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The Effects of Principal's Decision-making, Organizational Commitment and School Climate on Teacher Performance in Vocational High School Based on Teacher Perceptions

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Abstract: This quantitative research aims to analyze the effects of the principal's decision-making, organizational commitment and school climate on teacher performance in vocational high school. The research sample was 160 vocational school teachers in North Minahasa Regency with simple random sampling method. The data were collected using a Likert scale questionnaire 25 with statements. The data analysis was performed using simple linear regression and multiple linear regression. The results showed that the principal's decision-making, organizational commitment and school climate had a positive and significant effect on the performance of vocational school teachers, both partially and simultaneously. The results of this research can be an important reference for educational administrators at vocational high school level to design school strategies and policies that can encourage increased teacher performance to achieve better school productivity.

Keywords: Organizational commitment, principal's decision-making, school climate, teacher performance.

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Introduction

The success of an organization cannot be separated from the role of human resources (Wibowo, 2011). Human resources are considered as the key component for achieving organizational goals. At schools, teachers are human resources who play an important role in achieving quality education.

Teachers' important role appears in the quality learning management in particular (Hayes et al., 2006). Quality learning requires teachers who can teach effectively to support student achievement (Burroughs et al, 2019). Effective teaching practices are the form of quality teacher performance (Muijs & Reynolds, 2018).

Teacher performance issue is not a new problem in educational research (Good & Lavigne, 2014). Issues concerning teacher performance have been widely studied in the past (Ghazali & Nordin, 2019). Due to its' important role in improving the education quality, teacher performance problems constantly become a major concern among academia (Dandalt & Brutus, 2020).

Furthermore, rapid development in information and technology has supported transparency in education and school practices so that teacher performance issues are more easily detected and monitored (Smith & Benavot, 2019). Consequently, it pressures school leaders to work hard to overcome the teacher performance problems (Jones et al., 2006). The supervision function carried out by the school leaders and education supervisors is important to improve the teacher performance especially in terms of teaching quality. With proper management, teacher performance can contribute positively to improve the education quality at schools (Ozgenel & Mert, 2019).

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Performance can be defined as the results of work done by a person or an organization in a certain period (Mangkunegara, 2013). Understanding the concept of performance that refers to the context of these results may not be enough to represent the meaning of performance comprehensively. The definition of performance as proposed by Brumback (1988) which includes aspects of behavior and work outcomes seems to be more comprehensive in understanding the meaning of performance.

In addition, Brumback (1988) also suggests that behavior can be valued as an outcome because it results from a person's mental and physical effort during task accomplishment. Jones et al. (2006) conclude that behavior and results in a person's mind could be used to measure their performance. Motowidlo and Van Scotter (1994) suggest that performance is the result and behavior of someone that supports organizational goals. If these concepts are placed in the context of teacher performance, then teacher performance can be defined as any behavior including the results in the teacher's mind and work that is relevant to the needs and goals of the school.

Low teacher performance indicates that teachers have not done their best in carrying out their roles. Evidence of low teacher performance can be seen from the student achievement (Adnot et al., 2016). For example, the 2018 PISA (Program for International Student Assessment) results show that the Indonesian students' achievements are still below the average score set by the Organization for Economic Co-operation and Development (OECD, 2019). Furthermore, the policies made by the Indonesian government for teacher welfare through certification programs and professional teacher allowance do not have a significant impact in improving the education quality (Bima & Yusrina, 2018; Wahyuningsih & Afandi, 2020).

Similar problems also occur in several other countries in Southeast Asia. Thailand, for example, that has been participating in PISA since 2000, still shows achievements that are not much different from Indonesia. Malaysia, that has been participating in PISA since 2009, is also ranked at the bottom third of the participating countries (Gill & Berezina, 2020); although their performance is slightly better than Indonesia and Thailand. These things are evidence that teacher performance as an important driving factor for student achievement is still low and needs to be improved by educational institutions, especially by the management at school level.

De Waal and Van Der Heiden (2015) emphasize that management is needed to encourage performance-based behavior in organizations. Therefore, management at school level has an important contribution to improve the teacher performance. The research by Gill and Berezina (2020) report that the practice of education management at school level in Singapore can encourage the student achievement to exceed that of Indonesian, Thailand and Malaysian students. In this regard, decision-making at school level is an important factor in improving the teacher quality and school development. Schools have more opportunities to determine their educational development needs.

In this research, the principal's decision-making, organizational commitment and school climate are considered to be important factors of management at school level that affect teacher performance. Therefore, this research is conducted to analyze the model of teacher performance improvement in vocational high school level.

Decision-making is a process of selecting alternative actions to achieve certain goals (Forman & Selly, 2002). How good a decision is made depends on the underlying process (Secchi, 2011). Brunsson (2007) argues that decisions have the potential to support or weaken an action, and opportunities for mobilization of action are influenced by the way the decision is made. The principal's decision-making has the potential to direct all school elements to achieve the school goals. Olcum and Titrek (2015) reveal that decision-making is useful to improve organizations, solve organizational problems and influence organizational personnel in their actions. A principal's decision-making that is done well will lead to teachers' positive behavior in carrying out their duties. This is based on an understanding that decisions are guidelines that give rise to responsibility and direction in action.

On the other hand, a principal's decision-making which is carried out in a less systematic and even less democratic manner will negatively influence teachers' acceptance to the decision. Negative teacher response to the decisions made by the principal will also decrease teacher performance.

In the school organization context, the way a teacher acts professionally can be seen as a form of teacher performance. Sonnentag and Frese (2002) also emphasize that actions which are relevant to organizational goals can be considered as a performance form. However, the evaluation needs to be done to ascertain whether or not the individual's performance is derived by organizational goals. If the actions that the teacher does are not derived by the school goals, it can be said that it is not an expected performance.

Making organizational decisions within the school scope is part of a principal's leadership duties. A principal will influence the people lead, including teachers. Therefore, the principal's decision-making process must be carried out properly so that the decisions will receive positive support from all school elements, including teachers.

Support for decisions made by the principal will influence the process of implementing the decisions. Hussain et al. (2017) show that decisions made by principals influence the teacher and school performance. Shen and Xia (2012) also suggest that the principal's decision regarding teacher teaching policies in the classroom, the allocation of teacher working hours, school budget allocation, learning outcomes assessment issues and teacher assignments will specifically

affect teacher performance. Poor decision-making by principals can lead to low teacher morale which is indicated by absenteeism and late arrival (Wadesango, 2012).

In addition to principal's decision-making, organizational commitment is considered to have an important contribution to improve teacher performance as well. Organizational commitment can be defined as a form of psychological attachment between the individual and the organization that causes the individual to feel reluctant to leave the organization (Meyer & Allen, 1991).

Meyer and Allen (1991) describe in detail that affective attachment to the organization; cost consequences as a result of the decision to leave the organization, and obligation to continue to be in the organization are three important components that reflect an individual's commitment to the organization. In this regard, Miroshnik (2013) adds that personal inclination and organizational intervention are two things that affect an individual's commitment to the organization.

Strong emotional relationships between individuals and their organizations will produce behavioral tendencies that support organizational goals. Behavior that supports organizational goals can be considered as a form of individual contextual performance (Yousaf et al., 2015). A strong belief in the goals and values of an organization influences an individual's willingness to mobilize the ability to realize the goals of the organization (Hanaysha, 2016). In the school organization context, teachers' commitment to the school is an important factor that has the potential to improve teacher performance.

School climate is the last factor in this research that is believed to have an important contribution in improving teacher performance. Many research have addressed the impacts of school climate on student achievement (Berkowitz et al., 2016; Daily et al., 2019; Goddard et al., 2015; Reynolds et al., 2017). The research results confirm that positive school climate can stimulate learning environment and affect student academic achievement (DeWitt & Slade, 2014). Meanwhile, there are only a few research discussing the relationship between school climate and teacher performance. Therefore, this research is important to conduct because teachers are the driving force of school organizations who also feel the school climate (Van Horn, 2003).

School climate will influence teachers' behavior in carrying out their duties at school (Suharsaputra, 2010). Teachers' behavior that is relevant to the professional assignment can be regarded as a form of teacher performance. School climate refers to the pattern of people's experience of school life and illustrates the values, norms, goals, interpersonal relationships, teaching and learning practices, and organizational structure (National School Climate Council, 2007).

Individuals assess school climate through their perceptions. Anderson (1982) states that climate factors are often operationalized in the form of people's perception. However, these perceptions must be based on their experience in the environment, and not about their attitudes (Ehrhart et al., 2014). Although each person's perception is subjective and may differ from one another, the perception of climate factors seems more realistic (Creemers & Reezigt, 1999).

A negative school climate can decrease teacher performance. The impact of a negative school climate is shown in ineffective organizational communication and lack of collaboration among school members (Rafferty, 2003). In contrast, a positive school climate has a strong relationship with perceptions of lower job stress and high job satisfaction among teachers (Malinen & Sovalinen, 2016). This shows that a positive school climate is important to encourage better teacher performance.

There are four hypotheses based on the theoretical review, namely:

- H1: Principal's decision-making has a significant influence on the performance of vocational school teachers.
- H2: Organizational commitment has a significant influence on the performance of vocational school teachers.
- H3: School climate has a significant influence on the performance of vocational school teachers.
- H4: Principal's decision-making, organizational commitment and school climate simultaneously have a significant influence on the performance of vocational school teachers.

Research Problem

The teachers' low performance is an important issue that needs to be considered seriously by the management at school level because it harms the sustainability of the school and the development of the people around it. Jones et al. (2006) suggest that many things will be at stake when dealing with problems of teachers' low performance. The ineffective implementation of teacher assignments is one indicator of inadequate teacher performance. In addition, student achievement results that are below the standard and the education quality at national level which has not shown significant changes prove that teacher performance still needs to be managed appropriately. Teachers are school resources that have positive impacts on student outcomes (Hayes et al., 2006). Therefore, the management at school level needs to be directed to improve teacher performance. Several management factors that affect teacher performance at school level identified in this research include decision-making by the principal, organizational commitment and school climate.

Research Goal

This research is a quantitative research using a survey method. The purpose of this research is to analyze the effects of principal's decision-making, organizational commitment and school climate on vocational high school teacher performance, both partially and simultaneously.

Methodology

General Background

This research employed a quantitative approach that was carried out from September to November 2019. Principal's decision-making, organizational commitment and school climate were the important factors considered to influence teacher performance in vocational high school. The relationship between variables is presented in Figure 1 below.

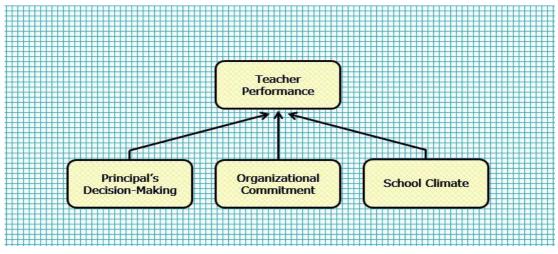


Figure 1. Relationship between variables

Participants

The research population was 268 teachers from 16 vocational schools in North Minahasa Regency; an area in the northern part of Sulawesi Island, Indonesia. This area has natural resources potential in mining, agriculture, fisheries, marine affairs and tourism. The existence of vocational high schools in this area is seen as an appropriate strategy for developing human resources so that they are skilled and productive in managing the potential of existing natural resources to improve the regional economy. The sampling method used was the simple random sampling. The research sample was 160 teachers consisting of 97 women (60.63%) and 63 men (39.37%). The number of samples was determined based on the sampling size using the Slovin formula. Based on the age category, the research sample consisted of 44 teachers from 25 to 36 years old (27.50%), 67 teachers from 37 to 48 years old (41.87%) and 49 teachers from 49 to 60 years old (30.63%). Table 1 shows the number of respondents by gender. In addition, the number of respondents by age is shown in Table 2.

| Gender | Number of respondents | Percentage (%) |
|----------------------------------|---|--------------------------------|
| Male | 63 | 39.37 |
| Female | 97 | 60.63 |
| Note: the total number of respon | dents was 160 | |
| | | |
| | Table 2. Number of respondents by age | |
| Age (Year) | Table 2. Number of respondents by age Number of respondents | Percentage (%) |
| | | Percentage (%) 27.50 |
| Age (Year) | Number of respondents | |

Note: the total number of respondents was 160

Instruments and Procedures

The instrument used was a Likert scale questionnaire consisting of 4 latent variables, namely: teacher performance, principals' decision-making, organizational commitment and school climate. There were 7 statements (items 19 to 25) on teacher performance variable derived from the theory by Hersey et al. (1996); 7 statements (items 1 to 7) on principal's decision-making variable from the theory developed by Siagian (1986); 7 statements (items 8 to 14) on

organizational commitment variable from Meyer and Allen's theory (1991); and 4 statements (items 15 to 18) on school climate variable from the theory by Anderson (1982). This instrument used a Likert scale with 5 degrees of choices: 5 for "Always", 4 for "Frequently", 3 for "Sometimes", 2 for "Rarely", and 1 for "Never".

To test the validity of the instrument's content, all items were assessed by 5 experts who have expertise in this field. The experts gave their input regarding the design of the instrument. The researchers refined the instrument based on the input to be re-assessed. The acceptance criteria were taken from the validity coefficient value table suggested by Aiken (1985). For the five raters with five degrees of assessment, the suggested validity coefficient value was 0.80 at a probability of 0.05 (Aiken, 1985). The item validity index was calculated using the Aiken formula (Aiken, 1985). Based on the analysis, it was found that the item validity index value was in the range of 0.85 to 1.00, which was categorized as "high". The validity results of the research instrument is presented in Table 3.

| Latent | No. | The second se | | Validator | | | | V | Catagory |
|--------------------------|------|---|---|-----------|---|---|---|------|----------|
| Variable | Item | Item/Statement | 1 | 2 | 3 | 4 | 5 | V | Category |
| | 1 | In each meeting, the principal explains the problem before it is discussed. | 5 | 5 | 4 | 4 | 5 | 0.90 | high |
| | 2 | The principals' decision-making is based on reliable data. | 4 | 5 | 5 | 5 | 5 | 0.95 | high |
| | 3 | The principal can analyze the problem well. | 5 | 5 | 5 | 4 | 4 | 0.90 | high |
| Principals' Decision- | 4 | The principal can choose the best alternative for every problem that the school encounters. | 5 | 5 | 5 | 4 | 5 | 0.90 | high |
| making | 5 | The principal makes decisions based on mutual agreement. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| | 6 | The principal oversees the implementation of the decisions. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| | 7 | The principal evaluates the implementation of the decisions. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| | 8 | I believe in the goodness of our school's values and goals. | 5 | 4 | 5 | 5 | 5 | 0.95 | high |
| | 9 | I feel emotionally attached to this school. | 5 | 4 | 4 | 5 | 5 | 0.90 | high |
| Organizational | 10 | I feel that the problem that the school encounters is my problem, too. | 5 | 4 | 5 | 5 | 5 | 0.95 | high |
| Commitment | 11 | I feel that I have made great progress at this school. | 4 | 5 | 4 | 5 | 4 | 0.85 | high |
| | 12 | I feel at loss if I leave this school. | 5 | 5 | 4 | 4 | 5 | 0.90 | high |
| | 13 | I feel obliged to maintain the reputation of this school. | 5 | 5 | 5 | 4 | 4 | 0.90 | high |
| | 14 | I feel responsible to make this school better. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| | 15 | The school environment looks clean and well maintained. | 4 | 5 | 5 | 5 | 4 | 0.90 | high |
| School Climate | 16 | There is harmony among teachers, staff and school principal. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| | 17 | There is a clear division of tasks for teachers and school staff. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| | 18 | Alls teachers and staff obey the school regulations. | 5 | 5 | 4 | 5 | 5 | 0.95 | high |
| | 19 | I try to equip students with adequate knowledge. | 4 | 5 | 4 | 5 | 4 | 0.85 | high |
| | 20 | I work for achievement. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| | 21 | I utilize appropriate learning media to support the learning process. | 4 | 5 | 4 | 4 | 5 | 0.85 | high |
| Teacher | 22 | I can apply learning methods that are suitable to the learning needs. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| Performance | 23 | I have the opportunity to attend training and professional development. | 5 | 5 | 5 | 5 | 5 | 1.00 | high |
| | 24 | I prepare to learn tools to support the teaching process. | 5 | 5 | 5 | 5 | 5 | 1.00 | High |
| | 25 | I am happy to get advice and guidance from the supervisor on my progress. | 5 | 5 | 4 | 5 | 5 | 0.95 | High |

Table 3. Instrument validity results

The instrument reliability was measured using the Cronbach's Alpha internal consistency. For reliability test, this instrument was tested on 30 respondents who were not included in the research sample. The data analysis on the reliability of each variable using the IBM SPSS v.22 application is summarized in Table 4 below.

| | Relial | | | |
|-----------------------------|------------------|---|------------|--|
| Variable | Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items | |
| Principal's Decision-making | .763 | .735 | 7 | |
| Organizational Commitment | .796 | .789 | 7 | |
| School Climate | .843 | .847 | 4 | |
| Teacher Performance | .783 | .775 | 7 | |

Table 4. Instrument reliability results

Note: the total number of items is 25

Table 4 shows that the reliability coefficient of Principal's Decision-making is $\alpha = 0.763$; Organizational Commitment with $\alpha = 0.796$; School Climate with $\alpha = 0.843$; Teacher Performance with $\alpha = 0.783$. The reliability coefficient value for each variable is categorized as "adequate" because it is bigger than 0.7 (Garson, 2003).

The data collection process involved several aspects of ethical considerations including obtaining prior approval from the schools involved. Furthermore, the researchers also obtained approval from each respondent by guaranteeing the respondents' confidentiality and privacy. In the process of collecting data, the researchers also gave freedom to each respondent to withdraw from the research at any time, which was done to respect the respondents' rights.

In the data collection process, the researchers also tried to minimize the occurrence of biased answers from the respondents. Before the questionnaire was distributed, the researchers explained the content and purpose of the self-assessment instrument. In addition, the participants were also asked to provide honest opinion to support improvement at schools.

Data Analysis

The data from the questionnaire were then analyzed using simple linear regression method to partially analyze the influence of principal's decision-making, organizational commitment and school climate variables on teacher performance. In addition, multiple linear regression method was used to analyze the effect of principal's decision-making, organizational commitment and school climate simultaneously on teacher performance. Before carrying out the regression analysis, the researcher controlled several conditions related to the research data. It was conducted to ensure that the basic assumptions for the analysis were fulfilled. The data normality test was conducted using the Kolmogorov-Smirnov test to ensure that the samples were normally distributed. In addition, multicollinearity problem was also taken into account because it could negatively affect the regression coefficient results. Therefore, a multicollinearity test was carried out to ensure that there was no inter-correlation between the independent variables.

Results

The data analysis description for the four variables is presented in the following Table 5.

| | Principal's Decision-making | Organizational Commitment | School Climate | Teacher Performance |
|----------------|--------------------------------|------------------------------|----------------|------------------------|
| Ν | 160 | 160 | 160 | 160 |
| Minimum | 15 | 20 | 15 | 20 |
| Maximum | 25 | 32 | 20 | 28 |
| Mean | 20.8 | 26.5188 | 18.7125 | 23.8938 |
| Std. Deviation | 2.13624 | 2.34178 | 1.38449 | 1.98611 |

| Table 5. | Descriptive statistics | results |
|----------|------------------------|---------|
|----------|------------------------|---------|

Table 5 shows that from 160 research samples, the score of principals' decision-making variable ranges from 15 to 25, resulting in an average score of 20.8 with 2.13624 standard deviation. The average score of organizational commitment variable is 26.5188, deriving from 20 as the lowest and 32 as the highest score with 2.34178 standard deviation. The lowest and highest score of school climate variable is 15 and 20, making an average score of 18.7125 with 1.38449 standard deviation. Lastly, teacher performance variable's average score is 23.8938 with 1.98611 standard deviation,

with 20 as the lowest and 28 as the highest score. The simple linear regression analysis was used to test Hypothesis 1, 2 and 3. Meanwhile, hypothesis 4 was tested using the multiple linear regression analysis.

Hypothesis Testing 1: Principal's Decision-making has a Significant Effect on Teacher Performance

| LL 10.029 | UL | SE | р | ι | р |
|--------------|--------|-------|-------|--------|---|
| 10.020 | | | | | |
| 10.029 | 14.964 | 1.249 | | 10.002 | 0.000 |
| | | | | | |
| 0.43 | 0.66 | 0.06 | 0.589 | 9.17 | 0.000 |
| - | | | | | 0.43 0.66 0.06 0.589 9.17 ace interval; LL = lower limit; UL = upper limit; SE = |

Table 6. Simple linear regression output for hypothesis testing 1

 β = standardized coefficient; p < .05.

Based on the analysis, the unstandardized coefficient (B) is 0.548, which means that for every 1 unit increase in the principal's decision-making variable, the teacher performance variable will increase by 0.548 units.

This analysis produces a regression model of Y = 12.496 + 0.548 * X1 with a determinant coefficient (R²) of 0.347, meaning that 34.7% teacher performance is influenced by principal's decision-making variable, and the remaining 65.3% is influenced by other factors. Furthermore, the significance testing using t-test shows a statistical t-value of 9.17, which is bigger than the t-table value (1.97). Thus, it can be concluded that hypothesis 1, which states that principals' decision-making has a significant effect on teacher performance, is acceptable.

Hypothesis Testing 2: Organizational Commitment has a Significant Effect on Teacher Performance

Table 7. Simple linear regression output for hypothesis testing 2

| Variable | В | 95% CI for B | | CE | 0 | ÷ | |
|--|-------|--------------|-------|-------|-------|--------|-------|
| Variable | В | LL | UL | SE | р | ι | р |
| Intercept | 6.077 | 3.912 | 8.242 | 1.096 | | 5.544 | 0.000 |
| Organizational commitment → Teacher performance | 0.672 | 0.591 | 0.753 | 0.41 | 0.792 | 16.316 | 0.000 |

Note: B = unstandardized coefficient; CI = confidence interval; LL = lower limit; UL = upper limit; SE = std. error; β = standardized coefficient; p < .05.

The analysis shows that the unstandardized coefficient (B) is 0.672, which means that for every 1 unit increase in the organizational commitment variable, the teacher performance variable will increase by 0.672 units.

The analysis produces a regression model of Y = 6.077 + 0.672 * X2 with a determinant coefficient (R²) of 0.628, indicating that 62.8% teacher performance is influenced by organizational commitment variables, and the remaining 37.2% by other factors. The significance testing using t-test reveals a statistical t-value of 16.316, which is bigger than the t-table value (1.97). Thus, it can be concluded that hypothesis 2, which states that organizational commitment has a significant effect on teacher performance, is acceptable.

Hypothesis Testing 3: School Climate has a Significant Effect on Teacher Performance

Table 8. Simple linear regression output for hypothesis testing 3

| Variable | В - | B 95% CI for B SE | | ß | ÷ | | |
|--|--------|-------------------|--------|-------|-------|-------|-------|
| Vallable | D | LL | UL | 3E | р | ι | р |
| Intercept | 11.669 | 7.903 | 15.434 | 1.906 | | 6.121 | 0.000 |
| School climate \rightarrow Teacher performance | 0.653 | 0.453 | 0.854 | 0.102 | 0.455 | 6.430 | 0.000 |

Note: B = unstandardized coefficient; CI = confidence interval; LL = lower limit; UL = upper limit; SE = std. error; β = standardized coefficient; p < .05.

Table 8 shows that the unstandardized coefficient (B) is 0.653, which means that for every 1 unit increase in the school climate variable, the teacher performance variable will increase by 0.653 units.

The regression model produced is Y = 11.669 + 0.653 * X3 with a determinant coefficient (R²) of 0.207. It indicates that 20.7% teacher performance is influenced by school climate variable, and the remaining 79.3% by other factors. The

significance testing using t-test finds the statistical t-value of 6.43, which is bigger than the t-table value (1.97). Thus, it can be concluded that hypothesis 3, which states that school climate has a significant effect on teacher performance, is acceptable.

Hypothesis Testing 4: Principal's Decision-making, Organizational Commitment and School Climate Simultaneously have a Significant Effect on Teacher Performance

The analysis shows that the unstandardized coefficient (B) for the three variables is as follows: 0.189 for the principal's decision-making; 0.542 for the organizational commitment, and 0.265 for the school climate.

Furthermore, the t-test results of the relationship between variables show that principal's decision-making significantly influences teacher performance with a statistical t-value of 3.905, which is bigger than the critical t-value at 1.97. Similar to that, organizational commitment and school climate also have significant influence on teacher performance with a statistical t-value of 12.838 and 3.888, respectively. The analysis results of the correlation coefficient, regression coefficient and significance testing using t-test are presented in Table 9 below.

Table 9. The results of multiple linear regression analysis for testing hypothesis 4

| Variable | В | 95% C | I for B | SE | β | t | n |
|---|-------|--------|---------|-------|-------|--------|-------|
| Variable | D | LL | UL | 3E | р | L | р |
| Intercept | 0.638 | -2.011 | 3.287 | 1.341 | | 0.476 | 0.635 |
| Principal's decision-making \rightarrow Teacher performance | 0.189 | 0.093 | 0.284 | 0.48 | 0.203 | 3.905 | 0.000 |
| Organizational commitment \rightarrow Teacher performance | 0.542 | 0.458 | 0.625 | 0.42 | 0.639 | 12.838 | 0.000 |
| School climate \rightarrow Teacher performance | 0.265 | 0.130 | 0.400 | 0.68 | 0.185 | 3.888 | 0.000 |
| Note: B = unstandardized coefficient; CI = confidence interval; LL = lower limit; UL = upper limit; SE = std. error; β = standardized coefficient; p < .05. | | | | | | | |

The multiple linear regression analysis produces a regression equation model of Y = 0.638 + 0.189 * X1 + 0.542 * X2 + 0.265 * X3 with 1.14 error variance and determinant coefficient (R²) of 0.71. The complete data presentation of the regression model's significance can be seen in Table 10 below.

Table 10. The significance of the regression model

| Tuble 10. The significance of the regression model | | | | | | | | | |
|--|---------|---------|-----|-----|--------|--|--|--|--|
| R ² | SE | F | df1 | df2 | Sig. F | | | | |
| .710 | 108.000 | 127.240 | 3 | 156 | .000 | | | | |

Note: predictors: principal's decision-making, organizational commitment, school climate; dependent variable: teacher performance; R^2 = coefficient of determination.

The coefficient value indicates that contribution of the principal's decision-making, organizational commitment and school climate variables to the teacher performance was 71%. The significance of the overall regression model can be seen from the Anova output significance value of 0.000, which is smaller than 0.05 (0.000 <0.05). In addition, the F value in Anova output can also be used as a basis for determining the significance of the overall regression model, where the F statistical value is bigger than the table F value (127.24 > 2.66).

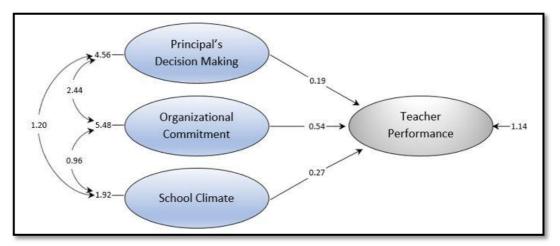


Figure 2. Estimation results for multiple linear regression analysis

Based on the hypotheses testing, it can be concluded that principal's decision-making, organizational commitment and school climate have positive and significant effects on teacher performance, both partially and simultaneously.

Discussion

The results of this research have revealed that principal's decision-making, organizational commitment and school climate have a positive and significant influence on the performance of vocational school teachers in North Minahasa Regency, both partially and simultaneously. This research has proven that the performance of vocational school teachers increases when the principals' decision-making is done well. It is in line with the research by Murtiningsih and Lian (2017) which reported that principal's decision-making process was influential in improving teacher performance. According to Murtiningsih and Lian (2017), principals' decision-making encourages the realization of the school's vision and mission through performance produced by teachers and school staff. Systematic decision-making by the principal will result in quality decisions that can be accepted by all school members, including teachers. This is important because quality and acceptance are two main criteria of a good decision (Keren & de Bruin, 2010). Quality decisions that result from systematic decision-making process are powerful instruments to set clear responsibilities and directions for action for individuals in carrying out tasks (Utomo & Narulita, 2018). Teacher performance, which is a representation of teachers' behavior and work results relevant to school goals, will be mobilized by decisions from the principal.

Through a systematic process, principals' decision-making involves rationality which allows recognition and fulfillment of needs for one's values. Matters relating to value system must be respected and prioritized. The decision will be made with full responsibility by considering the applicable value system (Rhim et al., 2020). Therefore, school leaders need to implement systematic decision-making practices in the school environment. The findings of this research also prove that organizational commitment contributes positively to improve teacher performance. It is consistent with the research by Laily and Wahyuni (2017) which concluded that higher organizational commitment will also increase teacher performance. This research has also found a strong relationship between organizational commitment and teacher performance in vocational high school in North Minahasa Regency, which confirms that factors related to organizational commitment correlate strongly with teacher performance (Adeyemi, 2008; Jackson, 2018). Thus, it can be concluded that organizational commitment has an important role in improving teacher performance.

Teachers with strong commitment to the school will be more productive at work compared to those who are not committed (Merida-Lopez & Extremera, 2020). Willingness to sacrifice for the school, a sense of responsibility to make the school better, as well as loyalty to maintain the school's reputation in the community are the manifestation of teachers' attitude who are strongly committed to their schools. This commitment needs to be treated well and given appreciation by schools (Beckman & Stanko, 2020). Therefore, school leaders need to have a strategy in managing and maintaining teachers' organizational commitment. Schools need to instill ethical and moral values in the school environment, which will foster a strong sense of trust among teachers at schools (Sulaiman et al., 2019). As a conclusion, positive perspective will create teachers' positive attitudes and behavior.

The school climate also plays an important role in improving teacher performance (Dan & Ye, 2020). The findings of this research reveal that school climate has a significant influence on the performance of vocational school teachers in North Minahasa Regency. Although the correlation coefficient between school climate and teacher performance was in the "moderate" category, it still indicates that school climate positively contributes to improve teacher performance. The school climate experienced by teachers influences teacher behavior in carrying out their duties. The school's physical environment, harmonious relationships among all school members, clear division of tasks among all school members and implementation of the values at schools positively influence teacher performance. This is in line with the research by Creemers and Reezigt (1999), stating that high-performance standards, high teacher expectations,

regularity of the learning environment and harmonious relationships between teachers are produced from a healthy school life. The findings of this research are also consistent with that of Selamat et al. (2013), reporting that school climate had a positive influence on teacher performance. Teacher performance will improve when school climate is improved.

Teachers feel comfortable when working in a school environment with a healthy climate, both physically and psychologically, which enables teamwork among teachers, school staff and principals in carrying out their tasks (Mailool et al., 2020). Teamwork and mutual support between one another will have a positive impact on teacher performance and school productivity. Therefore, school leaders are responsible to make a conducive climate in school environment. School leaders must be willing to accept constructive criticism and respond with actions that meet the needs. However, a conducive school climate requires the participation and support of all school elements, including teachers and school staff. All school elements must be able to live side by side despite having various background differences. Existing differences must be managed appropriately so as not to cause negative effects on school life.

Conclusion

Principal's decision-making, organizational commitment and school climate as part of management at school level contribute positively to improve teacher performance. Based on the results of this research, interventions carried out through management at school level bring significant changes to improve teacher performance.

Education administrators at school level have a big role and responsibility in planning and designing strategic policies to improve teacher performance and school productivity. Decisions taken at school level must go through a systematic process and reflect the aspirations and needs of each school member. Furthermore, creating a positive climate in school environment will encourage performance-based behavior among teachers. A positive climate can be built through the development of ethical and moral values at school. A good school climate can encourage effective open communication that results in productive collaborative practices between teachers. Teachers' organizational commitment can also produce behavior that supports the school goals. A strong emotional relationship between teachers and school will result in a willingness to sacrifice for the school.

Suggestions

Schools should strive to continuously improve teacher performance to meet the changing needs in education. The openness of information in education encourages schools to improve their education system through efforts to improve teacher performance. The openness of information in this context means that every decision made at the school level, including organizational programs, must be known by everyone affected by the decision. This information disclosure is also related to the school transparency in providing clear information on the implementation of their institutional functions, which will affect the effectiveness of educational supervisory function. Ideally, the educational supervisory function is oriented towards the idea of improvement and not for finding fault and imposing sanctions. Therefore, neither school institutions nor teachers need to protect themselves with negative views about the work of educational supervision. Through the educational supervisory function, any weaknesses of teachers and schools, including the inadequate level of teaching skills, will become an input to propose appropriate improvements.

School leaders must continue to encourage performance-based behavior among all school elements. New strategies to improve teacher performance must be well designed by principals to serve the increasing educational needs. Performance-based behavior in school environment must be built by creating a positive school climate through mutual respect among all school members, strong teamwork, high social care, setting a clear task structure and fairness in applying regulations.

As the leader of the school, a principal is responsible to maintain the teachers' commitment. Therefore, school administrators should facilitate teachers' professional development in a sustainable and planned manner. This will provide positive reciprocal benefits for teachers and schools. The acquisition of new skills and pedagogical perspectives is received by teachers from their theoretical knowledge and practical experience (Swart et al., 2020). For this reason, good cooperation between schools, educational institutions and teacher professional training plays an important role. In addition, teachers must be rewarded according to their achievements so that organizational commitment is maintained.

Research on new policies and strategies to improve teacher performance is necessary to conduct since the challenges in education continue to change. Therefore, teacher performance must be continuously updated to serve the increasing educational needs.

Limitations

Limitations of this research include the use of questionnaire as the instrument to assess teacher performance. As a result, the teacher performance in this research is only measured through the teachers' perceptions. In addition, the selection of respondents is not determined based on the vocational high school status (public or private). Thus, this

research cannot reflect the performance of vocational high school teachers in general. The research results could be different if there were more heterogeneous respondents. Therefore, future researchers need to conduct a research with more heterogeneous respondents.

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