Validity and reliability level of an application measuring school principle’s decision making

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Abstract. The objective of the research is to obtain information about the effect of authority and decision making on managerial effectiveness on principal of state primary school. The research was conducted to all of state primary school principal at The City of north Jakarta by using a survey method with path analysis applied in testing hypothesis. The number 80 principal as sample was selected by using Slovin formula. The research concludes: (1). there is direct effect of authority on managerial effectiveness. (2). there is direct effect of decision making on managerial effectiveness. (3). there is direct effect of authority on decision making. Therefore to enhance principal’s managerial effectiveness can be carried out by authority, and decision making.

1. Introduction
In an era that continues to move towards a borderless world, leadership staff are required to be able to direct, influent, guide, and give constructive examples to their subordinates or followers as well as performance and contributions to colleagues and superiors in the process of achieving organizational goals. The success of each organization or group in the organization depends on the effectiveness of the leadership of those who are trusted by the leadership position. Whether business, government, education, social or religious organizations, organizational effectiveness determines the success of the organization. Managerial effectiveness can anticipate changes, make the best use of opportunities towards the increasing achievement and bring the organization into the achieving of the agreed goals in a commendable manners. Humanizing employees can be done by the company as an institution or leaders at every level in a company. Attitudes which do not demean subordinates to respect subordinates as humans needs to be instilled. Appreciating subordinates as humans means assuming subordinates are equal for who are ate the low level accidently. Therefore, every leader must learn how to respect her or his subordinates. Self-esteem is directly related to the hope for success. People who have high self-esteem believe that they have more abilities which are needed to develop the success of work. A leader in an organization has a higher status than one who is led, therefore, it must know well about human or society, their abilities and weaknesses. A leader must have the ability to work with people who have a various traits, so that truly with full willingness and loyalty to work under her or his leadership. A leader also must be good at approaching people and respecting their opinions or views of others.
Every organization (institution) expects the successfulness in its organization. This makes a need for an effort to manage each institution effectively and efficiently. An organization is categorized effective if it has achieved the expected goals. The activity is said to be efficient if the process satisfies all components in an organization, so that it becomes a driver to achieve the stated goals. Effectiveness is often controlled by understanding efficiency even though there are differences between the two. Effectiveness emphasizes on the results achieved. While efficiency more emphasizes on the way to achieve results by comparing input and output.

Managerial effectiveness is related to the development of human resources which is the key to the success of several new industrial countries in Asia such as South Korea, Hong Kong, Japan and Singapore. These countries do not have adequate natural resources, but are able to become strong industrial countries through high managerial effectiveness.

Many things that cause managerial improvement in an organization include job promotion, monthly income, motivation, interests, attitudes, knowledge, leadership attention, responsibility, opportunities to obtain high education, job satisfaction, work environment, self-actualization, self-esteem, social skills and so on.

Yukl in his writing conveys, the effectiveness of a group in carrying out a task is determined by the level of effectiveness of the leader [1]. To determine the effectiveness of leadership can be seen from group appearance, achievement of group goals, group preparedness, ability to deliver crisis/conflict, satisfaction of subordinates to superiors, subordinate commitment to the goals or mission of the organization, welfare, and development of group members, and feelings that are always proud of subordinates towards the boss regarding his status and position. A school principal must be able to carry out managerial activities such as making decisions, conducting supervision, communicating, carrying out human resource management, and opening networks to socialize in order to establish cooperation with other parties to realize organizational goals.

A leader has the authority to determine what will be done by staff so that organizational goals are achieved, besides that appropriate decision making can make good managerial effectiveness in the organization. Based on the importance of the role of authority and decision making on managerial effectiveness, the authors feel interested in conducting research with the title the influence of authority and decision making on the effectiveness of principal managerial in public Elementary Schools in North Jakarta Municipal.

The definition of managerial effectiveness according to McQuerrey defines, managerial effectiveness is a leader’s ability to achieve desired results [2]. Can be said managerial effectiveness is the ability of a leader to achieve the needs needed. According to Juarez explains, managerial effectiveness is this: it’s the combined effect of a manager who uses different management tools and techniques [3]. It can be said that effective managerial is this, the combined effect of a manager who uses management equipment and different techniques. The understanding of effectiveness according to Waddell et al, explains, effectiveness is a measure of the appropriateness of the goals that manager have selected for the organizations to pursue, and of the degree to which the organization achieves those goals [4]. It can be said that effectiveness is a measurement of feasibility to pursue organizational goals in which to select, and to the degree of organization that has been achieved in that purpose. According to Mullins explains, effectiveness is doing the right things, and relates to output of the job and what the manager actually achieves [5]. Effectiveness must be related to the process management and an execution of work. Based on the statement stated, it can be explained that managerial effectiveness is proper actions of a manager to achieve the goals set. Effectiveness must relate to the achievement of several objectives or task performance from the management process and work implementation. Lutans in, states that, effective manager are defined in term of the quantity and quality of standards of performance, and the satisfaction and commitment of subordinate [5]. Based on the statement, it can be explained that effective managers are reflected in the accuracy of actions taken by a manager to increase the quantity and satisfaction and commitment of his subordinates' work. The same thing was stated by Robbins P and Mary in his writing stating that, effectiveness is often described as doing the right things- that is, those work activities that
will help organization reach its goals [6]. The statement shows that someone who has high commitment and quality of performance and satisfaction can be determined by effective managerial implementation. From the descriptions above, it can be synthesized that managerial effectiveness is the success of a leader who with high commissions can plan, organize, direct, and control to improve work performance in achieving organizational goals.

In general, the authority itself according to Ivancevich explains, authority is the ability to influences other based on the perceived power of one’s position and role within an organization [7]. It can be said that authority is the ability to influence others because of the perceived power of a position and a certain role in an organization. According to Jones also explains, authority, power that is legitimized by the legal and cultural foundations on which is organizations is based, is the ultimate source of power in an organizations [8]. It is said that authority, that power is legitimacy by law and the cultural foundation in the basis of organization, is the last resource of power in an organization. Gibson et al, explains, authority is a formal power that a person has because of the position in the organization [9]. It is said that authority is the formal power a person has because of a position in an organization. Yukl explains, a legitimate request should be made in a firm, confident manner [1]. It is said that requests that have authority must also be made explicitly and in a convincing manner. The definition of authority according to the Great Dictionary of Indonesian Language (KBBI) is the power to make decisions governing and delegating responsibility to others AL-KHAWARIZMI [10].

Based on the concepts stated above, authority can be synthesized as the formal power that is owned by someone to influence subordinates in the organization with the firmness in it. Hodgetts et al., explains, decision making involves choosing from among alternatives [11]. This shows that generally decision making is defined as the selection of several alternatives. According to Colquitt et al., also explains decisions making refers to the process of generating and choosing from a set of alternatives to solve all problem and further in rational decision making model it is said [12]: the rational decision making model offer a step by step approach to making decision making; the first step (1), to the identify the criteria that are important (2) to generate a list of all available alternatives that might be potential solution to the problem (3) the evaluation to those alternatives (4) choose the solution that maximize value (5) implement appropriate solutions. This shows an offer for a step-by-step approach to making decisions to maximize decision outcomes. The translations of the steps are: (1) determining appropriate criteria, (2) making general list of all alternatives, (3) evaluating alternative on criteria, (4) choosing the best solution, (5) applying alternative, decision making refers to result and choice of a set of alternative for problem solving. According to Kreitner and Kinicki, also explains decisions making entails identifying and choosing alternative solutions that lead to a desire state of affair [13]. It can be said that decision making requires identification and choosing alternative solutions that will lead to the state of the desired business. Other opinions as stated by Jr et al., explains, decision making means making choice, and these choices, made at each step in the decision making process just describe [14]. It can be said that decision making means making choices, and these choices are made by following the steps of the decision making process described. According to Robbins and Judge argues These decisions follow a six step rational decision making model [15]. 1) Define a problem, 2) identify the decision criteria, 3) allocate weights to the criteria, 4) develop the alternatives, 5) evaluate the alternatives and 6) select the best alternatives. Based on the concept description above, it can be synthesized; decision making is the act of choosing alternatives in problem solving to achieve organizational goals.

2. Method
This research was conducted at Public Elementary School of North Jakarta Municipality. The sample used is Simple Random Sampling with a total number of 80 principals. The method used in this research is survey by using questionnaire as primary data collection tool and documentation.

This research uses path analysis to find out the influence between variables according to the causal model formed. Before the questionnaire was used in this study a trial was conducted to determine the validity and reliability of the instrument. These results are used as instruments to take research data in
3. Result and discussion

3.1. Direct effect of authority to managerial effectiveness

From the results of the calculation of path analysis, the direct influence of authority on managerial effectiveness of the principal of the Public Elementary School in North Jakarta. From the calculation results obtained by the correlation coefficient of \( r_{13} = 0.395 \) and the path coefficient value \( p_{31} = 0.296 \) where the value of the coefficient of \( t \) count is 2.813. The coefficient value of \( t \) tabel for \( \alpha = 0.05 \) is 1.99. The results of this research are in accordance with the research of Leslie et al., in the results of the research described [16], “the methodology described in this section pertains to all following chapter, which address specific parts of the conceptual model. Two hundred eleven managers from four organizations participated in our study. All manager included were approximately at the same organizational level. Ninety-eight of the managers were from a Swiss pharmaceutical company. Twenty-five worked for a U.S. high-tech manufacturing firm. Forty-eight worked a Swiss hospitality and service organization, and 40 worked for a Swedish truck-manufacturing organizational. Both samples were predominantly comprised of well-educated white males with a mean age of 44 in the low-global-complexity group and 45 in the high global-complexity group. The majority of managers in each group were educated in only one country. Members of the high global-complexity group were also more likely to have been expatriates in the past than were those in the low-global-complexity group. Although 41 countries were represented in the total sample, 43% of the group was Northern European by birth (German, Swedish, and Swiss) and 18% were U.S. citizens by birth. Those percentages were reflective of the corporate headquarters’ locations of the four participating organizations. Participants live in 30 countries at the time of the study, with 66,9% living in Switzerland, Germany, Sweden, or the United States. Considering the split between low and high global complexity, individuals in the high-global-complexity sample were proportionately more likely than the low-global-complexity sample to speak English (39%) or French (10%) as their native language. The individuals in the low-global-complexity sample were proportionately more likely than those in the high-global-complexity group to speak German (33%) or Swedish (18%) as their native language”. Thus hypothesis 1 which predicts there is a direct influence of authority on the managerial effectiveness of principals is acceptable. This reflects that the more appropriate the authority of the school principal, the higher the managerial effectiveness of the principal.

| Source       | df | Sum of Squares (JK) | Mean Square (RJK) | F count | F table  \\ \( \alpha = 0.05 \) | \( \alpha = 0.01 \) |
|--------------|----|---------------------|-------------------|---------|----------------|----------------|
| Total        | 80 | 1671061             |                   |         |                |                |
| Regression a | 1  | 1664933,51          |                   |         |                |                |
| Regression b | 1  | 955,82              | 955,82            | 14.42 **| 3.96           | 6.97           |
| b/a          |    |                     |                   |         |                |                |
| Residu       | 78 | 5171,67             | 66,30             |         |                |                |
| Tuna Cocok   | 37 | 2539,96             | 68,65             | 1.07 ns | 1.70           | 2.12           |
| Galat        | 41 | 2631,71             | 64,19             |         |                |                |
3.2. Direct effect of decision making on managerial effectiveness

From the results of the calculation of path analysis, the direct influence of decision making on managerial effectiveness of principal in Public Elementary Schools of North Jakarta Municipality. From the calculation results obtained the value of the correlation coefficient $r_{23} = 0.402$ and the path coefficient value $p_{32} = 0.306$ where the coefficient value of $t_{count}$ is 2.912. The coefficient value of $t_{table}$ for $\alpha = 0.05$ is 1.99. The results of this research are in accordance with the opinion of Schermerhorn & Bachrach, explains, decision making means making process, and these choices, made at each step in the decision making process just described, usually have a moral dimension that might easily be overlooked [17]. Therefore hypothesis 2 which predicts that there is a direct influence of decision making on managerial effectiveness of the principal can be accepted. This reflects that the more appropriate the decision making of a principal is, the higher the managerial effectiveness of the principal.

**Table 2.** ANAVA for simple linear regression.

| Source         | df | Sum of Squares (JK) | Mean Square (RJK) | $F_{count}$ | $F_{table}$ $\alpha = 0.05$ | $F_{table}$ $\alpha = 0.01$ |
|----------------|----|---------------------|-------------------|-------------|-----------------------------|-----------------------------|
| Total          | 80 | 1671061             |                   |             |                             |                             |
| Regression a   | 1  | 1664933,51          |                   |             |                             |                             |
| Regression b/a | 1  | 988,70              | 988,70            | 15,01 **    | 3,96                        | 6,97                        |
| Residu         | 78 | 5138,79             | 65,88             |             |                             |                             |
| Tuna Cocok     | 33 | 2307,24             | 69,92             | 1,11 ns     | 1,69                        | 2,11                        |
| Galat          | 45 | 2831,55             | 62,92             |             |                             |                             |
3.3. Direct effect of authority to decision making
From the results of path analysis calculation, the direct effect of authority on decision making of principal in Public Elementary Schools of North Jakarta Municipality. From the calculation results obtained the value of the correlation coefficient $r_{12} = 0.325$ and the path coefficient value $p_{21} = 0.325$ where the coefficient value of $t_{count}$ is 3.093. The coefficient value of $t_{table}$ for $\alpha = 0.05$ is 1.99. The results of this research are in accordance with the opinion of Ivancevich which explains, Managerial decision making is permeated by ethical issues [7]. Managers have power and authority: when these factor exist, there is potential for wrong and right, good and evil. Therefore the hypothesis 3 which all edges that there is a direct effect on authority over decision making acceptable. This reflects that the more precise the authority of the principal is, the more appropriate the decision of the principal.

### Table 3. ANAVA for simple linear regression.

| Source       | df | Sum of Squares (JK) | Mean Square (RJK) | $F_{count}$ | $F_{table}$ $\alpha = 0.05$ | $F_{table}$ $\alpha = 0.01$ |
|--------------|----|---------------------|-------------------|-------------|---------------------------|---------------------------|
| Total        | 80 | 1642577             |                   |             |                           |                           |
| Regression a | 1  | 1633918,61          |                   |             |                           |                           |
| Regression b/a | 1  | 914,18              | 914,18            | 9,21 **     | 3,96                      | 6,97                      |
| Residu       | 78 | 7744,21             | 99,29             |             |                           |                           |
| Tuna Cocok   | 37 | 3729,21             | 100,79            | 1,03 m      | 1,70                      | 2,12                      |
| Galat        | 41 | 4015,00             | 97,93             |             |                           |                           |

![Figure 2. Diagram of the linear regression line of X3 and X2.](image-url)
4. Conclusion

(1) there is a positive effect of authority on managerial effectiveness of a principal, which is determined by the effect degree in the form of correlation coefficients and path coefficients. This path coefficient value determines how much the managerial effectiveness of the principal's variance is determined by the variable authority. Furthermore, it can be seen the significance of the influence between authority and managerial effectiveness partially. This has the meaning and affirmation that authority is empirically not the only predictor variable for the variance of managerial effectiveness score of the principal. (2) there is a positive influence on decision making on managerial effectiveness of a principal, which is determined by the degree of influence in the form of correlation coefficients and path coefficients. This path coefficient value determines how much managerial effectiveness of the school head's variance is determined by the decision-making variable. Furthermore, it can be seen the significance of the effect of decision making on managerial effectiveness of the principal partially. This has the meaning and affirmation that empirical decision making is not the only predictor variable for the variance of managerial effectiveness score of the principal. (3) there is a positive effect of authority on the school principal's decision making, determined by the degree of effect in the form of correlation coefficients and path coefficients. This path coefficient value determines how much the variance in the decision of the principal is determined by the variable authority. then it can be known the significance of the influence between authority and decision making of the principal.

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