The Effect of Motivation and Learning Effectiveness and the Quality of Economic Education Study Program Graduates

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- motivation;
- learning effectiveness

**ABSTRACT**

This research was conducted to find out information and learning to the quality of study program Economic Education University of Jambi. This research uses survey method with correlational approach. The in place of this research is the study program Economic Education University of Jambi with the number of affordable population as much as 325 graduates. Data collection using questionnaire instrument. The sampling technique is done randomly with the following steps: First, calculate the target population of all Economic Education courses in Jambi University; second, the number of people reachable by lottery gives the order number; third, selecting 20 random people in statistics to try; Fourth, select 50 random people in the sample to sample the research. This research produces; (a) There are factors influencing the feasibility of Economic Education Universitas Jambi; (b) There are many things that affect the quality of graduates. The implication of this research is the effort to improve the quality that can be done by improving the motivation and study of the students of Economic Education Universitas Jambi.

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**1. INTRODUCTION**

Law No. 20 of 2003 on National Education System article 3 states that national education can develop capacity and also the character and civilization of a dignified nation in order to educate the life of the nation, the goal for the development of the potential of learners to become human beings who believe and piety to God Almighty, have noble character, healthy, knowledgeable, capable, creative, independent, and become citizens a democratic and responsible state. Education is a very important aspect to build the civilization of the nation, especially Indonesia. With a population of more than 230 million, extended is not supported by a strong educational base, then the large population will only be a burden to be the foundation of development. Information tools used by many people, learners, learning process programs (curriculum), management and especially quality. Because the core of education in PBM, then has a very decisive role. Moreover, decentralization policy gave birth to a
new paradigm in the education system, the success or failure of decentralization is determined by management. The ability factors as managers in producers, at universities and universities are decisive, lecturers are demanded and also improve their abilities by expanding their horizons of thought, work ethic and responsibility. Therefore education coaching is not only used in all civitas academica, also directed to the development of teaching and learning process, especially the improvement of science, educational technology and responsibility of the leadership as the responsible lecturers concerned in the study program.

According to Rusdi (2004: 2) the fast-paced changes in people's lives, due to the development of science and technology, as well as the various demands of the needs of various sectors greatly affect the development of the environment. Educational institutions as an open system, as a social system and as agents of change, must not only be sensitive and adaptable, but should also anticipate developments that will occur within a certain period of time.

Furthermore, in saying Rusdi (2004: 3) one of the effective strength in the management of educational institutions that play an important role and responsible in the face of change is leadership, the behavior of leaders and lecturers in the classroom that is able to initiate new thinking in the process of interaction within the university. By making changes or compilation of objectives, goals, configurations, procedures, inputs, processes or outputs of an institution in accordance with the demands of development. Essence is motivation and effectiveness in teaching. A lecturer is a person who is truly a leader, an innovator. Therefore the quality of lecturers as a key to the quality of graduates. Besides that which is not less important and also quite dominant in the learning process is the responsibility of lecturers to the task and discipline, because that discipline lecturer in motivating students can improve the quality of graduates, so as to contribute positively to the quality of results to the achievement of student achievement.

Motivation theory developed by Gibson et al (2006: 132-134) provides opportunities for organizations and individuals positively related to quality. Gibson et al believes that motivational theories can be grouped into two categories: content theories and process theories. Content theory focuses on the factors that exist within a person, in which factors are factors that drive, direct, maintain and stop behavior, or as factors that determine the specific needs that can motivate employees. While process theories describe and analyze how the behavior is driven, directed, guarded and stopped by the main external factors of a person. Furthermore it is said that motivation refers to behavior in improving quality.

The second level is group effectiveness. According to this perspective individuals who work may not work alone or in other words can not be separated from work in groups. So that the effectiveness of each individual work will be the effectiveness of group work. The third level is the effectiveness of the organization. Organization consists of individuals and a number of groups, so to the effectiveness of organizations is a function of individual effectiveness and group effectiveness. Student effectiveness includes ability, expertise, knowledge, attitude, motivation in learning. So the difference in this case leads to differences in the effectiveness of individuals in learning. Especially in this study the effectiveness of student learning is defined as the ability of students in managing time in learning, doing tasks and lectures.

Winkle (1996: 53) suggests the definition of learning is a mental or physical activity that takes place in an active interaction with the environment that results in changes in knowledge, understanding, skills, values and attitudes. The changes are relative, constant and scarred. In line with Winkle. Purwanto (1993: 85) says there are four kinds of understanding of learning, that is; (1) learning is a change of behavior. Usually the change can lead to better behavior, (2) learning is a change that occurs through practice or experience, (3) learning is a change in long period of time, (4) behavior that changes because of learning aspects personality, physical and physical as well as the skills and habit of solving a problem.
Furthermore, Calhoun and Acocella (1993: 200-208) say that learning habits are as follows: Duration of study, the division of study time, place of study, the concentration of study time, learning attitude, way of learning.

Based on the above description can be concluded that what is meant by the effectiveness of learning is the learning activities undertaken by students both campus and at home that includes the time to learn, place to learn, attitude and how to learn.

2. METHODS

This research uses survey method. The approach used is correlational approach. To obtain the primary data in the field used questionnaires are prepared based on the indicators that exist in the research variables. The questionnaire is designed to be directed to the graduates of the FGIP Jogi University’s Economic Education course, as well as the analytical unit in the study. The target population used as the target of this study is a graduate of Economic Education. While the affordable population is alumni Economic Education Universitas Jambi who have passed at least 2 years. Data analysis procedure in the form of questionnaires used to obtain research data; the influence of motivation and effectiveness of learning on the quality of graduate of Economic Education University of Jambi. Analysis of test requirements indicates that the score of each research variable has met the requirements for statistical testing. Hypothesis testing is done by calculating the path coefficient $Py_1$, $Py_2$. Line coefficient calculation is done by using SPSS software.

3. FINDINGS AND DISCUSSION

Before the first analysis is done descriptive analysis. Descriptive analysis is intended to describe the description of the variables measured in this study which include: 1. Variables of motivation, 2. Variable learning effectiveness, and 3. Variable quality of graduates.

Some descriptive statistics include measures of central tendency or centralization of data and dissemination of data. The size of the concentration on the data includes the mean value of the count, mode, median. While the size of the data spread includes the range of data and standard deviation. The presentation of group distribution tables is presented to explain the description of research variables.

The variables measured in this study consist of endogenous variables and exogenous variables. Endogenous variable is the variable whose value is determined in the system under study in accordance with the theory model in the study. Endogenous variables in this study are the quality of graduates ($Y$), whereas exogenous variables are variables whose value is not specified inside, but outside the system under study. These exogenous variables determine the value of endogenous variables. Exogenous variables in this study include: Motivation ($X_1$), and Learning Effectiveness ($X_2$). Both of these exogenous variables can determine the Quality of the Graduate ($Y$) variable. Statistics descriptions start from the Graduates Quality ($Y$) variable, then the Motivation Variable ($X_1$), and the Learning Effectiveness ($X_2$) variable.

3.1 Description Data on Graduates

Based on the primary data obtained in the field about the quality of graduate Economic Education Jambi University, the respondent can answer questions with the highest score of 154 and the lowest score is 101 with a score range 53. While the total theoretical score is 31 to 155. From the calculation results obtained average score (mean) of 136.94 with median value of 137.91. While the values often appear (mode) is 138.50. This shows that the average scores of respondents, middle values and values most often appear not so much different. In addition, sample variance was obtained for 128.10 and standard deviation (SD) of 11.32.

Based on the calculation results obtained the number of interval classes as much as 6.61 with a class distance of 8.02. Furthermore, the frequency distribution of the data of the quality variable of the graduate of Economic Education University of Jambi can be seen in table 1.
From the table above is reflected that the frequency of each interval as in table 1 the quality of graduate Economic Education University of Jambi as a variable (Y) has a tendency distribution of normal distribution.

3.2. Description of data on Motivation

Based on primary data obtained in the field about the motivation of Economic Education Jambi University, the respondent can answer the question with the highest score is 114 and the lowest score is 64 with a score range 50. While the total theoretical score is 23 to 155.

From the average data score (mean) 89.06 with a mean of 87.04 while the most frequent value appears (mode) is 84.17. In addition, the sample variance score of 159.98 and standard deviation (SD) was 12.65. Furthermore the frequency distribution of data of motivation variable of Prodi Economic Education Universitas Jambi can be seen in table 2.

From the table above is reflected that the frequency of each interval as in table 2 motivation of graduate of Economic Education University of Jambi as variable (X1) has tendency of distribution which is normal distribution.

3.3. Description of Data on the Effectiveness of Learning

Based on the measurements of the effectiveness of learning, obtained data with the highest score of 121 and the lowest score is 76 with a score range of 45. The theoretical (mean) range of scores is 27 to 135.

Mean score of learning efficiency (mean) is 100,82 with median value 104,88, meanwhile score is most common (mode) is 109,74. This indicates that the mean scores (mean), middle values and values most often appear (mode) are not so much different. In addition, the value of sample variance was 149.99 with standard deviation (SD) of 12.25. Furthermore, the frequency distribution of variable data of effectiveness of Economic Education Study Program, Universitas Jambi can be seen in table 3.
Table 3: Distribution of Learning Effectiveness Trends

<table>
<thead>
<tr>
<th>No</th>
<th>Class of Interval</th>
<th>Absolute Frequency Data (fd)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>76 – 83</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>84 – 91</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>3.</td>
<td>92 – 99</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>4.</td>
<td>100 – 107</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>5.</td>
<td>108 – 115</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>6.</td>
<td>116 – 124</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

From the table above reflected that the frequency of each interval as in table 3 effectiveness learn graduate Economic Education University of Jambi, as variable (X2) has tendency of distribution which is normal distribution.

3.4 Findings

There are certain statistical tests that must be met for path analysis. Therefore, before performing data analysis by using path analysis, firstly done some statistical test which is requirement in path analysis.

1. Test of Estimated Error Normality
   a. Test of Normality of Estimates of Graduates’ Quality of Motivation
   
   Result of calculation of error normality of Y - Ŷ estimation got L0 max = 0,10, meanwhile Lt = 0,11. The normal requirement is L0 max < Lt thus the Y - Ŷ tak estimated error is from a normally distributed population.
   b. Test of Normality of Estimates of Graduates’ Quality of Learning Effectiveness

   Result of calculation of error normality of Y - Ŷ estimation got L0 max = 0,09, meanwhile Lt = 0,11. The normal requirement is L0 max < Lt thus the Y - Ŷ tak estimated error is from a normally distributed population.

Table 4: Summary of data normality test using Liliefors test

<table>
<thead>
<tr>
<th>No</th>
<th>Error</th>
<th>L0</th>
<th>Lt</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ŷ - Ŷ</td>
<td>0,10</td>
<td>0,11</td>
<td>Normal</td>
</tr>
<tr>
<td>2</td>
<td>Ŷ - Ŷ</td>
<td>0,09</td>
<td>0,11</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Description: Normal conditions: L0 < Lt

2. Homogeneity Test of Variance
   a. Homogeneity Test of Variance of Motivation Data (X1) with Quality of Graduates (Y)

   Homogeneity of variance of graduate quality data on motivation tested using Bartlett test. Based on the calculation results obtained value X2count = 12.11 while X2table = 30.14. The data requirement called homogeneous is X2count < X2table. This means that the graduate-quality data group on motivation comes from a homogeneous population.
   b. Homogeneity Test of Variance of Learning Effectiveness Data (X2) with Quality of Graduates (Y)

   Homogeneity of variance of graduate quality data on study effectiveness tested using Bartlett test. Based on the calculation results obtained value X2hitung = 9.57 while X2table = 33.92. The data requirement called homogeneous is X2count < X2table. Means that graduate quality data on the effectiveness of learning comes from a homogeneous population.
3. Hypothesis Testing

a. Motivation (X1) with Quality Graduates (Y)

Functional relationship between motivation (X1) and Graduate Quality (Y) can be presented in the form of regression equation as follows: \( \hat{Y} = 126.79 + 0.11 X1 \). To test the hypothesis that there is a positive correlation between motivation (X1) and Quality of Graduates (Y), it is necessary to test the significance and linearity to the regression equation by using F test. The requirements of the tested hypothesis is when \( F_{hitung} > F_{table} \). Based on calculation result of regression significance test obtained value \( F_{hitung} = 7.91 \) while \( F_{table} = 4.20 \). This shows that the relationship between motivation variable (X1) with variable of graduate quality (Y) is significant.

To test whether the regression equation is linear or not, it is necessary to test linearity with F test. The linearity requirement of what regression equation when \( F_{count} < F_{table} \). Based on the calculation results obtained \( F_{hitung} = 1.25 \) while \( F_{table} = 2.40 \) (dk pembilang = 28 dk denominator = 20 and \( \alpha = 0.05 \)). Thus the regression \( \hat{Y} = 126.79 + 0.11 X1 \) is linear.

Result of calculation of significance test and regression linearity test between motivation variable (X1) with Quality Graduates (Y) can be seen in table 6.

Table 6: List of ANAVA for Meaning and Linearity X1 with Y

<table>
<thead>
<tr>
<th>Sumber Variasi</th>
<th>dK</th>
<th>JK</th>
<th>RJK</th>
<th>( F_{hitung} )</th>
<th>( F_{table} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (T)</td>
<td>50</td>
<td>943905</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Regresi (a)</td>
<td>1</td>
<td>937628,18</td>
<td>937628,18</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Regresi b/a</td>
<td>1</td>
<td>101,71</td>
<td>101,71</td>
<td>7,91*</td>
<td>4,20</td>
</tr>
<tr>
<td>Sisa</td>
<td>48</td>
<td>6175,11</td>
<td>128,65</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tuna Cocok</td>
<td>28</td>
<td>3928,61</td>
<td>140,31</td>
<td>1,25</td>
<td>2,40</td>
</tr>
<tr>
<td>Galat</td>
<td>20</td>
<td>2246,50</td>
<td>2246,50</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Information:
*: very significant regression (Fcount = 7.91 > Ftable = 4.20)
: linear regression (Fcount = 1.25 < Ftable = 2.40)

From the above calculation results obtained \( F_{hitung} = 7.91 \), while at \( \alpha = 0.05 \) Ftable = 4.20. Because Fcount > Ftable then the regression is very significant. In the linearity test of simple linear regression equation, the calculation results show the value Fcount = 1.25 and Ftable = 2.40. Because Fcount < Ftable then the model of linearity equation of motivation (X1) on graduate quality (Y) is linear and significant.

b. Learning Effectiveness (X2) with Graduate Quality (Y)

The functional relationship between learning effectiveness (X1) and Graduate Quality (Y) can be presented in the form of regression equation as follows: \( \hat{Y} = 126.05 + 0.11 X2 \). To test the hypothesis that there is a positive correlation between the effectiveness of learning (X1) and the Quality of Graduates (Y), it is necessary to test the significance and linearity of the regression equation by using F test. The requirements of the tested hypothesis is when Fcount > Ftable. Based on calculation result of regression significance test obtained value Fcount = 6.62 while Ftable 4.20. This shows that the relationship between motivation variable (X1) with variable of graduate quality (Y) is significant. To test whether the regression equation is linear or not, it is necessary to test linearity with F test. The linearity requirement of what regression equation when Fcount < Ftable. Based on the calculation results
obtained $F_{hitung} = 0.90$ while $F_{table} = 2.40$ (dk pembilang = 25 dk denominator = 23 and $\alpha = 0.05$). Thus the regression $\hat{Y} = 126.05 + 0.11 X_2$ is linear.

After the calculation and analysis of regression equation effectiveness of learning ($X_2$) on the quality of graduates ($Y$) known regression equation $Y = 54.818 + 0.567 X_2$. From the calculation results obtained values as presented in table 7 below:

<table>
<thead>
<tr>
<th>Source of Variants</th>
<th>db</th>
<th>JK</th>
<th>RJK</th>
<th>$F_{count}$</th>
<th>$F_{table}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (T)</td>
<td>50</td>
<td>943905</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Regression (a)</td>
<td>1</td>
<td>937628,18</td>
<td>937628,18</td>
<td>6.62*</td>
<td>4.20</td>
</tr>
<tr>
<td>Regression (b/a)</td>
<td>1</td>
<td>85,37</td>
<td>85,37</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sisa</td>
<td>48</td>
<td>6191,45</td>
<td>128,99</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tuna Cocok</td>
<td>25</td>
<td>3062,08</td>
<td>122,48</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Galat</td>
<td>23</td>
<td>3129,37</td>
<td>240,72</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Information:
*: very significant regression ($F_{count} = 6.62 > F_{table} = 4.20$)
: linear regression ($F_{count} = 0.90 < F_{table} = 2.40$)

From the above calculation results obtained $F_{count} = 6.62$ while at $\alpha = 0.05 F_{table} = 4.20$. Because $F_{count} > F_{table}$ then the regression is very significant. In the linearity test of simple linear regression equation, the calculation results show the value $F_{count} = 0.90$ and $F_{table} = 2.40$. Since $F_{count} < F_{table}$, the model of linearity effectiveness of learning equation ($X_2$) on graduate quality ($Y$) is linear and significant.

3.5 Discussion

Based on the calculation of the analysis of the influence of Motivation, and the Effectiveness of Learning to the Quality of Graduates, it can be proved that the research hypothesis is significant at the level of $\alpha = 0.05$. There is influence of each exogenous variable to endogenous variable.

1. Motivation ($X_1$) with Quality Graduates ($Y$)

Based on primary data obtained in the field about the motivation of Economic Education Jambi University, the respondent can answer questions with the highest score of 114 and the lowest score is 64 with a score range 50. While the total theoretical score is 23 to 155. From the average data score (mean) 89.06 with a mean of 87.04 while the most frequent value appears (mode) is 84.17. In addition, the sample variance score of 159.98 and standard deviation (SD) was 12.65.

The quality of graduate of Economic Education Jambi University, in the respondent can answer the question with the highest score is 154 and the lowest score is 101 with a score range 53. While the total theoretical score is 31 to 155. From the calculation results obtained average score (mean) of 136.94 with a median of 137.91. While the value that often appears (mode) is 138.50. This shows that the average scores of respondents, middle values and values most often appear not so much different.

Based on the calculation results obtained $F_{count} = 7.91$, while at $\alpha = 0.05 F_{table} = 4.20$. Because $F_{count} > F_{table}$ then the regression is very significant. In the linearity test of simple linear regression equation, the calculation results show the value $F_{count} = 1.25$ and $F_{table} = 2.40$. Because $F_{count} < F_{table}$, then the model of linearity equation of motivation ($X_1$) on graduate quality ($Y$) is linear and significant.

2. Learning Effectiveness ($X_2$) with Quality Graduates ($Y$)

Based on the results of measurements on the effectiveness of learning, obtained data with the highest score of 121 and the lowest score is 76 with a score range of 45. The theoretical (mean) range of scores is 27 to 135. Average learning effectiveness score (mean) of 100.82 with value middle (median) of 104.88, while the most frequent score (mode) is 109.74. This indicates that the mean scores (mean), middle values and values most often appear (mode) are not so much different. In addition, the value of sample variance was 149.99 with standard deviation (SD) of 12.25. The quality of graduate of Economic Education Jambi University, in the respondent can answer the question with the highest
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4. CONCLUSION

Based on the description of the discussion of research results, then the conclusion in this study put forward as follows: (1) The calculation results obtained $F_{\text{count}} = 7.91$, while at $\alpha = 0.05$ $F_{\text{table}} = 4.20$. Because $F_{\text{count}} > F_{\text{table}}$ then the regression is very significant. In the linearity test of simple linear regression equation, the calculation results show the value of $F_{\text{count}} = 1.25$ and $F_{\text{table}} = 2.40$. Because $F_{\text{count}} < F_{\text{table}}$ then the model of linearity equation of motivation (X1) on graduate quality (Y) is linear and significant. This means that motivation affects the quality of graduates, if the motivation of lecturers run well against students in the KBM, then the quality of graduates will be better too. (2) Based on the calculation results obtained $F_{\text{count}} = 6.62$ while at $\alpha = 0.05$ $F_{\text{table}} = 4.20$. Because $F_{\text{count}} > F_{\text{table}}$ then the regression is very significant. In the linearity test of simple linear regression equation, the calculation results show the value of $F_{\text{count}} = 0.90$ and $F_{\text{table}} = 2.40$. Since $F_{\text{count}} < F_{\text{table}}$, the model of linearity effectiveness of learning equation (X2) on graduate quality (Y) is linear and significant. This means the better the effectiveness of studying undergraduate students Economic Education University Jambi increasingly affect the quality of graduates.

REFERENCES