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EFFECT OF MOTIVATION AND COMPETENCE ON THE PERFORMANCE OF JUNIOR HIGH SCHOOL SCIENCE TEACHERS WITH ORGANIZATIONAL CULTURE AS MODERATION VARIABLES

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Abstract

This study aimed to determine and analyze the effect of motivation and competence on Junior High School Science Teachers' performance with organizational culture as a moderating variable. This type of research is quantitative explanatory, namely to reveal the relationship of influence between variables. The population includes all Junior High School Science Teachers in the Jember city area. By using the purposive sampling method, a sample of 70 teachers was assigned as research respondents. Data collection using a questionnaire with a Likert scale using 5 points. The total number of questions is 20 items—data analysis using SPSS version 22 application with linear regression and multiple linear regression techniques. The results of this study indicate that: 1) motivation has a significant effect on the performance of Junior High School Science Teachers in Jember Regency; 2) organizational culture moderates the influence of motivation on the performance of Junior High School Science Teachers in Jember Regency; 3) competence has a significant effect on the performance of Junior High School Science Teachers in Jember Regency; 4) organizational culture moderates the effect of competence on the performance of Junior High School Science Teachers in Jember Regency; 5) motivation and competence together have a significant effect on the performance of Junior High School Science Teachers in Jember Regency; 6) organizational culture moderates the influence of motivation and competence together on the performance of Junior High School Science Teachers in Jember Regency.

Keywords: Motivation, Competence, Organizational Culture, Teachers Performance.

INTRODUCTION

Human resource management is an important thing to consider. By managing human resources effectively, it will produce good achievements and performance. Alignment of organizational, group, and individual factors and supported by competencies, motivations, and group norms will create good human and social capital to achieve superior performance (Buller & Evoy, 2012). The results of Saad's research, Noorsiah, and Awadh (2013) stated that to achieve organizational goals effectively needed the development of human resources through the development of human resource training related explicitly to integrated information technology in the organization's system. This means that developing the

ability of human resources to meet the demands of the organization for the achievement of the organization requires special efforts through training activities related to their duties in the organization, especially core skills and additional skills, for example, in the form of integrated information technology in organizational systems. Yilmaz and Bulut's research results (2015) state that human resource management is able to develop employees to meet the requirements for the organization to improve organizational performance and effectiveness. Thus, the human resource factor is an important part of every organization, institution, or work unit in achieving organizational goals. Adequate resources from organizational strategies and supporting tools are not enough if the human resources they have are still not qualified to support organizational activities. It can also be interpreted that human resource management activities are complex activities that encompass several steps, namely planning, organizing, actualizing the implementation of activities, and carrying out continuous control of activities so that the achievement of an organization can be guaranteed to the maximum.

The school is one form of organization in which there are members of the organization named the principal, teachers, administrative staff, and students. The quality of school organization activities is influenced by several factors: leadership, staff, supporting facilities, and relations (Wijaya, 2018). The quality of human resources in the school organization Science Teachers is a teacher who has the task of teaching, educating, guiding and training students in Science subjects. Science subjects are subject areas related to natural phenomena and phenomena and study the causes and consequences for humans.

Several studies on performance show that many factors influence the performance achieved by employees. These factors include motivation, competence, and organizational culture. Competence is knowledge, skills, and basic values in a person reflected in thinking and acting. Arifin's research results (2015) states that competence has a significant positive effect on employee performance. Likewise, research by Trisnawati, Mareni, and Sudja (2018) states that competence has a significant effect on employee performance.

Organizational culture is a pattern of behavior, values, and habits that occur in an organization that raises the spirit to carry out tasks to achieve organizational goals. Awadh and Saad's research (2013) states that organizational culture can increase employee performance productivity. Paschal and Nisam (2016) research results state that organizational culture has a significant positive effect on employee performance. The results of Amdani, Sinulingga, Absah, and Muda (2019) stated that organizational competence and culture had a significant effect on employee performance. This means that aspects of motivation, competence, and organizational culture are important to consider in developing human resources quality. This leaves a gap in research that can be further investigated. This research will be carried out in a different area, namely in Jember, East Java, Indonesia, thus different from previous research. This means that the title of the research to be studied has a novelty. Based on some of these descriptions, it is important to research to explore competence,

organizational culture, and creativity on teacher performance in terms of influence together or partially.

LITERATURE REVIEW

Teacher Performance

Performance is the quality and quantity of achieving tasks individually, in groups, or organizations (Hurn & Osborne, 1991). Performance can be improved by establishing clear and measurable job descriptions for each employee to understand what their functions and responsibilities are (Bernadin, Joice & Russel, 2013). Wexley and Yukl (1977) states that performance is the implementation of the theory of balance, which says a person will show optimal performance if he gets the benefits (benefits), and there are stimulations (inducement) in work and reasonable (reasonable)

Job performance in performance appraisal is an important development in the portfolio of human resources (Bateman & Snell, 2007; Fay & Luhrmann, 2004; Hellriegel et al., 2004). Employee performance is a sign of individual work performance after someone does the work involved in the profile (Hellriegel, Jackson & Slocum, 1999; Caracas, 2010). Performance is a fundamental multicomponent concept that can distinguish aspects of performance processes related to expected behavior and results (Borman & Motowidlo, 1993; Campbell et al., 1993; Roe, 1999). Task performance is the effectiveness of one's work to fulfill the organization's vision and mission (Borman & Motowidlo, 1997). Adaptive performance is a person's ability to work efficiently in work situations that are easily changed.

Motivation

Luthans (2006) states that motivation is a process of interaction in a person who encourages biological and psychological efficiency to drive behavior and encouragement to achieve a goal. Robbin and Judge (2015) define that motivation encourages motivation and helps determine the direction, intensity, and perseverance in individuals to achieve certain goals. Gibson et al. (1996) motivation is an abstraction of a concept that describes the process of impulse that arises and directing someone's behavior with specific goals. According to Rivai (2011), motivational indicators of Mc Clelland's needs include; the need for achievement (N-Ach), the need for affiliation (N-Aff), and the need for power (N-pow).

Competence

Competence is a person's ability in the field of knowledge or a particular phenomenon in the form of knowledge, understanding, skills, and attitudes manifested in thoughts, verbal speech, and concrete actions. Schroeter (2008) states that competence is the knowledge, understanding, and motor skills of a person that involves making decisions that can be applied in practice.

Moeharino (2009) states that competence is a basic characteristic of someone who describes how to think and act and draw conclusions that can be done and maintained within a certain period. According to Spencer & Spencer (1993), competence underlies a person who increases

individual performance effectiveness in his work. Based on this description, competence can be assumed to be a determinant in improving job performance. Thus conceptually, it can also improve the ability to work at work. Spencer & Spencer (1993) state that competencies are formed based on five characteristics: motive, traits, self-concept, knowledge, and skill. Mukhtar's research results (2018) states that competence has a significant effect on employee performance. Arifin (2015) research results state that competence has a significant positive effect on teacher performance.

Organizational Culture

Organizational culture is the values, attitudes, behaviors, and habits that apply to an organization that can affect employee performance results to achieve organizational goals. Organizational culture is a set of beliefs, norms, and values shared in an organization that can influence members to think manifested in behavior (Lunenbergh, 2012). Some factors that support organizational culture's strength include organizational stability, reward systems, job satisfaction, team orientation, empowerment, core values, and agreement (Iljins, Skvarciany & Sarkane, 2015). Schein (1992) states that organizational culture is a pattern of basic assumptions about oneself in a particular organization. These assumptions are built to overcome problems with external adaptation and internal integration firmly embedded and then transformed into values and beliefs in carrying out activities. Needle (2004) states that organizational culture is human behavior or interaction within an organization.

Methodology

This study examines the effect of motivation and competence on performance by moderating organizational culture. This type of research is explanatory research that aims to reveal the relationship of the influence of one variable's phenomenon to another variable. The population of this research is all 103 junior high school science teachers in the city of Jember. Furthermore, using a purposive sampling technique, the number of samples used as respondents in this study was 70 junior high school science teachers. The research data needed include motivation, competence, organizational culture, and teacher performance. The questionnaire was developed to obtain data on motivation, competence, organizational culture, and performance. The self-developed questionnaire is compatible with the phenomenon being measured. This is consistent with the opinion of Werner & Eleanor (1993), which states that self-developed questionnaires distributed by own hands are the most sensible thing for many studies. The number of questionnaires developed was 20 questions. The variables of motivation, competency, organizational culture, and performance each consist of 5 questions. A 5-point Likert scale is used to evaluate respondents' agreement and disagreement. The number of answer choices there are five choices, namely, strongly agree (score 5), agree (score 4), disagree (score 3), disagree (score 2), strongly disagree (score 1).

In general, many experts and researchers consider that statistical tests are a very suitable and consistent choice of instrument to

comprehensively analyze most of the data (Buglear, 2005). Furthermore, statistical analysis was carried out with statistical software packages for social science (SPSS) version 22 with data analysis techniques, namely linear regression and multiple linear regression. Furthermore, the analysis results' output carried out a significance test to test whether the research hypothesis was accepted or rejected.

RESULTS AND DISCUSSION

This study examines the effect of independent variables on the dependent variable. Also, it examines moderation variables that function to strengthen or weaken the effect of the independent variables on the dependent variable. The independent variable consists of motivation (X1) and competence (X2). The moderating variable is organizational culture (X3). And the dependent variable is performance (Y). In this study, to analyze the research data used linear regression analysis. This analysis is used to determine the effect of independent variables on the dependent variable, namely, the influence of motivation (X1) and competence (X2) on performance (Y). The influence of moderating variables in strengthening or weakening motivation and competence on performance (Y). The results of testing the hypothesis in this study are as follows.

Effect of Motivation on Performance

Based on the results of the measurement of the magnitude of motivation (X1) and performance (Y) through a questionnaire, the motivation influence test (X1) on performance (Y) is then performed with linear regression analysis techniques with output as the following table.

Table 1. Price of Linear Regression Test Coefficient Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	7,789	1,879		4,145	,000
X1	,463	,112	,447	4,117	,000

a. Dependent Variable: Y

Based on table 1, the results of testing the hypothesis of the effect of motivation on junior high school science teachers' performance were performed linear regression tests. The test results found that the significance (α) is 0,000. Thus these results α 0,000 < 0.05 can be interpreted as H0 is rejected while H1 is accepted. In other words, it can be concluded that motivation has a significant effect on the performance of junior high school science teachers.

Effect of Motivation on Performance with Moderated Organizational Culture

Two regression tests are needed to determine the effect of organizational culture as a moderating variable that weakens or strengthens the relationship of motivational influence on performance. The

steps are first, the linear regression test of the effect of motivation on performance produces a summary model as shown in table 2; second, the multiple linear regression test of the effect of motivation on performance by moderating organizational culture results in a summary model as shown in table 3; third, comparing the coefficient of determination (R Square) between the two results of the linear regression test with the provisions if the value of R square becomes larger means the moderating variable is amplifying the effect whereas if the R square value becomes smaller means the moderating variable is attenuating the effect. Both the output model summary linear regression test and multiple linear regression test as in the following table.

Table 2. Linear Regression Test Summary Model Results
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,447 ^a	,200	,188	1,29059

a. Predictors: (Constant), X1

Based on table 2, the value of R square is 0.2 can be interpreted that the contribution of the influence of motivation on performance is equal to 20%. Furthermore, to test the contribution of the influence of organizational culture as a moderating variable on the relationship of motivational influence on performance is measured by multiple linear regression analysis with the output model summary as the following table.

Table 3. Model Summary Results of Multiple Linear Regression Tests
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,761 ^a	,579	,560	,95019

a. Predictors: (Constant), X1X3, X1, X3

Table 3 shows that R square's value is 0.579, which means that the contribution of the influence of motivation on performance by moderating organizational culture is 57.9%. Thus it can be concluded that there is an increase in the value of R square on the results of the regression test between the effect of motivation on performance compared with the results of the regression test on the effect of motivation on performance by moderating organizational culture. The increase was from 20% to 57.9%. Based on this, the alternative hypothesis (H1), which states that organizational culture can moderate the influence of motivation on performance, is acceptable.

Effect of Competence on Performance

Based on the results of the measurement of the magnitude of competence (X2) and performance (Y) through a questionnaire, the competency influence test (X2) on performance (Y) is then performed with linear regression analysis techniques with output.

Table 4. Linear Regression Test Coefficient Results Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5,176	1,454		3,561	,001
X2	,644	,090	,654	7,131	,000

a. Dependent Variable: Y

Based on table 4, the results of testing the hypothesis of the influence of competence on junior high school science teachers' performance, a linear regression test was performed. The test results found that the significance (α) is 0,000. Thus these results α 0,000 < 0.05 can be interpreted as H0 is rejected while H1 is accepted. In other words, it can be concluded that competence has a significant effect on the performance of junior high school science teachers.

Effect of Competence on Organizational Culture Moderated Performance

Two regression tests are needed to determine the influence of organizational culture as a moderating variable that weakens or strengthens the relationship of the influence of competence on performance. The steps are first, the linear regression test of the effect of competence on performance produces a summary model as shown in table 5; second, multiple linear regression test the effect of competence on performance by moderating organizational culture produces a summary model as shown in table 6; third, comparing the coefficient of determination (R Square) between the two results of the linear regression test with the provisions if the value of R square becomes larger means the moderating variable is amplifying the effect whereas if the R square value becomes smaller means the moderating variable is attenuating the effect.

Table 5. Linear Regression Test Summary Model Results Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,654 ^a	,428	,419	1,09111

a. Predictors: (Constant), X2

Based on table 5, the value of R square is 0.428, which means that the contribution of competence to performance is 42.8%. Furthermore, to test the contribution of organizational culture's influence as a moderating variable on the relationship of competence's influence on performance is measured by multiple linear regression analysis with the output model.

Table 6. Model Summary Results of Multiple Linear Regression Tests
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,750 ^a	,562	,549	,96131

a. Predictors: (Constant), X2X3, X2

Table 5 shows that R square's value is 0.428, which means that the contribution of the influence of motivation on performance by moderating organizational culture is 42.8%. Table 6 shows that the R square's value is 0.562, which means that the influence of competence on performance is 56.2%. Thus it can be concluded that there is an increase in the value of R square on the results of the regression test between the effect of competence on performance compared with the results of the regression test on the effect of competency on performance by moderating organizational culture. The increase was from 42.8% to 56.2%. Based on this, the alternative hypothesis (H1), which states that organizational culture can moderate the influence of motivation on performance, is acceptable.

The Effect of Motivation and Competence Together on Performance

Based on the results of the measurement of the magnitude of motivation (X1), competence (X2), and performance (Y) through a questionnaire, then the test of the influence of motivation (X1) and competence (X2) together on performance (Y) with multiple linear regression analysis techniques with output like the following table.

Table 7. ANOVA Results for Multiple Linear Regression Test
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	60,681	2	30,340	25,152	,000 ^b
	Residual	80,819	67	1,206		
	Total	141,500	69			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

A multiple linear regression test was performed to answer the hypotheses of motivation and competence to influence, together with junior high school science teachers' performance. The test results found that the significance (α) was 0,000 (table 7). Thus the results α 0,000 < 0.05 can be interpreted as H0 is rejected while H1 is accepted. In other words, it can be concluded that motivation and competence together have a

significant effect on the performance of junior high school science teachers.

The Effect of Motivation and Competence Together on Organizational Culture Moderated Performance

To determine the effect of organizational culture as a moderating variable that weakens or strengthens the relationship of the influence of motivation and competence together on performance, two regression tests are needed. The steps are first, a linear regression test the effect of motivation and competence together on performance produces a summary model as shown in table 8; second, the multiple linear regression test the effect of motivation and competence together on performance by moderating organizational culture produces a summary model as shown in table 9; third, comparing the coefficient of determination (R Square) between the two results of the linear regression test with the provisions if the R square value becomes larger means the moderating variable is amplifying the effect whereas if the R square value becomes smaller means the moderating variable is attenuating the effect. The two output model summary tests are multiple linear regression and moderated linear regression tests are moderated as in the following table.

Table 8. Model Summary Results of Multiple Linear Regression Tests
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,655 ^a	,429	,412	1,09830

a. Predictors: (Constant), X2, X1

Based on table 8, the value of R square is 0.429, which means that the contribution of motivation and competence to performance is 42.9%. Furthermore, to examine organizational culture's contribution as a moderating variable on the relationship of the influence of motivation and competence together on performance is measured by multiple linear regression analysis with the output model summary as the following table.

Table 9. Model Summary Results of Multiple Linear Regression Tests with Moderated Organizational Culture
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,751 ^a	,564	,538	,97382

a. Predictors: (Constant), X2X3, X1, X2, X1X3

In table 9, R square's value is 0.564, meaning that the influence of motivation and competence on performance by moderating organizational culture is 56.4%. Thus it can be concluded that there is an increase in the value of R square on the results of the regression test between the influence of motivation and competency together on performance compared to the results of multiple linear regression tests on the effect of motivation and competency together on performance by moderating organizational culture. The increase was from 42.9% to 56.5%.

Based on this, the alternative hypothesis (H1), which states that organizational culture can moderate the influence of motivation and competence on performance, is acceptable.

Discussion

Based on data analysis results about the effect of motivation and competence on junior high school science teachers' performance with moderated organizational culture, the following matters can be described.

Hypothesis 1 test results show that motivation significantly affects junior high school science teachers' performance. This can be interpreted that the better the motivation, the better the teacher's performance. This study's results are consistent with the study results by Kwapong et al. (2015), which states that motivation has a strong positive correlation with employee performance. Likewise, research by Zameer et al. (2014) states that motivation correlates significantly with employee performance. Subsequent researchers Olusadum and Anulika (2018) stated that motivation is positively correlated with employee performance. Hypothesis 2 test results show that organizational culture can moderate the influence of motivation on junior high school science teachers' performance. This can be interpreted that the better the organizational culture will further strengthen teacher performance motivation. The results of testing hypothesis 3 show that competence significantly affects junior high school science teachers' performance. Thus, it can be interpreted that the better the competency, the better the teacher's performance will be. This is consistent with research Rahmawati (2011) states that competence has a significant positive effect on performance. Pudjiastutik's research results (2011) stated that competence had a significant positive effect on job performance. Rizal et al. (2013) state that the competency factor positively influences employee performance.

The testing hypothesis 4 states that organizational culture can moderate the effect of competence on junior high school science teachers' performance. Thus it can be interpreted that. It can be interpreted that the better the organizational culture, the stronger the competence influence on the performance of junior high school science teachers. This is consistent with the research of Chan, Song, Sarker, and Plumlee (2017), which states that work motivation affects employee performance. Hypothesis 5 test results stated that motivation and competence significantly influence junior high school science teachers' performance. This is in line with Vlaicu (2015) research, which states that the increase in job satisfaction within certain limits will affect employee performance. The results of testing hypothesis 6 state that organizational culture can moderate the influence of motivation and competence on junior high school science teachers' performance. This can be interpreted that the higher the organizational culture will further strengthen the influence of motivation and competence on junior high school science teachers' performance.

CONCLUSION

Based on the analysis of data and the grading of the influence of motivation and competence on the performance of junior high school science teachers with organizational culture as a moderating variable in

Jember Regency, several conclusions can be drawn as follows: Motivation has a significant effect on the performance of junior high school science teachers. This means that the better the motivation, the better the teacher's performance. Organizational culture moderates the influence of motivation on the performance of junior high school science teachers. Thus, the better the organizational culture, the stronger the influence of motivation on junior high school science teachers' performance. Competence has a significant effect on the performance of junior high school science teachers. Thus, the better the competence, the better the teacher's performance. Organizational culture moderates the influence of competition on the performance of junior high school science teachers. Thus the better the organizational culture, the better the performance of junior high school science teachers. Motivation and competence together have a significant effect on the performance of junior high school science teachers. Organizational culture moderates the influence of motivation and competence on junior high school science teachers' performance.

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