

STUDENTS' SATISFACTION WITH LEARNING USING E-LEARNING BASED ON GENDER

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ABSTRACT

Along with the increasingly rapid development of the times, especially in the field of Information and Communication Technologies (ICT), coupled with the Covid-19 pandemic, educational institutions have changed their way of carrying out the teaching-learning process from previously taking place face-to-face to virtual face-to-face teaching and learning via online network. The need for a system that can support this process change is urgently needed. Responding to this need, Almuslim University as an educational institution, utilizes its system, namely Almuslim University E-Learning. This study aims to analyze the level of Almuslim University students' satisfaction with the use of e-learning by lecturers in online learning is based on gender. The research approach used in this study is a quantitative approach, with the Accidental Sampling in the data collection technique. Respondents in this study amounted to 1,018 people. The analysis technique used in this research is descriptive statistical analysis. The results showed that Almuslim University students' satisfaction with the use of e-learning by lecturers in online learning based on gender for both male and female students was in the good category.

Keywords: *e-learning, gender, learning, students' satisfaction.*

1. INTRODUCTION

At this time as the times are growing rapidly, especially in the field of Information and Communication Technologies (ICT) which has penetrated every aspect of human life, especially in the world of education. Utilization of ICT for every element of the world of education, including for the benefit of learning there is always an increase (Ismartoyo & Haryati, 2019). The development of ICT itself can provide online learning facilities. One example is e-learning. One of the e-learning used in the learning process is based on the Learning Management System (LMS) (Larasati & Andayani, 2019).

Based on the results of a survey by the Association of Indonesian Internet Service Providers, known as APJII, information was obtained that there were 210.03 million internet users in Indonesia in the 2021-2022 period. The number of internet users increased by 6.78%, with an internet penetration rate of 77.02% compared to the 2020-2021 period of 196.7 million people. Based on age, the highest internet penetration rate is in the 13-18 years old age group, namely 99.16% and the second position is occupied by the 19-34 year age group with an internet penetration rate in Indonesia of 77.02% (Bayu, 2022).

The Covid-19 pandemic has made educational institutions change the way they carry out the process of teaching and learning activities from previously face-to-face to teaching and learning in the network (online). The need for a system that can accommodate

changes in this process is urgently needed. Responding to this need, Almuslim University as an educational institution in Aceh Province, utilized its system, namely the Almuslim University E-Learning Learning Management System (LMS) Application to facilitate online learning.

Online learning is one part of the positive aspects of using the internet because it will make it easier for students to access learning (Sadikin & Hamidah, 2020). Through online learning, the government and institutions provide a platform as a place for learning, which is managed by the government using a Learning Management System (LMS) or freely available by other agencies (Windhiyana, 2020). The Learning Management System (LMS) is an integrated and comprehensive system that can be used as an e-learning platform. LMS has several features, including learning content management, learning process management, evaluation and exams conducted online, as well as subject administration, chatting, and discussions (Larasati & Andayani, 2019).

Currently, e-learning is a support for education and is a major requirement for online learning systems at universities or colleges. The results of the 2015 Online Learning Consortium data research show that the number of students participating in online learning has increased, namely more than 5 million, around 32% of students have taken online courses, and it is estimated that this will increase by around 3.9% per year at universities or colleges. E-Learning is the biggest use of technology and the internet which provides various solutions to increase student knowledge and performance. Based on existing assumptions, e-learning will be connected to internet technology and networks and can go beyond the traditional training paradigm. E-learning based on the Learning Management System (LMS) is an integrated and comprehensive system that functions as an e-learning platform (Dhawan, 2020).

In previous research conducted by Saifuddin regarding student perceptions of e-learning using the Moodle LMS and the various aspects students need when using e-learning, the results showed that 98.8% of students knew e-learning, 86.3% supported the implementation e-learning, and 77% said they were satisfied with e-learning (Saifuddin, 2018).

Gender is a concept that is usually used to identify differences between men and women that are not related to biological aspects but are related to roles, responsibilities, needs, obstacles, and opportunities (Arbain et al., 2015). Gender differences often occur both in the community and in the educational environment. The results of research by Anggrawan et al. (2019) showed that in

mixed learning 40% offline and 60% online, the learning outcomes of male students were better than female students.

Research on Almuslim University student satisfaction with the use of e-learning by lecturers in online learning is useful to help other researchers who wish to start research as a source of information in writing lecture assignments, final assignments (thesis, thesis, dissertation), as well as articles in journals. Researchers found that not many studies have discussed student satisfaction with the use of e-learning by lecturers in gender-based online learning. In this study, researchers wanted to analyze how Almuslim University student satisfaction with the use of e-learning by lecturers in online learning is based on gender.

1.1 Satisfaction

Satisfaction can be defined as the result of comparing expected performance with actual performance or perceived results (Heriyanto, 2019). Student satisfaction can be influenced by several factors, including: appreciation of knowledge and knowledge acquired, academic services provided by tertiary institutions, support for facilities and infrastructure to meet academic needs, rules and policies related to the implementation of the academic process, as well as expectations for tertiary institutions that have provide services to students as customers (Heriyanto, 2019).

1.2 E-Learning

E-learning is a learning method using electronic media in the form of audio and or visual through internet technology (Larasati & Handayani, 2019) and multimedia that allows students to be involved in learning anywhere and anytime without having to meet face to face with the lecturer (Prayudha et al., 2020).

1.3 Satisfaction with E-learning

User satisfaction is closely related to the quality of systems and information from e-learning. If users are satisfied with the content and interface design of e-learning, then they will be interested in using e-learning. E-learning users will be satisfied if the existing e-learning matches or exceeds what e-learning users expect (Prayudha et al., 2020).

To increase student satisfaction with the services of a system and technology (in this case e-learning), systems and technology should not be a separate part of learning. (Heriyanto, 2019).

1.4 Gender

The word gender in terms of Indonesian comes from the English language "gender" which is a characteristic that is inherent in both men and women in terms of social, cultural, psychological and other non-biological aspects. These inherent characteristics and characteristics can be exchanged and can change from time to time also from one place to another, it can even occur in different social classes (Arbain et al., 2015; Ismail, 2020).

2. METHODS

2.1 Approach and Type of Research

2.2 This research approach is quantitative. Quantitative research is an approach to test objective theory by examining the

relationship between variables. These variables, in turn, can be measured using instruments, so that data quantities can be analyzed using statistical procedures (Creswell, 2012). This type of research is a descriptive study, where the researchers described students' satisfaction with the use of e-learning by lecturers in online learning based on gender.

2.3 Research Time

This research was carried out at the end of the even semester of the 2021/2022 Academic Year.

2.4 Population and Sample

The research population is all Almuslim University students who are active in the Even Semester of the 2021/2022 Academic Year. The sampling technique is Accidental sampling, which is a sampling technique based on coincidence, meaning that respondents who happen to meet researchers or are willing to become respondents can be used as samples, if deemed that person is suitable as a data source (Sugiyono, 2016). Respondents in this study totalled 1,018 students, consisting of 813 women and 205 men. All respondents were spread across 20 Undergraduate Study Programs and 1 Midwifery Diploma III Program at Almuslim University.

2.5 Data Collection Methods

The data collection method used a questionnaire in the form of a Google form developed by the Almuslim University Quality Assurance Agency and distributed online. The questionnaire consisted of 12 statement items, using a Likert Scale which consisted of 4 levels of answers, namely very good, good, average, and poor. Before the questionnaire was used, an instrument trial was carried out at the beginning of the Even Semester of the 2021/2022 Academic Year to 195 respondents who were Almuslim University students from 18 study programs and 1 Diploma III Midwifery Program at Almuslim University. The validity test was carried out using the Pearson Bivariate Correlation Test and the Reliability Test uses the Cronbach's Alpha Test. Both were tested using SPSS16.0 software.

At the research stage, respondents were sent online questionnaires containing questions or statements related to research variables. The form of the questions in the questionnaire given to the respondents is a form of closed questions using a scale of 1 to 4, which indicates levels ranging from less, sufficient, good, and very good. The data from the questionnaires that have been collected are then analyzed with descriptive statistics using the percentage formula. The existing data is displayed in graphical form and then a deeper analysis is given regarding the graph displayed so that it can describe how Almuslim University students perceive the use of e-learning by lecturers in online learning based on gender.

3. RESULTS & DISCUSSION

Almuslim University e-learning is a system as an online learning medium provided by the campus for lecturers and students, so that all learning activities can be tracked in the Almuslim University system as a whole. The overview of the Almuslim university e-learning is as shown in Figures 1 and 2 below.



Figure 1. E-Learning Front Page Display of Al-Muslim University



Figure 2. Display of E-Learning Pages Almuslim University after Lecturer Login

Collecting data in this study using a questionnaire. Before being used as a complete data collection tool, the questionnaire was first tested for validity and reliability with SPSS software version 16.0. The number of respondents used in the validity test was 195 people. The validity test in this study used the Pearson Bivariate Correlation. The results of the validity test are shown in Table 1.

Table 1. Validity Test Results of Student Satisfaction with the Use of E-Learning in Online Learning

		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
A1	Pearson Correlation	1	.750**	.714**	.649**	.543**	.680**	.552**	.547**	.558**	.557**	.537**	.586**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	196	196	196	195	196	196	194	195	196	196	196	196
A2	Pearson Correlation	.750**	1	.662**	.637**	.534**	.627**	.567**	.547**	.561**	.617**	.607**	.626**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	196	196	196	195	196	196	194	195	196	196	196	196
A3	Pearson Correlation	.714**	.662**	1	.670**	.595**	.657**	.542**	.626**	.602**	.487**	.499**	.557**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	196	196	196	195	196	196	194	195	196	196	196	196
A4	Pearson Correlation	.649**	.637**	.670**	1	.621**	.631**	.612**	.519**	.608**	.443**	.433**	.577**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	195	195	195	195	195	195	193	194	195	195	195	195
A5	Pearson Correlation	.543**	.534**	.595**	.621**	1	.585**	.478**	.430**	.473**	.310**	.318**	.545**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	196	196	196	195	196	196	194	195	196	196	196	196
A6	Pearson Correlation	.680**	.627**	.657**	.631**	.585**	1	.716**	.587**	.536**	.446**	.502**	.662**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	196	196	196	195	196	196	194	195	196	196	196	196
A7	Pearson Correlation	.552**	.567**	.542**	.612**	.478**	.716**	1	.498**	.499**	.507**	.536**	.617**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	194	194	194	193	194	194	194	193	194	194	194	194
A8	Pearson Correlation	.547**	.547**	.626**	.519**	.430**	.587**	.498**	1	.716**	.501**	.479**	.509**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	195	195	195	194	195	195	193	195	195	195	195	195
A9	Pearson Correlation	.558**	.561**	.602**	.608**	.473**	.536**	.499**	.716**	1	.601**	.481**	.580**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	196	196	196	195	196	196	194	195	196	196	196	196
A10	Pearson Correlation	.557**	.617**	.487**	.443**	.310**	.446**	.507**	.501**	.601**	1	.688**	.512**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	196	196	196	195	196	196	194	195	196	196	196	196
A11	Pearson Correlation	.537**	.607**	.499**	.433**	.318**	.502**	.536**	.479**	.481**	.688**	1	.504**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	196	196	196	195	196	196	194	195	196	196	196	196
A12	Pearson Correlation	.586**	.626**	.557**	.577**	.545**	.662**	.617**	.509**	.580**	.512**	.504**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	196	196	196	195	196	196	194	195	196	196	196	196

** Correlation is significant at the 0.01 level (2-tailed).

Based on Table 1 it appears that Sig.(2-tailed) Pearson <0.05 meant that all instrument items were valid, meaning that all statement

items in the questionnaire can be used during research to measure student satisfaction with the use of e-learning by lecturers in online learning. Reliability test can be carried out jointly on all question items or statements in the research questionnaire (Sujarweni, 2014). Reliable instruments can produce reliable data (Arikunto, 2010). The reliability test of this study used Cronbach's Alpha where the results are presented in Table 2.

Table 2. Reliability Test Result

Cronbach's Alpha	N of Items
.976	12

From Table 2 it is known that there are 12 items in the questionnaire statement with a Cronbach's Alpha of 0.976. Because the Cronbach's Alpha value is $0.976 > 0.60$, it can be concluded that the 12 item statements of the Almuslim University student satisfaction questionnaire regarding the use of e-learning by lecturers in online learning based on the results of the analysis are reliable.

The results of the research in the form of answers taken from the questionnaire that was given to the respondents to fill out are presented in Table 3 below.

Table 3. Results of Almuslim University Student Satisfaction Questionnaire Answers to the Use of E-Learning in Gender-Based Online Learning

Gender	Responses			
	Very Good	Good	Average	Poor
Male	64	82	33	26
Female	243	379	105	86

Furthermore, the following is the percentage value of Almuslim University student satisfaction with the use of e-learning by lecturers in online learning based on gender can be seen in Figure 3.

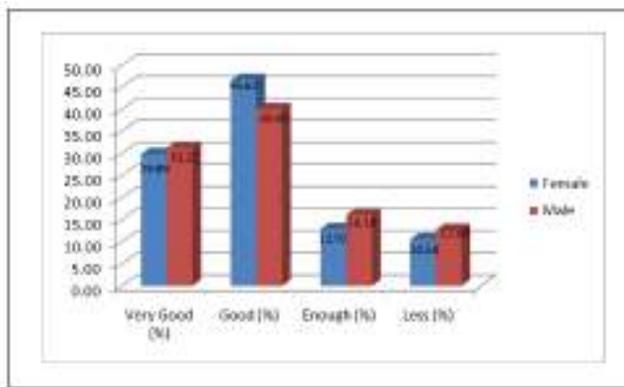


Figure 3. Satisfaction of Almuslim University Students Based on Gender on the Use of E-Learning in Online Learning

Based on Table 3 and Figure 3 it appears that both male and female students have good average satisfaction with online learning using e-learning. This is indicated by the highest percentage of answers in the good and very good categories where male students successively 40% and 31.22% respectively, while female students are 46.62% and 28.89% respectively. Almost the same level of satisfaction that says good and very good use of e-Learning by lecturers in online learning between male and female students is due to the fact that online learning has so far only taken place in a number of meetings, the rest of which is still carried out face-to-face (offline). In line with opinion of Saifuddin (2018) which states that students have a good perception of e-learning, this is influenced by the knowledge and experience of students in using e-learning. Students show their willingness to do learning with e-learning by 86.3%, besides that students support in e-learning content there are instructions that must be done with e-learning, descriptions of learning that will be carried out in class, as well as material that can be studied before learning online face to face.

The results obtained are different from research (Muzaki, 2021) which obtained the results that there were significant differences in perceptions between men and women in online learning during the Covid-19 pandemic. These differences are that women feel more comfortable answering questions given in online lectures, women prefer to be at home when participating in online learning, and women choose more learning to take place online than men after the Covid-19 pandemic ended.

Furthermore, both male and female students still have the perception that the use of e-learning by lecturers in online learning is still quite good and even tends to be lacking. Perceptions like this arise as a result of the e-learning system sometimes having errors during the learning process, this causes students to have difficulties when they have to fill in attendance lists, access materials, do exercises, discuss through discussion forums, send assignments, take quizzes, and asynchronous activities. others, causing a small number of students as respondents to have a poor perception of the use of e-learning by lecturers during online learning.

These results are in line with research of (Retnowardhani & Sianturi, 2022) who suggested the best private university in Jakarta to upgrade the e-learning system because the system sometimes experiences errors when sending exercises, assignments, and quizzes by students to lecturers which will increase user loyalty. Likewise, the quality of information also has a significant effect on user satisfaction.

4. CONCLUSION

Based on the results of the descriptive statistical tests using the percentage formula, it can be concluded that Almuslim University student satisfaction, both male and female students, regarding the use of e-learning by lecturers in online learning is included in the good category. The use of e-learning in the field of education at Almuslim University is very beneficial for lecturers and students in implementing the Teaching and Learning Process (PBM) online. There are still many parts that can be maximized by the leadership of Almuslim University so that students have even better (very good) satisfaction with the use of e-learning by lecturers in online learning, one of which is increasing bandwidth capacity and providing free wifi access that can be reached and utilized by all

lecturers as well as students to support the learning process. For further researchers, to further broaden knowledge, this research can be refined by adding other variables such as comparing the level of student achievement when carrying out conventional learning with full face-to-face (offline) with the level of achievement of students when carrying out offline learning combined with conventional learning. virtual face-to-face (online/online) using e-learning.

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