

# The Effect of Motivation and The Work Environment to Competence and Performance of Lecturers at One of Higher School in Surabaya

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**Abstract-** As one of the private higher educational institution, it is a must for the civitas academica to pay attention on its quality. One of the elements which plays a crucial role in improving the quality of higher education is the lecturer. Lecturers are demanded to have good performance. To improve the performance of the lecturer requires several things such as high motivation, adequate competence, good leadership and work environment which support lecturers in improving their performance. The purpose of the research was to recognize the Influence of Motivation and Work Environment Against Competence and Performance of lecturers. In this study, data was collected by using questionnaire to the population. Data was analyzed by using Structural Equation Modelling (SEM) operated through programme of AMOS 6. The results of the study showed that the variable of work environment had a significant impact towards the competence where the probability value was  $<0.05$  and the motivation variable had no influence on the competence where the probability was value  $> 0.05$ . And test results between motivation, work environment and competence had a significant influence towards the performance of lecturers.

**Key Words :** motivation, work environment, competence dan lecturer performance

## I. BACKGROUND OF STUDY

As one of the private higher educational institution, it is a must for the civitas academica to pay attention on its quality.

The success in an education does not have to succeed 100%, because the educational outcomes are determined by many factors such as; educational facilities, students, the environment where education is conducted and the educators. To reduce the failure in education all the critical success factors must functionate well, for students always carried out entrance test, while in this study focused on the performance of educators (lecturers). Efforts to improve the quality of higher school in Indonesia. A comprehensive improvement of the interconnected elements is needed. One of the elements which play a very important role in improving the quality of higher education is the lecturer.

Lecturer's competence determines the quality of the implementation of Tridharma higher education as shown in the professional activities of lecturers. To ensure the implementation of lecturers' meet the criteria assigned in the legislation, it is necessary to evaluate the lecturer's performance periodically on a specified time. Based on the above matters, the top managers feel the need to assess the performance of lecturers which can be used as a feedback for the top management to keep improving the performance of lecturers

## II. RESEARCH METHODOLOGY

### A. Conceptual Mode

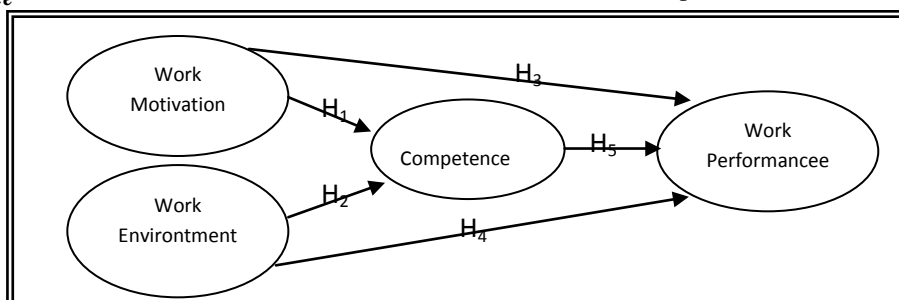


Figure 1. Conceptual Model

### B. Model Analysis

Researcher used Structural Equation Modelling (SEM) operated through programme of AMOS 6 to analyze the data. SEM also allows a researcher to answer research questions that are both regressive and dimensional (Augusty T. Ferdinand, 2005).

### C. Type And Data Sources

Type and data sources used in this study consist of primary and secondary data.

Primary data is research data obtained directly from original source (not through intermediary). Primary data are specifically collected by researchers to answer the study (Indriantoro dan Supomo, 1999) or directly related to the problems studied (Cooper dan Emory, 1997). Primary data needed in this research is data related to the variables of competence, motivation, work environment, and performance. These data were taken from questionnaires that have been prepared first by the researchers and answered the respondents. Respondents who answered the questionnaires are permanent lecturers of Sekolah Tinggi Teknologi Angkatan Laut Surabaya.

The indexes that can be used to test the feasibility of a model are presented in the following table.

TABLE 1. GOODNESS-OF-FIT

Goodness-of-fit indexes	Cut-of-value
Chi-square	df $\alpha$ 0,05
Significance Probability	$\geq 0.05$
RMSEA	$\geq 0.08$
GFI	$\geq 0.90$
AGFI	$\geq 0.90$
CMIN/DF	$\geq 2.00$
TLI	$\geq 0.95$
CFI	$\geq 0.95$

### D. Interpretasi dan Modifikasi Model

After the model was estimated, the residual must be small or zero and the frequency distribution of the residual covariance must be symmetric. A good model has a small Standardized Residual Variance. The number 2.58 is a permissible Standardized Residual value limit, interpreted as statistically significant at the 5% level and indicates a substantial prediction error for a pair of indicators.

### E. Definition of Operational Variables

Overall, the determination of attributes and indicators and operational definitions of variables used in this study can be seen in the following table. :

TABLE 3.

Variable	Definition	Indicator	Measurement
Dependent: Lecturer Performance	The work achieved by a person in carrying out those tasks charged to him are based on upon proficiency, experience, and sincerity as well as time.	1. Quality of lecturer work: whether or not a person's work results is good. 2. Creativity: how the lecturer in solve problems arises during teaching teaching-learning process. 3. Quantity of lecturer's work: the amount of teaching result of a lecturer in completing the work specified by top management.	Likert Scale 1 to 5 which shows respondent's opinion absolutely disagree until absolutely agree
Lecturer's competence	a set of knowledge, skills, and behaviors which should be owned, cherished, and mastered by lecturers in performing their professional duties	1. Understanding towards the students 2. Designing 3. Implementing and learning, 4. Evaluating learning outcomes 5. Developing the students	Likert Scale 1 to 5 which shows respondent's opinion absolutely disagree until absolutely agree
Independent: Motivation	psychological state and mental attitude of a man who energizes, directs, distributes, maintains, and continues the actions and behavior of lecturers	1. The interest in task 2. Efficiency 3. Evaluation 4. Money and other rewards 5. Avoid punishment from the superiors Kinman <i>et al.</i> , (2001)	Likert Scale 1 to 5 which shows respondent's opinion absolutely disagree until absolutely agree
Work Environment	Everything surround lecturers which can influence him in carrying out his duties	a. Lighting b. Air circulation c. Noise d. <i>Class lay out</i> kelas, its presence can reduce the lecturer's saturation level	Likert Scale 1 to 5 which shows respondent's opinion absolutely disagree until absolutely agree

## III. RESEARCH RESULT

### A. Test of Validity and Reliability

In order to make the data obtained have meaning and can be interpreted, it is necessary to analyze the data. In this data analysis hypothesis testing is done on all the variables

studied, it is intended to prove the influence between independent variables and dependent variable as a whole.

TABLE 4

Item	Validity ( $r_{\text{count}}$ )	$r_{\text{table}}$	Prob.	Keterangan
X1.1	0.446	0.0979	0.000	Valid
X1.2	0.682	0.0979	0.000	Valid
X1.3	0.738	0.0979	0.000	Valid
X1.4	0.607	0.0979	0.000	Valid
X1.5	0.698	0.0979	0.000	Valid
X2.1	0.739	0.0979	0.000	Valid
X2.2	0.696	0.0979	0.000	Valid
X2.3	0.801	0.0979	0.000	Valid
X2.4	0.796	0.0979	0.000	Valid
Z.1	0.681	0.0979	0.000	Valid
Z.2	0.740	0.0979	0.000	Valid
Z.3	0.743	0.0979	0.000	Valid
Z.4	0.671	0.0979	0.000	Valid
Z.5	0.508	0.0979	0.000	Valid
Y.1	0.829	0.0979	0.000	Valid
Y.2	0.823	0.0979	0.000	Valid
Y.3	0.820	0.0979	0.000	Valid

Source: processed Result of Researcher 2017

## B. Test of Reliability

Reliability test is an index that shows how far the measuring instrument can be trusted or reliable. Results obtained from the SPSS analysis tool on the reliability test with the technique of halved obtained the following results:

TABLE 5.

Variable	Alpha Value	Explanation
Motivation ( $X_1$ )	0.625	Reliable
Work Environment ( $X_2$ )	0.767	Reliable
Competency ( $Z$ )	0.684	Reliable
Lecturer's performance ( $Y$ )	0.762	Reliable

Source: Processed results of researchers 2017

Each variable obtained alpha coefficient greater than 0.6. For instruments in the form of test kits or questionnaires, if the coefficient alpha above 0.6 - 0.7 then it can be concluded that the measuring instrument is considered reliable (Burhan, 2000: 312). Thus the data from the population that the author thoroughly included in the category of valid and reliable, so it is worthy for further testing. While the results of model modification estimation analysis with AMOS 6.0 fan SPSS 19 program is presented in the following figure:

Analisis Structural Equation Modelling (SEM)

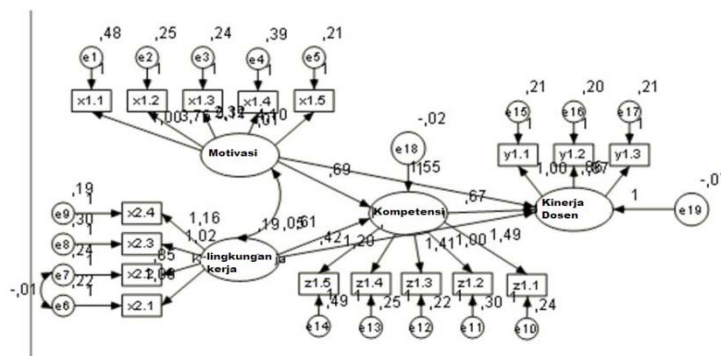


Figure 2. Full Structural Model

Source: Processed Result of Researcher 2017

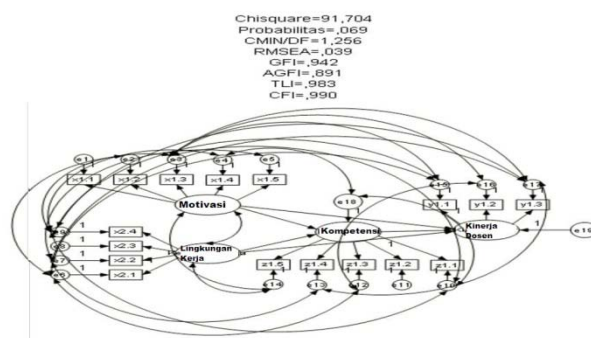


Figure 3. Modification Model  
Source: Processed Result of researcher 2017)

The result of calculation of goodness of fit index value generated by modification model is as followings :

TABLE 6. VALUE OF GOODNESS OF FIT AND CUT OFF VALUE MODIFICATION MODEL

Criteria	Model Test Result	Critical value	Explanation
Probability	91,704	$\geq 0,05$	Fit model
$\chi^2$ chi-square	Prob.0,069		
Cmin/df	1,256	$\leq 2,00$	Fit model
RMSEA	0,039	$\leq 0,08$	Fit model
GFI	0,942	$\geq 0,90$	Fit model
AGFI	0,891	$\geq 0,90$	Tidak Fit model
TLI	0,983	$\geq 0,90$	Fit model
CFI	0,990	$\geq 0,90$	Fit model

Having known the value of coefficient of each variable, then the next stage is to test the hypothesis by using CR value and its probability. Parameter whether there is a partial effect or not can be determined based on the value of CR (Critical Ratio). To determine whether or not the influence of exogenous variables on endogenous and endogenous variables on endogenous variables, the following provisions are used:

1. The first parameter is comparing CR count  $> 1,96$  or - CR count  $< -1,96$ . there is exogenous variable influence towards endogenous or endogenous variable towards endogenous variable.
2. It can also be seen from level of significant or probability value. If the probability value is  $0,05$ , then there is exogenous variable influence to endogen variable. On the contrary, if the probability value  $> 0,05$  then there is no influence of exogenous variables on endogenous variables or endogenous variables to endogenous variables.

From the above explanation can be describe the significant relationship among the hypothesized variables. The path coefficient of influence of motivation, work environment towards competence and lecturer's performance can be expressed into the structural equation as following:

$$Z = 0.689 X_1 + 0.611 X_2 + \epsilon_1$$

$$Y = 1.547 X_1 + 0.429 X_2 + 0.667 Z + \epsilon_2$$

Here are Regression Weight and Standardized Regression Weight model of structural equations that have

Source: Processed Result of researcher (2017)

#### Hypothesis testing

The analysis result of motivation, work performance influent competency and performance is presented in the following figure:

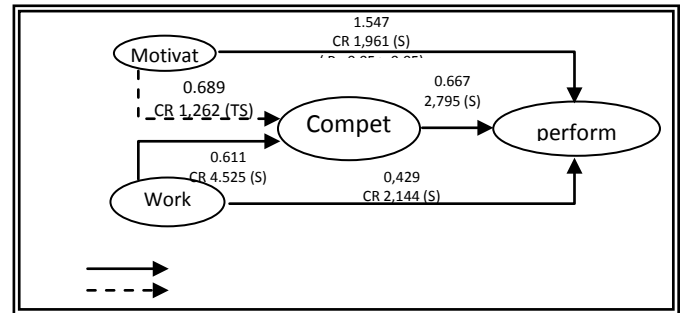


Figure 4.  
Source: Processed Result of researcher (2017)

been modified among variables as described before, then the hypothesis testing can be explained as follows:

Test of Regression Weight Causality

	Estimate	S.E.	C.R.	P	Label
Competence <--- Motivation	,689	,546	1,262	,207	par_1
Competence <--- Work performance	,611	,135	4,525	,000	par_2
Performance <--- Motivation	1,547	,789	1,961	,050	par_3
Performance <--- Work performance	,429	,200	2,144	,032	par_4
formance <--- Competence	,667	,239	2,795	,005	par_5

source : Output AMOS

From the results of hypothesis testing in the form of path coefficient of influence of motivation, work environment, competence to the performance of lecturers. It is found:

1. Hypothesis Testing 1: Effect of Motivation on Competence.

The findings in this study indicate that motivation has no significant effect on competence. It is showed from CR value of 1.262 is larger than 1.96. Likewise, if viewed from the probability value of 0.207, this value is greater than the level of significance of  $(\alpha)$  of 0.05. Thus, hypothesis 1 which states that the motivation has a significant effect on the competence of lecturers is not proven true, so the hypothesis is rejected.

2. Hypothesis Testing 2: Effect of work environment variable on lecturer competence.

The findings in this study indicate that the work environment has a significant influence on competence. It is showed from CR value of 4.525 is greater than 1.96. Similarly, when it is viewed from the probability

value of 0.000, this value is smaller than the significance level of ( $\alpha$ ) of 0.05. Thus, hypothesis 2 which states that the work environment has a significant effect on the competence of lecturers is proven true, so the hypothesis is accepted.

### 3. Hypothesis Testing 3: Effect of Motivation Variable on Lecturer's Performance.

The findings in this study indicate that motivation has significant effect on lecturer's performance. It is showed from CR value of 1,961 is greater than 1.96. Similarly, when it is viewed from the probability value of 0.050 this value is smaller than the significance level of ( $\alpha$ ) of 0.05. Thus, hypothesis 3 which states that the motivation has a significant effect on the performance of lecturers is proven correct, so the hypothesis is accepted.

### 4. Hypothesis Testing 4: Effect of Work Environment Variable on Lecturer's Performance

The findings in this study indicate that the work environment has a significant effect on the performance of lecturers. It looks like CR value is 2,144 bigger than 1.96. Similarly, when viewed from the probability value of 0.032 this value is smaller than the significance level of ( $\alpha$ ) of 0.05. Thus, hypothesis 4 which states that the work environment has a significant effect on the performance of lecturers is proven true, so the hypothesis is accepted.

### 5. Hypothesis Testing 5: Effect of Competence on lecturer's performance

The findings in this study indicate that competence has significant effect on lecturer performance. It is showed from CR value of 2,795 is greater than 1.96. Similarly, when it is viewed from the probability value of 0.005, this value is smaller than the significance level of ( $\alpha$ ) of 0.05. Thus, hypothesis 5 which states that the competence has a significant effect on the performance of lecturers is proven true, so the hypothesis is accepted.

## IV. DISCUSSION

In this section, we will discuss the analysis of the research results which is described earlier. Discussion is based on the relevant theoretical and empirical findings in accordance with the proposed hypothesis

### The influence of motivation on competence

Based on the results of the first hypothesis testing, it is found that the motivation variable does not affect to the competence. This can be seen from the probability value of 0.207 this value is greater than the significance level of ( $\alpha$ ) of 0.05. This result contrasts with research conducted by Burton, et al (2002) who argued that highly motivated employees will have a high commitment to the company as well.

With the assessment of motivation on the indicator of interest in the task, efficiency, evaluation, money and other rewards and avoid punishment from superiors. Lecturer's assessment of motivation is less due to lack of evaluation of teaching from the management and lack of attention to lecturers. This time the lecturers are motivated because of money and other awards have a big influence compared to other indicators, so it can affect their competence which indirectly affect their performance. To overcome these problems the leadership should evaluate the lecturers and apply salary in accordance with the position and expertise possessed by the lecturer and provide allowances to the lecturers in order to provide motivation and stimulation to improve the performance of lecturers.

### Effect of work environment on competence

Based on the results of the second hypothesis testing, it is found that the work environment variable affects the competence, it can be seen from the probability value of 0.000. this value is smaller than the significance level of ( $\alpha$ ) of 0.05. These results support research conducted by Shalley et al. (2000), Dul and Ceylan (2010), Martens (2011) and Politis (2005) proved that the work environment has a positive and significant effect on creativity. Based on this research can be explained that a good work environment, comfortable and conducive is needed by an employee to cultivate and achieve high creativity.

The result of data analysis shows that the work environment has a positive and significant effect on the competence. This means that the work environment is measured through four indicators: lighting, air circulation, noise, Lay out the existence class can reduce the feeling of boredom and fatigue of the lecturers have a positive and significant impact on competence. Working environment built and implemented perceived benefits directly by lecturers have a positive and significant impact on competence. The better, comfortable and conducive working environment then the lecturer competence will increase.

### The influence of motivation on lecturer performance

Based on the results of testing the third hypothesis, it is found that the variable of motivation affect the performance. this can be seen from the probability value of 0.050 this value is smaller than the significance level of ( $\alpha$ ) of 0.05. These results support research conducted by Doyle and Wong (1998) who argued that high performance is influenced by high motivation owned by employees. However, the results still show a positive direction and the value is significant at  $\alpha$  5%.

With motivation research found that high discipline indicator in work to avoid punishment from superiors have high average of 3.47 this indicate that motivation of lecturer indicate that amount of result of one's teaching in completing work is due to the force of superiors, thus showing that the performance of the lecturers, showing

the low creativity caused lecturers can solve the problem of teaching because of the rules that have been set so that performance is less. To improve the motivation of lecturers, the top management should pay attention on the need which leads to a sense of security, tranquility and assurance of a person in his position, his position, his authority and his responsibilities as a lecturer. Lecturers teach with enthusiasm and full of productivity when perceived a formal guarantee of position and authority.

#### Effect of work environment on lecturer performance

Based on the results of testing the fourth hypothesis found that the work environment variables affect the performance of lecturers, it can be seen from the probability value of 0.032 this value is smaller than the significance level of ( $\alpha$ ) of 0.05. The results of this study are in line with research conducted among other research Ajayi et al. (2011), Westerman and Simmons (2007), Dhermawan et al. (2012), Sofyan (2013) and Wyan and Wargocki (2013) proves that the work environment has a positive and significant effect on employee performance.

Result of data analysis show that work environment have positive and significant influence to lecturer performance. This means that the work environment measured by four four indicators of lighting, air circulation, noise, lay out of existence class can reduce the feeling of boredom and fatigue of the lecturers have a positive and significant impact on the performance of lecturers. Working environment built and implemented perceived benefits directly by lecturers have a positive and significant impact on performance. The better, comfortable and conducive working environment then the lecturer's performance is increasing. Based on this research can be explained that a good work environment, comfortable and conducive is needed by a lecturer to achieve high performance.

#### Effect of competence on lecturer performance

Based on the results of the fifth hypothesis testing it is found that the competence variable affects the performance of the lecturer, it can be seen from the probability value of 0.005 this value is smaller than the significance level of ( $\alpha$ ) of 0.05. this is in accordance with what is stated by Gibson (2000) says that a person's performance is determined by the ability (competence) and motivation to carry out the work.

The result of the analysis shows that the competence of lecturer's personality which includes the authority as the person of the lecturer, the wisdom in making the decision and can be the role model in attitude and behave get the highest score on the lecturer performance assessment. The personality will determine whether he is a good educator and mentor for students, or it will be a destroyer for the student's future. Nevertheless, in the realm of the effort to develop the profession of teachers and lecturers related to the strengthening of personality competence seems to be still relatively limited and tend to

put forward the development of pedagogic and academic competence (professional). This can be seen in various lecturers' training, the much-shelled material tends to be more of a strengthening of pedagogic and academic competence. Likewise, academic policies in Lecturer Competency Test more emphasis on mastery of pedagogic and academic competence (professional).

### V. CONCLUSION

Based on the research results can be drawn conclusion as the following:

1. Result of motivation variable has an in-significant effect to competence. The hypothesis is rejected because the CR value of 1.262 is smaller than 1.96.
2. The results of testing Work Environment significantly influence the competence variable. The hypothesis is accepted because the CR value of 4.525 is greater than 1.96.
3. Motivation variable has significant effect to lecturer performance variable. The hypothesis is accepted because the CR value of 1.961 is greater than 1.96.
4. Result of research of work environment variable significantly influence to lecturer performance variable. The hypothesis is accepted because the CR value of 2,144 is greater than 1.96.
5. Competence variable significantly influence to lecturer performance variable. The hypothesis is accepted because the CR value of 2.795 is greater than 1.96.

### SUGGESTION

1. Theoretically these findings provide an understanding of the importance of motivation, work environment, competence to the performance of lecturers at one of the private higher school . Nevertheless, there are still some limitations in this research. The sampling is uneven, because the questionnaire has not reached all lecturers, the research sample is still limited to the permanent lecturers.
2. The performance appraisal used is self-appraisal. In subsequent research, performance appraisal should not only be done by the lecturers themselves, but also should be done by their immediate of the college where the lecturer works, so the data obtained on performance can be more representative.
3. Future research is important to consider expanding the object of research not only lecturers from on higher school but also from other higher schools.

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