Research Article

The Effect of Organizational Culture and Communication in Decision Making by School Principals

Linda IKA MAYASARI 1  Maruf AKBAR 2  Eliana SARI 3

Abstract
The purpose of this study was to determine the effect of organizational culture and communication on principal decision making. The importance of decision made by principal becomes the background of this study. The mistake in decision making can reduce the school’s ability to achieve its vision. This study aims to seek the effect of organizational culture and communication in decision making. This study was conducted in the state junior high school, Indonesia. The study involved 144 principals as the population and 105 of the principals as the sample. This research engaged quantitative approach with survey design. The result of study showed that there is significant, direct and positive effect of organizational culture and communication on decision making. The result of this study can be used to enhance the effectiveness in decision making by principals. It can be concluded that principals need to enhance the organizational culture and communication.

Keywords: Alternative education, school-community partnerships, quality of education

1. INTRODUCTION

As a developing country, Indonesia continuously strives to become developed country. Education is one field of need and important to be watched out. The development of education in Indonesia has been increasing rapidly. Every year the number of primary schools, junior high schools, and even colleges are increasing. A recent data shows that there are 148,244 primary schools, 38,960 junior high schools, 13,495 senior high schools and 13,710 vocational high schools (Education Ministry, 2018). The improvement of the total of school will be better if there is an improvement in quality of the education.

Increasing the number of educational institution can be a trigger to compete in order to achieve good quality human resources. The competition should be grown in a healthy way towards better educational services in each institution. To realize this there is a need for a principal who is able to do and understands all about leadership. The principal becomes a main figure in the success of quality improvement in each school. Quality of a principal is one of the things that affect the output of that school. The Principal is someone who becomes a protagonist in the school, whom actions and words are going to be followed and copied by teachers, educational stuff, and students. The principal has the key role to progress and success of a school (Education, 2010).
In an institution, the principal is a member of an internal committee who has an important role to reach the success of the school. Through the role of principal, the teachers’ potency will be improved better. A teacher works optimally when led by a qualified principal. And on the contrary, a qualified teacher will not work with all of his competency if led by a principal who does not understand his/her main responsibilities as a principal. One of the responsibilities of a principal as a leader is making decisions. The decision decided by a principal will bring positive and negative impacts. Right decision will improve the quality of the institution, while a wrong decision will cause a decrease in the quality of the institution. The ability of a principal in making decisions will impact to the existence of the school. Besides, it affects to the school generally, the decision by principal also has impacts on the motivation of the teachers and educational staff. Teachers and staff may feel more motivated to work if the decision made meets their expectations. Teachers and staff may also be in lack of motivation if the decision is not as they had expected and is considered disadvantageous for them.

Some problems faced by some principals in Indonesia particularly in the regency of Bekasi is making a wrong decision. In general, the failure happens because of a levy that violates the roles or provisions. Wrong decision absolutely brings out a problem for the principal personally and also toward the school (http://www.wartasidik.com/?p=913, n.d.). Considering the problem above, it is important to conduct a study toward these problems. The aim of this study is to seek the effect of organizational culture in decision making and the effect of communication in decision making.

1.1. Second Level Subtitles Should Be in Lower Case

Decision making is an attached part of organization activities. Every problem faced by an organization depends on the way in decision making. Right way to make a decision will be able to avoid problems in order to reach the aim or purpose. Decision making according to (Luthans & Doh, 2017) is defined as choosing between two or more alternatives. However, viewed as a process, the actual choice activity is preceded by gathering information and developing alternatives. Stated by (Daft): Decision making is the process of identifying problems and opportunities and the resolving them. Decision making involves effort both before and after the actual choice. Thus, the decision as to whether to select Colin, Tasha, or Carlos requires the accounting manager to ascertain whether a new junior auditor is needed, determine the availability of potential job candidates, interview candidates to acquire necessary information, select one candidate, and follow up with the socialization of the new employee into the organization to ensure the decision’s success. During the process of decision making there are always some alternatives that has to be considered thoroughly in order to choose the best solution and make the best decision. In decision making a leader should consider some factors. Stated by (McShane & Von, Organizational Behavior, 2010) “decision making is a conscious process of making choices among alternative with the intention of moving toward some desired state of affairs”. Decision making is a process of selecting among some different actions with the criteria of decision. The criteria to select the alternative include the costs, advantages, disadvantages, effect, or the pleasure of its alternative. The ability to select and decide the alternative is important to be mastered by principals.

There are factors which affect decision-making, these are organization culture and communication. Some experts have stated own opinion about organization culture. According to (Harris & Hartman, 2002) state: “Organizational culture is the values, norms, and attitudes of the people who make up an organization. The culture lets people know what is important in an organization, how to behave, and how to perceive things”. Stated by (Kinicki & Williams, 2011) Organizational culture sometimes called corporate culture is a system of shared beliefs and values that develops within an organization and guides the behavior of its members.
Based on the definitions above, it can be synthesized that organizational culture is a system of understanding followed by the members that differentiate the organization from other organizations. The indicators of organizational culture are assumption, values, norms, and attitudes. Organizational culture is believed to affect decision making (McShane & Glinow, Organizational Behavior, 2008) state “that they need to be sensitive to the fact that cultural organizational differences exist and, although often subtle, can influence decisions making, behavior, and interpersonal relations”. According to (Jalal, 2017) State “Leadership and decision making are influenced by cultural significances and skills”. According to (George & Jones, 2012) State “Organizational culture is the set of shared values, beliefs and norms, that influence the way managers think, make decision, feel and behave toward each other and toward people outside the organization”. Communication is also believed can affect a decision making. As a social being, every human needs another human presence to communicate, to have group, help one another to fulfill own needs. The effort of humans to provide their needs is not possible by their own but together with other people. That kind of conditions require people to make communication with one another in a group as well as in wider social life. Good communication is needed in order to reach the purpose of the message delivered and to be understood by other people. Communication according to (Daft) is: Communication is the process by which information is exchanged and understood by two or more people, usually with the intent to motivate or influence behavior. Communication is not just sending information. Honoring this distinction between sharing and proclaiming is crucial for successful management. According to (Tailor, 1999) state: Communication may be defined as giving, receiving, or exchanging information, opinions or ideas by writing, speech or visual means, so that the material communicated is completely understood by everyone concerned. According to (Robbins & Judge, 2011) state: The final function of communication is to facilitate decision making. Communication provides the information individuals and groups need to make decisions by transmitting the data to identify and evaluate alternative choices. None of these four functions is more important than the others. To perform effectively, groups need to maintain some form of control over members, stimulate members to perform, allow emotional expression, and make decision choices. Almost every communication interaction that takes place in a group or organization performs one or more of these functions.

According to (Griffin & Moorhead, 2014) state: Communication is essential to the decision making process as well. Information and information sharing are needed to define problems, generate and evaluate alternatives, implement decisions, and control and evaluate results. Finally, communication expresses feelings and emotions. Organizational communication is far from merely a collection of facts and figures.

2. METHOD

2.1. Research Design

In order to reach the aim of study above, the method which engaged in this research is survey method design. The data were collecting through selecting sample from populations. Next step employed quantitative approach to describe the effect between each variable with path analysis technique.

2.2. Sample

The population of interest for this study was the principal of the State Junior High School, which consists of 144 people. The sample in this study was taken by simple random sampling technique. The size of the sample in this study was determined by using Slovin formula. Based on the results of calculations, it is known that the sample in this study is 105 people.

To get a sample of 105 people, the following steps were carried out:

a) Designating the school that will be used as place of research.
b) Looking at the number of teachers in each school which is the unit of research analysis.

c) Establishing a research sample (based on Slovin Formula known to 144 people).

d) Determining the sample size of each school to represent the characteristics of the population.

e) Making a simple random sampling of members of the population by writing the names of all the teachers and taking the names randomly according to the number of samples in each school.

2.3. Data Collection and Analysis

Data were collecting using questionnaire that had been tested for validity and reliability. Based on the calculation of the validity and the reliability made total of questionnaire for organizational culture variable are 37. While the total of questionnaires for variable of communication are 36 and for variable of making decision are 35.

Based on the framework of thinking that has been explained previously, a path chart can be drawn which shows the effect of organizational culture, creativity, and communication in making decision as follows.

![Figure 1: Research of constellation](image)

3. FINDINGS

3.1. Data Description

Data description of each research variable is presented in the following table.

| No. | Information | $X_3$ |
|-----|-------------|------|
|     |             |      |
Table 1 shows that the range of empirical scores on the decision making variable is between 105 and 166, so the range of scores is 61. Based on the results of the calculation it is known that mean is 134,41; median 133,39; standard deviation 14,43 and sample variance 208,2441.

Table 2. The description of Organizational Culture variable data \((X_1)\)

| No. | Information | \(X_1\)  |
|-----|-------------|---------|
| 1.  | Mean        | 142.03  |
| 2.  | Standard Error | 1.55   |
| 3.  | Median      | 145.73  |
| 4.  | Mode        | 149.44  |
| 5.  | Standard Deviation | 15.83 |
| 6.  | Sample Variance | 250.6819 |
| 7.  | Range       | 52      |
| 8.  | Minimum     | 114     |
| 9.  | Maximum     | 166     |
| 10. | Sum         | 14352   |
| 11. | Count       | 105     |

Table 2 shows that the range of empirical scores on the organizational culture variable is between 114 and 166, so the range of scores is 52. Based on the results of the calculation it is known that mean is 142,03; median 145,73; standard deviation 15,83 and sample variance 250,6819.

Table 3. The description of communication variable data \((X_2)\)

| No. | Information | \(X_2\)  |
|-----|-------------|---------|
| 1.  | Mean        | 136.69  |
| 2.  | Standard Error | 1.16   |
| 3.  | Median      | 137.76  |
| 4.  | Mode        | 139.44  |
| 5.  | Standard Deviation | 11.87 |
| 6.  | Sample Variance | 140.7945 |
| 7.  | Range       | 70      |
| 8.  | Minimum     | 109     |
| 9.  | Maximum     | 179     |
| 10. | Sum         | 14913   |
| 11. | Count       | 105     |
Table 3 shows that the range of empirical scores on the communication variable is between 109 and 179, so the range of scores is 70. Based on the results of the calculation it is known that mean is 136.69; median 137.76; standard deviation 11.87 and sample variance 140.7945.

3.2. Requirements Analysis Tests

The requirements analysis tests used were the estimated error normality test, linearity test and significance test. The description of requirements analysis test result is as follows:

3.2.1. Estimated error normality

Estimated error normality test was done to see whether the sample that came from a population was normally distributed. In path analysis, sample errors must come from populations that are normally distributed. The statistical test used to test normality was done by using Lilliefors formula.

1) Normality Test for Estimated Error Data of Decision Making on Organizational Culture (X₃ on X₁)

The results of Lilliefors statistical calculations showed that the normality for the estimated error X₃ on X₁ obtained L_count of 0.0685. Lilliefors critical value L_table for n = 105 at α = 0.05 is 0.086. Based on these results, it is known that the L_count ≤ L_table (0.0685 < 0.086), so it can be concluded that the distribution of decision making variable estimation error (X₃) on the organizational culture variable (X₁) comes from a population that has a normal distribution.

2) Normality Test for Estimated Error Data of Decision Making on Communication (X₃ on X₂)

The results of Lilliefors statistical calculations showed that the normality for the estimated error X₃ on X₂ obtained L_count of 0.0602. Lilliefors critical value L_table for n = 105 at α = 0.05 is 0.086. Based on these results, it is known that the L_count ≤ L_table (0.0602 < 0.086), so it can be concluded that the distribution of decision making variable estimation error (X₃) on the communication variable (X₂) comes from a population that has a normal distribution.

3) Normality Test for Estimated Error Data of Communication on Organizational Culture (X₂ on X₁)

The results of Lilliefors statistical calculations showed that the normality for the estimated error X₂ on X₁ obtained L_count of 0.0789. Lilliefors critical value L_table for n = 105 at α = 0.05 is 0.086. Based on these results, it is known that the L_count ≤ L_table (0.0789 < 0.086), so it can be concluded that the distribution of communication variable estimation error (X₂) on the organizational culture variable (X₁) comes from a population that has a normal distribution.

3.2.2. Significance and regression linearity test

1) Significance and Linearity Test of Decision Making on Organizational Culture (X₃ on X₁)

Thus, the relationship of the simple regression equation model is \( \hat{X}_3 = 63.20 - 0.50 X_1 \). Before the regression equation model is further analyzed and used in drawing conclusions, the significance and linearity of the regression equation test is first done.

The regression equation is \( \hat{X}_3 = 63.20 - 0.50 X_1 \), for the significance test obtained \( F_{hitung} = 44.69 > F_{table} = 6.89 \) pada \( \alpha = 0.01 \). Because \( F_{count} > F_{table} \) then the regression equation is stated to be very
significant. For the linearity test obtained $F_{\text{count}}$ of 1.26 is smaller than the $F_{\text{table}}$ of 1.59 at $\alpha = 0.05$. Because $F_{\text{count}} < F_{\text{table}}$, the distribution of estimated points forms an acceptable linear line. The point distribution approaching the regression equation line which looks visually linear can be seen in the following figure.

![Figure 2. Graph of regression equations $\hat{Y} = 63.20 - 0.50 X_1$](image)

The form of the relationship between organizational culture and decision making is shown by the regression equation $= \hat{Y} = 63.20 - 0.50 X_1$. The regression equation showed significant meaning at the significance level of 5%. This regression equation can be interpreted that the change in one unit score of organizational culture will be followed by a change in decision making score, which is at 0.50 units in the constant 63.20.

2) Significance and Linearity Test of Decision Making on Communication ($X_3$ on $X_2$)

Thus, the relationship of the simple regression equation model is $\hat{Y} = 48.91 + 0.63 X_2$. Before the regression equation model is further analyzed and used in drawing conclusions, the significance and linearity of the regression equation test is first done.

The regression equation is $\hat{Y} = 48.91 + 0.63 X_2$, for the significance test obtained $F_{\text{hitung}} = 37.05 > F_{\text{table}} = 6.89$ pada $\alpha = 0.01$. Because $F_{\text{count}} > F_{\text{table}}$ then the regression equation is stated to be very significant. For the linearity test obtained $F_{\text{count}}$ of 1.57 is smaller than the $F_{\text{table}}$ of 1.60 at $\alpha = 0.05$. Because $F_{\text{count}} < F_{\text{table}}$, the distribution of estimated points forms an acceptable linear line. The point distribution approaching the regression equation line which looks visually linear can be seen in the following figure.

![Figure 3. Graph of regression equations $\hat{Y} = 48.91 + 0.63 X_2$](image)
The form of the relationship between communication and decision making is shown by the regression equation \( \hat{X}_3 = 48.91 + 0.63 X_2 \). The regression equation showed significant meaning at the significance level of 5%. This regression equation can be interpreted that the change in one unit score of communication will be followed by a change in decision making score, which is at 0.63 units in the constant 48.91.

3) Significance and Linearity Test of Organizational Culture on Communication (\( X_1 \) on \( X_2 \))

Thus, the relationship of the simple regression equation model is \( \hat{X}_1 = 78.10 + 0.41 X_2 \). Before the regression equation model is further analyzed and used in drawing conclusions, the significance and linearity of the regression equation test is first done.

The regression equation is \( \hat{X}_1 = 78.10 + 0.41 X_2 \), for the significance test obtained \( F_{hitung} = 44.78 > F_{table} = 6.89 \) pada \( \alpha = 0.01 \). Because \( F_{count} > F_{table} \) then the regression equation is stated to be very significant. For the linearity test obtained \( F_{count} \) of 1.22 is smaller than the \( F_{table} \) of 1.92 at \( \alpha = 0.05 \). Because \( F_{count} < F_{table} \), the distribution of estimated points forms an acceptable linear line. The point distribution approaching the regression equation line which looks visually linear can be seen in the following figure.

![Figure 4. Graph of regression equations \( \hat{X}_1 = 78.10 + 0.41 X_2 \)](image)

The form of the relationship between organizational culture and communication is shown by the regression equation \( \hat{X}_1 = 78.10 + 0.41 X_2 \). The regression equation showed significant meaning at the significance level of 5%. This regression equation can be interpreted that the change in one unit score of organizational culture will be followed by a change in communication score, which is at 0.41 units in the constant 78.10.

3.3. Hypothesis Testing

To know the amount of direct influence and significance test for each path can be seen in the following table.
Table 4. Summary of pathway significance test

| No. | Effect of Direct | Coefficient Path | Dk  | \( t_{\text{count}} \) | \( t_{\text{table}} \) |
|-----|-----------------|------------------|-----|-----------------------|-----------------------|
|     | \( X_1 - X_3 \) | 0,243            | 101 | 2,69                  | 1,98                  |
| 1   | \( X_2 - X_3 \) | 0,354            | 101 | 3,66                  | 1,98                  |
| 2   | \( X_1 - X_2 \) | 0,332            | 102 | 3,83                  | 1,98                  |

Structurally the overall diagram of the path of each structure can be seen in the following Figure:

![Path analysis diagram](image)

**Figure 5: Path analysis diagram**

1) First hypothesis: There is a direct positive effect of organizational culture (\( X_1 \)) on decision making (\( X_3 \)).

The hypothesis tested is the direct positive effect of organizational culture (\( X_1 \)) on decision making (\( X_3 \)). Base on the results of the path analysis of organization culture (\( X_1 \)) effect on decision making (\( X_3 \)). Obtained the path coefficient \( \rho_{21} \) of 0,243 with \( t_{\text{count}} = 3,69 \), while the value of \( t_{\text{table}} = 1,98 \) (\( \alpha = 0,05; \text{Dk} = 101 \)). Therefore \( t_{\text{count}} > t_{\text{table}} \), then \( H_0 \) is rejected, \( H_1 \) is accepted. Thus, it can be concluded that the organizational culture has a positive direct effect on decision making.

2) The second hypothesis: There is a direct positive effect of communication (\( X_2 \)) on decision making (\( X_3 \)).

The hypothesis tested is the direct positive effect of communication (\( X_2 \)) on decision making (\( X_3 \)). Base on the results of the path analysis of communication (\( X_2 \)) effect on decision making (\( X_3 \)), obtained the path coefficient \( \rho_{21} \) of 0,354 with \( t_{\text{count}} = 3,66 \), while the value of \( t_{\text{table}} = 1,98 \) (\( \alpha = 0,05; \text{Dk} = 101 \)). Therefore \( t_{\text{count}} > t_{\text{table}} \), then \( H_0 \) is rejected, \( H_1 \) is accepted. Thus, it can be concluded that the communication has a positive direct effect on decision making.

3) The third hypothesis: There is a direct positive effect of organizational culture (\( X_1 \)) on communication (\( X_2 \)).

The hypothesis tested is the direct positive effect of organizational culture (\( X_1 \)) on communication (\( X_2 \)). Base on the results of the path analysis of organization culture (\( X_1 \)) effect on communication (\( X_2 \)), obtained the path coefficient \( \rho_{21} \) of 0,332 with \( t_{\text{count}} = 3,83 \), while the value of
Therefore \( t_{\text{count}} > t_{\text{table}} \), then \( H_0 \) is rejected, \( H_1 \) is accepted. Thus, it can be concluded that the organizational culture has a positive direct effect on communication.

4. DISCUSSION and CONCLUSION

The study showed that there are positive and direct effect of organizational culture in decision making with correlation coefficient is 0.550 and path coefficient is 0.243. This result means that organizational culture take direct and positive effect in decision making by the principal. This means that to improve the ability of decision making, the organizational culture has to be improved first. This findings in line with the result of study by (Ölçüm & Titrek, 2015) state: “that administrator use a rational decision making style, and they rarely use a decision-making style avoidance. Result of regression analysis shows that teacher job satisfaction level predicted by the way of administrator in making decision”.

Based on the result of study, found that indicator with highest achievement of organizational culture is assumption, it is 26.73% with the average of 4.139. If it is linked with highest indicator achievement, in making decision variable, it can be concluded that selecting the alternative action in making decision by principals is effected by assumptions which believed in organizations or institution. That is why, selecting alternative actions is a need in making decision better by the principal. It can be done by improving the feel of equation for assumptions that exist in school. It means that when the assumptions of teachers, staff, have been in line, it will absolutely make principal easier to choose alternative action in making the decision.

Result of the study is also showed that there are direct and positive effect of communication in decision making, with coefficient correlation is 0.618 and path coefficient is 0.354. This result can be concluded that, good communication by the principle will have effect on decision making. It means that to improve ability in decision making by principal can be done with improving his communication skills. This result of study in line with opinion of (Robbins & Judge, 2011) state that the effect of communication in decision making: “The final function of communication is to facilitate decision making. Communication provides the information individuals and groups need to make decisions by transmitting the data to identify and evaluate alternative choices. None of these four functions is more important than the others. To perform effectively, groups need to maintain some form of control over members, stimulate members to perform, allow emotional expression, and make decision choices. Almost every communication interaction that takes place in a group or organization performs one or more of these functions”.

This result of study is also supported by result of study that conducted by (Mykkänen & Tampere, 2014) who state: “Studies of organizational communication around decision-making and decision communication have largely concerned how decisions should be made and promoted. Fewer efforts have focused on how decisions should be communicated inside organizations and how they influence organizational effectiveness and performance”. Based on the result of study known that the highest indicator achievement of communication variable, in decision making is exchanging ideas/opinion with the score 3.87 with the average 25.48%. If it is linked with highest indicator achievement in decision making variable can be conclude that selecting alternative actions in decision making by principal effected by the ability of principal in exchanging the ideas or opinions. Therefore in order to expand the selection of alternative actions in decision making process the principal’s capability of exchanging ideas and opinions during communication has to be improved.

In selecting the alternative of problem solving, a principal needs the capability of communication especially exchanging ideas or opinions. A principal who is not capable of exchanging ideas and opinions will face difficulties in finding the solution for a problem as he will have difficulties seeing alternatives. Exchanging information as ideas, opinions, makes more input of
information from partner to select the alternative of problem solving. Based on result of study, found that variable of organizational culture and communication has direct and positive effect on decision making. The score of the effect is 0.243 and 0.354. Through the score above, the variable that known has big impact in decision making is communications variable.

In order to improve the effectiveness of decision making, organizational culture and communication need to be improved. The organizational culture can be improved by equalizing the assumption toward the problem or everything that happens in institution or school. The same case with good communication from principal determine the decision that will be made. The communication starts with identifying the problem, selecting the alternative, determine the alternative, and held on the result of decision. In communications, the principal faces and meets people from different background. They are teachers, supervisors, other principals, committee, staff, and even students.

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