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Research Article

## Effect of Information Technology, Satisfaction and Motivation to Teacher Performance

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**Abstract:** This study aims to determine the effect of information technology, satisfaction and motivation on teacher performance. Respondents are civil servant teachers of Public Elementary School in Kendit sub-district, Situbondo district, amounting to 104 teachers, which amounts to 104 teachers. The sample size is 83 people. Research using multiple linear regression analysis. The research findings show that there is no influence between information technology variables on teacher performance. While the variable of satisfaction and motivation have an effect on to teacher performance

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**Key Words:** Information technology, satisfaction, motivation, performance.

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### I. Introduction

Education is one effort to improve the quality of human resources. The role of teachers in education is at the forefront in the implementation of the learning process, for it required the totality, dedication, and loyalty for a teacher in performing their duties. Teachers are one element in education that must play an active role and put themselves as professionals in accordance with the demands of the development of science and technological developments. According to research conducted by Professor Hattie of the University of Auckland, the dominant factors of student achievement are: (1) student characteristics (49%), (2) teachers (30%), (3) others (21%), people's mind, May 4, 2016). In the current era of globalization when the advancement of science and technology to develop quickly of course also impact on teachers how important to improve the performance and ability of teachers in utilizing the technology. Information and communication technology systems strongly support the success in carrying out the work (Teece, 1997; Korpelainen et al., 2010). This shows the existence of technology in the school environment will be useful when teachers are able to utilize effectively, not just accumulate inventory in school. So the teacher expected by the community is a teacher who is full of innovation, creative as a leader with a very high motivation, as the administrator of his class, as a supervisor of the class and himself as well as a broad-minded organizational. According to Firman and Tola (2008: 77) there are some obstacles in the implementation of e-learning, including the lack of ICT infrastructure equipment (including telephone networks and reliable power supply) and the unavailability of skilled personnel to manage ICT equipment in many schools, rural. To that end, the government continuously strives to improve the quality of teacher performance in the form of increasing human resources and improving employee welfare. The results of research Wimartono et al. (2015) concluded that the influence of the use of IT to the profession of teachers both when transferring knowledge to students and when teachers make efforts to develop themselves become professional teachers have not maximized because of the lack of competence of teachers in the field of IT. While the results of research conducted by Solechan and Shinta (2016 ) mentions there is significant influence of internet utilization on teacher performance.

Job satisfaction is a way of seeing a person both positive and negative about his work. If one's work has autonomy for action, there are variations, contributes significantly to the success of the organization and the employee gets feedback about the work he is doing, the employee will be satisfied. The environmental situation also affects the level of one's satisfaction. The results of Ardiansyah and Purba (2015) showed that job satisfaction had a positive effect on teacher performance

Appropriate motivation for employees will be encouraged to do as much as possible in the implementation of tasks for the success of organizational goals for the interests of members are maintained. Teachers who have high motivation will be motivated to carry out their duties with full responsibility, confidence and love work and melakuan effective and efficient learning process in improving performance. Previous research, (Istarini and Sukanti, 2012), (Eros, 2014), (Hakim and Yahya, 2014), and (Sari, 2016) show that work motivation has a positive effect on teacher performance.

As a developing country the Indonesian nation continues to strive to improve the quality of education. The effort is realized by allocating an education budget of 20% of the State Revenue and Expenditure Allocation. The result of teacher competency test conducted in 2015 in Kendit sub-district, Situbondo regency, as many as 33% get value above 60. While 67% get score below 60. This is of course very concern for government efforts to improve the quality of education through the improvement of competence teacher.

### Problem Formulation

Based on the background that has been described above, the research problem can be formulated as follows:

1. Does information technology affect teacher performance?
2. Does job satisfaction affect teacher performance?
3. Does work motivation affect teacher performance?

### 1.3 Research Objectives

The goal to be achieved from this research as follows:

1. To know and analyze the influence of information

technology on teacher performance.

2. To know and analyze the effect of job satisfaction on teacher performance.
3. To know and analyze the effect of work motivation on teacher performance.

## II. LITERATURE REVIEW

### Performance

Performance or performance is the result achieved by individuals in achieving a person's achievement regarding the tasks assigned to him (Marwansyah, 2016: 229). Mahmudi's opinion (2007: 6) performance relates to something related to the activity of doing the work, in this case includes the results achieved work. Ulfatin and Triwiyanto (2016: 150) states that performance is the result obtained from the functions or indicators of a job or a profession in a certain period.

From the definitions of experts above can be concluded that the performance is a record of the work achieved by a person on the task given the organization at a certain time.

Teacher performance assessment is part of the education system through the aspect of management of educational resources to realize professional teachers. According to Suprihatiningrum (2016: 172) which includes teacher professional development activities include five kinds of activities:

- a. Conducting activities of writing scientific work in the field of education.
- b. Finding the right technology in the field of education.
- c. Create lesson / visual aids or guidance tools.
- d. Creating artwork
- e. Follow curriculum development activities.

### Information Technology

Information technology is information systems created through hardware and software used to implement computer-based systems (Callon, 1996 in Rustono, 2013). Information technology is all forms of technology used to process and transmit information in electronic form (Solechan and Shinta, 2016: 44). According to Murhada and Giap (2011: 2) information technology is the result of convergence between computer technology and telecommunication technology. Teachers as professional educators are expected to utilize technological advances for self-development (Ekawati Dkk, 2016: 51) and in the use of computers as a medium of learning (Sanjaya, 2012: 197). ICT for self-development can be beneficial for an educator, ICT benefits for educators in two indicators (Ekawati Dkk 2016: 51), namely:

- 1) Able to find effective learning resources
- 2) Able to publish writing

### Satisfaction

Job satisfaction is an important thing given in the work in accordance with the perspective of employees (Kaswan, 2015: 88). Job satisfaction is a person's perception both positive and negative about his work. Meanwhile, according to Wibowo (2016: 132) job satisfaction is the pleasure of a person in assessing the work and the work environment. So it can be concluded that job satisfaction is a self-supporting feeling of employees associated with their work and with his condition.

Schermerhorn, Jr. John R., James G. Hunt, Richard N. Osborn,

and Mary uhl-Bien (2011: 73) suggest there are two models suggested in measuring job satisfaction namely The Minnesota Satisfaction Questionnaire and Job Descriptive Index. The Minnesota Satisfaction Questionnaire measures satisfaction by: (1) working conditions, working conditions, (2) Chances for advancement, opportunities to advance, (3) Freedom to use one's own judgment, freedom to use self-judgment, (4) praise for doing a good job, praising for doing good work, (5) feelings of accomplishment, feeling of completion. The Job Descriptive Index measures satisfaction from five aspects: (1) The work itself, the job itself, (2) Quality of supervision, quality of supervision, (3) relationship with co-workers, relationships with co-workers, (4) promotion opportunities, promotional opportunities, and (5) Pay, paid.

From the description above, the researcher uses job satisfaction indicator that is the satisfaction of the job itself, the quality of supervision, the relationship with co-workers as an indicator in this research.

### Motivation

Motivation according to Sedarmayanti (2016: 257) is a willingness to maximize efforts toward organizational goals conditioned by the ability of the effort to meet individual needs. Motivation is the impetus for a series of processes of human behavior on the achievement of goals, (Wibowo, 2016: 322). The willingness or motivation of an employee to work is usually indicated by a continuous and goal-oriented activity. A motivated employee is an employee whose behavior is directed toward the organization's goals while unmotivated employees according to Gomes (2007: 179) are those who may be included in one of three things: (1) Employee behavior is not goal-oriented; (2) employee behavior is not directed to a valuable goal for the organization; and (3) the worker is not committed to the goal, and therefore easily distracted and demands high supervision. So it can be concluded that motivation is the source of one's movers in action.

Motivation process is directed to achieve the goal. The goal to be achieved is seen as a force that attracts individuals. Motivation theory used in this research is hierarchy theory of need from Abraham Maslow;

The Hierarchy theory of Abraham Maslow's needs Abraham Maslow's hierarchy of needs theory is the hierarchy of five needs with each need met in sequence, then the next need becomes dominant, according to Maslow in every human being there are five levels of need:

- a. Physiological needs include, clothing, food, boards
- b. Safety or security needs, free from threats and guaranteed safety
- c. Social needs, ie the need for friends, affiliations, interactions and love
- d. Needs an appreciation that includes, prestige, power.
- e. Needs self-actualization in the sense of the ability to develop the potential contained within oneself so that it becomes a real ability.

## III. RESEARCH METHODS

### Population and Sample

#### Population

According to Yusuf (2014: 147) the population is the totality of all possible values rather than certain characteristics of the number of objects to be studied its nature. In this study the

population of civil servant teachers in the Kendit sub-district public primary school consists of several classes of rank, namely: III / a = 18, III / b = 11, III / c = 8, III / d = 11, IV / a = 30, IV / b = 26. So the total population of 104 people.

**Sample**

According to Sugiono (2014: 81) the sample is part of the number and characteristics possessed by that population. The researcher will use sample size of research with Krejcie and Morgan formula, using Proportional random sampling technique where the number of samples in each strata is proportional to the number of population members in each population stratum, (Yusuf, 2014: 162). Sample quantities with Krejcie and Morgan formulas are as follows:

$$s = \frac{x^2 NP (1-P)}{d^2(N-1)+ x^2 P(1-P)}$$

Information

s = the desired sample

x<sup>2</sup>- chi Square value with degrees of freedom (dk) = 1

N = Population

P = Proportion of population

D = degree of accuracy received in proportion

So the sample with (N = 104, degrees of negativity α = 0.05 and the population proportion 0.50, while the value of Chi Square with df 1 on the level sigifikansi 0.05 on Chi Square table is 3.841) then the sample research

$$s = 3,841 \times 104 \times 0,50 \times (1-0,50) : (0,05)^2(104-1) + 3,841 \times 0,50(1-0,50)$$

$$s = 3,841 \times 104 \times 0,25 : 0,0025 \times 103 + 3,841 \times 0,25$$

$$s = 99,866 : 0,2575 + 0,96025$$

$$s = 99,866 : 1,217$$

$$s = 82,5$$

$$s = 83 \text{ (in rounded)}$$

So the sample research used in this study as much as 83 respondents from the population of 104 people. Thus the comparison of the sample of the class of civil servant teachers who become respondents research as follows:

$$\text{Group III / a} = 18/104 \times 83 = 14$$

$$\text{Group III / b} = 11/104 \times 83 = 9$$

$$\text{Group III / c} = 8/104 \times 83 = 6$$

$$\text{Group III / d} = 11/104 \times 83 = 9$$

$$\text{Group IV / a} = 30/104 \times 83 = 24$$

$$\text{Group IV / b} = 26/104 \times 83 = 21$$

**Data Source**

Sources of data in this study using primary sources and secondary sources. Primary sources are data sources that directly provide data to data collectors and secondary sources are sources that do not directly provide data collecting data, (Sugiono, 2014: 137). Primary data was obtained through questionnaires that were given to the sample of civil servant teachers as research respondents in Kendit subdistrict, Situbondo district while secondary data were obtained through the existing documents in the office of Technical Implementation Unit of District Education Office Kendit, Situbondo district.

**Variable Measurement Scale**

Scale of measurement in this study using ordinal scale. Measurement of variables This study uses Likert scale, which according to Sugiono (2014: 93) Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena. For the purposes of quantitative analysis, the answer of each item of the instrument is given 1-5

**Method of Data Analysis and Hypothesis Testing**

**Test of Instrument Validity and Reliability**

The results of valid research when there is similarity between the data collected with the actual data occurs on the object under study (Sugiyono, 2014: 121), according to Joseph (2014: 234) that the validity of an instrument is how far the instrument really measures what (object ) to be measured. Meanwhile, according to Taniredja and Mustafidah (2012: 42) an instrument is said to be valid if it can reveal the data of the variables studied appropriately. So if the validity test done correctly will show the level of validity of a given instrument. The higher the validity of an instrument, the better it is to use it. Test the validity of the questionnaire in this study in trials on 30 respondents, this is done to see whether the questionnaire given can be understood by the respondents as a whole and feasible before given to the respondents who entered in the sample research. In this research will use technique correlate each question and statement with total score toward the validity of construct with product moment correlation coefficient at 5% significance level which is done with Statistical Package for Social Science computer program abbreviated as SPSS. According to Siregar (2013: 47-48) to know what is used is right to measure what you want to measure, that is:

1. If the product moment correlation coefficient exceeds 0.3
2. If the correlation coefficient of product moment > r table (α: n-2)
3. The value of Sig. ≤ α.

Reliability is the consistency or stability score of a research instrument against the same individual, and is given in different times, (Yusuf, 2014: 242). According to Siregar (2013: 55) the reliability is to know the extent to which the results of measurements remain consistent, if measured two or more times against the same symptoms by using the same measuring tool as well. In this research the technique used for item reliability of the questionnaire was done with the help of SPSS computer program with Alpha Cronnbach technique. Criteria of a research instrument is said to be reliable by using this technique, when the reliability coefficient (r11) > 0.6, (Siregar 2013: 57).

**Data Analysis Method**

Technics of statistical analysis used in research using multiple linier regression analysis technique. The double meaning is that the number of independent variables is more than one (double) while the relationship remains linear, Taniredja and Mustafidah (2012: 92). This analysis to know the direction of the relationship between independent variables with dependent variable, whether each independent variable has an increase or decrease. The data used in this case is an interval scale. This study uses multiple regression analysis to analyze the relationship of three independent variables and one dependent variable that is information technology (X1), job satisfaction (X2) and motivation (X3) to performance variable (Y). With regression equation as follows;

$$Y = a + b1.X1+b2.X2+b3.X3 +e$$

Information :

- Y = dependent variable (performance)
- X1 = free variable (information technology)
- X2 = free variable (job satisfaction)
- X3 = independent variable (motivation)
- a = contro
- b1, b2, b3 = regression coefficient value
- e = residual

**Hypothesis Testing**

Research hypothesis to be tested in research is closely related to the proposed problem formulation, (Sugiyono, 2014: 153) then the statistical methods used to test the hypothesis by using t test. T test is used to measure separately the contribution of each independent variable to the dependent variable and also used to see the significance of correlation coefficient through SPSS calculation. In statistical theory in determining H0 rejected or accepted always compare between statistic count with table statistic, with p-value that is smallest value of  $\alpha$  which still reject H0. In SPSS p-value is known as a significant term which is often abbreviated as sig. H0 will be rejected if the value of  $\text{sig} < \alpha$ , (Taniredja and Mustafidah, 2012: 79).

**IV. RESULTS AND DISCUSSION**

Data Quality Test Data quality test aims to determine the quality of data obtained in research has been valid and reliable, so that the results of assessment and analysis research can be justified.

4.1.1 Test Validity The validity test conducted by the writer in testing the questionnaires given to the respondents using SPSS statistics 17.0 with the product moment technique with the respondent as many as 30 people to valid whether or not the data obtained,  $N = 30$ ,  $\alpha = 0.05$  value  $r (0.05, 30- 2)$  from the product moment table is 0.374 as for the result of the count as follows:

Tabel 4.18 Recapitulation of Validity Test Results

Variable	r count	Sig.	Information
<b>Information Technology (X1)</b>			
X1.1.1	0,672	0,000	Valid
X1.1.2	0,753	0,000	Valid
X1.1.3	0,802	0,000	Valid
X1.2.1	0,717	0,000	Valid
X1.2.2	0,801	0,000	Valid
X1.2.3	0,645	0,000	Valid
<b>Job satisfaction (X2)</b>			
X2.1.1	0,645	0,000	Valid
X2.1.2	0,414	0,000	Valid
X2.1.3	0,710	0,000	Valid
X2.2.1	0,414	0,000	Valid
X2.2.2	0,601	0,000	Valid
X2.2.3	0,699	0,000	Valid
X2.3.1	0,637	0,000	Valid
X2.3.2	0,598	0,000	Valid
X2.3.3	0,742	0,000	Valid

**Work motivation (X3)**

X3.1.1	0,670	0,000	Valid
X3.1.2	0,605	0,000	Valid
X3.1.3	0,431	0,017	Valid
X3.2.1	0,450	0,013	Valid
X3.2.2	0,516	0,004	Valid
X3.2.3	0,708	0,000	Valid
X3.3.1	0,737	0,000	Valid
X3.3.2	0,698	0,000	Valid
X3.3.3	0,688	0,000	Valid
X3.4.1	0,756	0,000	Valid
X3.4.2	0,749	0,000	Valid
X3.5.1	0,753	0,000	Valid
X3.5.2	0,429	0,018	Valid
<b>Performance (Y)</b>			
Y1.1	0,698	0,000	Valid
Y1.2	0,660	0,000	Valid
Y1.3	0,804	0,000	Valid

Source: Appendix 4 Validity Test Results (2017) processed

Based on table 4:18 above can be seen that the independent variable authors ie variable information technology, job satisfaction, work motivation and dependent variable that the performance of r has a bigger than r table. This indicates that the indicator used in this research variable is valid and feasible to be used as a measuring tool in the research.

**4.1.2 Test Reliability**

Reliability test is used to show that the questionnaire provided by the authors included in the category of measuring tools consistent, reliability test results on SPSS statistics17.0 are as follows:

Table 4:19 Reliability Test Results

Variable	A	Information
<b>Information Technology</b>		
Technology	0.784	Reliabel
Job satisfaction	0.748	$\alpha > 0,6$
Work motivation	0.751	
Performance	0.785	

Source: Appendix 5 Test Results Reliability (2017), processed

Based on the calculation in 4:19 shows that all the variables used in this study are reliable, it can be seen from the value of  $\alpha > 0.6$  which means reliable.

**Multiple Linear Regression Analysis**

Multiple linear regression analysis is used to see the effect of variablesIndependent against the dependent variable, in this study, the authors will see the effect of variable Information Technology, job satisfaction and work motivation on performance. Based on SPSS statistics17.0 test results obtained data as follows:

Table 4:21 Results of Multiple Linear Regression Calculations

		Correlations			
		Performance	Information Technology	Job satisfaction	Work motivation
Pearson Correlation	Performance	1.000	.416	.381	.493
	Information Technology	.416	1.000	.273	.416
	Job satisfaction	.381	.273	1.000	-.028
	Work motivation	.493	.416	-.028	1.000
Sig. (1-tailed)	Performance	.	.000	.000	.000
	Information Technology	.000	.	.006	.000
	Job satisfaction	.000	.006	.	.400
	Work motivation	.000	.000	.400	.
N	Performance	83	83	83	83
	Information Technology	83	83	83	83
	Job satisfaction	83	83	83	83
	Work motivation	83	83	83	83

Source: Appendix 6 Results of Multiple Linear Regression Analysis (2017), processed

**Correlation partially**

1. The partial correlation between information technology (X1) and performance (Y) variables is  $r = 0.416$ . This value indicates a fairly positive relationship between (X1) and (Y). That is the directional relationship between variables (X1) and (Y1). If the value (X1) rises, then the value of performance rises significantly.

2. The partial correlation between job satisfaction variable and performance is obtained by value of  $r = 0.386$ . This value indicates a positive weak relationship between (X2) and (Y) means that if job satisfaction rises, then performance does not increase significantly.

3. Partial correlation between work motivation variable and performance  $r$  value obtained =  $0.493$ . This value indicates a fairly positive relationship between (X3) and (Y) means that if the work motivation increases then the performance will also rise significantly. From the table of calculations of Multiple Linear Regression Correlations can be analyzed.

Figure 4.3. Results of Multiple Linear Regression Calculations

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.240	1.743		.138	.891
	Information Technology	.041	.031	.131	1.315	.192
	Job satisfaction	.142	.036	.358	3.932	.000
	Work motivation	.096	.021	.448	4.655	.000

a. Dependent Variable: Kinerja

Source: Appendix 6

From Figure 4.3 The Results of Multiple Linear Regression Calculations Coefficients<sup>a</sup> shows that multiple linear regression equation model to estimate performance influenced by information technology, job satisfaction and work motivation are as follows

$$Y = 0,240+0,041X1+0,142X2+0,096X3 +e$$

From the above equations can be analyzed several things, among others:

1 Performance (Y) in the absence of information technology, job satisfaction and work motivation (X1, X2 and X3 = 0), then the performance is only worth 0.240 whereas if each respondent answers increased 1 point for answers to information technology, job satisfaction and work motivation (X1, X2 Y = 0,240+0,041X1+0,142X2+0,096X3

$$Y = 0,240+0,041(83)+0,142(83)+0,096(83)$$

$$Y = 0,240 + 3,403+ 11,786+7,968$$

$$Y = 23,397$$

2. Multiple linear regression coefficient of X1 = -0,041, X2 = 0,142 and X3 = 0,096 indicate the amount of addition of performance level (Y). Each increase of respondent's answer to the variable of information technology (X1), job satisfaction, (X2) and work motivation (X3).4.3.

**Hypothesis testing**

Testing the ststistic hypothesis is made to take a decision to accept or reject the hypothesis (Ho), so the authors can make decisions objectively based on the results of data that has been in though and tested. Hypothesis testing performed by the author with the following steps:

**Partial Testing (t test)**

A. Variable Information Technology to Performance Variables.

The steps are :

(a) Make a hypothesis

Ho: There is no influence of information technology on performance

Ha: There is an effect of information technology on performance

(b) Making hypotheses in statistical form

Ho:  $\beta = 0$

Ha:  $\beta \neq 0$

(c) Determine the test criteria

If,  $Sig \leq \alpha$ , then Ho is rejected

If,  $Sig > \alpha$ , then Ho is accepted

From the table of calculation results Multiple Linear Regression Coefficients  $\alpha$  obtained sig value = 0.192

For the value of  $\alpha$ , because the two-sided test then the value of  $\alpha$  divided by 2, so the value  $\alpha = 0.05 / 2 = 0.025$

Because,  $Sig = 0.192 > \alpha = 0.025$  then Ho is accepted

(d) Make a decision Because Ho accepted then Ha rejected.

This means there is no effect of information technology on performance. Then the hypothesis of research that states there is influence of information technology on performance is rejected.

B. Job Satisfaction Variable on Performance Variables The steps are

(a) Make a hypothesis

Ho: There is no effect of job satisfaction on performance

Ha: There is influence of job satisfaction on performance

(b) Making hypotheses in statistical form

Ho:  $\beta = 0$

Ha:  $\beta \neq 0$

(c) Determine the test criteria If,  $\text{Sig} \leq \alpha$ , then Ho is rejected If,  $\text{Sig} > \alpha$ , then Ho is accepted From Table of Results of Multiple Linear Regression Regression Coefficients  $\alpha$  obtained sig value = 0.000

For the value of  $\alpha$ , because the two-sided test then the value of  $\alpha$  divided by 2, so the value  $\alpha = 0.05 / 2 = 0.025$

Because,  $\text{Sig} = 0,000 < \alpha = 0.025$  then Ho is rejected

(e) Make a decision

Because Ho is rejected then Ha is accepted. This means there is influence of job satisfaction on performance. Then the hypothesis of research that states there is influence of job satisfaction on performance accepted.

C. Variables Motivation Work Against Performance Variables The steps are

(a) Make a hypothesis

Ho: There is no influence of work motivation on performance

Ha: There is influence of work motivation on performance

(b) Making hypotheses in statistical form

Ho:  $\beta = 0$

Ha:  $\beta \neq 0$

(c) Determine the test criteria

If,  $\text{Sig} \leq \alpha$ , then Ho is rejected

If,  $\text{Sig} > \alpha$ , then Ho is accepted From Table of Results of Multiple Linear Regression Regression Coefficients  $\alpha$  obtained sig value = 0.000

For the value of  $\alpha$ , because the two-sided test then the value of  $\alpha$  divided by 2, so the value  $\alpha = 0.05 / 2 = 0.025$

Because,  $\text{Sig} = 0,000 < \alpha = 0.025$  then Ho is rejected

(d) Make a decision

Because Ho is rejected then Ho accepted this means there is influence of work motivation on performance. Then the hypothesis that there is influence of work motivation on performance accepted.

## Discussion

### Influence of Information Technology on Performance

In partial test (t test) between the variables of information

technology to performance variable based on appendix 6 table Results of Multiple Linear Regression Calculation correlations correlations between information technology and performance variables obtained value  $r = 0.416$  this value indicates a sufficient and unidirectional relationship between information technology variables (X1) with performance variables (Y1). This means that the relationship of these two variables move in the same direction. So if the variable of information technology (X1) increases (increases) then the performance variable (Y) increases vice versa if the information technology (X1) decreases (decreases) then the performance variable (Y) decreases (decreases). Indicators used in the variable of information technology there are 2 (two), namely information technology as a source of learning and utilization of information technology in learning. From the respondents' answers received by the author, related to indicators of learning resources in technology, about 47% of respondents who answered hesitant to access google scholar as a source of learning. This shows the low level of respondents in accessing learning resources via the internet. The role of information technology to improve performance can be explained through the ability of teachers to produce scientific work. Utilizing information technology as a source of learning such as through google scholar is very petrified respondents in search of articles, journals, abstracts of research in the writing of scientific papers. The ability of respondents in operational computer that seen in table 4.7 shows about 67% of respondents can operationalize own computer. While from table 4.8 known as much as 97.6% said never access the internet and only 2.4 percent who claimed never access the internet. While internet facility available in school from table 4.11 can be known 83,1% stated in school there is internet facility and counted 16,9% stated in school there is no internet facility. From the data presented above shows the respondents have the ability to access the internet like google scholar to improve performance through the ability in writing scientific papers. From table 4:15 can be known as much as 15.7% still hesitant even 1.2 percent states disagree in answering the ability to write one scientific work in one year. If teachers rarely seek learning resources through the medium of information technology, then to make scientific work will be more difficult to get reading materials, literature and new research information. This could be one cause of at least teachers who successfully completed making scientific work in fulfilling the credit score assessment (PAK) as a requirement of promotion of a teacher. The results of this study in accordance with research Wimartono et al, (2016: 87) concluded that the influence of the use of IT to the profession of teachers both when transferring knowledge to students and when teachers do self-development into professional teachers have not run optimally. This is because the lack of competence of teachers in the field of IT. Thus the hypothesis that there is an influence between information technology on performance is not proven true.

### Effect of Job Satisfaction on Performance

In partial test (t test) between job satisfaction variable to performance variable based on appendix 6 correlation table correlation between work satisfaction variable and performance obtained r value = 0.381 this value show weak positive relationship and have direct relation meaning if job satisfaction variable (X2 ) increases then causes the performance variable (Y) is also increased, otherwise if the variable of job satisfaction (X2) decreases then causes the performance (X2) also decreases. In the variable of job

satisfaction the indicator used is the satisfaction of the job itself, the quality of supervision and the relationship with the colleague. Of the three indicators, respondents expressed high satisfaction with the indicator. One of the indicators in the quality of supervision in order to provide technical assistance / guidance. From the respondent's answer to the quality of supervision received by the author, the teacher's satisfaction level to the supervisor is very high reaches 97.6%, both related to the technical guidance provided, the supervisor support to improve the teacher's competence as well as the communication in the work is only 2.4% . But from the results of the correlation between job satisfaction and performance despite showing a positive number but still low. This certainly requires the hard work of supervisors to work to improve the quality of guidance provided to further improve the performance of teachers. The results of this study with the study of Ardiansyah and Purba (2015), Sari (2016) which states job satisfaction has a positive effect on teacher performance. This means the hypothesis that there is an influence between satisfaction and performance is proven to be true,

### Effect of Work Motivation on Performance

In partial test (t test) between work motivation variable to performance variable based on appendix 6 correlations table correlation between work motivation variable and performance obtained r value = 0.493 this value indicates positive relation which enough and have direct relation, that mean if motivation variable work (X3) increases then causes the variable performance (Y) is also increased, otherwise if the variable work motivation (X3) decreased then cause the performance (X2) also decreased. Motivation Variables using Maslow's need theory indicator which includes physiology, safety, social, appreciation and self-actualization, almost all respondents agreed on the indicator. With the increasing welfare of teachers through additional employee income such as teacher certification allowance, it is appropriate for teachers to improve performance as a form of responsibility for professionalism of teachers in providing quality services. From the answers of respondents related to the fulfillment of the needs of the theory of fulfillment needs of Abraham Maslow more than 90% who answered agreed to meet the needs of respondents fipara. The amount of motivation is expected to further increase the teacher to improve its performance. It can be concluded that respondents responded with high answers in the hierarchy of needs conveyed by the theory of Abraham Maslow. But if we look at the results of the correlation between work motivation and performance shows a positive relationship performance although the correlation is not too high. For that we need to increase motivation to always improve its performance. The results of this study are in line with the study of Hakim and Yahya (2014), Eros (2014) who stated that work motivation has a positive effect on teacher performance. This suggests that the hypothesis that there is an influence between motivation and performance proves to be true.

## V. CONCLUSIONS AND SUGGESTIONS

### Conclusion

Based on some previous discussion, the authors can draw some conclusions as the answer of the problem formulation in this study, as follows:

1. Information technology has no effect on teacher performance. Although the correlation between the variables

of information technology and performance shows a positive result but the relationship has not been able to influence teacher performance. Indicators used in information technology include information technology as a source of learning and utilization of information technology for learning.

2. Job satisfaction affects the performance of teachers. The correlation between job satisfaction and performance variables shows positive results, meaning that if job satisfaction increases then cause performance also increases. Indicators in job satisfaction variable there are three that is satisfaction will work itself, satisfaction to quality of supervision and also relation with co-worker.

3. Motivation of work affect the performance. The correlation between work motivation and performance variables showed a positive result, meaning that if the work motivation increased then cause the performance also increased. Teachers have a high motivation in carrying out their work but have not been able to improve its performance.

### Suggestions

Suggestion given from result of this research are:

1. The results showed that facilities and infrastructure of information technology in schools is still minimal. This needs more serious attention from the government for the procurement of technology facilities and infrastructure in schools. With the availability of adequate facilities and infrastructures teachers can get more learning resources and utilization of information technology for the learning process so that learning technology using multimedia can be implemented, and is expected to improve the overall quality of education.
2. If facilities and infrastructure of information technology has been fulfilled then the next step by improving the quality of teacher human resources by providing training related to the use and development of information technology. By mastering the technology slowly the teacher will abandon the method of teaching conventionally and switch to the method of learning with multimedia technology. So that teachers can balance the rapid development of information technology for education and reduce education gap with other countries
3. The low performance of teachers in the development of sustainable profession, such as the ability to write scientific papers, make props, curriculum development activities, and other activities that support the development of the teacher profession, need to be followed up by doing workshops, seminars, or comparative studies to increase insight , creativity or learning innovations that are conducted periodically, either at their own expense or from government programs. So that teachers really become professional teachers in their field.

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