



## THE EFFECT OF E-PERFORMANCE APPRAISAL SYSTEM AND ADDITIONAL INCOME OF CIVIL SERVANT ON PERFORMANCE WITH JOB SATISFACTION AS INTERVENING VARIABLE IN THE REGIONAL SECRETARIAT OF MOJOKERTO CITY

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### ABSTRACT

Since 2019 the Government of Mojokerto City has made efforts to convert the performance appraisal system manually into an online system. This effort was made to realize effective and efficient governance based on technology. E-Performance is a website-based application used by the Government of Mojokerto City to manage and assess employee performance. E-Performance is a staffing system that can determine oversight to the activities of civil servants, who can then directly determine the amount of the additional income of civil servant. The purpose of this study is to analyze and prove the effect of e-performance appraisal system and additional income of civil servant on performance in the Regional Secretariat of Mojokerto City with job satisfaction as an intervening variable. This research uses a quantitative approach combined with an explanatory method. The results of this study conclude several things, including: 1.) E-Performance appraisal system has significant positive effect on performance; 2.) Additional income of civil servant has significant positive effect on performance; 3.) E-Performance appraisal system has significant positive effect on job satisfaction; 4.) Additional income of civil servant has significant positive effect on job satisfaction; 5.) Job satisfaction has significant positive effect on performance; 6.) E-Performance appraisal system and additional income of civil servant have significant positive effect on performance through job satisfaction.

**Keywords:** additional income of civil servant, e-performance appraisal system, job satisfaction, performance

### INTRODUCTION

In 2014 the central government established a new compensation system for Civil Servants based on the position and performance of the apparatus as outlined in Law Number 5 of 2014 concerning State Civil Apparatus which stated that Performance Allowances are given following performance achievements and performance allowances must be in line by increasing the performance of the apparatus. Good governance begins with good officials that to realize good governance the country needs qualified and competent human resources in their field (Destari, Lumbanraja, & Absah, 2018).

In a government organization or agency, human resources that have sufficient competence under the objectives of the agency are needed. To create apparatus human resources that have competence, it is necessary to improve the quality of employee professionalism and develop the human resources of the apparatus itself. In Government Regulation Number 58 of 2005 concerning Regional Financial Management in article 63 paragraph 2 states that the Regional Government can provide additional income to the regional civil servants based on objective considerations by taking into account the financial capacity of the region and obtaining the approval of the Regional House of Representatives by the provisions of the regulations.



One of the steps implemented by the Mojokerto City Government in an effort to improve employee performance is to provide additional income based on employee performance achievements. The purpose of providing additional income is to improve employee welfare in the hope that it will help improve employee discipline and quality so that they can work more optimally in providing services to the community. The provision of additional income in Mojokerto City has been carried out since 2017 with the concept of providing additional income based on food allowances every day during the working day of the month. Then developed in the 2018 where the concept of providing additional income was based on employee's class position.

Since 2019 the Government of Mojokerto City has made efforts to convert the performance appraisal system manually into an online system. This effort was made to realize effective and efficient governance based on technology. E-Performance is a website-based application used by the Government of Mojokerto City to manage and assess employee performance. E-Performance is a staffing system that can determine oversight to the activities of civil servants, who can then directly determine the amount of the additional income of civil servant. In its application, E-Performance in the Government of Mojokerto City bases performance calculations through daily activities and minute percentages of these activities.

The concept of implementing this E-Performance application that is calculated is measured by the level of performance of each employee in carrying out their duties. Every employee must input what he/she does every day. The detail of what they have done showed the diligent performance of the employee. Then the calculation is measured from the level of performance of each employee in carrying out their duties. So each employee can get a different salary each month (Hameed, *et. al.*, 2014). The initial data that the author collected related to employee performance in the Regional Secretariat of Mojokerto City as revealed in the following table:

**Table 1. Performance Data at the Regional Secretariat of Mojokerto City from 2018 to 2019**

No.	Work Unit	Percentage (%)	
		2018	2019
1	Government Section	84,48%	91,81%
2	Public Relations and Protocol Section	85,36%	98,11%
3	Law Section	80,75%	89,48%
4	Economic Section	80,85%	90,81%
5	Development Section	89,56%	91,35%
6	Organization Section	86,99%	95,20%
7	General Section	82,54%	90,78%
8	Public Welfare Section	85,53%	95,99%
	<b>Mean</b>	84,51 %	92,94%

(Source: Regional Secretariat of Mojokerto City, 2019)

From table 1 above, data obtained show that the average performance of employees in the Regional Secretariat of Mojokerto City in 2019 increased by 8,43% compared to 2018. This indicates the effect of increasing performance after the application of E-Performance as an employees' performance appraisal system.



**Table 2. Employee Attendance Rate in the Regional Secretariat of Mojokerto City from 2017 to 2018**

No	Work Unit	Finger Print Timeliness (%)		Meeting Attendance Rate (%)	
		2017	2018	2017	2018
1	Government Section	79	81	75	78
2	Public Relations and Protocol Section	80	85	80	80
3	Law Section	76	82	75	78
4	Economic Section	77	80	76	80
5	Development Section	77	80	75	78
6	Organization Section	80	85	76	79
7	General Section	78	83	78	80
8	Public Welfare Section	79	82	79	81
<b>Mean</b>		78,25	82,25	76,75	79,25

(Source: Regional Civil Service Agency of Mojokerto City, 2019)

Based on table 2 shows that the level of discipline of employees in the Regional Secretariat of Mojokerto City in 2018 increased compared to 2017 in line with the application of additional income based on class positions starting in 2018. Increased performance and income of employees can indicate that employees are satisfied with the current work system (Yang & Wang, 2013; Darma & Supriyanto, 2017). The purpose of this study is to analyze and prove the effect of e-performance appraisal system and additional income of civil servant on performance in the Regional Secretariat of Mojokerto City with job satisfaction as an intervening variable.

### E-Performance Appraisal System

E-Performance is a website-based application that is used to analyze the position's needs, the workload of the office and the workload of the organization as the basis for calculating work performance and providing employee's additional income (Zulystiawati, 2014). This application is part of the E-Government relations type which is included in the G2E (Government to Employees) type of relationship where the application is intended to bridge the government's relationship with its employees (Njeje, Chepkilot, & Ochieng, 2018). The application of the performance appraisal system through the e-performance application is expected to be able to accommodate the reporting of all activities carried out by each Civil Servants (Zulystiawati, 2014). In its practice, this application will record any daily activities carried out on that day which are then accumulated in one month. Then, to anticipate fictitious reports, direct superiors or leaders will immediately become the filter (Akter & Husain, 2016).

According to Al-Raisi, Amin, & Tahir (2011), the basis of the E-Performance appraisal system indicators is as follows: *First*, Appraisal Indicators, where there are indicators of appraisal indicators as follows: a.) Result oriented; b.) Behaviour work; c.) Personal traits. *Second*, Appraiser, where there are indicators of appraiser as follows: a.) Ability of the appraiser; b.) Objective appraisal results; c.) Appropriate appraisal precedures. *Third*, Appraisal Methods, where there are indicators of the appraial methods of the task as follows: a.) Relevance; b.) Acceptability; c.) Practically; d.) Sensitivity; e.) Validity; f.) Reliability.



## Additional Income of Civil Servant

Additional income of civil servant is an addition provided to employees relating to attendance and performance. According to the Regulation of the Head of National Civil Service Agency Number 20 of 2011, performance allowances are additional income given to Civil Servants, the amount of which is based on the results of job evaluation and employee performance achievements (Erdinal, 2018). Okeke, Nwele, & Achilike (2017) said that regional performance allowance is a refinement of existing allowances and will be a specific allowance to spur performance while ensuring fairness in the provision of additional income. The granting of regional performance allowances carries out bureaucratic reform in line with the rapid development of the times and increasingly complex problems faced by the state (Ismajli & Qosja, 2012).

According to Rizal, *et. al.* (2014), the indicator for granting additional income of civil servant will be given based on: *First*, the class of position is determined based on the results of the evaluation of the position as a process of human resource management that is used to assess a position systematically using the criteria referred to as position factor. *Second*, the work discipline is carried out based on the recapitulation of employee attendance, both the attendance of employees at work, after work and the absence of employees. *Third*, the appraisal of work productivity is carried out based on a.) individual performance achievements; b.) organizational performance achievements; c.) the assessment of individual and organizational performance achievements.

## Performance

According to Miao, *et. al.* (2019) that performance is the result or level of success of a person or overall during a certain period in carrying out the task compared to various possibilities, such as work standards, targets or targets or predetermined criteria. Performance is the work that can be achieved by a person or group of people in an organization by their respective authorities and responsibilities, to achieve the goals of the organization concerned legally, not violating the law and under applicable morals and ethics (Bakan, *et. al.*, 2014; Hidayati & Rahmawati, 2016).

Suhartini & Nurlita (2019) expressed for measuring the performance of an employee consisting of 6 dimensions, namely: *First*, work quality where the extent to which the process or results of the implementation of activities approaching perfection or approaching the expected goals. *Second*, work quantity where the amount of work done or produced, for example, such as the number of goods, the number of activities, or it could also be value for money. *Third*, timeliness was the extent to which employees can complete the work following the specified time by taking into account the results of the work. *Fourth*, the need for supervisors where the extent to which a worker can carry out a job function without requiring the supervision of a supervisor to prevent undesirable actions. *Fifth*, cost-effectiveness is the extent to which the application of human, financial, technological, and material resources is maximized to achieve the highest yield or reduce the loss of each unit of resource usage. *Sixth*, interpersonal import is the bailability to the extent that employees are able to work together among colleagues, superiors and subordinates.



## Job Satisfaction

Prasad & Kumar (2014) defined that job satisfaction is an employee's attitude towards work related to work situations, cooperation between employees, rewards received at work, and matters relating to physical and psychological factors. Mehrad & Fallahi (2015) said that job satisfaction is an emotional attitude that is fun and loves work, where this attitude is manifested in work morale, work discipline, and work performance. Job satisfaction can be achieved if all expectations within employees can be fulfilled in the implementation of their duties (Mariati and Mauludin, 2018). This is closely related to the rewards they get after doing a job (De Menezes, 2012; Inuwa, 2016).

Javed, Balouch, & Hassan (2014) suggested that job satisfaction has 5 dimensions which include: 1.) The work itself, related to the characteristics of work and the complexity of the work performed is fun and satisfying and gives challenges to employees; 2.) Pay where the system of remuneration based on job demands, individual skill levels and wage standards will create Job Satisfaction; 3.) The opportunity of promotion in which the process of change from one job to another in the hierarchy of authority and responsibility is higher than the authority and responsibilities that have been given in the previous time or in other words given the opportunity to advance in the organization; 4.) Supervision carried out by superiors in a fair, open and willing to cooperate with subordinates will affect employees in working; 5.) Coworkers where colleagues work in organizations and their interactions are cooperative in work.

## METHOD

### Research Location and Schedule

The location of this research is located in the Regional Secretariat of Mojokerto City Jalan Gajah Mada No. 145 City of Mojokerto. The research schedule and time schedule for the research is from December 2019 to March 2020.

### Research Approach and Design

This study uses a quantitative approach combined with an explanatory method so that this study will explain the relationship between clauses and hypothesis testing which are formulated using research methods in accordance with the variables to be examined which will then analyze the relationship between the effect of e-performance appraisal system ( $X_1$ ) and additional income of civil servant ( $X_2$ ) to performance ( $Y$ ) through job satisfaction ( $Z$ ) as an intervening variable.

### Population and Sampling Technique

The population in this study is civil servants who get additional income of civil servant in the Regional Secretariat of Mojokerto City, amounting to 114 people per Desember 2019. To determine the number of samples in each section the Proportional Random technique was used. Sampling, which is a random sampling of population by taking into account the proportions of each group in the population so he smallest proportion of the population can be represented, with the formula:

$$S = \frac{x}{y} \cdot n$$

Information:

S = Samples target number

x = Samples total number

y = Population total

n = Population total of each stratum



By using the formula above the number of samples obtained for each section on Government of Mojokerto City is as shown in the following table:

**Table 3. Number of Population and Sample**

No	Work Unit	Amount of Employee	S = (X/Y).n	Rounding up (Number of Samples)
1.	Regional Secretariat	3	2,34	2
2.	Government Section	12	9,36	9
3.	Law Section	10	7,80	8
4.	Organization Section	8	6,24	6
5.	Development Section	16	12,49	12
6.	Economic Section	10	7,80	8
7.	Public Welfare Section	8	6,24	6
8.	Public Relations and Protocol Section	21	16,49	17
9.	General Section	26	20,51	21
Total		<b>114</b>	<b>89</b>	<b>89</b>

(Source: Primary Data, 2019)

### Collecting and Data Analysis

Data retrieval is a systematic and standardized procedure for obtaining the required data and obtaining answers to existing problems. In this study, researchers obtained these data through primary data, secondary data, observation, and study of literature review. After data collection, the next step is data processing. At this stage, the data is processed in such a way that the truths can be concluded that can be used to answer the problems raised in the study. Data processing techniques using the following methods: 1.) Editing data; 2.) Data coding; 3.) Tabulating data. After processing the data, the next step is data analysis. There are several data analysis techniques in this study, including 1.) Validity and reliability tests; 2.) Classic assumptions Test; 3.) Hypothesis test and path analysis.

## RESULT AND DISCUSSION

### Validity Testing

Validity is a standard or basic measure that shows appropriateness, usefulness, and validity that lead to the accuracy of the interpretation of the measurement of research variables. To measure the validity used Pearson product-moment correlation. If the Pearson product-moment correlation between each statement with a total score produces a positive correlation value ( $r_{count}$ ) and  $r_{count} > 0.208$ , then the statement item is declared valid. Following are the results of testing the validity of each statement item on each research variable:

**Table 4. Calculation Results of Validity Testing**

Variable	Item	$r_{count}$	$r_{count}$	Information
F-Performance	x1.1.1	0,644	0,208	Valid
	x1.1.2	0,615	0,208	Valid
	x1.1.3	0,705	0,208	Valid
Appraisal System (X <sub>1</sub> )				Valid
	x1.1.4	0,672	0,208	Valid
	x1.1.5	0,706	0,208	Valid



Variable	Item	r <sub>count</sub>	r <sub>count</sub>	Information
	x1.2.2	0,653	0,208	Valid
	x1.2.3	0,748	0,208	Valid
	x1.2.4	0,720	0,208	Valid
	x1.3.1	0,696	0,208	Valid
	x1.3.2	0,612	0,208	Valid
	x1.3.3	0,764	0,208	Valid
	x1.3.4	0,771	0,208	Valid
	x1.3.5	0,647	0,208	Valid
	x1.3.6	0,656	0,208	Valid
	x2.1.1	0,512	0,208	Valid
	x2.1.2	0,496	0,208	Valid
	x2.1.3	0,538	0,208	Valid
	x2.1.4	0,565	0,208	Valid
	x2.1.5	0,552	0,208	Valid
of Civil Servant				Valid
				Valid
	x2.1.6	0,423	0,208	Valid
Additional Income	x2.2.1	0,469	0,208	Valid
(X <sub>2</sub> )	x2.2.2	0,480	0,208	Valid
	x2.2.3	0,355	0,208	Valid
	x2.2.4	0,343	0,208	Valid
	x2.3.1	0,295	0,208	Valid
	x2.3.2	0,273	0,208	Valid
	x2.3.3	0,311	0,208	Valid
	x2.3.4	0,332	0,208	Valid
	y.1.1.1	0,370	0,208	Valid
	y1.1.2	0,381	0,208	Valid
	y1.1.3	0,339	0,208	Valid
	y.1.2.1	0,327	0,208	Valid
	y1.2.2	0,291	0,208	Valid
				Valid
				Valid
				Valid
	y.1.2.3	0,290	0,208	Valid
	y1.3.1	0,227	0,208	Valid
Performance	y1.3.2	0,446	0,208	Valid
(Y)	y1.3.3	0,528	0,208	Valid
	y1.3.4	0,405	0,208	Valid
	y1.4.1	0,448	0,208	Valid
	y1.4.2	0,422	0,208	Valid
	y1.5.1	0,240	0,208	Valid
	v1.5.2	0,475	0,208	Valid



Variable	Item	r <sub>count</sub>	r <sub>count</sub>	Information
	z1.3.1	0,496	0,208	Valid
	z1.3.2	0,458	0,208	Valid
	z1.3.3	0,587	0,208	Valid
	z1.4.1	0,504	0,208	Valid
	z1.4.2	0,487	0,208	Valid
	z1.4.3	0,378	0,208	Valid
	z1.5.1	0,527	0,208	Valid
	z1.5.2	0,745	0,208	Valid
	z1.5.3	0,649	0,208	Valid

(Source: Primary Data, 2020)

Based on table 3 it is known that all statements on the E-Performance Appraisal System variable, Additional Income of Civil Servant, Performance and Job Satisfaction produce positive counts and are greater than 0.208 ( $r_{table}$ ), thus statement items measuring each research variable are stated valid and further analysis can be done.

### Reliability Testing

Reliability is a consistency of a test in measuring or observing something that is the object of measurement, in this case the research variables include: e- performance appraisal system, additional income of civil servant, performance, and job satisfaction. To measure the reliability used Cronbach's alpha value. If the Cronbach's alpha value > 0.600, then the statement items that make up the research variable are declared reliable. Here are the results of testing the reliability of research variables:

Table 5. Calculation Results of Reliability Testing

Variable	Cronbach's Alpha	Critical Value	Information
E-Performance Appraisal System	0.937	0.600	Reliable
Additional Income of Civil Servant	0.800	0.600	Reliable
Performance	0.789	0.600	Reliable
Job Satisfaction	0.856	0.600	Reliable

(Source: Primary Data, 2020)

Based on table 4 shows that the magnitude of the Cronbach's Alpha value in each dimension on all research variables is greater than the critical value of 0.600, thus the statement items that make up the research variable are declared reliable.

### Classical Assumption Testing

The following will explain the results of testing the assumptions needed for hypothesis testing through path analysis. The classic assumption tests used in this study include data normality testing (residual normality), multicollinearity testing, heteroscedasticity testing and autocorrelation testing as described below:

#### 1. Data Normality Testing

Data normality test is to see whether the residual value is normally distributed or not. A good regression model is to have a normally distributed

residual value. So the normality test is not carried out on each variable but the residual value. Frequent errors often occur, namely that a normality test is performed on each variable. This is not prohibited but the regression model requires normality in the residual value not in each of the research variables. Residual normality testing is carried out using the normal probability plot and the Kolmogorov-Smirnov test. If the points are collected around a straight line, then the residual regression model is concluded to be normally distributed. Here is a picture of the normal probability plot generated from the regression model:

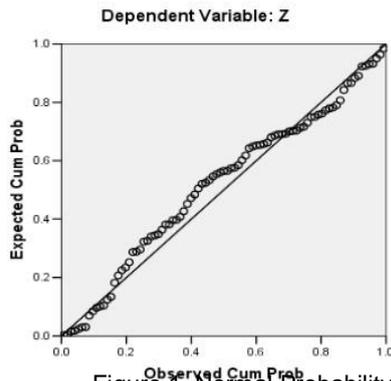


Figure 1. Normal Probability Plot Regression Model X1 dan X2 on Z (Source: Primary Data, 2020)

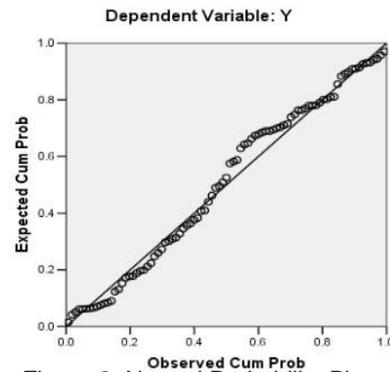


Figure 2. Normal Probability Plot Regression Model X1, X2 and Z on Y (Source: Primary Data, 2020)

From figures 1 and 2 above it is known that the points are collected around the normal line so that the regression model residuals are concluded following the normal distribution. To determine the normality of the residual regression model the researchers also used the Kolmogorov-Smirnov test. If the significance value of the Kolmogorov-Smirnov test is  $> 0.05$  ( $\alpha = 5\%$ ), it can be concluded that the regression model residuals are normally distributed. The normality test aims to test whether, in the regression model, confounding or residual variables have a normal distribution. Here are the results of the normality test:

**Table 6. Calculation Results of Data Normality Testing**

Model	Regression	Significancy	Information
First	Effect X1 and X2 on Z	0,434	Normal
Second	Effect X1, X2 and Z on Y	0,964	Normal

(Source: Primary Data, 2020)

Table 5 shows that the Kolmogorov-Smirnov test of the two regression models produced significance values of 0.412 and 0.412, respectively, where the value was greater than 0.05 ( $\alpha = 5\%$ ), so it can be concluded that the residuals of the two regression models were normally distributed. Thus the normality assumption has been fulfilled and continued to the next assumption test.

## 2. Multicollinearity Testing

Multicollinearity is to see whether there is a high correlation between independent variables in a multiple linear regression model. If there is a high correlation between the independent variables, then the relationship between the independent variable and the dependent variable is disturbed. Multicollinearity is a



condition where among the independent variables in the regression model there is a high correlation or correlation. A good regression model is one that does not contain multicollinearity. To detect the presence or absence of multicollinearity, the Variance Inflation Factor (VIF) is used, if the tolerance value  $> 0.10$  or VIF value  $< 10$ , then there is no multicollinearity between the independent variables in the regression model. The following are the values of tolerance and VIF in the two regression models in this study:

**Table 7. Calculation Results of Multicollinearity Testing**

Regresi	Independent Variable	Tolerance	VIF	Information
Effect of X <sub>1</sub> and X <sub>2</sub> on Z	E-Performance Appraisal System (X <sub>1</sub> )	0,670	1,492	Non-Multicollinearity
	Additional Income of Civil Servant (X <sub>2</sub> )	0,670	1,492	Non-Multicollinearity
Effect of X <sub>1</sub> , X <sub>2</sub> and Z on Y	E-Performance Appraisal System (X <sub>1</sub> )	0,603	1,657	Non-Multicollinearity
	Additional Income of Civil Servant (X <sub>2</sub> )	0,555	1,803	Non-Multicollinearity
	Job Satisfaction (Z)	0,576	1,735	Non-Multicollinearity

(Source: Primary Data, 2020)

Based on table 6 it can be seen that the tolerance value of each independent variable in both regression models is above 0.10, so also the VIF values are all below 10, so it can be concluded that both regression models are free from multicollinearity or in other words the non-assumption multicollinearity has been fulfilled.

### 3. Heteroscedasticity Testing

Heteroskedastisitas test is to see whether there is an unequal variance from one residual to another observation. If the residual variant is not homogeneous, then heteroscedasticity occurs. A good regression model does not contain heteroscedasticity, in other words, the residual variant must be homogeneous. Detection of the presence or absence of heteroscedasticity is done by the spearman test method which correlates the independent variables to the absolute residual value. If the spearman test produces a significance value  $> 0.05$  ( $\alpha = 5\%$ ), then it is concluded that the regression model does not occur heteroscedasticity. The following are the results of the heteroscedasticity test:

**Table 8. Calculation Results of Heteroscedasticity Testing**

Regression	Independent Variable	Significancy	Information
Effect of X <sub>1</sub> and X <sub>2</sub> on Z	E-Performance Appraisal System (X <sub>1</sub> )	0,364	Non-Heteroscedasticity
	Additional Income of Civil Servant (X <sub>2</sub> )	0,199	Non-Heteroscedasticity
Effect of X <sub>1</sub> , X <sub>2</sub> and Z on Y	E-Performance Appraisal System (X <sub>1</sub> )	0,881	Non-Heteroscedasticity
	Additional Income of Civil Servant (X <sub>2</sub> )	0,025	Non-Heteroscedasticity
	Job Satisfaction (Z)	0,593	Non-Heteroscedasticity

(Source: Primary Data, 2020)



Based on table 7 above, it is known that the spearman test produces significance values for each independent variable in both regression models whose values are greater than 0.05 ( $\alpha = 5\%$ ), so it is concluded that there is no heteroscedasticity in the regression model. Thus the assumption of non-heteroscedasticity has been fulfilled.

#### 4. Autocorrelation Test

An autocorrelation test is used to see whether there is a correlation between a period  $t$  with the previous period ( $t-1$ ). The autocorrelation test is only done on time series data and does not need to be done on cross-section data such as on a questionnaire where all variables are measured simultaneously at the same time. Autocorrelation shows that in a linear regression model there are confounding errors in the period with errors in the previous period. A good regression model is free from autocorrelation. Detection of the presence or absence of autocorrelation can be done using the Durbin Watson test (DW-test). An observation is said to not occur autocorrelation if the value of Durbin Watson  $dU < DW < 4-dU$ . Following are the Durbin Watson values generated from the regression model:

Table 9. Calculation Results of Durbin-Watson Value

Variable Effect	dU	DW	4-dU	Information
X1 and X2 on Z	1,70	2,13	2,30	Non-Autocrorelation
X1, X2 and Z on Y	1,73	1,76	2,27	Non-Autocrorelation

(Source: Primary Data, 2020)

Based on table 8, it is known that each Durbin-Watson (DW) value is at the  $dU$  and  $4-dU$  intervals. So that the results indicate no autocorrelation in the two regression models or the assumption of free autocorrelation in the two regression models has been fulfilled.

#### Analysis Findings on the Effects of E-Performance Appraisal System and Additional Income of Civil Servant on Job Satisfaction

The analysis findings on the effect of E-Performance Appraisal System ( $X_1$ ) and Additional Income of Civil Servant ( $X_2$ ) on Job Satisfaction ( $Z$ ) produce path coefficients and the significance value of  $t$  as follows:

Table 10. Analysis Findings on the Effects of E-Performance and Additional Income of Civil Servant on Job Satisfaction

Model	Path Coefficient	$t_{count}$	Significancy	Information
E-Performance Appraisal System ( $X_1$ )	0,239	3,080	0,003	Significant
Additional Income of Civil Servant ( $X_2$ )	0,423	4,229	0,000	Significant
R-Square = 0,424				

(Source: Primary Data, 2020)

Testing the effect of e-performance appraisal system on job satisfaction produces a  $t_{count}$  of 3,080 with a significance value of 0,003 less than 0,05 ( $\alpha = 5\%$ ), it is concluded that e-performance appraisal system has significant effect on job satisfaction of civil servants in the Regional Secretariat of Mojokerto City. The path coefficient value of the effect of e-performance appraisal system on job satisfaction of 0,239 indicates that e-performance appraisal system has positive and significant



effect on job satisfaction. This means that increasing e-performance appraisal system will increase job satisfaction of civil servants who work in the Regional Secretariat of Mojokerto City significantly.

Testing the effect of the additional income of civil servant on job satisfaction produces a  $t_{count}$  of 4,229 with a significance value of 0,000 less than 0,05 ( $\alpha = 5\%$ ), it is concluded that the additional income of civil servant has significant effect on job satisfaction of civil servants in the Regional Secretariat of Mojokerto City. The path coefficient value of the effect of the additional income of civil servant on job satisfaction of 0,423 indicates that the additional income of civil servant has a positive and significant effect on job satisfaction. This means that the greater income of civil servant will increase the job satisfaction of civil servants in the Regional Secretariat of Mojokerto City significantly.

The R-Square value generated from lane 1 is 0,424, indicating that the change in job satisfaction of civil servants in the Regional Secretariat of Mojokerto City is effected by E-Performance and additional income of civil servant by 42,4%, the remaining 57,6% % is effected by factors other than E-Performance and additional income for civil servants.

### Analysis Findings on the Effects of E-Performance Appraisal System and Additional Income of Civil Servant on Performance through Job Satisfaction

The analysis findings on the effect of e-performance appraisal system ( $X_1$ ) and additional income of civil servant ( $X_2$ ) on performance ( $Y$ ) through Job Satisfaction ( $Z$ ) produce path coefficients and the significance  $t_{count}$  is listed in table 10 as follows:

**Tabel 11. Analysis Findings on the Effects of E-Performance Appraisal System and Additional Income of Civil Servant on Performance through Job Satisfaction**

Model	Path Coefficient	$t_{count}$	Significancy	Information
E-Performance Appraisal System ( $X_1$ )	0,149	2,096	0,039	Significant
Additional Income of Civil Servant ( $X_2$ )	0,259	2,702	0,008	Significant
Job Satisfaction ( $Z$ )	0,274	2,914	0,005	Significant
R-Square = 0,467				

(Source: Primary Data, 2020)

Testing the effect of e-performance appraisal system on performance produces  $t_{count}$  of 2,096 with a significance value of 0,039 less than 0,05 ( $\alpha = 5\%$ ), then it is concluded that e-performance appraisal system has significant effect on performance of civil servants in the Regional Secretariat of Mojokerto City. The path coefficient value of the effect of e-performance appraisal system on performance is 0,149 indicates that e-performance appraisal system has positive and significant effect on performance. This means that e-performance appraisal system will improve the performance of civil servants in the Regional Secretariat of Mojokerto City significantly.

Testing the effect of the additional income of civil servant on performance produces  $t_{count}$  of 2,702 with a significance value of 0,008 less than 0,05 ( $\alpha = 5\%$ ), it is concluded that the additional income of civil servant has significant effect on performance of civil servants in the Regional Secretariat of Mojokerto City. The path

coefficient value of the additional income of civil servant effect on performance is 0,259 indicates that the additional income of civil servant has positive and significant effect on performance. This means that an increase in the additional income of civil servant will significantly improve the performance of civil servants in the Regional Secretariat of Mojokerto City.

Testing the effect of job satisfaction on performance produces  $t_{count}$  of 2,914 with a significance value of 0,005 less than 0,05 ( $\alpha = 5\%$ ), then it is concluded that job satisfaction has a significant effect on performance of civil servants in the Regional Secretariat of Mojokerto City. The path coefficient value of the effect of job satisfaction on performance is 0,274 indicates that job satisfaction has positive and significant effect on performance. This means that the increase in job satisfaction will significantly improve the performance of civil servants in the Regional Secretariat of Mojokerto City.

The R-Square value generated from lane 2 is 0,467 indicating that the change in performance of civil servants in the Regional Secretariat of Mojokerto City is effected by e-performance appraisal system, additional income of civil servant and job satisfaction by 46,7%, the remaining 53,3 % is effected by factors other than e-performance appraisal system, additional income of civil servant and job satisfaction. Based on the results of path analysis in path 1 and path 2 can be made the following path diagram image:

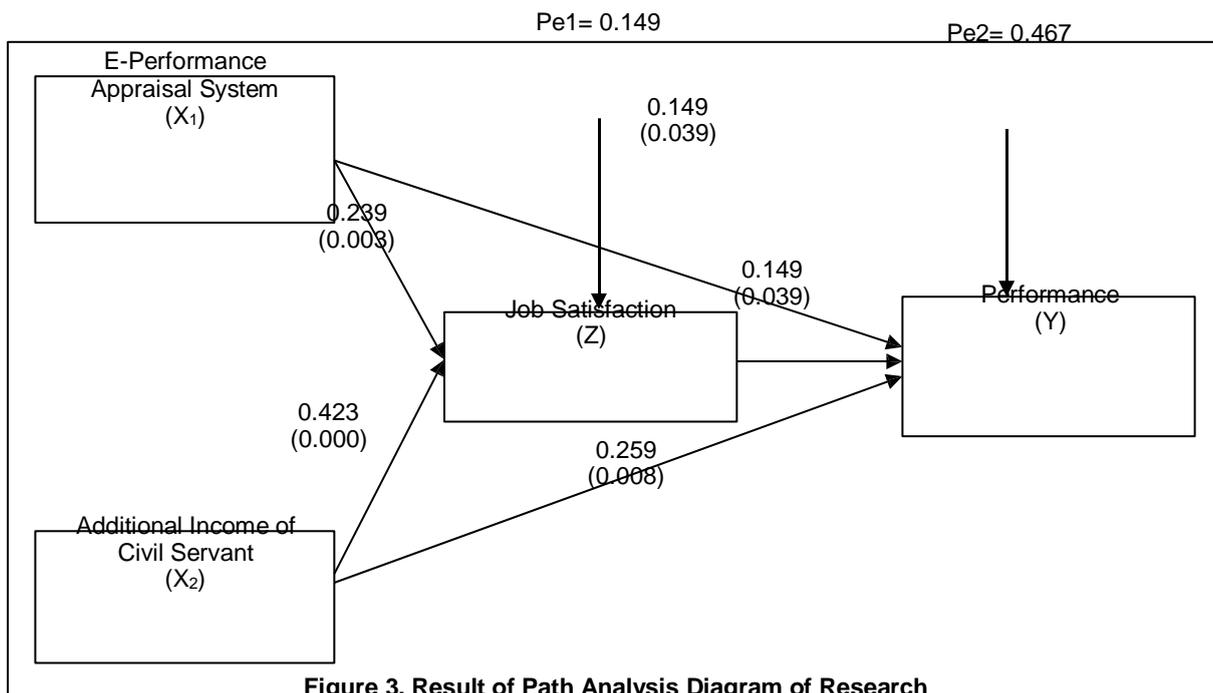


Figure 3. Result of Path Analysis Diagram of Research

(Source: Primary Data, 2020)

From the path diagram analysis picture above, it is known the amount of error in each effect of the independent variable on the dependent variable obtained through calculations as follows:

$$Pe_1 = (1 - 0,424)^{0.5} = 0,758$$



$$Pe2 = (1-0,467)^{0.5} = 0,730$$

Based on these results the model validity can be calculated through the total determination coefficient as follows:

$$Rm^2 = 1 - P_{ei}^2 P_{e2}^2$$
$$Rm^2 = 1 - (0,758^2 \times 0,730^2)$$
$$Rm^2 = 0,695$$

The total determination coefficient value of 0,695 indicates that 69,5% of the information contained in the research data can be explained by the model, while the remaining 30,5% is explained by errors or other variables not used in the model.

### Hypothesis Testing

Based on the results of the analysis that has been done, the following is a large value of the effect between variables directly:

**Table 12. Effect Value Between Variables Directly**

Directly Effect	Effect Direction	Effect Value
E-Performance Appraisal System (X1) → Performance (Y)	Positive	0,149
Additional Income of Civil Servant (X2) → Performance (Y)	Positive	0,259
E-Performance Appraisal System (X1) → Job Satisfaction (Z)	Positive	0,239
Additional Income of Civil Servant (X2) → Job Satisfaction (Z)	Positive	0,423
Job Satisfaction (Z) → Performance (Y)	Positive	0,274

(Source: Primary Data, 2020)

Based on table 11 shows that there is an effect of e-performance appraisal system on performance is significant, with a large effect of 0,149. Based on these results the first hypothesis (H<sub>1</sub>) which suspects that there is an effect of e- performance appraisal system (X<sub>1</sub>) on the performance (Y) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true. There is an effect of additional income of civil servant on performance is significant, with a large effect of 0,259. Based on these results the second hypothesis (H<sub>2</sub>) which suspects that there is an effect of additional income of civil servant (X<sub>2</sub>) on the performance (Y) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true.

There is an effect of e-performance appraisal system on job satisfaction is significant, with a large effect of 0,239. Based on these results the third hypothesis (H<sub>3</sub>) which suspects that there is an effect of e-performance appraisal system (X<sub>1</sub>) on job satisfaction (Z) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true. There is an effect of additional income of civil servant on job satisfaction is significant, with a large effect of 0,423. Based on these results the fourth hypothesis (H<sub>4</sub>) which suspects that there is an additional income of civil servant (X<sub>2</sub>) effect on the job satisfaction (Z) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true.

There is an effect of job satisfaction on performance is significant, with a large effect of 0,274. Based on these results the fifth hypothesis (H<sub>5</sub>) which suspects there is an effect of job satisfaction (Z) on the performance (Y) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true. The following is a large value of effect between variables indirectly:



**Table 13. Effect Value Between Variables Indirectly**

Indirectly Effect	Effect Direction	Effect Value
E-Performance Appraisal System (X1) → Job Satisfaction (Z) → Performance (Y)	Positive	0,201 x 0,174 = 0,034
Additional Income of Civil Servant (X2) → Job Satisfaction (Z) → Performance (Y)	Positive	0,466 x 0,157 = 0,073

(Source: Primary Data, 2020)

In this study, there is an intervening variable named job satisfaction. A variable is called intervening if the variable also affects the relationship between the independent variable and the dependent variable. From the results of the final calculation of the Sobel-test in the table, it is known that the  $t_{count}$  of the e- performance appraisal system variable is  $2,12 > t_{table} = 1,96$  (significance value of 5%). This means that job satisfaction is a variable that can intervene with the effect of e-performance appraisal system on performance. Based on these results the sixth hypothesis<sub>(a)</sub> of the research ( $H_{6a}$ ) suggests that E-Performance affects the performance of civil servants in the Regional Secretariat of Mojokerto City through job satisfaction, is accepted and proven to be true.

From the results of the final calculation of the Sobel-test in the table, it is known that the value of the additional income of civil servant variable is  $2,46 > t_{table} = 1,96$  (significance value of 5%). This means that job satisfaction is a variable that can intervene in the effect of the additional income of civil servant on performance. Based on these results the sixth hypothesis<sub>(b)</sub> ( $H_{6b}$ ) which suspects the additional income of civil servant affects the performance of the civil servants in the Regional Secretariat of Mojokerto City through job satisfaction, is accepted and proven to be true. So that it can be stated that the sixth hypothesis ( $H_6$ ) which predicts E-Performance and additional income of civil servant affects the performance of civil servants in the Regional Secretariat of Mojokerto City through job satisfaction, are accepted and proven to be true.

## CONCLUSIONS

This study produces the following conclusions are there is an effect of e-performance appraisal system on performance is significant, with a large effect of 0,149. Based on these results the first hypothesis ( $H_1$ ) which suspects that there is an effect of e-performance appraisal system ( $X_1$ ) on the performance (Y) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true. There is an effect of additional income of civil servant on performance is significant, with a large effect of 0,259. Based on these results the second hypothesis ( $H_2$ ) which suspects that there is an effect of additional income of civil servant ( $X_2$ ) on the performance (Y) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true.

There is an effect of E-Performance on job satisfaction is significant, with a large effect of 0,239. Based on these results the third hypothesis ( $H_3$ ) which suspects that there is an effect of e-performance appraisal system ( $X_1$ ) on job satisfaction (Z) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true. There is an effect of additional income of civil servant on job satisfaction is significant, with a large effect of 0,423. Based on these



results the fourth hypothesis ( $H_4$ ) which suspects that there is an additional income of civil servant ( $X_2$ ) effect on the job satisfaction ( $Z$ ) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true. There is an effect of job satisfaction on performance is significant, with a large effect of 0,274. Based on these results the fifth hypothesis ( $H_5$ ) which suspects there is an effect of job satisfaction ( $Z$ ) on the performance ( $Y$ ) of civil servants in the Regional Secretariat of Mojokerto City, is accepted and proven to be true.

From the results of the final calculation of the Sobel-test in the table, it is known that the  $t_{count}$  of the e-performance appraisal system variable is  $2,12 > t_{table} = 1,96$  (significance value of 5%). This means that job satisfaction is a variable that can intervene with the effect of e-performance appraisal system on performance. Based on these results the sixth hypothesis<sup>(a)</sup> of the research ( $H_{6a}$ ) suggests that e-performance appraisal system affects the performance of civil servants in the Regional Secretariat of Mojokerto City through job satisfaction, is accepted and proven to be true. From the results of the final calculation of the Sobel-test in the table, it is known that the value of the additional income of civil servant variable is  $2,46 > t_{table} = 1,96$  (significance value of 5%).

This means that job satisfaction is a variable that can intervene in the effect of the additional income of civil servant on performance. Based on these results the sixth hypothesis<sup>(b)</sup> ( $H_{6b}$ ) which suspects the additional income of civil servant affects the performance of the civil servants in the Regional Secretariat of Mojokerto City through job satisfaction, is accepted and proven to be true. So that it can be stated that the sixth hypothesis ( $H_6$ ) which predicts e-performance appraisal system and additional income of civil servant affects the performance of civil servants in the Regional Secretariat of Mojokerto City through job satisfaction, are accepted and proven to be true.

Based on the results of the analysis, discussion and conclusions in this study, the researcher proposes the following recommendations and recommendations: *First*, e-performance appraisal system has positive and significant effect on job satisfaction which has the lowest influence value of 0.149. This means that e-performance appraisal system affects the job satisfaction of civil servants in the Regional Secretariat of Mojokerto City with the lowest influence value due to several factors, including 1.) Sometimes the e-performance appraisal system makes civil servants not really make employees actively working but only shows the work of civil servants without knowing the process; 2.) Mismatch in the amount of work in quantity with the workload felt by each civil servant; 3.) Sometimes there are civil servants who still have the responsibility in completing work without knowing the consequences of the consequences, even on the contrary thinking about the consequences of the consequences but do not feel responsible for completing their work.

*Second*, the additional income of civil servant has positive and significant effect on job satisfaction having the highest influence value of 0.423. This means that the additional income of civil servant affects the job satisfaction of civil servants in the Regional Secretariat of Mojokerto City with the highest influence value due to several factors, including 1.) Additional income is applied to all classes of civil servants; 2.) Information on a valid nominal amount based on valuation output; 3.) Work discipline improvement according to the applicable regulations to support the assessment



indicators; 4.) Work productivity is increasing because the enthusiasm and passion of work also increase.

*Third*, the implementation of a clear, transparent, and objective e-performance appraisal system according to the laws and regulations as well as those in effect as well as additional income of civil servant according to the the nominal amount appropriately received in order to continue to improve the performance of each civil servant in the Regional Secretariat of Mojokerto City. *Fourth*, synergy and strong work commitments are needed for every civil servant in the Regional Secretariat of Mojokerto City in completing work tasks as well as possible, both individually and in collaboration.

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