



The Influence of Gadget Use on Academic Achievement of 2016 Unsyiah Physics Batch

Nur Khairina Hidayatika^{1*}, Mustafa², Tarmizi³

^{1,2,3}Department of Physics Education, Syiah Kuala University, Banda Aceh - Indonesia

*Corresponding email: renahidayatika@gmail.com

ABSTRACT

In this globalization era, communication tools are very fast examples. Gadgets are a communication tool that has many functions. Where the function is already using the different features. Gadgets considered more complete than other electronics because of its functionality and different. Gadgets examined included laptops and mobile phones. The approach used in this research is the quantitative study. In the approach comes from the students who actively use the gadget in the context lectured. Collection of activity data using questionnaires and student evidence. As for the CPI data analysis and processing used by the product moment correlation coefficient and linear regression simple shapes in which both the data intervals. Based on the analysis of data, a scoreprice r count is larger than a good table for the error of 5% and 1% ($0.76 > 0.345 > 0.266$), so that H_a is accepted and H_o is rejected. The conclusion of this research is there is a positive use of gadgets to force GPA student education physics, 2016. which is expected to help raise the GPA when the use of gadgets is positively.

Keywords: influence, gadgets, and achievement, GPA

INTRODUCTION

Teaching and learning is an activity that is worth educating. At the top level of education, students are expected not to be passive in the implementation of teaching and learning through existing media, such as books in libraries, journals, e-books, and the internet. At present students use electronic devices in the form of mobile phones, laptops, notebooks and the like to look for answers to assignments given in college.

Common applications in gadgets are, internet, MP3, telephone, email. sms, bluetoot, Wifi, game, Video call, chatingg and Camera. It is undeniable that many negative and positive things are found in the use of gadgets for some teenagers, parents and children. As for some people using gadgets for communication, work, looking for information, or just to find entertainment so that people often depend on small objects called smart. Not only that according to (Mubashiroh, 2013) "Gadget technology that has a variety of benefits and advantages can also lead to positive and negative impacts for users. The positive impact of using gadgets is that it will be more efficient in the use of time in communication while the negative impact is sites that endanger underage users and addicted to games ". For students,

gadgets are used as task finishers, looking for information, looking for entertainment and entrepreneurship. So many students make it easy for everything to achieve their desires.

Problem of Research

Based on the results of observations made by researchers to students of Physics education, students of class of 2016 all already have mobile phones / gadgets of type Android because gadgets have many features that facilitate their users to connect to the internet more easily anytime and anywhere. Gadgets or mobile phones (smartphones) are not just communication tools, but have become a trend or lifestyle in the modern era as it is today. Gadgets with various applications and social media that are very easily accessed, so that they are often misused by students (Manumpil, Ismanto, and Onibala: 2015) which can have a negative impact on academic grades or student achievement levels. Some students who prefer to play gadgets rather than follow the learning process, so students are not focused and not concentrated in the learning process. Sometimes students prefer to play the gadgets they have when the lecturer is explaining the lecture material. Because they are preoccupied with gadgets, students forget about their obligations as a student to study. In fact, 2016 Physics students, most of whom already have gadgets and use gadgets to do assignments and study more daily than relying on books as guidelines but have an IP above 3.00. Therefore, researchers are interested in examining this 2016 class of Physics Education student with the title Effect of the Use of Gadgets on the Academic Achievement of Physics Students of FK Unsyiah Angkatan 2016.

Research Focus

It is undeniable that many negative and positive things are found in the use of gadgets for teenagers, children, and even toddlers. Although most of the people use gadgets for communication, work or business matters, looking for information, or just to find entertainment. Therefore the gadget also has its own values and benefits for certain people. Not only that according to (Mubashiroh, 2013) "Gadget technology that has a variety of benefits and advantages can also lead to positive and negative impacts for users. The positive impact of using gadgets is that it will be more efficient in the use of time in communication while the negative impact is sites that endanger underage users and addicted to games ". For students, gadgets are used as task finishers, looking for information, looking for entertainment and entrepreneurship. So many students make it easy for everything to achieve their desires.

Most of the previous students who are not yet familiar with technology, the internet and smart devices are using their time to study and work, they are trying to achieve their desires with difficulty. Previous students have dexterity in thinking and conveying their thoughts, so that for final grades like the previous student's GPA it is very difficult to achieve the highest score but the knowledge possessed by previous students cannot be doubted. Unlike today's students who only have a cellphone or smart phone, they just sit and relax then all the work will be done. So for grades like GPA is obtained easily without having to study so hard.

The more the development of the age, the more developed the technology today. In the age of melenial now it can not be denied that gadgets are open to electronic devices that can facilitate humans in communication. Of all kinds of different forms and functions make young and old alike fond of using it. Gadgets play an important role to make it easy in all jobs, not only to communicate, gadgets are designed to provide information, where to buy and sell online, looking for entertainment and used as a learning medium . If the gadget is used properly and is used for positive things, it is possible for students who use the gadget to make it easier to learn, then their learning outcomes or academic achievement scores will be good. But there are also many students who use gadgets for just looking for entertainment, they even use gadgets 80% for social media and 20% to access lessons. Gadgets also have a negative effect on users, for example by the existence of pornographic content, online games, and the sale of prohibited tools. Which results in users addicted and damage brain tissue, and can damage yourself. So, the use of gadgets has positive and negative sides so we have to choose and sort out which ones are for us and which ones can damage us. Based on the explanation, further research is needed on the Effect of the Use of Gadgets on the Academic Achievement of Physics Students of Faculty of Physics, Unsyiah Angakatan 2016.

METHODOLOGY OF RESEARCH

General Background of Research

The approach used in this research is a quantitative approach. The location chosen for this research is the physics student class of 2016 FKIP Unsyiah.

Sample of Research

The sample in this study was selected using purposive sampling technique. The selected sample is physics student class of 2016 Fkip Unsyiah who uses gadgets with a total number of students of 64 respondents throughout the class of 2016 with 58 students who are still active.

Instrument and Procedures

The instrument used was a Likert scale questionnaire with a total of item number 23 and an alternative answer of 4. The researcher used this questionnaire as the main data collection tool developed based on a predetermined grid. In the questionnaire technique using a Likert scale, each variable provides 4 alternative answers. Furthermore, collection techniques are also carried out using documentation.

Data Analysis

Data analysis techniques using product moment correlation and simple linear regression.

RESULTS AND DISCUSSION

As stated the data collection techniques used in this study were using a questionnaire distributed to respondents namely physics students of 2016 who used gadgets. The question items were 23. The research respondents involved all 64 students, but 6 of them were no longer actively lectured so that the respondents surveyed were 58 students. The data is obtained by using a Likert scale questionnaire technique with ordinal data and GPA data in the form of intervals, so the ordinal data is transformed into intervals where the transformation is called the Square Root transformation. So that the ordinal questionnaire data is transformed into interval data with marks x' . to seek $\bar{x} = \Sigma x' : n$ and $\bar{y} = \Sigma y : n$. The two dependent variable data and the independent variable have become interval data, so that the data can be calculated the relationship between the two variables using product moment correlation and simple linear regression. then the product moment correlation coefficient is calculated at 0.99. This states that there is a positive relationship of 0.99 on the use of gadgets to the GPA of physics education class of 2016. The price of r table for the error level of 5% with $n = 58$ obtained r table = 0.266 and for 1% obtained $r = 0.345$. Since the price of r count is greater than r table for both 5% and 1% errors ($0.76 > 0.345 > 0.266$), it can be concluded that there is a positive and significant relationship of 0.56 between the value of the use of gadgets and GPA of physics education students. The coefficient of determination $r^2 = 0,76^2 = 0,57$. This means that the average value of the use of gadgets 57.00% is determined by the GPA value of physics education students in 2016, through the regression equation $Y = 0.0065 + 1.02X$. This states that H_a is accepted and H_o is rejected so that there is an influence of the use of gadgets on physics education students GPA in 2016. Then the price of r count is greater than the price of r table, so that H_o is rejected and H_a is accepted. . In correlation analysis there is a number called the Coefficient of Determination, the magnitude of which is the strength of the coefficient (r^2). So from the above calculation results obtained $r = 0.89$ and the coefficient of determination $r^2 = 0,99^2 = 0,89$. So that the interpretation of the correlation coefficient table is very strong.

CONCLUSIONS

Based on the results obtained from processing the use of gadgets data on the GPA of 2016 physics education students is calculated using the product mement correlation, the result is 0.99. Which there is a strong positive relationship with the use of gadgets on the GPA. The data calculated using simple linear regression values obtained $r = 0.57$. This states that there is an influence of the use of gadgets on GPA at a moderate level. So that the use of gadgets will positively have an impact on the value of the GPA that will increase.

Based on the conclusions obtained, it is expected that students can use more gadgets to look for lecture material. So it will have a positive impact if the gadget is used according to the needs of lectures. Then the positive use of gadgets in lectures will increase the value of the GPA and increase insight and learning knowledge during the lecture.

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