
Choosing A Competence, Education And Work Discipline On The Productivity Of Food Security And Agricultural Services For The Future

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ABSTRACT

Submitted: 12-17,2021 **Purpose of the study** — *find out whether competence, Education, and work discipline affect work productivity either partially or simultaneously.*

Accepted: 01-11, 2022 **Research method**— *Causal associative research with a quantitative approach using a questionnaire survey method. The population in the study was the staff of the Food and Agriculture Security Service "KNG", which amounted to 206 people and then reduced using the slovin formula so that it became 68 samples.*

Published: 01-31, 2022 **Result**— *the results of the t-test are obtained that the tcount value of the Competence variable (X1) has a p-value of 0.000 <0.05, meaning that it is significantly distributed, while count 5.775 > from table 1.997 means significant. (table 1.997 obtained from degrees of freedom (df) n-3 or 68-3=65. The results of the t-test show that the t-count value of the Education variable (X2) has a p-value of 0.000 <0.05, which means it is significant, while tcount is 6.287 > from table 1.997, which means it is significant. And for the tcount value of the Work Discipline variable (X3), it has a p-value of 0.000 <0.05 which means it is significant, while tcount is 2.804 > from table 1.997, which means it is significant.*

Conclusion— *First: There is a positive and significant influence partially Competence on Employee Productivity of the Food and Agriculture Security Service of "KNG" . The magnitude of the influence of Competence on Employee Productivity is 94%. Second: There is a positive and partially significant effect of Education on the Productivity of the Food and Agriculture Security Service of Kuningan Regency employees of 87.7%. Third: There is a positive and significant influence partially Work Discipline on the Productivity of the Employees of the Food Security and Agriculture Office of "KNG" 82.2%. Fourth: There is a simultaneous positive and significant effect of Competence, Education and Work*

Discipline on Employee Productivity at the Food and Agriculture Security Service of "KNG". The magnitude of the positive influence of Competence, Education, Work Discipline on Employee Productivity is 96.4% while the remaining 3.6% is influenced by other factors. With increasing competence, Education and work discipline, employee productivity will also increase.

Keywords: Competence, Education, Work Discipline, Employee Productivity



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INTRODUCTION

Productivity is a basic need for every organization in the process of achieving goals (Kaydos, 2020). Productive human resources are very much needed to be used as important assets for organizations (Ibrahim & Daniel, 2018) is facing competition and the current global economic crisis (Affandi et al., 2020). With work productivity, it is expected that work will be carried out efficiently and effectively (Sulaiman et al., 2021), but in fact, not all employees of the Dinas Food and Agriculture Security "KNG" has high productivity; this is due to 1) The work is not completed according to the specified time (Shalihah, 2019). Lack of skills in completing the work. 2) Limited resource handling capabilities. 3) Lack of loyalty to the organization (Kot-Radojewska & Timenko, 2018). 4) The work results do not meet the expected quality (Solimun & Fernandes, 2018). 5) Lack of cooperation, causing slower completion of work. 6) Lack of communication between co-workers (Source: Results of Pre-Research Interview with the Head of the Food and Agriculture Security Service "KNG").

These problems cannot be ignored; there must be efforts to increase productivity so that the organization is able to achieve its goals according to the plan (Sanyal & Hisam, 2018). One of the efforts to increase employee productivity is competence.

Competency variables used to measure competence are work experience, education, knowledge, and skills (Liu & Aunguroch, 2018). Through the competencies possessed by employees, employee productivity will increase. One of the causes that make worker productivity low is weak competence, more and more professionals can encourage productivity (Hasan et al., 2018).

Another factor that affects work productivity is the Education possessed by employees (da Cruz Carvalho et al., 2020). Education is essentially an attempt to find needed and useful information for life. In addition, the application of work discipline is also expected to increase employee productivity. Based on field observations, the education level of employees at the Food and Agriculture Security Agency of Kuningan Regency is still not optimal. There are still

many employees who have not graduated, and in general, there is no desire to continue their Education to a higher level, as a result, their mastery and insight and achievement for work are still limited. This is described in the table of education levels of the employees of the Food and Agriculture Security Service "KNG": 1) Lack of motivation to develop themselves through Education. 2) The average level of Education is still at the high school level. 3) From the observation data, it can be seen that there are 80 employees of the Food and Agriculture Security Service "KNG" who graduated from high school, 40 people graduated from D3, 75 undergraduate graduates and 11 master graduates. Overall employees of the Food and Agriculture Security Service "KNG" are still dominated by high school graduates

Apart from competence and Education, productivity is also influenced by discipline (Jeganathan et al., 2018). Work discipline can be seen as something that has great benefits, both for the benefit of the organization and for employees (Efendi et al., 2020). For work discipline organizations, it will ensure the maintenance of order and the smooth implementation of tasks so that optimal results are obtained. based on observations in the field that the level of discipline of the employees of the Food and Agriculture Security Service "KNG" still needs to be improved; this is reflected in: Working time is not used properly, especially during the WFH (Work From Home) period during the Covid pandemic.

There are still many employees who are late to the office when the WFO (Work From Office) schedule is due to take turns going to work during the pandemic, should have arrived at 7.30 WIB, there are still many who come in at 9.00 WIB, including the schedule for returning home which should be home at 15.30. Provide timely reports every month. Lack of compliance with official regulations Work results are not in accordance with the plan Use of uniforms that are not in accordance with the specified rules (Wu et al., 2018).

From the explanation above, it is clear that there is an influence of Competence, Education and Work Discipline on Productivity. The research framework, related to exposure to expert opinions and the results of previous research, can be interpreted that there is an influence of Competence, Education and Work Discipline on Employee Productivity. To facilitate the research process, it is illustrated in a framework chart which can be seen in the following figure:

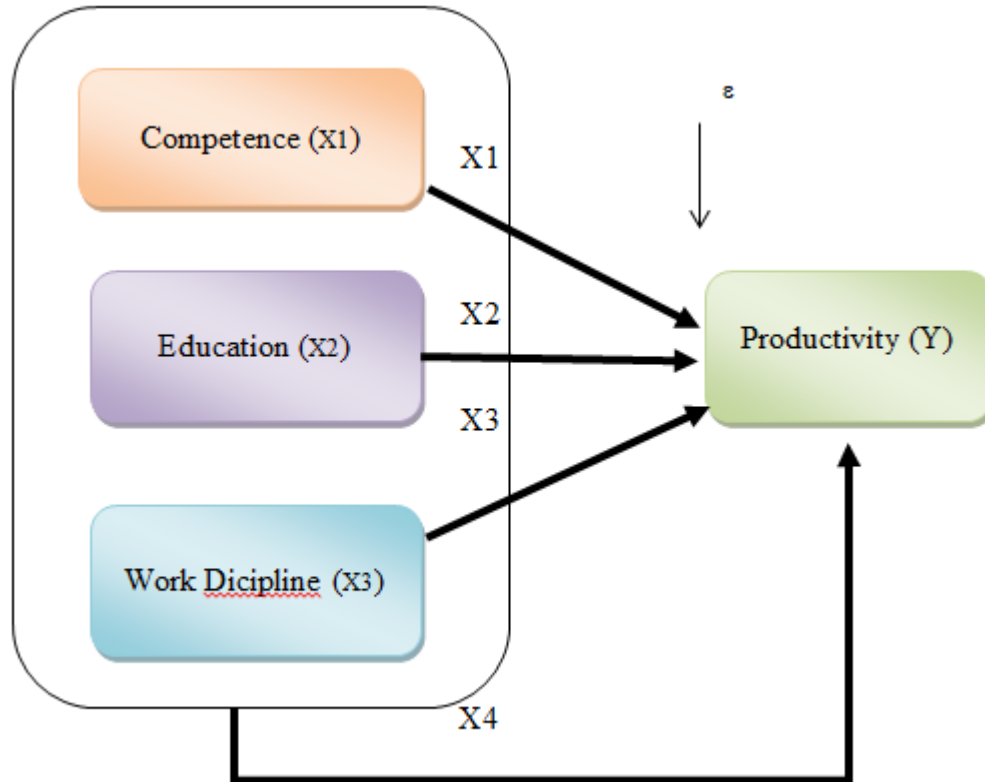


Figure 1. Conceptual framework

Hypotheses are proportions or assumptions that may be true and are often used as the basis for making decisions or problems or for further research. According to (Sugiyono, 2015) "The hypothesis is a temporary answer to the research problem formulation, therefore the research problem formulation is usually arranged in the form of a question sentence. It is said to be temporary because the answers given are only based on relevant theories, not yet based on empirical facts obtained through data collection.

Based on the description above, the hypotheses to be developed in this study are as follows:

- H1: It is suspected that there is a positive and significant influence partially competence on the Productivity of the Employees of the Food and Agriculture Security Service of "KNG" Regency.
- H2: It is suspected that there is a positive and partially significant effect of Education on the Productivity of the Employees of the Food Security and Agriculture Office of "KNG" Regency.
- H3: It is suspected that there is a positive and significant influence partially on Work Discipline on the Productivity of the Employees of the Food and Agriculture Security Service of "KNG" Regency.

H4: It is suspected that there is a simultaneous positive and significant influence of Competence, Education and Work Discipline on the Productivity of the Employees of the Food Security and Agriculture Office of "KNG" Regency.

METHOD

This type of research is a causal associative research with a quantitative approach using a survey method using a questionnaire. The population in the study was the staff of the Food and Agriculture Security Service "KNG" which amounted to 206 people and then reduced using the slovin formula so that it became 68 samples. Data Analysis Techniques by testing research instruments with validity and reliability tests. Classical Assumption Test with: 1) Normality Test. 2) Multicollinearity Test. 3) Heteroscedasticity Test. Multiple Linear Regression Analysis Test then Coefficient of Determination Test (R^2).

To prove the H1, H2 and H3 hypotheses, a t-test was carried out, namely testing the effect of the independent variables one by one (partial) on the dependent variable. To find out whether there is a partial effect, it can be seen from the magnitude of the probability of the significance of each variable in the coefficient table. The F test is also known as the simultaneous significance test (Azizah et al., 2021; Ghozali, 2015; Suliyanto, 2018).

RESULTS AND DISCUSSION

Analysis of validity test using bivariate Pearson by comparing r count $>$ r table (2-sided test with sig. 0.05) variables X1, X2 and X3 are declared valid because the value of all r count $>$ r table 0.2404. The results of the reliability testing of variables X1, X2, X3 and Y variables, obtained the reliability coefficient values as follows:

Table 1: The results of the reliability testing of the X1, X2, X3 and Y variables

| Variable | Reliability | Description | Category |
|-----------------|-------------|-------------|----------|
| Competence | 0,902 | Reliable | High |
| Education | 0,876 | Reliable | High |
| Work Discipline | 0,848 | Reliable | High |
| Productivity | 0,897 | Reliable | High |

Based on the table above, the Cronbach Alpha reliability coefficient for the competency variable (X1) is 0.902 for the education variable (X2) is 0.876 for the work discipline variable (X3) is 0.848 and the Work Productivity variable (Y) is 0.897. Thus the research instrument for all variables is reliable and can be used in research.

Classic assumption test

The results of the normality test using *Kolmogorov-Smirnov* on this research variable are said to have residual values that are normally distributed because the significance value is $0.129 >$ of the 0.05 value. So it can be ascertained that the distribution of data on this research variable is normal.

Multicollinearity test with tolerance value and variance inflation factor (VIF). The value that is commonly used to indicate the presence of multicollinearity is the VIF value < 10 (Ghozali, 2015)

Table 2: Multicollinearity Test Results

| Model | | Collinearity Statistics | |
|-------|-------------------|-------------------------|-------|
| | | Tolerance | VIF |
| 1 | (Constant) | | |
| | Competence_X1 | .077 | 2.926 |
| | Education_X2 | .177 | 5.663 |
| | Work_Dicipline_X3 | .152 | 6.580 |

From the results of the data in the table above, it is known that each variable has a VIF value < 10. This means that there is no multicollinearity problem in the regression model, so that this variable meets the requirements of regression analysis.

Furthermore, Heteroscedasticity Testing with regression testing with the dependent variable absolute residual value, it was found that none of the t_count values for the independent variable had a significant effect (sig. > 0.05), so it can be concluded that in the estimation regression there are no symptoms of heteroscedasticity.

Multiple Regression Analysis Test

Table 3: Multiple Linear Regression Equation

| Model | | Unstandardized Coefficients | | Standardized Coefficients Beta | t | Sig. |
|-------|-------------------|-----------------------------|------------|--------------------------------|--------|------|
| | | B | Std. Error | | | |
| 1 | (Constant) | -2.157 | 1.210 | | -1.783 | .079 |
| | Competence_X1 | .492 | .085 | .492 | 5.775 | .000 |
| | Education_X2 | .373 | .059 | .355 | 6.287 | .000 |
| | Work_Dicipline_X3 | .187 | .067 | .171 | 2.804 | .007 |

a. Dependent Variable: Productivity_Y

Based on the table above, the multiple linear regression equation is as follows:

$$Y = -2,157 + 0,492X1 + 0,373X2 + 0,187X3$$

The equation states that each addition of X1, X2 and X3 by 1 will increase Y by 0.492 and 0.373 and 0187, meaning that each increase in Competence, Education and Work Discipline by 1, will increase Employee Productivity by 0.492 and 0.373 and 0187.

Table 4: Hypothesis Testing (t) variable X₁, X₂ and X₃ to Y

| Model | | Unstandardized Coefficients | | Standardized Coefficients Beta | t | Sig. |
|-------|--|-----------------------------|------------|--------------------------------|---|------|
| | | B | Std. Error | | | |

| | | | | | | |
|---|-------------------|--------|-------|------|--------|------|
| 1 | (Constant) | -2.157 | 1.210 | | -1.783 | .079 |
| | Competence_X1 | .492 | .085 | .492 | 5.775 | .000 |
| | Education_X2 | .373 | .059 | .355 | 6.287 | .000 |
| | Work_Dicipline_X3 | .187 | .067 | .171 | 2.804 | .007 |

a. Dependent Variable: Productivity_Y

Based on table 4. the results of the t-test are obtained that the tcount value of the Competence variable (X1) has a p-value of 0.000 <0.05, meaning that it is significantly distributed, while count 5.775 > from table 1.997 means significant. (table 1.997 obtained from degrees of freedom (df) n-3 or 68-3=65. The results of the t-test show that the t-count value of the Education variable (X2) has a p-value of 0.000 <0.05, which means it is significant, while tcount is 6.287 > from table 1.997, which means it is significant. and for the tcount value of the Work Discipline variable (X3), it has a p-value of 0.000 <0.05 which means it is significant, while tcount is 2.804 > from table 1.997 which means it is significant.

Furthermore, to determine the joint effect of Competence (X1) Education (X2) and Work Discipline (X3) on Employee Productivity (Y), tested with the F test, the test results can be seen in the table below:

Table 5: F . Test Results

| ANOVA | | | | | | |
|-------|------------|----------------|----|-------------|---------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 1760.815 | 3 | 586.938 | 571.750 | .000 ^b |
| | Residual | 65.700 | 64 | 1.027 | | |
| | Total | 1826.515 | 67 | | | |

a. Dependent Variable: Productivity_Y

b. Predictors: (Constant), Work_dicipline_X3, Education_X2, Competence_X1

Based on the table of ANOVA test results or F test obtained Fount of 571,750 with a significance level of 0.000. This means that the variables of Competence (X1) Education (X2) and Work Discipline (X3) have a joint (simultaneous) effect on Employee Productivity (Y). The results of the F test have a p-value of 0.000 <0.05 which means it is significant, while fcount 1703.51 > from t table 2.748 means significant.

The coefficient of determination is seen from the value of Adjusted R². The value of Adjusted R² ranges from 0 to 1, which means that the independent variable has a strong ability to explain fluctuations in the dependent variable. Conversely, if the value of Adjusted R² is getting closer to 0, it means that the weaker the ability of the independent variable to explain fluctuations in the dependent variable. The results of the calculation of the coefficient of determination are obtained as shown in the table below:

Table 6: Coefficient of Determination

| Model Summary | | | | |
|---------------|---|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |

| | | | | |
|---|-------------------|------|------|-------|
| 1 | .982 ^a | .964 | .962 | 1.013 |
|---|-------------------|------|------|-------|

a. Predictors: (Constant), Work_dicipline_X3, Education_X2, Competence_X1

From the table 6. it can be seen that R Square is 0.964, this means that 96.4% of Employee Productivity is influenced by Competence, Education, Work Discipline in strong conditions, while the remaining 3.6% is influenced by other factors.

CONCLUSION

Based on the results of the analysis and discussion that have been stated previously, the following conclusions can be drawn: First : There is a positive and significant influence partially Competence on Employee Productivity of the Food and Agriculture Security Service of “KNG” . The magnitude of the influence of Competence on Employee Productivity is 94%. Second: There is a positive and partially significant effect of Education on the Productivity of the Food and Agriculture Security Service of Kuningan Regency employees of 87.7%. Third: There is a positive and significant influence partially Work Discipline on the Productivity of the Employees of the Food Security and Agriculture Office of “KNG” 82.2%. Fourth: There is a simultaneous positive and significant effect of Competence, Education and Work Discipline on Employee Productivity at the Food and Agriculture Security Service of “KNG”. The magnitude of the positive influence of Competence, Education, Work Discipline on Employee Productivity is 96.4% while the remaining 3.6% is influenced by other factors. With increasing competence, Education and work discipline, employee productivity will also increase.

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