variables of Principal Leadership and School Culture are equal to 0 (zero), which means that the model does not have predictive capabilities.

## Hypothesis

Hypothesis testing is used to determine whether exogenous variables have a significant impact on endogenous variables. If the value of the T-statistic is greater than or equal to the T-table (1.96), or if the P-value is less than the significance alpha of 5% or 0.05, then it can be concluded that there is a significant influence of exogenous variables on endogenous variables. The output of the significance test, as well as the model, can be seen in the following figure:



**Figure 2. Measurement Model**

### 1) The direct influence of the Principal's Leadership (X1) on Teacher Creativity (Y)

The test results show that the T-statistic is **2,175** and the p-value is **0,030**. Because the T-statistic is  $2.175 > 1.96$  and the p-value is  $0.030 < 0.05$ , it can be concluded that there is a significant influence of the Principal's Leadership ( $X_1$ ) on Teacher Creativity (Y). The regression coefficient is **0,272**, meaning that the better the principal's leadership, the higher the teacher's creativity. The findings of this study are in line with the transformational leadership theory described by Mudatsir (2021). The principal is a form of leadership that encourages all elements in the school to be willing to cooperate and participate optimally in bringing about change.

In addition, the results of these findings are in line with the results of research conducted by Rezeki et al. (2021) Get the result of a value of  $t_{count} > t_{table}$ , namely  $6,172 > 1,678$ , which means that there is a significant influence between the leadership of the principal and the level of teacher creativity. The  $R^2$  value of 0.458 indicates that the principal's leadership has a 45.8% influence on the level of teacher creativity.

### 2) The direct influence of School Culture (X2) on Teacher Creativity (Y)

The test results show that the T-statistic is **0.633** and the p-value is **0.527**. Because the T-statistic was  $0.633 < 1.96$  and the p-value was  $0.527 > 0.05$ , there was no significant influence of School Culture ( $X_2$ ) on Teacher Creativity (Y). The regression coefficient is **-0,104**, which means that school culture does not have a significant effect on teacher creativity. According to the article "The Change Leader" (Fullan, 2002), a rigid or non-transformative school organizational culture can inhibit teachers' creativity, especially if the school culture is not deeply internalized.

In addition, based on research conducted by Sons (2024), it was found that school culture has a positive, albeit non-significant, influence on teacher performance. In theory, teacher performance and teacher creativity have different dimensions, but they can also be interrelated. If the school culture cannot provide sufficient space for teachers to develop, it





will impact their creativity. Therefore, there needs to be harmony between the values and the implementation of each culture in schools.

### **3) Direct Influence of Work Motivation (X<sub>3</sub>) on Teacher Creativity (Y)**

The test results show that the T-statistic is **1.893** and the p-value is **0.058**. Because the T-statistic was  $1.893 < 1.96$  and the p-value was  $0.058 > 0.05$ , there was no significant effect of Work Motivation (X<sub>3</sub>) on Teacher Creativity (Y). The regression coefficient is **0.308**, indicating a positive but statistically insignificant direction. This aligns with the Self-Determination Theory (SDT), which posits that motivation is etymologically related to what "moves" people to act (Ryan, R.M., 2017). Intrinsic motivation refers to the activity of doing something because there is an interest, while extrinsic motivation refers to doing something because it leads to the results obtained (Ryan & So, 2000). These results are in line with research conducted by (2019). It was found that teachers' work motivation had a significant negative impact on their creativity.

### **4) Direct Influence of School Principal's Leadership (X<sub>1</sub>) on Work Motivation (X<sub>3</sub>)**

The test results show that the T-statistic is **3,825** and the p-value is **0,000**. Because the T-statistic is  $3.825 > 1.96$  and the p-value is  $0.000 < 0.05$ , there is a significant influence of the Principal's Leadership (X<sub>1</sub>) on Work Motivation (X<sub>3</sub>). The regression coefficient is **0,225**. This means that the leadership of the principal has a positive and significant effect on the teacher's work motivation. The results of this study are in line with Sukmayanti et al. (2021). This indicates that the correlation coefficient between work motivation and teacher creativity (RY<sub>2</sub>) of 0.921, corresponding to a strong relationship level, is robust. As for the probability value (sig  $0.000 < 0.01$ ), then H<sub>0</sub> is rejected, so it can be concluded that the correlation coefficient is significant. This indicates a positive relationship between work motivation and teacher creativity.

### **5) Direct Influence of School Culture (X<sub>2</sub>) on Work Motivation (X<sub>3</sub>)**

The test results show that the T-statistic is **10,584** and the p-value is **0,000**. Because the T-statistic is  $10.584 > 1.96$  and the p-value is  $0.000 < 0.05$ , there is a significant influence of School Culture (X<sub>2</sub>) on Work Motivation (X<sub>3</sub>). The regression coefficient is **0,624**, meaning that school culture has a positive and significant impact on teachers' work motivation. This is in line with research conducted by Zulkarnaen et al., (2020) The results of the positive direct influence of school culture (X<sub>1</sub>) on work motivation (X<sub>3</sub>) with a path coefficient of 0.203 and a T value count  $(3,518) > T_{table} (1.66)$ , so it can be concluded that school culture has a direct positive influence on work motivation.

### **6) Indirect Influence of Principal Leadership (X<sub>1</sub>) on Teacher Creativity (Y) through Work Motivation (X<sub>3</sub>)**

The test results showed a T-statistic of **1.867** and a p-value of **0.062**. Because the T-statistic is  $1.867 < 1.96$  and the p-value is  $0.062 > 0.05$ , there is no significant influence of Principal Leadership (X<sub>1</sub>) on Teacher Creativity (Y) through Work Motivation (X<sub>3</sub>). The regression coefficient is **0.192**, indicating that work motivation does not significantly mediate the relationship between the principal's leadership and teachers' creativity. When viewed from the 4th hypothesis, the principal's leadership does have a significant influence on work motivation (T-statistic  $3.825 > 1.96$  and p-value  $0.000 < 0.05$ ). Still, according to the 3rd hypothesis, it is stated that work motivation does not have a significant effect on teachers' creativity (T-statistic =  $1.893 < 1.96$  and p-value =  $0.058 > 0.05$ ). As a result, the indirect influence of the principal's leadership on teachers' creativity through work motivation is also insignificant. This means that although the principal can increase teachers' work motivation, it is insufficient to encourage teachers' creativity significantly.



### **7) Indirect Influence of School Culture (X<sub>2</sub>) on Teacher Creativity (Y) through Work Motivation (X<sub>3</sub>)**

The test results showed a T-statistic of **1.642** and a p-value of **0.101**. Because the T-statistic was  $1.642 < 1.96$  and the p-value was  $0.101 > 0.05$ , there was no significant influence of School Culture (X<sub>2</sub>) on Teacher Creativity (Y) through Work Motivation (X<sub>3</sub>). The regression coefficient is **0.079**, indicating that work motivation does not significantly mediate the relationship between school culture and teacher creativity. When viewed from the 5th hypothesis, it is indeed stated that school culture has a significant influence on work motivation (T-statistic  $10.584 > 1.96$  and p-value  $0.000 < 0.05$ ). However, work motivation has not been able to significantly mediate the impact of school culture on teacher creativity (T-statistic  $1.893 < 1.96$  and p-value  $0.058 > 0.05$ ).

This research suggests that leaders should adopt transformational and participatory leadership styles to motivate teachers to develop their skills further. In addition, teachers need to actively manage their intrinsic motivation so that they exhibit curiosity, critical thinking, flexibility, a desire to create new ideas, and a practical problem-solving approach. This study indicates an indirect influence on several relationships between variables. Therefore, researchers can then investigate other factors that may play a more significant role in the relationship.

### **Conclusion**

This research shows that the leadership of school principals has a significant role in encouraging teacher creativity in elementary schools. Additionally, the principal's leadership and school culture have been shown to enhance teachers' work motivation. However, work motivation does not directly contribute to increasing teacher creativity. It does not function as a mediator in the relationship between the principal's leadership or school culture and teacher creativity.

### **Recommendation**

Based on the results of this research, school principals are expected to be able to implement a leadership style that supports the improvement of teachers' creativity by creating a supportive work climate for the exploration of ideas, providing constructive feedback, and providing a forum for teachers to experiment with new ideas. In addition, schools need to strengthen a collaborative culture and be open to change, so that they can support teachers' creativity. It is also necessary to increase work motivation, especially that which comes from within, to improve teachers' creativity. Schools need to foster a work environment that promotes opportunities for learning and appreciation, enabling teachers to feel valued and appreciated.

The Education Office in Bogor City is expected to play an active role in providing policy support and facilities that enable teachers to develop their creativity through various innovative training sessions and forums, thereby sharing best practices among schools. For further research, this study can explore other variables that affect teachers' creativity. There is a need for a more effective assessment of indicators that can enhance teacher creativity.

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