THE INFLUENCE OF TECHNOLOGY LEARNING FACILITIES AND STUDENT MOTIVATION TOWARDS LEARNING INDEPENDENCE
(EMPIRIC STUDY ON BIDIKMISI SCHOLARSHIP STUDENTS REGIONAL OFFICE OF UNIVERSITAS TERBUKA AT TERNATE, INDONESIA)

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ABSTRACT
This study aims to determine the effect of learning facilities on students’ learning independence, the influence of students’ learning motivation on students’ learning independence, and the influence of learning facilities and students’ learning motivation together towards the independence of student learning. The result of the research shows that there is positive and significant influence of learning tool (X1) on learning independence (Y). It is obtained by t value (2.159) with p = 0.034 <0.05 and t table at 5% significant level with df = 78 equal to 1.991. There is a positive and significant influence of learning motivation (X2) on learning independence (Y). It is obtained t value (7.858) with p = 0.000 <0.05 and t table at 5% significant level with df = 78 equal to 1.991. There is a positive and significant influence of learning facilities (X1) and learning motivation (X2) simultaneously to the independence of learning (Y). This shows the coefficient of double correlation RY (1,2) = 0.746 and R² = 0.557 and price Fhitung equal to 48,980 with p = 0.000 <0.05 and F table = 3.11 at 5% significant level. The coefficient value X1 = 0.186 and X2 = 0.647, constant number equal to 8,650 so that can be made regression equation Y = 8,650 + 0.186X1 + 0.647X2. The higher value of the learning which means (X1) and the learning motivation (X2), the higher the value of the learning independence (Y). The coefficient of determination is R² of 0.557. That means 55.7% learning independence is explained by learning facilities and learning motivation. Meanwhile, 44.3% is explained by other factors that is not discussed in this study.

Key words: Learning Facilities, Learning Motivation, Learning Independence, Bidikmisi Scholarship
The Influence of Technology Learning Facilities and Student Motivation Towards Learning Independence (Empiric Study On Bidikmisi Scholarship Students Regional Office of Universitas Terbuka At Ternate, Indonesia)

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1. INTRODUCTION

Attitude and independent behaviour are two main factors in learning process at Open University (Maria et al, 2011). That is to say as learning system at Open University is long distance learning (Belawati, 2012). The feature of this system is that there a physic separation between the teacher and the students. It means that the learning process is not carried out by face to face and it is not done in the classroom. The students scatter everywhere and the learning place is found anywhere like at home, in the office, on the way to somewhere, and the students can learn anytime without bounding at certain time (Harsasi, 2015). Therefore, in general, the common students dealing with face to face education will face difficulties when they join the long distance education program. It is understood as they get used to get guidance from the teachers in the classroom. In the long distance education program, the students are required to study independently (UT, 2012.)

Darojat (2015) The importance of independence’s learning for students right now is based on the condition of modern life that the students are faced with the development of the technology and the current of fast global life so that the dynamic of life becomes more dynamically and developed. The development is also felt in education process (Ramadhani dan Sudaryanto, 2013). Old standard regulations of learning process was affected by values and new process is not certainly suitable with human life. That is to say so as humans must be dynamic, adapt quickly and immediatelly reflect as humans now are challenged to face more competitive life (Andriyansah & Zahra, 2017).

Learning motivation and learning independence cannot be separated from the discussion of human, as the development of motivation and independence is essential to human life. Handyani et al (2017) The view centered to the society will bring the implication to the education as the cultural transmission process focussing on growing hope and the rules of the society. Fatimah et al (201) Motivation and independence are the aims of education and individual process is the development of independence process, self-independence realization, motivation, process of unity, development and the widening character focusing on self. (Sugiharto, 2004., Fatimah, et al, 2014).

There are many Central Government scholarships awarded as to increase the cleverness of the nation, one of them through Bidikmisi scholarship. Bidikmisi is a program of government through General Directorat of High Education Cultural and Education Ministry Republic of Indonesia that was firstly launched in 2010. The aim of the Bidikmisi Scholarship program is to cut off the poverty chain by giving good achievement students from poor families to be successful people, then they can bring their family out of poverty (Hendrayana et al., 2014., Sari, et al 2017).

Based on the observation to the students of Good Achievement Poor Education Scholarship (Bidikmisi) regional office of Ternate are found that there were students used learning facilities less maximally. Fatimah, et al (2012) The writer assumed that the facilities and motivation create learning independence to students or on the other hand? Yet, it is undeniable that there is decrease in number of students of Good Achievement Poor Education Scholarship (Bidikmisi) that
continues his education. In the study program of S-1 Agribusiness, S-1 Management, S-1 State Administrative and S-1 Accountancy and S-1 Library, the number of students is 25 and the number is decreasing to the next semester (Sembiring, 2013).

Open University tries to equip learning facilities well. It is urgent to equip with learning facilities as they are needed in learning and teaching process. The adequate facilities are expected to trigger higher learning motivation of the students that will create learning independence growing by themselves. The problems are formulated as follows:

1. How does the learning facilities influence on students’ independence learning?
2. How does learning motivation influence on students’ learning independence?
3. How do learning facilities and students’ learning motivation affect students’ learning independence?

In distant learning, the availability and the completeness of learning facilities are crucial (Belawati, 2005). Learning facilities is needed to help the tutor and the students well and the teaching and learning process, and without teaching material, the teaching process will not run well and run less interesting or not interesting at all. By the availability of and the completeness of learning facilities, the students are getting more interested, more understandable, more experience and more skills. Interests and motivation in learning subject are the asset of students’ motivation. By the support of adequate learning facilities, bidikmisi students will grow more independent and more motivation in learning.

Picture 1 Research concept scheme as follows:

Sources: Watono (2008); Samsul (2010); Ramadhani dan Sudaryanto (2013); Hendrayana, et al., (2014)

Hypothesis of this research is that:

1. There is positive and significant correlation between learning facilities towards the learning independence’s bidikmisi scholarship students Regional office Ternate.
2. There is positive and significant correlation between students’ learning motivation towards learning independence’s bidikmisi scholarship students Regional office Ternate.
3. There is positive and significant correlation between learning facilities and learning motivation towards learning independence’s bidikmisi scholarship students Regional office Ternate.
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2. METHOD OF RESEARCH
The research is a descriptive and verificative one that the methods of research used are survey method and survey explanatory method. This research also used quantitative approach based on the primary data.

The research will use three (3) variables. In this model of research, there are two (2) variables, i.e learning facilities variables (X1) and students’ learning motivation variable (X2). Bounded variables (dependent) consists of one (1) variable, that is students’ independence learning (Y). In details, The three (3) variables explained as follows :

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition of Operation</th>
<th>Indicator of Judgement</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Facilities</td>
<td>Components of tools used directly in learning process in the education environment</td>
<td>Availability of learning facilities in the classroom</td>
<td>Watono (2008); Samsul (2010); Ramadhani dan Sudaryanto (2013); Hendrayana et al., (2014)</td>
</tr>
<tr>
<td>Learning Motivstion</td>
<td>Outer motivation or inner motivation to succeed in form of experience and practice that influence the</td>
<td>Willing to succeed Motivation to learn Hope and dream in the future Learning appreciation Interesting learning activities Condusive learning environment</td>
<td></td>
</tr>
<tr>
<td>Learning independence</td>
<td>Independence learning is a manner of individual derived from one’s self to learn independently because there is motivation to master one competence that is wanted</td>
<td>Free manner Self confident Original manner Independent from other people’s help Self-attempt</td>
<td></td>
</tr>
</tbody>
</table>

The research used Likert Scale Model with one detailed option one (1) to agree (S) and four (4) to disagree absolutely (STS). The population in this research is all the students receiving Good Achievement Poor Education Scholarship (Bidikmisi) who are studying in high education program at UPBJJ-UT Ternate in the academic year 2016 consisting of 101 students scattering around the program of S1 Study Program of Agriculture business, S1 Management, S1 State Administrative, S1 Accountancy and S1 Library. The terms of the samples in this research is that the students are active and at least in the semester two in finishing high education at regional office Ternate, besides they are active in joining the Face to Face Tutorial (TTM) which is being held. This makes the students can feel the variable instruments of questions provided by Regional office Ternate
In which :

\[ n = \frac{N}{N(d)^2 + 1} \]

In which :

- \( n \) = Sample size
- \( N \) = Respondent population total = 101 Students
- \( D \) = Precision value 95% sig. = 0.05

From the above calculation, it can be said that the total samples of 81 respondents in which the samples will be distributed proportionally to the five Study Programs. The methods of the distribution used the formula as follows: (Riduwan, 2007).

\[ n_i = \frac{N_i}{N} \times n \]

In which :

- \( n_i \) = Proportional sample size from each Study Program
- \( N_i \) = Respondent population total for each Study Program
- \( N \) = All Respondents Population Total Bidikmisi Students
- \( N \) = Sampel total size/respondent = 81 respondent

The number of proportional number samples used as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>First Registration</th>
<th>Study Program</th>
<th>Semester 2016.1</th>
<th>Population Total (N)</th>
<th>Sample Total (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2013.2</td>
<td>Agribusiness</td>
<td>VI</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>2014.2</td>
<td>Management</td>
<td>IV</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>2014.2</td>
<td>State Administ</td>
<td>IV</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>2015.2</td>
<td>Accountancy</td>
<td>II</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>2015.2</td>
<td>Library</td>
<td>II</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>101</td>
</tr>
</tbody>
</table>

| Total | 81 |

Sumber : Data of Registration and Examination UPBJJ-UT Ternate (2016.1) by thw writer.

The value of item to total correlation is considered valid if it has value \( \geq 0.30 \) (Sekaran, 2011; Sugiyono, 2004). The option of loadings factor ± 0.30 dealing with practicality significance as the burden factor above 0.30 considered significant to \( p = 0.05 \) (Heir, et al., 1995) in Abdullah, (2005). The test of reliability can be done by measuring consistency internal value known from Cronbach Alpha (\( \alpha \)). The value of Cronbach Alpha (\( \alpha \)) is needed to make an instrument reliable reliable \( \geq 0.60 \) (Sekaran, 2011; Ghozali, 2009). The testing of reliability is done with split half technique.
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Correlation Coeffesien Formula with Cronbach Alpha Formula as follows:

\[ \alpha = \frac{k}{k-1} \left( 1 - \frac{\sum_{j} s_{yj}^2}{s_x^2} \right) \] ........................ (1)

In which:
- \( s_x^2 \) = Different subject score all x test divided into J split
- \( s_{yj}^2 \) = Different subject score to j –split = 1, 2, 3, 4, ..... k
- \( K \) = Number of splits

The questionaires made is reviewed by the experts (academican and practician) and then it will involve from the survey group as many as twenty (20) of non Bidikmisi before they are given a full scale survey.

The calculation of validity r counted in validity test 20 respondents seen that all item questions from the questionaires have a value r counted positive and has a bigger than r critical as many as 0,30 that it can be concluded that all questionaire questions are valid.

The test result of reliability 20 respondents seen totally of the value of Cronbach’s alpha (\(\alpha\)) required above 0,60 that all statement items considered reliable.

The analysis in this research used Basic Assumed technique, that is Norms Test by noticing Normal Probability Plots graphic and Multicolinearity Test meant to find out whether there is correlation or not among double linear regression models, free variables. Regression model are not facing a problem of multicolinearity or there is no correlation among its free variables if the VIF is not more than 10.

The formula searching for VIF value:

\[ VIF = \frac{1}{1 - R_j^2} \] ........................ (2)

As a prerequisite, double linear analysis used, the writer tested whether there is or not multicolinearity between free variables by testing the number of inter correlation of free variables. The technique of correlation product moment as follows:

\[ r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{\left(N \sum X^2 - (\sum X)^2\right)\left(N \sum Y^2 - (\sum Y)^2\right)}} \] ........................ (3)

In which:
- \( r_{xy} \) = Correlation coeffesien test item
- \( N \) = The number of sample member
- \( \sum X \) = The score number of test item
- \( \sum Y \) = The number of total score
- \( \sum XY \) = The number of multiplying and X and Y
- \( \sum X^2 \) = The number of score square test item
- \( \sum Y^2 \) = The total number of score square
The prerequisite of multicolinearity among free variables is that there is high correlation (less than 0.800). If the is more than 0.800, it means that there is multicolinearity and data cannot be used to analyze double correlation. In the test of comparison of bounded variables score, there are the highest score, the lowest score, mean, median and modus.

To test all hypothesis proposed in this research, hypothesis tested using Simple Regression Analysis that is using steps as follows:
1. Make the line equity with two predictors, the formula as follows:
   $Y = a + b_1X_1 + b_2X_2$ .......................... (4)
2. Searching for coefficient determining between $X_1$ and $X_2$ predictors with criteria $Y$ as follows:
   $$R_{(1,2)} = \sqrt{\frac{b_1\sum X_1Y + b_2\sum X_2Y}{\sum X^2}}$$ .......................... (5)

   In which:
   $R_{(1,2)}$ = Correlation coefficient among $X_1$, $X_2$, and $Y$
   $b_1$ = Predictor coefficient $X_1$
   $b_2$ = Predictor coefficient $X_2$
   $\sum X_1Y$ = The number of multiplying $X_1$ and $Y$
   $\sum X_2Y$ = The number of multiplying $X_2$ and $Y$
   $\sum X^2$ = The number of score square $Y$ criteria
3. To test double meaningful regression with the formula as follows:
   $$F_{reg} = \frac{R^2(N-M-1)}{M(1-R^2)}$$ .......................... (6)

   In which:
   $F$ = Value F regression line harga F
   $N$ = Case number
   $M$ = Predictor number
   $R$ = Correlation coefficient between criteria and the predictors

   If $F$ counted bigger or equal to, that means that a significant influence of free variables towards bounded variables. However, if $F$ counted less than $F$ table, then there will no significant influence between free variables towards bounded variables. F test used to find out the significance of the all free variables, that is learning facilities, learning motivation towards bounded variables of student’s independence learning. The steps in F test determine the formula of $H_0$ and $H_1$, rejected, that means there is significant influence of free variables towards bounded variables. Then if $F$ counted ≤ $F$ table, so $H_1$ rejected,

   The level of significance chosen 5% ($\alpha = 0.05$), Price Decision Criteria $F$ counted consulted with $F$ table with the degree of the success (db) against N-1 at the level of significance ($\alpha$) = 5. If $F$ table ≥ $F$ table, then $H_0$ that means there is significant influence between free variables and bounded variables.
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\[ F_{\text{counted}} = \frac{R^2(N - m - 1)}{m(1 - R^2)} \] 

............... (7)

In which :

\( F \) = Price of F regression line \\
\( N \) = A number of samples \\
\( m \) = Constanta of free variables \\
\( R \) = Correlation coefficient between bounded variables and all free variables

3. FINDING AND DISCUSSION

Data description described in this research covers the mean (M), median (Me), and standard deviation (SD). To determine the number of interval class in frequent distribution from each score of free variables and bounded variables, the formula used is: \( K = 1 + 3.3 \log n \), in which \( n \) is the number of the population being studied that is 81 respondents the students receiving Good Achievement Poor Education Scholarship (Bidikmisi) who are studying in high education program at Regional office Ternate To determine the interval class consisting of 81 students the formula used \( K = 1 + 3.3 \log n \) then it is obtained \( K = 7.315 \) is made into \( K = 8 \)

The four categories of the tendencies of student’s learning motivation show that frequent variables of learning facilities have high category as there are 11 students (14%), enough category 19 students (23%), lack category 42 students (52%), and low category 9 students (11%)

The result of the groups into four categories of the tendencies of students’ learning motivation show that students’ learning motivation has high category 21 students (26%), enough category 15 students (18%), lack category 21 students (26%), and low category 24 students (30%).

The result of the groups into four categories of the tendencies of students’ learning independence has high category 29 students (36%), enough category 22 students (22%), lack category 18 students (22%), and low 16 students (20%).

The result of the validity testing questionnaires items show that all statement items in each Variables (X1) has correlation value more than \( \geq 0.30 \) as the limit value of questionnaires items. The questionnaires show that all statement items in each variables of Students’ Learning Motivation has a correlation value \( >0.30 \), the limit value of questionnaires items, except statement no 2 and 14 which have correlation value \( <0.30 \), so they all need to be got rid of as have no correlation significantly to total score. Then, it can be said that Variables of Students’ Learning Motivation (X2) valid and they can be used to measure the variables.

The result of the validity testing questionnaires items show that all statement items in each Variables of Students’ Learning Independence (Y) has a correlation value \( >0.30 \) as the limit value of questionnaires items, except item P.17 which has correlation value \( <0.30 \) that is needed to be got rid of as has no correlation significantly to total score. Then it can be said that Variables of Students’ Learning Motivation (X2) valid and they can be used to measure the variables.

The result of reliability testing obtained the result of reliability coefficients alpha (\( \alpha \)) 0.797 (strong relationship rate) to Variables of Facilities Learning (X1), reliability coefficients alpha (\( \alpha \)) 0.812 (strong relationship rate) to the Variables of Learning Motivation (X2), and reliability coefficients alpha (\( \alpha \)) 0.799 (strong relationship rate) to the Variables of Students’ Learning Independence (Y). It can be said that they are reliable as they have reliability coefficients alpha (\( \alpha \)) bigger than \( >0.60 \). As a whole, all questions in the questionnaires can be used as research instrument.
Gambar 2. Graphic Normal Probability Plots: Research Data

Source: Primary data processing result 2016

It is shown with data scattering around diagonal line, it shows that data is distributed normally. Hence, double linear regression model is for both data source that is research data fulfilled normal assumption.

Table 3 Value of VIF (Variance Inflation Factors) Free Variabel X1 and X2

<table>
<thead>
<tr>
<th>Source: Primary data processing result 2016</th>
</tr>
</thead>
</table>

Based on the table, it is found out that the value of VIF the third variables is less 10, so it can concluded that there is no problem of multicolonearity and it is worthy using. To test whether the multicolonearity happens or not among its free variables shown by investigating the number of intercorrelation between free variables through prodyc moment correlation technique.

Table 4 Correlation Among Variables

<table>
<thead>
<tr>
<th>Source: Primary data processing result 2016</th>
</tr>
</thead>
</table>

http://www.iaeme.com/IJCIET/index.asp 1584 editor@iaeme.com
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From analysis of tables 4 above, there is a conclusion that the total number of relation between learning facilities and students’ learning motivation is 0.420, the total number of students’ independence learning is 0.454, the total number between students’ learning motivation and students’ independence is 0.724. As a whole, the total value of correlation is less than 0.800 which means that there is no multicollinearity between free variables and high correlation.

1. The Comparison of Bounded Variable Score

The test of comparison of bounded variable score in this research is meant to find out the rate of difference in students’ Learning Independence of students receiving Bidikmisi scholarship Regional office Ternate. In this test, as a comparison of the highest score is used, the lowest score, the mean, the median and the most score, modus.

**Table 5 Comparison of Bounded Variable Score**

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Min Score</th>
<th>Max Score</th>
<th>Mean</th>
<th>Med</th>
<th>Mod</th>
<th>Std Dev</th>
<th>Variance</th>
<th>Qualification Score</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.46</td>
<td>3</td>
<td>3</td>
<td>0.526</td>
<td>0.276</td>
<td>2</td>
<td>Less</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.40</td>
<td>3</td>
<td>3</td>
<td>0.852</td>
<td>0.267</td>
<td>2</td>
<td>Less</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1</td>
<td>4</td>
<td>2.27</td>
<td>2</td>
<td>2</td>
<td>0.725</td>
<td>0.725</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>2</td>
<td>4</td>
<td>2.27</td>
<td>4</td>
<td>4</td>
<td>0.579</td>
<td>0.579</td>
<td>2</td>
<td>Less</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1</td>
<td>4</td>
<td>3.35</td>
<td>3</td>
<td>4</td>
<td>0.898</td>
<td>0.898</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.05</td>
<td>3</td>
<td>3</td>
<td>0.386</td>
<td>0.386</td>
<td>2</td>
<td>Less</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>0</td>
<td>4</td>
<td>3.37</td>
<td>3</td>
<td>3</td>
<td>0.536</td>
<td>0.536</td>
<td>4</td>
<td>Very</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>1</td>
<td>4</td>
<td>2.44</td>
<td>2</td>
<td>2</td>
<td>1.025</td>
<td>1.025</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>0</td>
<td>4</td>
<td>3.38</td>
<td>3</td>
<td>4</td>
<td>0.564</td>
<td>0.564</td>
<td>4</td>
<td>Very</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>1</td>
<td>4</td>
<td>2.01</td>
<td>2</td>
<td>2</td>
<td>1.137</td>
<td>1.137</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>1</td>
<td>4</td>
<td>3.23</td>
<td>3</td>
<td>4</td>
<td>0.732</td>
<td>0.732</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>0</td>
<td>4</td>
<td>3.14</td>
<td>3</td>
<td>3</td>
<td>0.869</td>
<td>0.869</td>
<td>4</td>
<td>Very</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td>0</td>
<td>4</td>
<td>3.17</td>
<td>3</td>
<td>3</td>
<td>0.620</td>
<td>0.620</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>1</td>
<td>4</td>
<td>3.41</td>
<td>3</td>
<td>4</td>
<td>0.94</td>
<td>0.94</td>
<td>2</td>
<td>Less</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.42</td>
<td>4</td>
<td>4</td>
<td>0.447</td>
<td>0.447</td>
<td>2</td>
<td>Less</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.38</td>
<td>4</td>
<td>4</td>
<td>0.564</td>
<td>0.564</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>1</td>
<td>4</td>
<td>2.78</td>
<td>3</td>
<td>2</td>
<td>0.875</td>
<td>0.875</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>1</td>
<td>4</td>
<td>1.81</td>
<td>2</td>
<td>2</td>
<td>0.528</td>
<td>0.528</td>
<td>3</td>
<td>Enough</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>2</td>
<td>4</td>
<td>3.44</td>
<td>3</td>
<td>3</td>
<td>0.300</td>
<td>0.300</td>
<td>2</td>
<td>Less</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>1</td>
<td>4</td>
<td>3.33</td>
<td>4</td>
<td>4</td>
<td>0.750</td>
<td>0.750</td>
<td>3</td>
<td>Enough</td>
</tr>
</tbody>
</table>

Sumber: Primary Data Proceeding Result 2016

Based on table 5 above, the statement item no 1, 2, 4, 6, 14, 15 and 19 have tendencies of lower learning independence, the statement item no 3, 5, 8, 10, 11, 13, 16, 17, 18 and 20 have high enough learning independence, and the statement item no 7, 9, dan 12 have very high learning independence.

For analysis of regression, the *coefficient output* of each variables can described as follows:
Yusuf; Andi Suci Anita; Rosalita Agustini; Wildoms Sahusilawane; Whika Febria Dewatisari; Eliaki Gulo; Eha Saleha; Mohbir Umasugi; Muhammad Alwi

Table 6 Coefficient Equity Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>8.650</td>
<td>5.936</td>
<td>1.457</td>
<td>.149</td>
</tr>
<tr>
<td>Sarana Belajar</td>
<td>.196</td>
<td>.006</td>
<td>.179</td>
<td>.159</td>
</tr>
<tr>
<td>Moltfas Mahasiswa</td>
<td>647</td>
<td>822</td>
<td>.853</td>
<td>.000</td>
</tr>
</tbody>
</table>

Sumber: Primary Data Proceeding Result 2016

Based on the table, the equity of regression explaining the influence of learning facilities (X1) and students’ learning motivation (X2) towards students’ independence (Y) is:

\[ Y = a + b_1X_1 + b_2X_2 \]

- Constanta (a) with the assumption that students’ learning motivation (Y) is 8.650. It means that there is an increase each one variable score of learning facilities (X1) and students’ learning motivation (X2) is constant or fie
- Coeffesien of regresssion variable of learning facilities is 0.186. It shows that the change of learning facilities will increase the students’ learning motivation (Y) 0.824.
- Coeffesien of regresssion variable of learning facilities is 0.647. It shows that the change of students’ learning motivation (X2) will increase the result of students’ learning independence (Y) 0.647.

2. Coefficient Determinance (\( R^2 \))

To find out double correlation and the wide formal thinking relationship towards history learning result seen the correlation and coefficient determinance (\( R^2 \)). The result of regression analysis can be seen in output model summary and described as follows:

Table 7 Output Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.746</td>
<td>0.557</td>
<td>0.545</td>
<td>4.745</td>
</tr>
</tbody>
</table>

Sumber: Hasil Pengolahan Data Primer 2016

Based on the above table, coefficient determinance \( R^2 \) (\( R \text{ Square} \)) is obtained 0.557 or (55.7%). It shows that the contribution of influence percentage from the independent variable facilities learning (X1) and students’ learning motivation (X2) towards the variables of students’ learning independence (Y) is (55.7 %). The rest is 44.73% influenced or explained by other variable that is not included in this research model. Adjusted \( R \text{ square} \) = 0.557. The measurement
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has the same meaning as R square, only Adjusted R square has a more stable value as it has been adjusted to the free variables. Standard Error of The Estimate = 4,745 shows the rate of mistakes in carrying out prediction towards the bounded variables.

3. Regression Test All Together s (Uji F Test)
This test is used to find out whether the independent variables of learning facilities (X1) and the students’ learning motivation (X2) all together influences significantly towards regression model can be used to predict the dependent variables or not.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2205.721</td>
<td>2</td>
<td>1102.890</td>
<td>49.960</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>1756.219</td>
<td>78</td>
<td>22.516</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3962.000</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Kemandirian Mahasiswa
b. Predictors: (Constant), Motivasi Mahasiswa, Sarana Belajar

Source: Primary data processing result 2016

Steps to do F test as follows:

• Determine formulae $H_0$ and $H_1$

$H_0$: means that there is no partial influence between learning facilities or learning motivation towards learning independence rate

$H_1$: means that there is influence between learning facilities or learning motivation towards learning independence rate

• Level of significance ($\alpha$)

Level of significance uses 5 % ($\alpha = 0.05$)

• Level of significance ($\alpha$)

Level of significance uses 5 % ($\alpha = 0.05$)

• Determine Ftable

The result F table (3,11) with $\alpha = 0.05$, dk = 81-2-1=78

• Determine Fcounted

Based on the table obtained F counted (48,980)

• Decision Criteria

As Fcounted (48,980) > F table (3,11) or the value of Sig (0.000) < (0.05) the $H_0$ rejected, that it can be concluded there is influence between learning facilities and learning motivation towards learning independence rate.

4. Test Partial Regression Coeffecient (t Test)
This test is used to find out whether independent variables of learning facilities (X1) and students’ learning motivation (X2) partially influences significantly towards the dependent variables of students’ learning independence (Y) or to find out whether the regression model can be used to predict the dependent variables or not. The regression of out analysis can be found out the value of t test at this table as follows:

Table 9 Regression Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>9.659</td>
<td>5.936</td>
</tr>
<tr>
<td>Sarana Belajar</td>
<td>.185</td>
<td>.086</td>
</tr>
<tr>
<td>Mottasi Mahasiswa</td>
<td>.647</td>
<td>.002</td>
</tr>
</tbody>
</table>

Source: Primary data processing result 2016

Steps to do t test as follows:

- Determine formulae $H_0$ and $H_1$

$H_0$: means that there is no partial influence between learning facilities or learning motivation towards learning independence rate

$H_1$: means that there is influence between learning facilities or learning motivation towards learning independence rate

- Level of significance ($\alpha$)

Level of significance uses 5% ($\alpha = 0.05$)

- Determine t table

The result $t$ table (1,991) with $\alpha = 0.05$, $dk = 81-2-1=78$

- Determine $t$ counted

Based on the table obtained $t$ hitung (2,159) for the variables of learning facilities (X1) and $t$ counted (7,858) for the variables learning motivation (X2).

- Decision Criteria

For the variables of learning facilities (X1). The result of t test found in $t$ counted (2,159) > t tabel (1,991) or the value of Sig (0.034) < (0,05) so it will be rejected, that it can be concluded that there is influence between learning facilities towards learning independence rate.

To the variables of learning motivation (X2). The result of t test found $t$ counted (7,858) > t or the value of Sig (0.000) < (0,05), then it will be denied, that is can be concluded there is influence between learning motivation towards learning independence.

The discussion of The Influence of Students’ Learning Facilities towards Student’s Learning Independence. The result of the research shows that there is positive and significant influence of learning facilities (X1) towards students’ learning independence (Y). By using analysis of simple regression obtained $t$ counted (2,159) with $p = 0.034 < (2,159)$ with $p = 0.034 < 0.05$ and $t$ table at significance rate 5% with df=78 is 1,991. The value of $t$ counted is bigger with significance rate.
The Influence of Technology Learning Facilities and Student Motivation Towards Learning Independence (Empiric Study On Bidikmisi Scholarship Students Regional Office of Universitas Terbuka At Ternate, Indonesia)

under 5% which means that learning facilities give positive influence towards students’ learning independence.

The result of the research The Influence of Students’ Learning Motivation towards Students’ Learning Motivation shows that there is there is positive and significant influence of students’ learning motivation (X2) towards students’ learning independence (Y). By using analysis of simple regression obtained t counted (7.858) with p = 0.000 < 0.05 and t table at significance rate 5% with f=78 is 1,991. The value of t counted is bigger with significance rate under 5% which means that students’ learning motivation gives positive influence towards students’ learning independence.

The result of the research The Influence of Students’ Learning Facilities towards Students’ Learning Independence shows that there is there is positive and significant influence of students’ learning motivation (X2) towards students’ learning facilities (X1). By using analysis of double regression with two predictors found out that double correlation coefficient RY (1,2) is 0,746 obtained the value of Fcounted 48,980 with p = 0.000 < 0,05 and Ftable is 3,11 with significance rate under 5% which means that students’ learning facilities and learning motivation give positive influence towards students’ learning independence.

Based on the result of double correlation analysis obtained KD that shows learning independence vary and can be explained by the combination of free variables R² that is 0,557. It means that 55.7% is students’ learning independene explained by students’s learning facilities and students’ learning motivation. Meanwhile, 44.3% shows that there is other factor that cannot be discussed in this research.

4. CLOSING

Based on data analysis and discussion, the research is summed up as follows:

1. There is positive and significant correlation between learning facilities (X1) towards independence learning (Y). This is shown through simple regression analysis that obtained the value of t counted (2.159) with p = 0.034 < 0.05 and t table at the level of 5% significance with df=78 as much as 1,991. The value of t counted > from t table at the lever under the significance of 5%, that makes the hypothesis acceptable means that learning facilities give effect positively and significantly towards independence learning. Hence, the higher learning facilities (X1), then the higher students’ independence learning (Y).

2. There is positive and significant correlation of learning motivation (X2) towards learning independence (Y). This is shown by simple regression analysis that obtained the value of t counted (7.858) with p = 0.000 < 0.05 and t table at the level of 5% significance with df=78 as much as 1,991. The value of t counted > from t table at the lever under the significance of 5%, that makes the hypothesis acceptable means that learning motivation gives effect positively and significantly towards independence learning. Hence, the higher learning motivation (X2), then the higher students’ independence learning (Y).

3. There is positive and significant correlation of learning facilities (X1) towards learning motivation (X2). This is shown by double regression analysis with 2 predictors RY (1,2) = 0,746 and R²= 0,557 and the value of Fcounted 48,980 with p = 0.000 < 0,05 and Ftable= 3.11 at the level under the significance of 5%, that makes the hypotesis acceptable. It means that learning facilities and learning motivation all together give positive effects towards students’ independence. The value of coeffesien X1 = 0,186 and X2 = 0,647, fixed number as much as 8,650 that can be made a regression equity Y regression Y = 8,650 + 0,186X1 +
Yusuf; Andi Suci Anita; Rosalita Agustini; Wildoms Sahusilawane; Whika Febria Dewatisari; Eliaki Gulo; Eha Saleha; Mohbir Umagusi; Muhammad Alwi

Hence, the higher learning facilities (X1), then the higher students’ independence learning (Y).

REFERENCES


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