The Effect of Learning Facilities and Family Environment on Motivation to Learn of Prospective Elementary Teacher Education on Online Learning

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Abstract

This research purpose determines the effect of learning facilities and family environment on motivation to learn of prospective elementary teacher on online learning. The research method used is descriptive quantitative. The data used are primary data obtained directly from filling out a questionnaire by 180 prospective elementary teacher education from a public University, Riau province, Indonesia. The results showed that there was a positive and significant effect of learning facilities and family environment on motivation to learn of prospective elementary teacher in learning during Pandemic, with the results of testing with the F test that obtained an F value of 21.272 with a significance value of F of 0.000 or a sig F value of <0.05. The multiple regression test results show that the coefficient of determination (R^2) is 0.440 or 44%.

Keywords: *family environment; learning facilities; learning motivation; online learning.*

1. INTRODUCTION

The Indonesian government policy is in the form of a Circular of the Minister of Education and Culture of the Republic of Indonesia Number 3 of 2020 concerning the Prevention of Corona Virus Disease (Covid-19) in the Education Unit on March 12, 2020, where lectures carried out by online learning. Follow up government's emergency responses related to the learning process in the form of social comparison as an effort to prevent, contain, or slow down the transmission of the covid-19 virus. Online learning is learning without face to face directly between lecturers and students but done online learning. Online learning is carried out through video conferencing, e-learning, non-e-learning, or distance learning. With online learning, it is expected to realize learning objectives that can be seen, one of which is the output or student learning outcomes.

One of the most significant things that can affect learning outcomes is motivation in learning (Lestari, Syahrilfuddin, Putra, & Hermita, 2019; Yuliana, Putra, & Amtosa, 2020). Motivation change energy for a person to the emergence of feelings and is preceded by responding to a goal (Donald in Sardiman, 2011). Motivation sees as a mental drive that drives and directs human behavior, including learning behavior (Dimyati and Mudjiono, 2010).

The learning process requires the motivation to drive the activities in it. Motivation is essential in determining how many students will be learning from a learning activity or how much to absorb the information presented to them (Riswanto & Aryani, 2017). Students who have strong motivation will have a lot of energy and enthusiasm to participate in learning activities regardless of their circumstances, both in face-to-face lectures and online learning. In learning activities, motivation becomes a capable driving force giving rise to learning activities and giving direction to learning activities so that the goal can be achieved (Kasdianti, A et al., 2019). Internal and external factors influence motivation to learn. Syamsu Yusuf (2009) states that learning motivation can arise due to internal and external factors. Extrinsic motivation can encourage people around students, such as parents, encouragement from friends, teachers,

the community, and other environments (Mulyani et al., 2020). Research is carried out on external student factors, namely learning facilities and family environment. The influence of learning facilities and the learning environment on PGSD FKIP Riau University students' learning motivation in online learning will be seen.

2. METHODS

This research uses a quantitative descriptive approach. The descriptive method is defined as a study that describes data factually and objectively. Quantitative research is processing data and obtaining numbers to describe the effect of learning facilities and family environment on student learning motivation. The research was conducted at prospective elementary teacher education, Faculty of Teacher Training and Education, Universitas Riau, with a population of 2018, 2019, and 2020, totaling 360 students.

Determination of the sample from the population was developed from Issac and Michael for an error rate of 5%. If the population is 360, the sample size is 180. In this study, the sampling technique used was proportional random sampling, random and proportional or balanced sampling. The list of research samples can be seen in the following Table.

Table 1. List of Research Samples for PGSD Students, FKIP Riau University

No	Class	Population (Student)	Sample Calculation	Sample
1	2018A	40	(40/360) x 180	20
2	2018B	39	(39/360) x 180	20
3	2018C	40	(40/360) x 180	20
4	2019A	40	(40/360) x 180	20
5	2019B	41	(41/360) x 180	20
6	2019C	41	(41/360) x 180	20
7	2020A	40	(40/360) x 180	20
8	2020B	40	(40/360) x 180	20
9	2020C	39	(39/360) x 180	20
	Jumlah	360		180 student

The data collection technique used in this study was a questionnaire. This study used a closed questionnaire and an open questionnaire. The following steps made the research instrument:

1. We are creating a research instrument lattice by developing variable learning motivation, learning facilities, and family environment.
2. The score calculation uses a Likert scale with a score of 1-5 (5 = always, 4 = often, 3 = ever, 2 = sometimes and 1 = never) and a table of trends.

Furthermore, the research instrument was tested to determine the level of validity and reliability of the instrument. Arikunto (2006, p.168) said that a suitable instrument must meet two essential requirements: valid and reliable. The trial subjects were taken from 60 students of the 2017 prospective elementary teacher education, Faculty of Teacher Training and Education, Universitas Riau, who were not research samples with the one shoot technique. Test data obtained to determine whether the instrument is suitable for use as a research instrument or not will be tested for validity and reliability testing. The questions were analyzed using SPSS 20.0 for windows.

a. Validation Test

1) The validation test results on the student motivation test statement in the Table above show that of the 23 questions tested, and there were three invalid statements. The correlation value obtained by this question is below the acquisition correlation limit, namely 0.254. Meanwhile, the other 20 statements were declared valid and were above the correlation value obtained.
2) The validation test results on the learning facility trial's statement in the Table above show that, of the 11 statements tested, all 11 other statements were declared valid and were above the correlation value obtained.
3) The validation test results on the family environment test

statement in the Table above show three invalid questions of the 19 statements tested. The correlation value obtained by this question is below the acquisition correlation limit, namely 0.254. Meanwhile, the other 16 statements were declared valid and were above the correlation value obtained.

b. Reliability Test
1) Test the reliability of the learning motivation instrument From the results of data processing using SPSS software, obtained a reliability value of 0.719 from 23 items of statements to 60 students. The research instrument was declared reliable, because r11 = 0.719> 0.6.
2) Test the reliability of the learning facilities instrument From the results of data processing using SPSS software, and the reliability value obtained was 0.862 from 11 items to 60 students. The research instrument was declared reliable, because r11 = 0.862> 0.6.
3) Reliability test of family environment instruments From the results of data processing using SPSS software, the reliability value obtained was 0.873 from 19 items of statements to 60 students. The research instrument was declared reliable, because r11 = 0.873> 0.6.

3. RESULTS AND DISCUSSION

Results
a. Analysis Prerequisite Test

Before conducting data analysis or testing hypotheses using multiple regression analysis, some requirements must be met: normality test, linearity, multicollinearity, and homosexuality. If these conditions have been met, the analysis can be continued.

1) Normality Test

Table 2. Normality Test Results

Variable	Value Asym Sig (2-tailed)
Learning Motivation	0,289
Learning Facilities	0,130
Family Environment	0,796

The normality test results show that the Asymp Sig value for the learning motivation variable is 0.289, the learning facility variable is 0.130, and the family environment variable is 0.796.

Based on the analysis results, the three variables have an Asymp value of Sig> 0.05, so all tested data is usually distributed.

2) Linearity Test

Table 3. Linearity Test Results

Variable		F_{count}	Sig
Independent	Dependent		
Learning Facilities	Learning	1,563	0,110
Family Environment	Motivation	1,573	0,107

From the output results in the Table above, it can be seen that the value of Sig> = 0.05, it can be concluded that the independent variable and the dependent variable have a linear relationship. In this regression analysis, the linearity requirements are met.

3) Multicollinearity Test

Table. 4 Multikolinearity Test Results

Variable	Tolerance	VIF	Conclusion
Learning Facilities	0,785	1,274	Multicollinearity does
Family Environment	0,785	1,274	not occur

Based on Table. 4 above, it can be said that the assumption is that there is no tolerance more than 0.1 so that it is free from multicollinearity symptoms and data analysis can be continued.

4) Homosedatisitas Test

Table 5. Homosedatisitas Test Results

Variable	Value Sig.	Conclusion
Learning Facilities	0,2491	Homosedatisitas
Family Environment	0,117	occurred

It can be seen in Table 4.5 above that the significance value (Sig.) The column shows the number of more than 0.05, so it can be concluded that the regression analysis meets the requirements for homosexuality.

b. Effect of Learning Facilities and Learning Environment on Student Motivation

In testing the hypothesis, namely: There is a Positive and Significant Effect of Learning Facilities and the Family Environment on Learning Motivation of prospective elementary teacher education in Online Learning Multiple regression analysis hypothesis testing with the following calculation results

Table 6.s Results of Multiple Regression Analysis

Variable	Coefisien Regresion (b)	t	Sig.
Learning Fasilities	0,071	2.909	0,004
Family Environment	0,054	3.821	0,000
Constanta	3,243		
R	0,440		
R2	0,194		
F_{hitung}	21,272		
Sig.	0,000		

Based on the analysis above, the regression line equation for the two predictors is Y = 3.243 + 0.071X1 + 0.054X2. Table 4.6 shows that the double R coefficient is 0.440, while R2 is 0.194. the Table shows that the variance in student learning motivation in online learning can be explained by 44% of the Learning Facilities and Family Environment through the model, while the rest (56%) is explained by other variables that are not taken into account in this model.

The results of the calculation of this hypothesis test, the constant value (b) is 3.243, and the regression line coefficient (b1) is 0.071, and (b2) is 0.054 positive, it can be concluded that simultaneously the Learning Facilities and Family Environment have a positive influence on student learning motivation in online learning. Significance test obtained from F_{count} of 21.272 with a significance of 0.000. Because the significance value is less than 0.05, it can be said that simultaneously the Learning Facilities and Family Environment have a

positive influence on student learning motivation in online learning.

The results of the analysis show that the research hypothesis (Ho) is rejected, and the alternative hypothesis (Ha), which reads "There is a Positive and Significant Effect of Learning Facilities and Family Environment on Learning Motivation of prospective elementary teacher education in Online Learning" is accepted.

Discussion

The research analysis shows a significant effect of learning facilities and family environment on prospective elementary teacher education learning motivation in online learning. The research shows the test results with the F test, which obtained a F_{count} of 21.272 with a significance value of F of 0.000. or the sig value F <0.05. Multiple regression testing results show that the coefficient of determination (R2) is 0.440 or 44%. The coefficient of determination shows the useful contribution of the two

independent variables to the dependent variable. The more students have adequate learning facilities and a right family environment, the higher the learning motivation. The school's role is in providing optimal facilities, and the family's role in giving attention both physically and non-physically can create comfort that will encourage students to learn. Learning facilities and family environment affect learning motivation by 44%, while the remaining 56% is influenced by other variables not examined in this study. Learning facilities are all items needed in the teaching and learning process both at home and school. So, if students in their learning are supported by facilities, complete learning so that these students will find it easier to use it (Ahmadi. A & Widodo, S., 2004, p. 88), having complete learning facilities at home will be very important and helpful for children in the learning process (Sukarni & Prihatni, 2018). Another opinion was also expressed by Dalyono (2001, p.241), saying that the complete learning facilities will help students learn, the lack of learning tools or facilities can hinder their learning progress. Learning facilities are needed to support student learning motivation, especially during online learning; when students feel that their facilities are complete and comfortable, they will have more motivation to learn. The study reinforces previous studies that revealed that there is a significant relationship between learning motivation on student achievement (Daniko, 2012; Siska Eko Mawarsih, 2013), and There is a significant beneficial effect between family environment, school environment, learning discipline as well as the motivation to study the learning achievement (Aminah, 2014).

4. CONCLUSION

There is a positive and significant influence of learning facilities and family environment on prospective elementary teacher education, Faculty of Teacher Training and Education, Universitas Riau learning motivation. The research is indicated by the F_{count} value of 21.272 with a significance value of F of 0.000. Because of the significant value of F <0.05, there is an effect of learning facilities and the family environment on student learning motivation. The coefficient of determination (R2) is 0.440 or 44%. Student learning motivation in online learning can be explained by 44% of the Learning Facilities and Family Environment through the model, while the rest (56%) is explained by other variables that are not taken into account in this model.

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