THE EFFECT OF MOTIVATION AND WORK DISCIPLINE ON EMPLOYEE WORK PRODUCTIVITY IN INDONESIA COMPUTER UNIVERSITY.

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Abstract

At present, the world of education is grown rapidly, that is why a quality of good human resources are needed for competition. The company aims to increase employee work productivity or performance, level of efficiency, effectiveness and less time decrease the employee performances. Lack of work motivation caused the level of employee discipline. Therefore, various ways are carried out by the company to face several factors that lead to an increase or decrease in employee work productivity. In this study, there are some factors the cause of the increase or decrease in employee work productivity, researchers observed 2 (two) factors, namely motivation and work discipline.

The purpose of this research is to find out the motivation and discipline of work on the work productivity of Indonesian Computer University employees. Where the employee's work productivity is low, motivation is not optimal and work discipline is low.

This study uses a method of quantitative analysis with the number of respondents 152 respondents from the entire population of 152 people who are permanent employees at the Indonesian Computer University. Data were collected by observation and questionnaire and documentation study. The analytical method used is descriptive and verification. Data processing with SEM and Lisrel 8.7 software.

Simultaneous research results show that work motivation and discipline have a significant effect on employee work productivity. And partially motivation has a positive and significant effect on work productivity, and work discipline has a positive and significant effect on employee work productivity.

Keywords: Motivation, Discipline, Work Productivity

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INTRODUCTION

The world of education is currently developing very rapidly, competition between educational institutions is not only from domestic institutions but also from foreign institution, this is one of considerations in determining the strategies to be taken by organization to adjust current conditions.

In order to improve the quality of universities in Indonesia, it is necessary to improve the quality of human resources, in this case, all members both lecturer and staffs in education supporting quality improvement in the world of education today. The power of educators and education staffs is a very influential in the high competition among universities.

Employee productivity is needed in improving the quality of students so that they can achieve the company goals effectively and efficiently. High employee productivity will result in maximum achievement at work. From the observations, we can see the completion of the work of employees at the Indonesian Computer University has never been done on time and not reached the target.

One factor that influences work productivity is employee work discipline. We can figure out the level of employee discipline in an organization by identifying the exact time of working hours. Indonesian Computer University has a total of 152 permanent employees, divided into several parts, namely study program secretariat staff, study program non-secretariat staff, security guards and cleaning service staff.

The high and low discipline of work of employees generally, will affect

the productivity of an organization. To improve employee work discipline within the Indonesian Computer University environment, good motivation is needed, to encourage good work. Things that must be considered are prosperity issues, bonuses and rewards for a good work performance. The above is related to employee motivation, which encourages employees to work with a good spirit and performance. To prove this, the researcher intends to conduct the research with the title **"The Impact of Motivation and Work Discipline of Employees on Employee Productivity of Indonesia Computer University"**

LITERATURE REVIEW

Motivation

Motivation is a mental condition that encourages activity and energy which leads to the achievement of needs, satisfaction or imbalances reduction. (Beredom, Garry A. Stainer 2006 in Sri Widodo 2015: 164)

Gibson (2013: 165) states that motivation is a force that encourages an employee to act and control behavior.

Discipline

Siagian (2013: 305) defines a work discipline as a form of training that seeks to improve and shape knowledge, attitudes and behavior of employees so that employees will work cooperatively with other employees and improve their work performance. Sastrohardiwiryo (2002: 130) in SL Mandey (2014: 1594) stated that discipline was an act how to respect, obey, and ruled the regulations both written and unwritten and able to implement and accept the sanctions if they broke the rules or regulation against the responsibility given.

Productivity

Ardana, (2012: 270) states productivity as a comparison between the results achieved by the overall power or factors of production used.

Productivity can be interpreted as the level of comparison between outputs and inputs, (Bernardin, Russke 1993 in Sri Widodo 2015: 4).

Relationship between variables

1. The link between motivation and work productivity

   Roni Faslah (2013: 50) explains that there is a positive and significant influence of motivation on employee work productivity at PT. Kabelindo Murni. Tbk
2. The Relationship between work discipline and work productivity

   Shannon C. Y Assagaf's research (2015: 648) shows that discipline partially has a significant effect on the productivity of the Manado regional revenue office

METHOD

1. **Research Object**

   The object that the author uses in this study is to determine the effect of work motivation and discipline on the work productivity of Indonesia Computer University employees, with a total of 152 respondents.

2. **Research Methods**

   The method used in this research is descriptive and verification method. This research uses survey method. Data processing uses SEM with Lisrel software.

Research Design

The research design used in this study is causality research which aims to explain the causal relationship between the variables studied with the aim to determine the effect of work motivation and discipline on employee

productivity of Indonesia Computer University employees.

Data collection technique

Data collection is done by:

1. Observation
2. Questionnaire
3. Interview
4. Study of literature

Validity and Reliability Instrument Test

1. Validity Test

To test the validity of the instrument, this study only reviewed an internal validity. To find out whether each item in the instrument is valid or not, it can be known by calculating the correlation coefficient between item scores (viewed as X) with total scores (seen as Y). The correlation of *person's product moments* is calculated using r table. If r count is greater than r table, then the correlation of *person's product moments* for each statement item is valid (*1count* > *1table* **Valid**), because the data has an ordinal measurement scale.

The value of validity is basically the correlation value. Therefore, to test the validity is done with total item of correlation technique which is the basic of Pearson correlation.

2. Reliability Test

Test Reliability is a test used to determine the extent to which the results of a measurement can be trusted. The measurement results can be trusted if used in several measurements of the same group of subjects obtained relatively similar results, as long as the measured aspects in the subject do not change.

According to Sugiyono (2012: 156), the reliability is related to the degree of consistency and stability of data or invention, a data is declared reliable if two or more researchers state the same results, or the same researcher at different times.

3. Hypothesis Testing

In LISREL, there is no significance value that can directly tell whether the relationship between a variable and other variables is significant.

There are three of very useful information per estimation on lisrel: regression coefficients, standard errors and t values. Standard error is used to measure the accuracy of each parameter estimate.

To determine the significance of the relationship between variables, the value of t must be greater than the t-table at a certain level depending on the sample size and level of significance.

At a significance level of 0.05, the t_{table} value is ± 1.960, the following is the hypothesis used:H_0: exogenous variable (X) does not have a significant effect on endogenous variables (Y)

H_0 : exogenous variable (X) does not have a significant effect on endogenous variables (Y)

H_1 : exogenous variable (X) does not have a significant effect on endogenous variables (Y)

Test criteria:

- If $t_{counts} > t_{table}$ then H_1 is accepted and H_0 is rejected
- If $t_{counts} \leq t_{table}$ then H_0 is accepted and H_1 is rejected

4. Statistics F Test

Statistical F test is to examine the effect of independent variables

on the overall non-free variable.

Based on the identification of the problems stated earlier, in this study, hypothesize as follows:

Simultaneous hypothesis between independent variables of organizational culture, motivation and work discipline towards employee work productivity.

H_0 : Motivation (X_1), and Work Discipline (X_2) together do not have a significant effect on Productivity (Y) variables.

H_1 : Motivation (X_1), and Work Discipline (X_2) together have a significant influence on Productivity (Y) variables

The general hypothesis for each test is as follows:

H_0 : there is no significant influence

H_1 : there is a significant influence

Test criteria:

- Reject H_0 if $t_{counts} \geq t_{table}$ or $t_{counts} \leq - t_{table}$
- Accept H_0 if $t_{count} < t_{table}$ or $t_{count} \geq - t_{table}$

At the 0.05 level of significance (5%) the t_{table} value is 1.96.

RESULTS AND DISCUSSION

Resident Identity

The following is the respondent's identity table:

Resident Identity

Category	Amount	Percentage
Age		
<31 years	25	16.4
31 - 40 years	94	61.8
41 - 50 years	29	19.1
> 50 years	4	2.6
Total	152	100
Gender		

Male	72	47.4
Woman	80	52.6
Total	152	100
Education		
SD / SMP	6	3.9
High School	29	19.1
D3 / S1	113	74.3
S2 / S3	4	2.6
Total	152	100
Length of work		
0-2 year	19	12.5
3-5 years	19	12.5
6-8 years	19	12.5
> 8 years	95	62.5
Total	152	100

Source: Data processed in 2018

Based on the table above, most respondents aged 31 to 40 years, as many as 94 respondents (61.8%); the next most are those aged 41 to 50 years as many as 29 respondents (19.1%); then those who were less than 31 years old were 25 respondents (16.4%); and the least are those aged more than 50 years, which are 4 respondents (2.6%).

Based on Gender, most of the respondents were female, namely 80 respondents (52.6%) and male as many as 72 respondents 47.4%.

Based on education, the majority of respondents have a D3 / S1 education that is as many as 113 respondents (74.3%), then those who have a high school education are 29 respondents (19.1%), who have SD (elementary) / SMP (junior high school) education as many as 6 respondents (3.9 %), and those who have a S2 / S3 education are 4 respondents (2.6%).

Based on the length of work, the majority of respondents have worked for more than 8 years, namely 95 respondents (62.5%), while the rest have worked for 6 years to 8 years, for 3 years to 5 years, and less than 3 years each 19 respondents (12.5%).

Recapitulation of Respondents' Responses About Motivation (X_1)

Recapitulation of Respondents' Responses About Motivation

Indicator	Mean	Score	Category
Salary / Wage	810	2.66	Good enough
Bonus	1045	3.44	Good
Award	1185	3.90	Good
Working Conditions	1175	3.87	Good
Responsibility	1136	3.74	Good
Total and average	**5351**	**3,52**	**Height**

Source: Data processed in 2018

Overall the results of processing presented in table 4.13 produces a score of 810 and an average value of 2.66 for the salary / wage indicator, for the bonus indicator produces a score of 1045 with an average value of 3.44, the award indicator gets a score of 1185 with a value an average of 3.90, then the work condition indicator gets a score of 3.87 with an average value of 3.87 and for the responsibility indicator of 1136 with an average of 3.74. The total indicator is 5351 with an average of 3, 52. The mean value is entered into the continuum line, the measurement of which is determined in the following way:

- Maximum Index Value = 5
- Minimum Index Value = 1
- Interval distance = maximum value - minimum value]: 5
  = [5 - 1]: 5
  = 0.8
- Overall average = [(total score): (number of respondents x number of questions)]
  = [(5351): (152x10)]
  = 3.52

The calculation shown that the score obtained is 5351 with an average of 3.52. Therefore we can conclude that the response of respondents regarding the motivation of Unikom employees overall are in good category. This is because the company has implemented what the employee's demands, by

looking at the results of respondent, several indicators of motivation that all respondents indicate high criteria in answering.

Recapitulation of Respondents Response About Work Discipline (X_2)

Recapitulation of Respondents Responses About Work Discipline

Indicator	Score	Mean	Category
Punctuality	1171	3,85	Good
Obedience to Regulations	1821	3,99	Good
Implementing Tasks and Obligations	1222	4,02	Good
Total and average work discipline	**4214**	**3,95**	Good

Source: Data processed in 2018

Overall the processing results presented in the table produce a total score of 4241 with an average of 3.95. The mean value is entered into the continuum line, the measurement of which is determined in the following way:

- Maximum Index Value = 5
- Minimum Index Value = 1
- Interval distance =[maximum value - minimum value]: 5

  = [5 - 1]: 5

  = 0.8
- Overall average = [(total score): (number of respondents x number of questions)]

  = [(4241): (152x7)]

  = 3.95

The calculation shown the indicator of timeliness gets a score of 1171 with an average value of 3.85, for the indicator of obedience with the rules get a score of 1821 with an average value of 3.99, and for indicators fulfilling tasks and obligations with a score of 1222 with on average 4.02. The total score obtained was 4241 with an average of 3.95. Therefore we can conclude that the respondent's response to the work discipline of Unikom's employees is in good category as whole.

Recapitulation of Respondents' Responses About Productivity (Y)

Recapitulation of Respondents' Responses on Productivity (Y)

Indicator	Score	Mean	Category
Effective	1191	3,92	Good
Efficient	1208	3,97	Good
Time	1231	4,05	Good
Total and average productivity	**3630**	**3,98**	**High**

Source: Data processed in 2018

Overall the processing results presented in the table produce a total score of 3630 with an average of 3.98. The mean value is entered into the continuum line, the measurement of which is determined in the following way:

- Maximum Index Value = 5
- Minimum Index Value = 1
- Interval distance = [maximum value - minimum value]: 5
  = [5 - 1]: 5
  = 0.8
- Overall average = [(total score): (number of respondents x number of questions)]
  =[(3630): (152x6)]
  = 3.98

From the calculation in shows the score obtained is 3630 with an average of 3.98. Therefore we can conclude that the responses of respondents regarding Productivity (Y) of Unikom employeesare in the high category as whole.

Normality test

The most fundamental assumption in multivariate analysis is normality, which is a form of data distribution in a single metric variable in producing a normal distribution. Data is unusual if data distribution that does not form a normal distribution, otherwise the data is said to be valid if it forms a normal distribution. If the assumption of normality is not got and the deviation of normality is large, then all the results of statistical tests are invalid because the calculation of the t-test and so forth is calculated by assuming norma[illegible]Ghozali, 2014:

(3,98)

37). Based on the results of the *Test of Multivariate Normality for Continuous Variables* mentioned above, the overall model shows that it meets the assumption of normality, where the *P-value of Skewness and Kurtosis* is 0.060 higher than 0.05.

Multicollinearity Test

The next assumption tested is multicollinearity. Multicollinearity means there is a very high correlation between exogenous latent variables. Multicollinearity can be detected by the correlation method, if there is a valuable correlation higher than 0.8, it means that there is multicollinearity between exogenous variables.

The correlation value between Motivation (X_1) and Discipline (X_2) is 0.46. Because all the correlation values between the exogenous variables are lower than 0.8 so that there is no multicollinearity.

Measurement Model

This evaluation is carried out on each measurement construct or model (the relationship between latent variables and observed variables) separately through the validity and reliability of the measurement model. A variable is defined to have good validity for the construct or latent variable if the factor load value is standard (standardized loading factor) greater than or equal to the critical value of 0.50 or the standard factor loading t value (standardized loading factor) greater than or equal with a critical value of 1.96. While reliability measurement uses construct reliability measure and average variance extracted with the following formula:

$$\text{Construct Reliability} = \frac{\left(\sum \text{Standardized Loading}\right)^2}{\left(\sum \text{Standardized Loading}\right)^2 + \sum \varepsilon_j}$$

$$\text{Variance Extracted} = \frac{\sum \text{Standardized Loading}^2}{\sum \text{Standardized Loading}^2 + \sum \varepsilon_j}$$

where *standardized loading* can be obtained directly through the LISREL program application *output*, and ε_j is a *measurement error* for each indicator or observed variable. The *cut-off* level to say that *construct reliability* is good is greater than 0.60, while the *cut-off* level can say that the *average variance extracted* well is greater than 0.50.

There is a significant influence of Motivation (X_1) on Productivity (Y)

Statistical hypothesis:

H_{01} : Motivation (X_1) has no significant effect on Productivity (Y)

H_{12} : Motivation (X_1) has a significant effect on Productivity (Y)

From the calculation results obtained the path coefficient value ρ_{yx2} = 0.30 with the value of t_{count} = 3.71. The path coefficient value above shows a unidirectional relationship between Motivation (X_1) and Productivity (Y), because it is positive (0.30> 0). This means that if motivation increases, productivity will increase, and vice versa.

Value on t_{table} with a significance level of 0.05 is ± 1.96 so that t_{count} (3.71) > t_{table} (1.96). Thus the coefficient is significant, H_{01} is rejected and H_{12} is accepted, meaning **that there is a significant influence of Motivation (X_1) on Productivity (Y).**

There is a significant influence of Work Discipline (X_2) on Productivity (Y)

Statistical hypothesis:

H_{02} : Work Discipline (X^2) has no significant effect on Productivity (Y)

H_{13} : Work Discipline (X^2) has a significant effect on Productivity (Y)

From the calculation results obtained the path coefficient value ρ_{yx2} = 0.36 with the value of t_{count} = 4.58. The path coefficient value above shows a unidirectional relationship between

Work Discipline (X_2) and Productivity (Y), because it is positive (0.36> 0). Meaning if Work Discipline increases, Productivity will increase, and vice versa.

The value at t_{table} with a significance level of 0.05 is ± 1.96 so that t_{count} (4.58)> t_{table} (1.96). Thus the coefficient is significant, H_{02} is rejected and H_{13} is accepted, meaning that **there is a significant influence on Work Discipline (X_3) on Productivity (Y).**

CONCLUSION

The results of research on the influence of motivation and work discipline on the contribution of Indonesia Computer University employees, concluded as below:

1. a. Motivation of Indonesia Computer University employees in the high category, with a score of 5351 with an average value of 3.52. The highest score on the award indicator with an average value of 3.90 with a good category while the lowest score on the salary / wage indicator is 810 with an average of 2.66 in the category of good enough.

   b. Indonesia Computer University Employee's work discipline is in good category, with a score of 4241 with an average value of 3.95. The highest score on the indicator performs tasks and obligations of 1222, with an average of 4.02 in the good category and the lowest score on the accuracy indicator time with an average of 3.85 with a good category.

   c. Work productivity of Indonesia computer universities is in the high category, with a score of 3630 with an average value of

3.98. The highest score on the time indicator is 1231 with an average value of 4.05 in the good category and the lowest indicator on the effective indicator evenly 3.92 in good category.

2. The motivation of Indonesia Computer University employees has a significant influence on the positive direction of employee work productivity. This shows that if motivation is high, productivity will be high.
3. Indonesia Computer University employee work discipline has a significant influence on the positive direction of employee work productivity. This shows that if work discipline is good then productivity will be high.

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