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The students learning habit and online learning improvement during covid-19 pandemic

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ABSTRACT

Coronavirus disease (COVID-19) has rapidly spread around the world, including in Indonesia. Some precautionary health protocol measures have been implemented due to this high infection virus, including campus class suspension. This condition made up the students learning habits has been changed. This research aimed to analyse their learning habit and educator's Improvement in online learning during this pandemic. Qualitative research by observation and questionnaires was used in this study. For observation, this research used controlling and evaluating health faculty and university instruments. One hundred and twenty-seven responses participated in this survey. The inquiries were divided into three significant questions: language and information technology skills, duration time for learning, independent and instructional, and student participation. The research obtained that there was a decline in students learning habits during this pandemic. Thereby the educator's Improvement, including the learning material, educational delivery method, and evaluation and assessment, must be required. Accordingly, the development and innovation of learning improvement should be continuously done.



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Introduction

Coronavirus disease (COVID-19) has rapidly spread around the world. Asia, Europe, America, including Indonesia, get the disease (Organization, 2020). It had a high impact on whole life, including the education and learning process. It also changed the way of training and learning. Some precautionary health protocol measures, including learning and working from home, have been implemented due to the high infection and risk of this virus. Campus class suspension and other education levels also postponed their learning process (Allcott et al., 2020; Nicola et al., 2020; Plancher, Shanmugam, & Petterson, 2020). The student prohibited going back to their hometown. Thereby students carried out the learning process from their hometown. This condition made up the students learning habits has been changed. Therefore educator improvement in a learning process during this pandemic is needed.

National standards of higher education implied that every university needs to inquire about the students with critical thinking, creative, communicative, collaborative, and ICT skills. In general, the learning process should achieve the learning achievement in transferable the student's classroom learning skill to real-life conditions (Deacon & Hajek, 2011; Dede, 2010; Setiawan, Malik, Suhandi, & Permanasari, 2018). Particularly in pharmacies education, every university or higher education must equip their students with

various learning methods, such as problem-based learning, problem-solving, project-based learning, critical thinking, and problem-solving. Critical thinking is used to analyze and solve complex patient problems, analyze and produce pharmacy's equipment for practice, and solve environmental issues based on pharmacist skills (Education, 2015). All the learning achievement above must be required for students to improve their competence even though it is in this pandemic. Therefore, the learning process should be supported not only by instructional methods but also the various forms of teaching and learning in theory and practice. Thereby, some empirical studies and research aimed to improve the transferable skill process and learning process. Research on teaching method or model or approach to enhance the critical thinking skill have been done included problem-based learning (Surya & Syahputra, 2017; Vandenhouten, Groessl, & Levintova, 2017), guided inquiry learning, problem-based approach (Wang, Li, Pang, Liang, & Su, 2016), collaborative work approach, creative problem solving, project-based learning (Dole, Bloom, & Kowalske, 2016; Shih & Tsai, 2017). For improving, critical thinking skill and practicum thinking skill through practicum also have been done (Haritani, Febriani, Puspita, & Arviana, 2019; Setiawan et al., 2018).

Nowadays, educators' difficulties in educational delivery processes must be faced in this pandemic situation. Campus class suspension nor the theory and practice become a consequence of the COVID-19 health protocol. Furthermore, for solving this problem, universities and other level education were doing online learning as the education process (Crawford et al., 2020; Dwivedi et al., 2020). Thereby, information technology and technology platforms' utilization included virtual meetings, e-learning, and mobile-devices apps were significantly used (Chen et al., 2020; Huang, Liu, Tlili, Yang, & Wang, 2020). For virtual meetings, the learning process used various platforms as Skype, Google meets, and zoom. Webinar and podcasts are also used rapidly to survive in this pandemic (Taha, Abdalla, Wadi, & Khalafalla, 2020). Most of those platforms required excellent network stability and high internet data capacity. Our previous research analysed that students in Universitas Hamzanwadi have high intensity and frequency in using the internet. This data becomes primary data to develop and improve a learning system (Doni Septu Marsa & Yuyun, 2018). But in this pandemic situation, students are prohibited from going back to their hometown. As a result, the learning process has obstacles in network stability and internet data capacity. Thereby, Improving the learning method and approaches appropriately with this challenging condition was required. As educators, we must be selective highly in choosing the learning method and the best platform to achieve our goal as a standard education process (Goldie, 2016).

This research focused on analysing students' learning habits and learning improvement in the online learning process during pandemic situations. Observation and spreading the questionnaire approach in the pharmacy students were used in this research. Thereby, controlling and evaluating the learning process should be done continuously. There are various researches in improving the learning method. Still, none of our best knowledge focused on students' learning habits and improved learning methods and online learning approaches during this pandemic. This research objective analyses the student's learning habits and learning improvement, including models and online learning techniques during a pandemic situation. Knowing the student's learning habits during online learning made us more comprehensive in choosing and considering the online process's learning method and approaches appropriately with our condition, as unique as the COVID-19 pandemic. Further, our research aimed to answer the following questions: 1) How does the student's learning habit in online learning during the pandemic condition 2) What are the educator's improvements in online education during the pandemic condition?

Method

Design

In this research, we used an inductive approach of qualitative descriptive (Kemparaj & Chavan, 2013; Van Wyk, 2012). For collecting the data, observation during online learning and questionnaires were used for all undergraduate of medicinal faculty students at the specific time after the final examination (Fathy & Morsy, n.d.; Morgan, Pullon, Macdonald, McKinlay, & Gray, 2017; Rayhan et al., 2013).

Participants

For participants, we used the purposive sampling technique for spreading the questionnaires. All the under graduated students of medicinal faculty in each grade at Universitas Hamzanwadi, east Lombok, participated in fulfilling the questionnaires. Amount of 127 student's responses followed in this survey. They were 25 man and 102 women with an interval age around 18-23 years old. They were divided into a different home town which spread in the various provinces in Indonesia, such as East Nusa Tenggara (NTT), West Nusa Tenggara (NTB), and Sumatera.

Data Collection

The observation and survey of questionnaires were used for data collection in this research. The representation of observation and survey was investigated during online learning and divided into three important questions. There were language and information technology skills, duration time for learning, independent and instructional, and student participation

Data Analysis

The amount of 127 responses of descriptive analysis and the percentage was used for analysing the data. There were three significant questions of the questionnaires and observation sheet in online learning during this pandemic situation.

Results and Discussion

The Qualitative Description of Online Learning Process: Observation Result

The Indonesian government announced Covid-19 disease officially on the first of March 2020 (Organization, 2020). Further, West Nusa Tenggara Province gave the official announcement on the twenty-fourth of March 2020 after one of their civil society infected positively with this virus (Ayuningtyas, Haq, & Utami, 2020). Thereby, Universitas Hamzanwadi has started to perform online learning on the sixteenth of March 2020 as work from home and learning from home. Instead of the learning process was begun on the ninth of March 2020 in the pharmacy faculty of Universitas Hamzanwadi. Uncertainty time of this pandemic ending made us give our best efforts to provide educational delivery appropriately as a normal process. Therefore working and learning from home continuously held until the end of the even semester until the next semester.

Based on this pandemic situation, the pharmacy department of health faculty spread the evaluation sheet to monitor and evaluate the online learning process. The lecture must fulfill this evaluation sheet after giving the class. The evaluation sheet included the identity of the item and performing online learning. For identity, there were names of lecture, name of a subject, class/semester, date and time, the name of faculty and department, and time of evaluation, for performing online learning included a resume of subject matter, online platform learning, teaching materials, the number of participated students, learning assessment, and the problem or obstacle in online learning during a pandemic. The evaluation process was held each month by the dean and head of the department. The university also spreads the instrument of monitoring and evaluating at the end of the semester or after the final exam used in this research. This instrument included performing the lectures in the delivery of the learning process. Students fulfilled the tool by online procedure and saved automatically. The evaluation sheet of the health faculty show on the following figure below:

UNIVERSITAS HAMZANWADI LEMBAGA PENGEMBANGAN PEMBELAJARAN DAN PENJAMINAN MUTU		
Formulir Pemantauan Pelaksanaan Pembelajaran Online		
A. Identitas		
Nama Dosen		
Nama Mata Kuliah		
Kelas/Semester		
Jadwal Perkuliahan Online	Hari/Tanggal	Waktu (Jam)
Fakultas (Tempat mengampu MK)		
Program Studi (Tempat mengampu MK)		
Diperiksa oleh	Dekan (Tgl diperiksa)	Korprodi (Tgl Diperiksa)
B. Pelaksanaan Pembelajaran Online		
Materi Pokok yang diajarkan (Ringkasan)		
Platform Daring yang digunakan		
<input type="checkbox"/> Google Classroom <input type="checkbox"/> WhatsApp <input type="checkbox"/> Edmodo <input type="checkbox"/> Email <input type="checkbox"/> ClassDojo <input type="checkbox"/> Video Tutorial <input type="checkbox"/> Lainnya, sebutkan (ringkasan materi yang kemudian difoto dan dibagikan ke group Whatsup)		
Bahan Ajar yang digunakan		
Jumlah Mahasiswa yang Aktif dalam Pembelajaran Online		
a. Aktif = orang b. Tidak Aktif = orang		
Penilaian Pembelajaran		
Kendala/Masalah yang dihadapi		
Terkendala dalam masalah jangkauan dan kecepatan akses. Demikian, semoga pembelajaran Online ini dapat dikembangkan di masa mendatang.		

Figure 1 <The Evaluation Sheet to control and evaluate the online learning process>

During pandemic conditions, the online learning process has problems from the evaluation instruments, including teaching materials, teaching methods, and approaches with the various platforms, internet data capacity, and network stability. Thereby, students and lectures still adapted to this new condition, including in the education process. Therefore, learning Improvement must support this pandemic situation (Crosby Joy, 2000; Roehl, Reddy, & Shannon, 2013). So, appropriately teaching methods and approaches to deliver teaching material with this condition were required and improved continuously.

The Number of the students learning habit in online learning during the pandemic

In this research, for analyzing the student learning habit, three essential questions of questionnaires that spread on Google form format. There were language and information technology skills, duration time for learning, independent and instructional, and student participation. The results of the study were:

1. Language and information technology skill

One of the three major questions in the questionnaires is language and information technology skills. This description is highly crucial in knowing the level of language and technology skills of health faculty students. Based on this information, the lecture will give their consideration about teaching material and the platform of online learning that they want to use. Thereby, the class can compose the appropriate content learning and platform with student's conditions in this pandemic. The data of language and information technology skill shown in the following figure below:



Figure 2 <Language and Information Technology Skill>

Based on the data above, students of health faculty in Universitas Hamzanwadi have an intermediate language and information technology skills. Therefore, the online learning process's content material should be composed in the Indonesian language, particularly in this pandemic situation. Further, the familiar platform should be used in the delivery of the teaching material. If the teacher or lectures want to use or develop a new platform, they should be given the extra time to explore the new platform before using it. The course also gave the direction and explanation if the platform or online learning process required the information technology skills to achieve the learning process. To complete the learning process's goal, it needs more time and more struggling in innovating the learning process (Hayashi, Chen, Ryan, & Wu, 2020; Schmoker, 2018).

2. Duration time for learning consisted independently and instructional.

The online learning process has specific time, including duration time in online learning in each day, duration time for students in learning independently before and during the pandemic condition, and duration time for students in learning instructional by lecture assistance. The following table below shows the data on students' learning habit in the online learning process:

Table 1 <The Descriptive Analysis and Percentage of Duration Time for Learning During the Pandemic>

Duration Time For Learning	Sum and percentage in each day			
	< 2 hours	2-4 hours	5-8 hours	> 8 hours
Students Learning Independently before Covid-19 pandemic	32 (25.2%)	75 (59.1%)	17 (13.4%)	3 (2.4%)
Students Learning Independently during Covid-19 pandemic	43 (34.1%)	56 (44.4%)	22 (17.5%)	5 (4%)
Class Online Learning	17 (13.4%)	71 (55.9%)	34 (26.8%)	5 (3.9%)
Students Learning Instructional				
Preparation of learning during Covid-19 Pandemic	99 (78.6%)	25 (19.8%)	1 (0.8%)	1 (0.8%)

Based on the data above, there was a decline in students' learning habits, particularly in independent student learning processes. Before the pandemic, the total sum of students in independent students learning was 32 students. But after the epidemic, the total sum of students was

43 students in independently learning at interval duration time less than 2 hours. The data show that around 34% of declining in independently student's learning. This phenomenon also indicates in the duration time 2-4 hours in independently student's education. There was about 33.9% of declining in student's learning habits during this pandemic condition. For another duration time, the decline of this data was not very big.

Further, the preparation of learning, most of the students (78.8%) gave their preparation less than 2 hours in every learning process or each class. Accordingly, students have no well-preparation before the learning process. We know that improving the learning method and approach appropriately with this pandemic condition was highly inquired from this data. Also, supporting the learning environment of students and teachers should be done. Emphasizing the supportive learning environment consider student's and teacher's condition. They are still adapted to this new condition (Aguilar & Valdiviezo, 2015; Rahimi, van den Berg, & Veen, 2015). Moreover, the education process was held as a normal process to achieve the learning process's goal.

3. Students Participation

The participation of students in the online learning process was also investigated in this survey. This data gave information on the student's involvement based on their self-assessment. The data are shown in the following figure below:

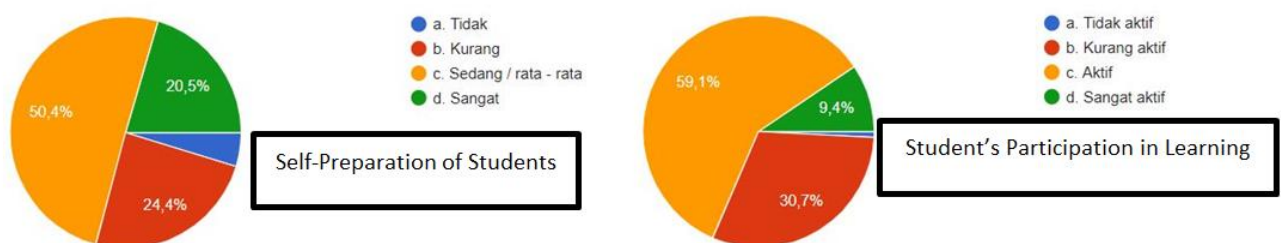


Figure 3 <Student's Participation in Online Learning During the Pandemic>

The data above show that student's participation in the intermediate level of self-preparation. The lower self-preparation and independent student learning gave a high impact on student's participation in education. From the data, students have fewer students' involvement at the number 30.7%. Thereby, the teacher should be given extra time to students for having preparation before studying. So, the appropriate teaching method, teaching approaches, and supporting learning environment were highly required.

Learning Improvement in online learning during the pandemic

As described above that the appropriate teaching method, teaching approaches, and supporting learning environment become more urgent, especially in this pandemic situation. Some learning improvements have been made in this even semester, including student's center learning approaches. The scientific method, including project-based learning, problem-based learning, guided inquiry, discovery learning, and collaborative learning, have been used for method learning. Instead of the various methods, the learning processes still have no maximum result. The problem was in online education as learning from home. The precautionary measure of health protocol, including physical distancing and social distancing, must be implemented considering this virus's highly infected. Hence, the students have a problem at collaboration or discuss time (Chu et al., 2020; Holmes et al., 2020). internet data capacity and network stability become a big problem, especially for students in a remote area. Further, the teacher used the platform that needs fewer internet data capacity, and network stability, including What's App with the content material, should be download.

For the next research, Universitas Hamzanwadi, including health faculty, will utilize the e-learning system, maximally in the odd semester. The instrument of evaluation and assessment required well-preparation. The uncertainty time of the end of this pandemic made us more effort to develop and improve the quality of the learning process.

Conclusions

In this pandemic situation, we must be fast learners, adapted, and innovated in learning improvement. From the data, research shows that there was a decline in the student's learning habits in the online learning

process. Due to this condition, educator's Improvement, including the learning material, educational delivery method, and evaluation and assessment, must be required and continuously improved. Further, the controlling and evaluating of the stakeholder and supporting environmental learning also needed.

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