Anxiety Studentstowards Closed And Open Form Assignments On Online E-Learning Medium In Associate Degree Of Midwiferymegarezky University Makassar

Amina Ahmad¹, Yusring Sanusi Baso², Saidah Syamsuddin³, Burnahuddin Bahar⁴, Muhammad Tamar⁵, Jibril⁶

¹Program Study of Midwifery Science, Postgraduate School, Hasanuddin University
(Email: aminaylazahra@gmail.com)

²Center for Learning Media, Learning and E-LearningResources, Hasanuddin University
(Email: yusring@unhas.ac.id)

³Faculty of Medicine, Hasanuddin University
(Email: idasyam70@gmail.com)

⁴Faculty of Public Health, Hasanuddin University
(Email: Muh.tamar@unhas.ac.id)

⁵Faculty of Medicine, Hasanuddin University
(Email: Muh.tamar@unhas.ac.id)

⁶Center for Learning Media, Learning and E-LearningResources, Hasanuddin University
(Email: jibnur@yahoo.com)

Corresponding author:
Amina Ahmad S.ST, Faculty of Midwifery, Hasanuddin University Makassar
Email: aminaylazahra@gmail.com

ABSTRACT

Giving assignments is one method that can motivate students to learn or train students' level of discipline and psychomotor. This study aims to identify the effect of giving closed and open forms of assignments on the online medium of E-Learning on the level of anxiety experienced by students in the Associate Degree of Midwifery of Megarezky University, Makassar.

This study used a Combination Method between research and development methods (Research and Development) with the Experiment Method. About 55 respondents chosen by the sampling technique. The assignment was given twice, including pre-and post-test. At pre-test, the open and closed assignments to develop the product model assignment in the Indonesia Online College application were given to the students. In Post-test, the data collected only using the Google Forms Hars Scale questionnaire instrument. This research was conducted at the Department of Midwifery, Megarezky University, Makassar in
November 2020. The data were analyzed using statistical tests using the Mann Whitney test. The study found that the mean value of open assignments was 20.93, with a minimum value of 10 and a maximum value of 39. In closed assignments, the mean value was 30.98, with the minimum value was 13 and the maximum value was 48. Based on the Mann Whitney test analysis, the results of giving closed and open online assignments through e-learning mediareached a probability value Asymp Sig (2-tailed) 0.000 <0.005. There was a significant influence between giving closed and open forms of assignments on students' anxiety in E-Learning online medium, such as using the Indonesia Kuliah Online application.

Keywords: Anxiety, Students, Form of Assignment, Online E-Learning Medium, Indonesia Kuliah Online application

1. INTRODUCTION

UNESCO estimates that educational institutions' closure due to this pandemic affects half of the world's students and is spread across 114 countries. Online teaching is now a new routine for some students but presents significant challenges. Not all learners have access to this type of education, given the social disparities in many countries (UNESCO, 2020; FVG, 2020). According to UNESCO monitoring, more than 160 countries have implemented national closures, impacting 87% of the world's student population. Several other countries implement local school closures; if the closure is implemented nationally, millions of additional students will experience disruption of education (UNESCO, 2020). Universities worldwide are unsure how long the coronavirus crisis will last how it might affect faculty students' mental health. The psychological impact is a critical bully, creating anxiety and uncertainty (Araújo, de Lima, Cidade, Nobre, & Neto, 2020). The impact of high student anxiety levels has been shown to affect student academic experience in college negatively. More specifically, anxiety has been shown to impact students' cognitive and affective outcomes negatively. A study of 106 students enrolled in general psychology shows that anxiety can hinder exam performance if it cannot be solved somehow. Another study examining anxiety in sophomore engineering students found that high anxiety led to lower GPAs (Cooper, Downing, & Brownell, 2018). Learners' anxiety is one of the main challenges students experience, given the inverse associations they have on students' mental well-being and academic achievement. The consequences of student anxiety can affect students' academic performance or their physiological and psychological well-being. Also, students who suffer from anxiety can damage reasoning skills, working memory and self-esteem. Additionally, they may experience psychosomatic characteristics (including palpitations, sweaty palms, rapid breathing, panic attacks and stomach upset) (Bashir, Albadawy, & Cumber, 2019). The prevalence of anxiety increases among college-age students. The adverse effects of anxiety on student health and academic performance are pressing concerns for college counselling centres. The American College Health Association reports 60.8% of students have experienced extreme anxiety in the past year, and 24.2% of students report that anxiety
negatively affects their academic performance (American College Health Association 2017). Anxiety in college science can cause anxiety because many students experience increased academic workload coupled with new responsibilities. Besides, science classrooms have been reported to be very stressful for some students. Rigidity and difficulty in science subject matter are common causes of student anxiety (Cooper et al., 2018).

One of the internet's uses in the world of education is distance learning. There are various terms to convey distance learning ideas using the internet, namely online E-learning, internet-enabled learning, virtual learning, virtual classroom or web-based learning. Online learning was first known because of the influence of the development of electronic-based learning (E-learning) introduced by Illions University through a computer-based learning system (Ikatan Alumni Doktoral Teknologi Pembelajaran Universitas Negri Malang, 2020).

Online learning is a system that can facilitate students to learn more widely and varied. Students can learn anytime and anywhere without being limited by distance, space, and time through the system's facilities. The learning material being studied is more varied, not only in verbal, audio and motion. In general, online learning is very different from conventional learning. Online learning emphasizes the accuracy and foresight of students in receiving and processing the information presented online. Online learning is growing due to the Covid 19 pandemic. It requires everyone to avoid crowds or gather (social distancing or physical distancing) (Ikatan Alumni Doktoral Teknologi Pembelajaran Universitas Negri Malang, 2020).

Online learning, also called E-learning, involves the combined use of technology and social networks. Online learning is more flexible, accessible, convenient and cost-effective. Additionally, it increases learning opportunities and offers learners a unique learning environment than traditional learning methods. Online learning has been applied to midwifery education in many studies. It shows similar learning outcomes and greater satisfaction than traditional learning. Students' characteristics, attitudes, and needs are important factors that affect learning efficacy, outcomes, and satisfaction. Therefore, online learning can be considered an alternative method to bridge the gap between learners' learning needs and educational services (Xing et al., 2018).

Shanghai, East China, Learners' attitudes towards online learning were evaluated with a 28-item scale. Malaysian researcher, Chong developed this scale. This scale consists of six subscales related to computer use (four items), convenience and flexibility (five items), interaction with facilitators and other students (seven items), access to knowledge (two items), positive learning experiences (seven items), and the improvement of nursing care (three items). Each item is rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). A number of all items gave a total score ranging from 28 to 140. A score of more than 100 indicates a positive attitude towards online learning (Xing et al., 2018).

2. MATERIALS AND METHODS

Location and Research Design

This research was conducted at the Faculty of Nursing and Midwifery, Megarezky University, Makassar. The type of research used was the Combination Method between research and development methods (Research and Development) with the experimental method.
Population and Sample
This study's population were students of Associate Degree of Midwifery at Megaresky University Makassar level I and level II. This study was involving 55 students in the 2019/2020 school year. In this study, sampling was carried out using a total sampling technique, a sampling technique equal to the population. Those 55 students were divided into two treatment groups with two measurements, and the two would be compared.

Method of Collecting Data
The instrument in this study used the Hars Scale Questionnaire, a measure of anxiety based on the appearance of symptoms in an individual experiencing anxiety. According to the Hars Scale, there were 14 visible symptoms; each item being observed was given five levels of scores ranging from 0 (zero) to 4 (severe). Data collection carried out through the Zoom application and filling out questionnaires via Google Forms since limited direct contact by students during the Covid 19 pandemic.

Data Analysis
The data that has been collected from the results of filling out the questionnaires were processed using a computer using the Statistical Package for Social Science (SPSS) program for Windows version 25. The analysis aimed to determine the effect of students' anxiety levels toward closed and open assignment forms on online media. A univariate analysis was carried out. Analyzing the stages of research variables was determined by calculating the frequency distribution and for bivariate analysis. The data has been collected would be analyzed using the parametric pituitary test, namely the Independent Sample T-Test. This test applied for the data in ratio and usually distributed. When the data were not normally distributed, the analysis would be transferred to non-parametric testing using the Mann Whitney test or U test.

3. RESULTS

Univariate Analysis
Table 1. Descriptive Statistics of Students' Anxiety with Closed and Open Assignment Forms on Online E-Learning Medium

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open assignment</td>
<td>55</td>
<td>10</td>
<td>39</td>
<td>20.93</td>
<td>7.105</td>
</tr>
<tr>
<td>Closed assignment</td>
<td>55</td>
<td>13</td>
<td>48</td>
<td>30.98</td>
<td>5.642</td>
</tr>
<tr>
<td>Valid N</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Primary data

Table 1 is descriptive statistics, provides information about the average accumulation, standard deviation, and the number of samples used as the research object. The average value of giving open assignments with a sample size of 55 was 20.93. The minimum average value was 10, and the maximum value was 39, with a standard deviation of 7.105. Those indicated
that the respondent's anxiety level toward the open assignments was at a moderate anxiety level.

Meanwhile, the average value of giving a closed assignment form with a sample size of 55 was 30.98. The minimum and maximum value were 13 and 48, with a standard deviation of 5.642, indicating the respondents' level of anxiety toward closed assignments was at the level of severe anxiety.

Table 2. Frequency Distribution of Results of Giving Open Assignments in the Online E-Learning Medium.

<table>
<thead>
<tr>
<th>Class Intervals</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 – 15</td>
<td>16</td>
<td>29</td>
</tr>
<tr>
<td>16 – 21</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>22 – 27</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>28 – 33</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>34 – 39</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Primary data*

Table 2 shows the respondent's anxiety to the question item from filling in the google forms hars scale questionnaire. Those were executed by giving the open assignments was 16 respondents with a total score of 10-15 and a percentage of 29%, categorized mild anxiety level. About 15 respondents with a total score of 16-21 and a percentage of 27% were at a moderate level of anxiety. Also, 15 respondents with a total score of 22-27 and a percentage of 27% were at a moderate level of anxiety. Seven respondents with a total score of 28-33 and a percentage of 13% were at a severe level of anxiety. In comparison, two respondents with a total score of 34 - 39 and a percentage of 4% were categorized a very severe level of anxiety.

Table 3. Frequency Distribution of Giving Closed Task Forms in Online E-Learning Medium.

<table>
<thead>
<tr>
<th>Class Intervals</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 – 19</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20 – 26</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>27 – 33</td>
<td>39</td>
<td>71</td>
</tr>
<tr>
<td>34 – 40</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>41 – 46</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>47 – 53</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>55</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

*Source: Primary data*

Table 3 shows the total score of the respondent's anxiety to the question item from filling in the google forms questionnaire on the hars scale by giving closed assignments was one respondent with a score of 13-19 and a presentation of 2% being at a mild anxiety level.
level. About four respondents with a total score of 20-26 and a percentage of 7% were at a moderate level of anxiety. Then, 39 respondents with a total score of 27-33 and a percentage of 71% being a severe level of anxiety. Three respondents with a total score of 41-46 (5%) and two respondents with a total score of 47–53(4%) were at a very severe anxiety level.

**Bivariate Analysis**

Table 4: Normality Test of Students’ Anxiety with Closed and Open Assignment on Online E-Learning Medium.

<table>
<thead>
<tr>
<th>Kolmogorov – Smirnov</th>
<th>Statistic</th>
<th>Df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open assignment</td>
<td>0.108</td>
<td>55</td>
<td>0.166</td>
</tr>
<tr>
<td>Closed assignment</td>
<td>0.208</td>
<td>55</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 4 shows that the normality test used to determine the data obtained were normally distributed or not. Data were classified normally distributed if the significance level was > α 0.05. If the significant level was < α 0.05, the data was classified as not normally distributed. Based on the Kolmogorov Smirnov Normality Test on the results of giving the form of an open assignment, the value of p = 0.166 means p > α 0.05, indicated that the data was normally distributed. Whereas, in the results of giving the closed assignment, the value of p = 0.000, means p < α 0.05, indicated that the data was not normally distributed. Thus, the Homogeneity of Variance Test was carried out to determine the type of data testing.

Table 5. Homogeneity Of Variance Test

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based On Mean</td>
<td>7.907</td>
<td>108</td>
<td>0.006</td>
</tr>
<tr>
<td>Based On Median</td>
<td>8.710</td>
<td>108</td>
<td>0.004</td>
</tr>
<tr>
<td>Based On Median And With Adjusted Df</td>
<td>8.710</td>
<td>105.868</td>
<td>0.004</td>
</tr>
<tr>
<td>Based On Trimmed Mean</td>
<td>8.277</td>
<td>108</td>
<td>0.005</td>
</tr>
</tbody>
</table>

*Homogeneity Of Variance Test*

Table 5 shows the homogeneity test used to determine whether the data have the same variant value or not. It was classified the same or no different (homogeneous) variant value if the significance level was > 0.05. If the significant level was < 0.05, it could be classified not the same variant value (not homogeneous).

The Homogeneity of Variance Test table shows that the probability value (Sig) based on the mean was obtained by 0.006 < 0.05. It means that the data had unequal variants (not homogeneous). The conclusion drawn from the homogeneity test was that the data were not normally distributed with non-homogeneous variants. So, a non-parametric hypothesis test was carried out using the Mann Whitney test.
Table 6 Results of the Mann Whitney Test Analysis

<table>
<thead>
<tr>
<th></th>
<th>Median (Minimum - Maximum)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open assignment (N = 55)</td>
<td>21.00 (10 – 39)</td>
<td>0.000</td>
</tr>
<tr>
<td>Closed assignment (N = 55)</td>
<td>30.00 (13 – 48)</td>
<td></td>
</tr>
</tbody>
</table>

*Mann Withney Test*

Based on Table 6, the results of giving closed and open assignments on the online e-learning media had a probability value of Asymp.Sig (2-tailed) 0.000 <0.005 indicated an effect of giving closed and open assignments in the online e-learning media on students' level anxiety in doing assignments.

4. DISCUSSION

Products developed through needs analysis and product design by making closed and open assignments in the *Indonesia Kuliah online* (IKO) application / Indonesian online college application. This application can be accessed on the website of https://indonesiakuliahonline.com site (Figure 1.)

This study was divided into two groups: the group giving closed assignments and giving open assignments. Each of which consisted of 55 respondents. Researchers conducted this research preceded by a pre-test giving the form of closed and open assignments. This pre-test aimed to test the product model for closed and open assignments in the *Indonesia Kuliah Online (IKO)* application (Indonesian Online Lecture Application) after conducting a trial analysis and refined the assignment form model. After conducting the pre-test, the researcher researched by giving open assignments to 55 respondents in the second week of the study.
then filled in the google forms a Hars Scale questionnaire for giving open assignment forms. In the fourth week of the study, giving closed assignment forms continued by filling out the google forms questionnaire Scale Hars for assigning a closed assignment. According to (Darmanto, 2012) in the research titled "Effect of Intensity of Giving Homework toward the Class X Student Achievement in Light Vehicle Engineering Students" at Muhammadiyah Vocational high school - Prambanan, and Muhammadiyah 3 Vocational High School – Yogyakarta, showed a difference in learning achievement. By using the variable assignment, the students given homework with high intensity. The achievement learning is higher than students who given homework with low intensity, with t count = 8.109, which is greater than t table = 1.655. This is in line with the finding of (Warsiyo, 2006), titled "The Effect of Assignment on Learning Achievement of Building Statics Calculation in Class I Semester 2 Students Department of Building at Bina Karya 1 Vocational High School, Karanganyar, Kebumen, Academic Year 2002/2003. The results indicated a significant difference in learning achievement between students given assignments and did not give assignments. The two results of the research mentioned above illustrate the importance of giving assignments to improving student learning outcomes. Also, Both research found differences with this study's results, although they have the same variable, assignment variable. However, our research measured the level of student anxiety in facing the assignment by polarizing the implementation of the "Indonesia Kuliah Online" application. The application "Indonesia Kuliah Online" application during the Covid 19 pandemic has its impact on students, one of which is the level of anxiety in depositing assignments. It is influenced by the uneven internet network throughout the archipelago. In theory, according to (Nevid, 2010), anxiety is a state of apprehension or a state of worry that complains something terrible will happen soon. Anxiety becomes abnormal when the level is not following the proportion, the threat or if it seems to come without a cause if it is not a response to a changing environment. Excessive anxiety can cause students to experience psychosomatic problems. Psychosomatic symptoms are including feelings of anxiety, tension, fear, sleep disorders, intelligence disorders, feelings of depression (gloomy), somatic/physical symptoms (muscle), somatic/physical symptoms (sensory), cardiovascular symptoms, respiratory symptoms, gastrointestinal (digestion) symptoms, urogenital symptoms, autonomic symptoms, and behavioural symptoms (attitude) (Hamilton in Mcdowell, 2006). When experiencing anxiety, the body system will increase the sympathetic nervous system, causing changes in the body's response (Patimah, Suryani, & Nuraeni, 2015). This research revealed the level of student anxiety in implementing the application "Indonesia Kuliah Online" in giving open forms of assignments. The level of anxiety experienced by students was 29% with a total score 10-15 (mild anxiety), 27% with total score 16 – 21 (moderate anxiety level), 27% with a total score 22 - 27 (moderate anxiety), 13% with a total score 28 – 33 (severe anxiety), and 4% with a total score 34 - 39 (very severe anxiety level). The results on giving a closed assignment form on the Formative Test menu showed that 2% with a score of 13-19 (mild anxiety), 7% with total score 20-26 (moderate level of anxiety), 71% with a total score of 27-33 (severe anxiety), 5% with a total score of 41 - 46 and 4% with total score 47 - 53 (both classified very severe anxiety).
Thus, there was an effect of giving closed and open forms of assignments on the online e-learning media against students' anxiety levels.

5. CONCLUSIONS AND SUGGESTIONS

The study revealed the *Indonesia Kuliah Online (IKO)* application in providing closed and open assignments on E-Learning online medium. Specifically, to know the anxiety level of students in doing assignments. It can be concluded that there was a significant effect on giving closed and open assignments through E-Learning media on the level of anxiety experienced by students.

The online medium of E-Learning is an alternative to distance learning and a very effective alternative during the Covid 19 pandemic. In this modern era, students are required to operate electronic devices, mainly computer devices. It aimed to strengthen the effectiveness of the distance learning process. Learning using this online media needs to be developed well. Hence, students are familiar with the online system and can make it easier for students to access their lessons and do assignments given by the teacher.

6. REFERENCES


