

Medical Student's Perception Toward Online Learning Behavior During Covid-19 Pandemic

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ABSTRACT

Nowadays, online learning has become a widespread practice as an integrated education technology during the COVID-19 pandemic. Learning is best viewed from the perception of students because they have direct experience of it. This study aimed to analyze the correlation between medical student's perception toward online learning behavior. This was a cross-sectional study at the Al-Azhar Islamic University, Mataram, West Nusa Tenggara. A total of 260 medical students were enrolled in this study. The dependent variable was online learning behavior and the independent variable was student's perception. Data were collected using questionnaires and analyzed using Chi-square table 2x2. Medical student's perception was correlated with online learning behavior during pandemic COVID-19 (OR= 2.78; p<0.001), and it was statistically significant. This study concludes that online learning behavior is associated with the medical student's perception of online learning during the COVID-19 pandemic.

Keywords: medical student, e-learning, perception, learning behavior

1. INTRODUCTION

Since 2019, the world faced a COVID-19 emergency situation. World Health Organization (WHO), define coronavirus disease (COVID-19) as an infectious disease caused by the newly discovered coronavirus. On January 30, 2020, WHO assessed the risk due to the virus at the global level and determined the status of the pandemic. Therefore, the Government of Indonesia, based on the Government Regulation Number 21 of 2020, has decided to implement large-scale social restrictions (PSBB) in Indonesia [1].

The large-scale social restrictions (PSBB) regulation is also applied in West Nusa Tenggara (NTB). On June 5, 2020, the Governor of NTB stated that residents were required to quarantine (Governor Regulation Number 31 of 2020) concerning the prevention and handling of COVID-19. Large-scale social restrictions certainly affect the field of education because they have an impact on the learning process in all schools and universities in NTB, especially for medical students at Faculty of Medicine, Al-Azhar Islamic University [2].

The United Nations Educational, Scientific and Cultural Organization (UNESCO) supports the implementation of PSBB regulation and recommends online educational applications and platforms those schools and teachers can use to reach students remotely [3]. This situation prompted the Indonesian Ministry of Education and Culture to prohibit universities from carrying out face-to-face learning and turn into online learning [4].

Online learning is learning that uses the internet network or some other technology with accessibility, connectivity, flexibility, and the ability to generate various types of learning interactions [5]. This learning has many advantages including allowing lecturers and students to interact in virtual classes that can be accessed anywhere and anytime, making students more responsible, motivated and independent in understanding and completing assignments given by lecturers [6, 7].

Although online learning is the best choice during the COVID-19 pandemic, this learning has many obstacles including internet network connections, limited quota, understanding in receiving material

presented by lecturers in both practical courses and theories [8, 9].

The next challenge for online learning especially for medical students is how to not only increase knowledge, but also clinical and social skills. Therefore, online learning requires well thought out strategies and a more active approach. To achieve this, it's necessary to analyze medical student's perception of online learning during the COVID-19 pandemic for evaluation as a consideration to improve learning and minimize obstacles during learning. Perception is a process of combining and organizing data, originated and developed by senses and in the end can provide awareness of what is around us and including self-awareness. Perception also describes the involvement of the communication process through oral, expectations and related to the experiences that have been experienced [9].

Medical students' perception of online learning will certainly describe what online learning is taking place either positively or negatively. This is assumed to have an effect on learning behavior during online learning during the COVID-19 pandemic. Therefore, this study aims to determine the correlation between medical students' perception of online learning during the COVID-19 pandemic and their learning behavior.

2. SUBJECTS AND METHOD

2.1. Study Design

This was a cross-sectional study carried out in July-August 2020 in Al-Azhar Islamic University, Mataram, West Nusa Tenggara, Indonesia.

2.2. Population and Sample

The population of this study was all medical students from the Faculty of Medicine, Al-Azhar Islamic University, Mataram, Indonesia. A total of 260 medical students were selected using simple random sampling.

2.3. Study Variables

The dependent variable was online learning behavior and the independent variable was student's perception.

2.4. Data Analysis

The study subject responses were collected in the form of primary data from an online questionnaire (google form). The data obtained were then analyzed using multivariate analysis (Chi-square) to examine the relationship between variable independent and variable dependent of this study.

2.5. Research Ethic

Research ethic in this study obtained from the Ethics Committee of the Faculty of Medicine, Al-Azhar Islamic University, Mataram, Indonesia, with number: 30/EC/FK-06/UNIZAR/VIII/2020.

3. RESULTS

After the study data were obtained and analyzed, the results of this study can be shown in the **Table 1**.

Table 1. The results of multivariate analysis Chi-square (bivariate)

Variable	Online Learning Behavior				Total		OR	p
	Negative		Positive		N	%		
	N	%	N	%				
Perception								
Negative	60	43.17	79	56.83	139	100	2.78	<0.001
Positive	26	21.49	95	78.51	121	100		

The Chi-square analysis showed that perception was related with the student behavior during online learning, and it was statistically significant (p<0.001). The OR value resulted was 2.78, which means that students with positive perception had the possibility to behave well by 2.78 times compared to students with bad perception of online learning. The p value <0.001 indicates that there

was a significant relationship between perception and student behavior during online learning.

4. DISCUSSION

The learning process of the Faculty of Medicine at Al-Azhar Mataram Islamic University was conducted online during the COVID-19 pandemic. Online learning

is a learning method that does not require face-to-face between lecturers and students but utilizes internet networks or some other technology with accessibility, connectivity, flexibility, and the ability to generate various types of learning interactions [5, 10].

Online learning has both a positive and a negative side. The positive side of online learning includes enabling lecturer and student to interact in virtual classes (mostly Zoom) that can be accessed anywhere and anytime, making students more responsible, independent in understanding and completing their assignments, and also increasing the role of students in learning [6, 7, 10]. The negative side of online learning has to do with the obstacles experienced among medical students. Student obstacles in online learning include network connections, limited quota, and understanding in receiving material presented by lecturers in both practical courses and theory [8, 9].

The positive and negative sides of online learning were analyzed from the perception of medical students at Al-Azhar Islamic University, Mataram, West Nusa Tenggara, Indonesia. Perception is the interpretation given by the individual to the stimulus what it receives. Stimulus can be in the form of objects or events that are accepted by the human senses or felt by feelings [11]. Siregar (2013) explained from his study that positive perception describes a positive view or as expected from the object being perceived. Meanwhile, negative perception describes a negative view, contrary to what is expected from the object being perceived [12].

Student's positive or negative perception of online learning are influenced by several factors. According to Ichayati (2012), the factors that influence perception are the concentration or concentration of all individual activities aimed at lecturers; one's expectations of stimuli that will arise; temporary or permanent needs will influence perception; the value system prevailing in a society affects perception; personality traits (such as indifference, arrogance, and sensitivity to environment and objects) [13]. According to Saifuddin (2017), students who have a good perception of online learning are influenced by students' knowledge and experience in using online learning tools. In this study, internal factors (internal student conditions) and external (lecturer competition, infrastructure) during online learning led to positive or negative perception [14].

The perception of medical students both positively and negatively correlated with learning behavior during online pursuits during the pandemic. Statistical tests showed that medical students' perception correlated significantly with online learning behavior which was significant based on statistical tests (OR = 2.78; $p < 0.001$). This shows that students' perception affects

their learning behavior. According to Mayasari et al. (2010) that the object of perception that is considered unpleasant has negative behavior and vice versa. The use of teaching methods in monotonous online learning results in boredom so that his behavior in terms of listening to material or doing assignments and so on becomes negative. On the other hand, interesting online learning motivates students to learn so that it has a positive effect on their learning behavior [15].

Learning motivation that triggers positive learning behavior is influenced by student perception. Medical students who have high learning motivation are proven to have positive perception of online learning according to Ichayati (2012). Learning motivation is influenced by perception of learning facilities. Students' positive perception about learning facilities have a positive effect on student learning motivation and vice versa. Therefore, students' perception of online learning is proven to influence learning motivation which triggers positive learning behavior [13].

Perception also affects the intention to do something. Sulistomo (2012) reported that perception has a positive influence on the intention and behavior of taking an action [16]. Someone will have the intention to do a behavior when they have a positive perception of the behavior. In this study, students' positive perception of online learning triggered their intention to do online learning so that it had a positive effect on their learning behavior.

5. CONCLUSION

This study concludes that online learning behavior is associated with the medical student's perception of online learning during the COVID-19 pandemic. Future study is needed to explore more factors that also affect learning behavior directly or indirectly.

AUTHORS 'CONTRIBUTIONS

Dina Qurratu Ainin, Artha Budi Susila Duarsa, and Dian Rahadiani contribute equally in this manuscript e.g., conceived and designed the analysis, collected the data, analyzed the data, and wrote the paper.

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