The Effect of Internet Utilization on the Students Academic Achievement in Educational Administration Study Program

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Abstract—The aim of this study was to find out the effect of internet utilization media as a learning resource on the academic of student's achievement in Educational Administration Study Program. A quantitative method with a survey design was employed in the study. The population used in this study was the of Educational administration students for the academic year 2015, 2016, and 2017. The total sampling techniques was used in this study by involved 100 students as participants. Also, primary data and secondary data were used as data collection techniques in this study in the form of questionnaires and transcript value documents. Furthermore, simple regression analysis was used as data analysis technique in this study. The results of the study showed that there was the effect of internet media on the academic achievement of students of the educational administration study program at Jambi University. According on the results of the t-test, it was found that internet media t_{count} was 5,002, while t_{table} was 1,984, it was obtained that 5,002 > 1,984, then Ha was accepted and H0 was rejected. Hence there was a significant partial effect between internet media (X) on academic achievement (Y). Based on the result of the study, it is suggested to be more wise in using internet media, besides the many benefits of the internet, it also has negative impacts.

Keywords—internet; achievement; academic

I. INTRODUCTION

Learning achievement cannot be separated in the process of learning activities. Learning activities are processes, while achievement is the result of the learning process. According to Walkins, Carnell, Lodge, Wagner, and Whalley, learning are reflective activity which enables the learners to draw upon previous experience to understand and evaluate the present [1]. In term of learning outcomes in higher education, Scott in his personal perspective stated that in higher education learning outcome are designed to give a clear indication of the learning destiny [2]. Moreover, Kaur and Singh, illustrated learning outcomes are like navigation tool such as GPS [3]. Once destination is fed to GPS, the devices will guide the driver to destinations. Similarity, learning outcomes are guiding tools which guide the student to desired of the planned courses. "learning outcomes are indicators of success of an academic course programmed" [3]. In the learning process, if somebody does not get an improvement in the quality and quantity of abilities, then the person has not experienced the learning

process or has experienced a setback in the learning process. Learning achievement is basically the end of result expected to be achieved after a person has learned or the level of success of the student level after going through the learning process about a particular material, the level of mastery, emotional change, or behavioral change measured by certain tests and realized in the form of values or score.

Furthermore, in the 21st Century, with the invention of the internet, interconnection, networking, communication, information sharing has emerged. Iyitoğlu and Çeliköz, in their study about the impact of internet in student's achievement stated that internet has been so excessively used all over world, not only for social network but also academic aspect of students live [4]. Internet now has become a primary need in all condition. In the realm of college. internet users among students is quite high compared to other students, this signifies student dependence on the internet world closely related to the world of lectures. Teaching at education mostly concentrate on giving information, which is one objective of education and to achieve the objectives the teachers and students should redefine their role and relevant competence commitment to perform. In this context it is also to understand the utilization of the internet in learning process [5].

In spite of the range of research studies conducted on the relationship between problematic internet used and the academic achievement such [6-8]. In the current study, the researchers take a specific type of the utilization of the internet. It is possible to claim that, similar to other areas of education, utilize of internet in learning activities will influence the development of instrument of teachers and great extent and increase the efficiency of the learning process, and also improve student's achievement.

Achievement in education is a complex process with many variables interacting in a way that affects how much learning actually takes places. Papanastasiou, in his study about internal and external factors affecting achievement in mathematics classified the factors that influence student's achievement into internal and external factors [9]. "Internal factors are those related to material, while external factors refer to the environment which support students learning" [9]. Additionally, Isdhana stated that internal factors mean how a

student can manage his learning time to achieve maximum performance [10]. External factors can be obtained from electronic media such as the using of internet and print media in the campus library academic environment.

Based on preliminary observations on students in the Educational Administration Study Program in Jambi University, the internet provides a lot of use while the use provided by the internet is not maximally used by students, especially in learning. On the other hand, they use the internet to live or update social media, play online games, and lack filtering hoax news. Due to copying scientific works without looking at clear sources. Most students have not been able to make the most of the internet facilities provided by the university. Because of the difficulty of reaching the internet network on campus, some other students thought the use of internet media made it easier for students to complete their course assignments well. During group discussions, papers and material delivery students used the internet as a learning resource. Briefly, the academic achievement of students in the Educational Administration Study Program for the academic year of 2015, 2016 and 2017 was obtained as follows.

TABLE I.   THE AVERAGE OF GPA OF EDUCATIONAL ADMINISTRATION STUDENTS

GPA	Number of students	Percentages %	Average of GPA
0,0 – 0,99	-	0%	Total number of GPA 425.32/ 117 = 3.64
1,00 – 1,99	-	0%	
2,00 – 2,99	3	2.6%	
3,00 – 4,00	114	97.4%	
Total	117	100 %	

Based on the table above, it explains 117 students of Education Administration, as many as 97.4% or 114 students get a Grade Point Average of more than three, and as many as 2.6% or 3 students are on the Achievement Index two, with an average GPA of 3.64. the academic administration program students are quite high. Learning achievement of Educational Administration Study Program students, University of Jambi is closely related to the seriousness of learning, reading and writing. Students are centers in the lecture process that are closely related to learning outcomes. Hence, the indicators of the success of the learning process can be seen from student learning outcomes. If student learning outcomes categorizes as high level, then it can be said that the success of the learning process categorizes as high level too, while if the student learning outcomes categorizes as low level, the learning success categorizes as low level.

II. METHODS

A. Research Approach

A quantitative method with a survey design was used in this study. Through the distribution of questionnaires to all respondents who were sampled in this study. The rationale in choosing this method because it can describe the factual conditions. In accordance with the problems and objectives to be achieved in this study to examine the direct effect of independent variables on the dependent variable.

B. Research Population

The population in this study were students of the Educational Administration Study Program, Jambi University, academic year of 2015, 2016, 2017, totaling 117 students. In detail, the number of population in this study can be presented in the following table.

TABLE II.   POPULATION LIST

Academic year	Total
EA 2015	38
EA 2016	33
EA 2017	46
Total	117

C. Data Collection Techniques

Observation, questionnaire, and documentation were used as the data collection in this study. (1) Documentation, with the documents relating to the problem under study, it strengthened the data obtained. It was used to find out the data/ number of students of Educational Administration in Jambi University. (2) Questionnaire, is a technique or method of indirect data collection (the researcher did not directly question the respondent). It is an instrument used to obtain data describing an individual's self with a number of questions, whose answers determined in advance so that the respondents do not have the freedom to choose answers, except those that have been determined.

D. The Test of the Instrument

The test of instrument used is a test of validity and reliability. Validity and reliability tests are used for instruments in the form of questionnaires on the use of internet media with multiple choice written test forms.

E. The Validity Test

The instrument for utilizing internet media is compiled based on indicators to produce 20 questions. To test the instrument items, the researcher conducted a trial first of 45 respondents outside the study sample. The value of the validity of each question item can be seen from the corrected item-total correlation value (r_{count}).

TABLE III.   RESULTS OF VALIDITY TEST

No	r-count	r-table	Note
1	0.356	0.290	Valid
2	0.311	0.290	Valid
3	0.568	0.290	Valid
4	0.609	0.290	Valid
5	0.719	0.290	Valid
6	0.573	0.290	Valid
7	0.668	0.290	Valid
8	0.739	0.290	Valid
9	0.602	0.290	Valid
10	0.546	0.290	Valid
11	0.683	0.290	Valid
12	0.779	0.290	Valid
13	0.784	0.290	Valid
14	0.647	0.290	Valid
15	0.715	0.290	Valid
16	0.642	0.290	Valid

Table 3. Cont.

17	0.785	0.290	Valid
18	0.627	0.290	Valid
19	0.779	0.290	Valid
20	0.692	0.290	Valid

There are 20 valid items on the results of the trial seen the questionnaire variable X (internet media utilization) based on the table presented above. Thus, the items used in the study amounted to 20 items.

F. Reliability Test

According to Siregar, reliability aims to find out how far the measurement remains consistent, if it is measured twice or more with the same symptoms using the same measuring instrument [11]. Test results of this research instrument were interpreted by using the following guidelines.

TABLE IV. INTERPRETATION GUIDELINES (R)

Level of Reliability	Note
0,800-1,000	Very high
0,600-0,799	High
0,400-0,599	Moderate
0,200-0,399	Low
0,000-0,199	Very low

After the numbers of reliability is known, then the number is interpreted with the reliability level of the correlation coefficient. The instrument is said to be reliable if it has a Cronbach's Alpha coefficient more than or equal to 0.600 then the instrument is said to be reliable.

TABLE V. RESULTS OF RELIABILITY TEST

Variable	Cronbach Alpha	Terms	Note
Media Internet (X)	0, 923	> 0, 6	Reliable

Based on the results of a reliable test, the variable of Media Internet () X (0.923 > 0.06) was very reliable.

G. Data Analysis Techniques

To process the data, simple regression analysis techniques was used as data analysis technique. To be able to test hypotheses with a simple regression test, it is needed to tackling the fulfillment of requirements (test assumptions) called normality test and linearity test.

H. Hypothesis Test

After the prerequisite test has been fulfilled, the hypothesis submitted can be tested. Hypothesis testing is carried out with the help of the SPSS program. The hypothetical tests carried out were simple regression analysis test, t test, and determination coefficient.

III. RESULTS AND DISCUSSION

Description of the data is a description of the results of data collection from the variables studied. This study focused on the effect of internet media utilization as a learning source for students' academic achievement in the Educational administration study program in Jambi University. This consisted of independent variables; internet media (X), and the dependent variable; academic achievement (Y). data collection was obtained through questionnaires distributed to students of the Educational Administration Study Program. Of the 117 population filled out questionnaires, 100 respondents and 17 respondents did not fill out questionnaires provided by researchers.

A. Variable Description of Internet Media

TABLE VI. VARIABLE DESCRIPTION OF INTERNET MEDIA

No	Variable questions : The utilization of internet Media	Criteria/Category		
		Mean	S.D	Level
The ability to access internet				
1	I am able to access the internet either via cellphone or computer	3.5	.522	High
Average		3.5	.522	High
Internet usage intensity				
2	I use the internet in learning activities	3.31	.486	High
3	I use the internet more than 5 hours a day to do assignments	2.89	.567	Moderate
4	Every day I access the Internet both after going home from college and at night.	3.36	.560	High
5	I use the Internet to find references	3.5	.541	High
6	I use the Internet to find lecture material	3.4	.569	High
7	I use the Internet to complete assignments given by lecturers.	3.35	.500	High
Average		3.30	.537	High
Internet as information				
8	The internet can add to my insight in finding information.	3.6	.492	High
Average		3.6	.492	High
Internet as a means of entertainment				
9	To get rid of boredom I opened an entertainment facility on the internet to refresh my mind again	3.48	.541	High
Average		3.48	.541	High
Internet as a communication tool				
	The internet makes it easy for me to send writing assignments or read to the lecturer via e-mail.	3.67	.473	High
11	Through the Internet I can share problems and solutions with friends and anyone about lecture material.	3.31	.506	High
Average		3.49	.489	High
Facilities / types of services used on the internet				
12	For learning purposes, I look for learning resources via the internet	3.25	.458	High
13	I use Google search tools to find reference material for lectures.	3.43	.498	High
Average		3.34	.478	High
Internet as a learning resource				
14	I use the internet as a digital library	3.3	.541	High
15	The internet gives me the convenience of finding subject matter	3.47	.502	High
16	I belong to students who are diligent in accessing the internet for learning needs.	3.2	.569	High

Table 6. Cont.

17	The internet provides access that makes it easy for me to learn	3.43	.498	High
18	I use the Internet during group discussions	3.16	.581	High
19	I use the internet as a developer of learning material that is packaged in the form of electronic learning	3.21	.518	High
20	The internet gives me easy access to learning resources.	3.43	.498	High
Average		3.31	.529	High

The table 6 showed that the tendency level of internet access ability categorized as high level with the mean value (3.5) and standard deviation (0.522), the intensity of internet use categorized as high level with the mean value (3.20) and standard deviation (0.537), the internet as information categorized as high level with mean value (3,6) and standard deviation (0,492), Internet as entertainment facility is in high category with mean value (3,48) and standard deviation (0,541), internet as communication tool categorized as high level with mean value (3, 49) and standard deviation (0.489), the facilities/ types of services used in the internet categorized as high level with a mean value (3.34) and standard deviation (0.478), then the internet as the learning source categorized as high level with a mean value (3.31) and standard deviation (0.529). Hence, from the seven indicators, the average use of internet media as a learning resource in educational administration study programs tended to be high category with a mean (3.36) and a standard deviation (0.512). Furthermore, the data was illustrated in the diagram below.

B. Data Description of Students' GPA

The following is a calculation to find the value of the tendency category score on the variable academic achievement (GPA) and its distribution table: Article 55-56 on the grade point average (GPA) in accordance with the rector regulation of Jambi University No. 02 in 2017.

TABLE VII.   STANDARD OF GPA (CHANCELLOR REGULATION ARTICLE 55 NO. 20 IN 2017)

GPA	Score	Category
GPA	2.00-3.00	Satisfactory
GPA	3.01-3.50	Very Satisfactory
GPA	3.51-4.00	Cumlaude

C. Prerequisite Test

Before testing the hypothesis, the data used for statistical analysis with simple regression techniques should meet several conditions explained as follows.

1) Normality test: Normality test is used to test whether in a regression model, dependent variable, independent variable, or both are normally distributed or not. Normality of the data can be seen using the Kolmogorov-Smirnov normal test, the basis used in decision making is if the sig> 0.05 then the data is normally distributed, but if the Sig <0.05 then the data is not normally distributed. From the results of the questionnaire test to determine the normality of the data. It also can be seen that the data for the internet variable was 0.330, it was greater than

0.05. Hence, the internet variable data was normally distributed. Whereas in the GPA variable, the Sig value was 0.154, it was greater than 0.05. In brief, the data for internet variables and GPA were normally distributed.

2) Linearity test: The use of a linear model is to be appropriate and a probability value can be used (Anova table) with the real level (0.05 or 0.01). If the probability is> 0.05, the model is rejected and if the probability is <0.05, the model is accepted. Based on the ANOVA output table above, the Sig. Linearity was 0,000 that the value was <0.05. This showed that internet media (X) and academic achievement (Y) has a linear relationship.

D. Test Hypothesis

Hypothesis testing is used to find out whether the proposed hypothesis is accepted or rejected. The hypothesis will be accepted if the collected data can prove the statement in the hypothesis, the hypothesis should be rejected if the data collected cannot prove the statement in the hypothesis.

Based on the results of the simple linear regression test, there is a regression line equation as follows.

$$Y = 3.139 + 0.008 + e$$
$$Y = 3,147 + e$$

The simple linear line equation could be explained as follows.

- A constant of 3,139 stated that if there was no use of internet media (X), the academic achievement achieved by students was 0.008.

- The regression coefficient of internet media variables of 0.008 stated that each increase in one unit of internet media variables (X) led to an increase in academic achievement by 0.008.

The t test is used to partially test each variable.

- The composition of the hypothesis Ho: there is no effect between the independent variables partially on the dependent variable.

  Ha: there is a partial effect of independent variables on the dependent variable.

- Price of t count

t table = $(\alpha / 2: n-k-1)$

  = (0.05/2:100-1-1)

  = (0.025: 98) (seen in the distribution of t table values)
  = 1,984

In bried, the results revealed that internet media with t_{count} value was 5,002, while t_{table} was 1,984. It obtained that 5,002> 1,984 then Ho was rejected. Hence, there was a significant partial effect of internet media (X) on academic achievement (Y) variables. According the calculation results in the summary model, the R square was 0.203 or 20.3%. This showed that there was an effect of internet media on academic achievement of 20.3%, while the ratio (100% - 20.3% = 79.7%) was affected by other causes.

After conducting a series of research and statistical analysis, the results showed that there was a significant influence between the use of internet media on the academic achievement of students of the Education Administration Study Program. Based on the results of the t test conducted with the results of calculations using SPSS 21 obtained internet media t_{count} value of 5.002, while t table of 1.984, obtained the result that 5.002 > 1.984 then Ho was rejected so that there was a significant partial effect between internet media on academic achievement variables.

Thus, it can be conveyed that the higher utilization of the internet as a source of learning, the higher the student's academic achievement will be. On the other hand, if the use of the internet as a learning resource is in low category, then academic achievement will also in low category. This was in line with the results of research conducted by Rusno that the use of the internet as one of the learning resources affected the learning achievement of economic educational students in Malang Kanjuruhan University by the score 10.4% [12]. The low effect of the internet on student achievement is due to internet is still used as an entertainment medium and not all lecturers provide it as internet-based assignments. The results of Alkaff's study showed that there was an effect between the use of internet as a learning medium on the student learning achievement of the Administration Science Study Program of the Faculty of Social and Political Sciences in the Islamic University of Jember [13]. Furthermore, the calculated X2 result was 4.464 with db (degree of freedom) = 1 with a significance level of 0.05 (5%) in Chi Square table was 3.481. In brief, the calculated number was greater than the table number of 4.464 >. In the result of Ramdani's study, there was an effect of the internet use on the student learning achievement of the Department of Communication Sciences [14], Faculty of Social and Political Sciences, Teuku Umar University. This was shown from the results of the t_{test} with t_{count} of 2.353 greater than t table (1.721), with a degree of freedom (db) n-2 = 21 in error 0.5% (0.005).

Additionally, the result of this study was in accordance with the benefits of the internet as a learning resource according to Brown cited in Munir [15], the internet as a learning resource, improving learning competence, improving teaching skills and experience in material procurement, overcoming problems of limited labor, and improving working efficiency. Moreover, in Rusman's words [16], using the internet with all its facilities will provide convenience to access various information for education that can directly increase students' knowledge for their success in the learning process, because the internet is the main source and knowledge in cyberspace.

IV. CONCLUSION AND RECOMMENDATION

Based on the results of statistical analysis to test hypotheses carried out with a simple linear regression analysis and discussion of data analysis, there is a positive and significant effect of the use of internet media on the academic achievement of students of the Educational Administration Study Program in Jambi University. With the results obtained, the internet media t_{count} value was 5.002, while the t_{table} of 1.984 showed that 5.002 > 1.984. Then the hypothesis was accepted and Ho was rejected. In brief, the authors suggest to students that the Internet has a positive impact because of rapid technological advances, the internet also has negative effects such as pornography and cybercrime, hoax news, and others. Take advantage of the internet wisely and wisely for activities that are more useful in learning resources.

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