Postgraduate students' perspective on supporting "learning from home" to solve the COVID-19 pandemic

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Article Info	ABSTRACT
	The objective of this present research was to reveal how the postgraduate student perceive of or respond to the online learning process. Quantitative method was adopted in this present research. The results showed that most students who had experienced of the online learning activities encountered some obstacles because they had never conducted Learning From Home (LFH) activities before. The respondents were 428 postgraduate students who actively joined in the LFH activities. There were 316 students used the platform Zoom as the supporting application in the LFH activities. Respondents filled in Google Form, then the collected data could be quickly and accurately processed. Other respondents preferred Google Classroom, WhatsApp and other applications in following the learning activities according to the agreement and features provided in each platform. There were 408 respondents experienced Two-ways communication between the lecturers and the students during the LFH activities. They stated that the limited internet network hindered the online lecturing. There were 31 respondents declared that technology limitations hampered the online lecturing and 105 students revealed that it is the limitations in using the application that caused the online lecturing to become obstacles.

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1. INTRODUCTION

The impact of the COVID-19 pandemic is increasingly being felt in many aspects of daily life, one of the aspects that is quite affected is the aspect of education [1]. Education in this time of pandemic is rapidly turning to online teaching to reduce transmission of the Virus. The majority of educators worldwide have switched to the e-learning model of learning, most of the learning and assessment is carried out using conference service provider platforms, special education portals and social media applications [2]. Prior to the COVID-19 pandemic, nearly half of educators (48%) did not use e-learning models [3]. During the COVID-19 pandemic, there was a statistically significant increase in the use of all e-learning alternatives.

In Indonesia, Corona Virus Disease 2019 (COVID-19) has given great impacts on the whole life lines of the society, including the education sector. The teaching and learning process of the students throughout the archipelago was disturbed since President of Indonesia announced the first case of the first patient suffering from the COVID-19 on March 2, 2020. The government has appealed that the education activities should be implemented from home using the internet so that the education process can go on and the students get their education rights.

In line with the government's appeal to working from home, learning at home and worshipping at home, the Graduate School, University of Muhammadiyah Prof. DR. HAMKA has been participating in changing the system of the face-to-face teaching-learning activities into the Internet-based learning at home. Each session will be noted in detail in terms of the lecturing materials and the number of students joining in the online class. Each lecturer is obliged to report his/her online lecturing every day. In line with the technology development, there are many platforms providing services to undergo online lecturing so that learning activities still go on. However, this does not mean that there is no obstacle. Some hindering factors in joining in the learning from homes activities are as: 1) Limited networks caused by geographic locations so that it is difficult to access the online lecturing platforms; 2) Limited networks that cause some difficulties in accessing the online lecturing platforms since it needs big enough data. This becomes obstacle to the students for the success on the study.

The COVID-19 pandemic has brought many challenges to higher education in terms of teaching, learning, research collaboration and institutional governance. On the other hand, this pandemic provides an excellent opportunity for various stakeholders to rethink and even redesign higher education with an effective risk management plan to increase sustainability and resilience to future uncertainties. This crisis forces higher education stakeholders to reconsider the role of information and communication technology (ICT), in particular reviewing the effectiveness of online learning in higher education. Although online learning has been treated as a remedy for higher education problems (for example increased school fees), students and instructors have expressed many negative concerns about the effectiveness of learning during this pandemic due to limited direct interactions [4], [5]. The impact of the COVID-19 pandemic has been tremendous in international higher education, especially student mobility [6], [7]. Due to travel restrictions and campus closings, many students change or cancel their study abroad plans. Therefore, higher education institutions from major destination countries, such as the US, UK and Australia, are already anticipating a sizeable decline in the number of international students entering for the coming semester. For example, from a survey conducted by the Institute of International Education, approximately 90% of US colleges and universities had anticipated a decline in international student enrollments, and 30% indicated a substantial decline in the 2020-2021 academic year [8]. A recent study published by the British Council in April 2020 showed that 39% of Chinese students, as the UK's largest source of international students, are unsure about canceling their study plans [9]. Likewise, Australia will face losses of around 150,000 Chinese students in the coming school year [10].

Technology in the field of education in the form of Web technology has now begun to be utilized in the learning process slowly began to change the face of education [11]. The World Wide Web has become a useful learning medium and has given students new learning experiences that were previously impossible. In a web-based environment, anytime and anywhere, 24 hours a day, 7 days a week, students with the help of an internet connection, can receive instructions, arrange and submit assignments, and ask questions to instructors and their fellow students. They can actively participate in class discussions from the nearest home, office or computer laboratory.

This research was focused on the postgraduate students' opinions about the internet-based learning conducted during the COVID-19 emergency period. The internet-based learning or learning from homes activities have strengths and weaknesses that may be directly felt by all students so that they may present their real perspectives based on their experiences in joining in the lecturing from home activities. Due to the technology advancement in education, face-to-face interactions in learning activities are not a must in the teaching and learning practices. This technology advancement has opened boundaries among the students and the teachers in terms of space and time. Learning that should always done in a room in a predetermined time can now be conducted anywhere and anytime as long as there is an internet connection. The concept of students as creators or pioneers involves students directly in the learning process by asking them to contribute using digital media to design learning activities, for development as 21st century learners [12]. One of the technology limitations in the world of education is the ability to use the technology maximally. Almost all students possess the technology in the forms of smartphones and laptops to support the learning activities in this era, but technical hindrances often happen during the use of the technology. This technical hindrance may be internal factors such as one's incompetence in using it or internal factors namely unstable internet or other factors out of the ability of the technology owners.

Research from various sources shows the fact that problems related to learning and technology do not originate from device errors, but are smooth in the use of these devices [13]. Just having a device does not guarantee that the owner can use the device to its full potential. Statistics on technology ownership in Australian universities collected over a decade ago show that most students have smartphones and/or tablets, and most have access to desktop and laptop computers [14]. The impacts from the education technology from the positive side are greatly useful in the COVID-19 pandemic condition where when the government has determined to learn, work, and worship from home, students and teachers still connect one another. The

teaching and learning activities may go on regardless of the distance. The teachers can directly communicate with the parents in order help monitor the students during the learning from home activities. Some researchers consider an important element in student learning interactions overall, the level of success in managing distance education that interactions between students and interactions between instructors and students as "educational transactions" there is transactional distance in the distance learning environment because instructors and learners do not interact in the same physical and temporal space [15]-[17].

Prior to the existence of e-learning, digital media had been used first in education to facilitate the absorption of knowledge in learning [18]. Based on validated evaluation questionnaires, students showed positive results that supported the use of media. Digital is taking attitudes towards technological advances, understanding assignments, construction of knowledge and digital media for learning and careers [19]. Online learning can be implemented effectively when supported by the quality of the faculty [20]. Online learning should have training related to online design and instruction. The training that must be held is adequate in the technology that applies to online teaching: How to use the online system and of course Soft-Ware, knowing what to do and who to contact when certain technological problems occur. For many developing countries, e-Learning is regarded as a solution to meet the growing demand for higher education. In Pakistan, online education is promoted as "Education for all" because it aims to reach students who live too far away from the city where higher education is implemented and cannot afford to pay conventional higher education costs [21]. E-learning solves the problems of large classrooms, increasing enrollment, and limited staff [22].

All students in Indonesia and throughout the world do not do the teaching and learning activities as usual. The COVID-19 pandemics compels the government to make a regulation to "Learn from Home" to reduce the danger of the transmission of the corona viruses. These viruses not only threaten the students but also all school citizens, as a result, the teaching and learning activities are implemented under the COVID-19. Distance learning is not peculiar in the world of education. However, the COVID-19 pandemics affects all sectors of education so that they should apply the online-based distance learning system. Certainly, this gives positive and negative impacts for various parties on the continuation of the teaching and learning process. The emergence of technological renewal and the adoption of digital technology to the world of education creates a breath of fresh new opportunities for educators to think creatively about assessment and improve long-term educational goals [23]. Bearing in mind the emergence of various skills and abilities that might be possible in a digital context - including the ease - of ease of doing online learning or online examinations [24]. The concept of learning in high education is always imagined in face-to-face-sessions with the students in the same room under the traditional view. A new paradigm appears in terms of the teaching and learning process. Under this new paradigm, face-to-face sessions in the same room are not necessary. The appearance of the internet technology overthrows the old paradigm where the teaching and learning process should be implemented in one same room and through face-to-face sessions. At present, the teaching and learning process can be done anywhere regardless of the space and time [25].

Learning activities that are routinely carried out by students at school can now be held anytime and anywhere due to advances in information technology in the form of the internet. Various online learning media are available to support the learning process without face-to-face session in the same environment and it is the positive side from the impacts of the internet technology advancement. However, the learning activities through internet need a certain management system that enables the teachers to transfer their knowledge to the students properly and thoroughly.

Distance learning known as online learning/e-learning has existed and being applied since 1980s. The first online course was conducted in 1981, and the first online program was established by the Western behavior Sciences Institute in the year 1982. This distance learning was implemented because of a condition of geographical condition between teachers and students [26]. Distance learning need interactive learning media to take attention from the students. Then, in the mid of the 20th century, efforts to develop infrastructures or learning media advanced as signaled by the use of visual tools completed with audio equipment. Therefore, an audio-visual equipment was established. One of the depictions that are mostly used as a reference as the theoretical basis for the use of media in the learning process is Dale's Cone of Experience [27].

Web-based learning or online education change the way we perform teaching and learning. Changes in education models happen very quickly. All institutions around the world adapt to this change, a highly dynamic educational landscape has generated a great interest among researchers, educators, administrators, policymakers, publishers, and businesses [28]. Criticisms related to deficiencies found in offline testing can be masked by online exams [29]. Although a number of exams can be carried out on a computer-based online basis, but most of the exams must still be of a traditional nature (e.g., books that are physically inaccessible, closed books), this can be a distinct advantage because it allows candidates to take the exam at a time or place they choose, or facilitate access to online resources [30].

Technology really brings positive impacts in terms of time efficiency but its use should be habituated. While, the weakness from using technology to support distance learning is especially felt by the elderly students and the people with lower middle economy who have not any technology to support the implementation of the distance learning process through the internet or online learning activities. Seeing many technological opportunities in providing convenience in the consistency of service in education, the whole world began to explore technology with the subject of students and other stakeholders [31]-[34]. Technological advances offer insights on learning experiences and online assessments both students and teachers [23]; for example, referring to technology digital as a tool that can be used to change an existing system [35]. Whereas, Allan says that technology brings a focus on the possibility of increasing efficiency while 'maintaining the reliability and durability of traditional methods [36]. Like other media, web-based instruction is not free from criticism. There are several limitations relating to: time-intensive commitment to develop and take web-based courses, lack of face-to-face interaction between students and their instructors, quality of education relative to class-based courses [37], feelings of isolation among students [38], [39], and lower level of online learners' completion rate. Others argue that the lack of face-to-face physical interaction is one of the main limitations in distance education because students and instructors are physically separated from each other and of course communication is mediated through internet communication tools. This physical separation becomes obstacle in terms of communication because lack of many non-verbal cues such as eye contact and facial expressions.

2.   RESEARCH METHOD

This type of research used in this research is quantitative research with a descriptive approach. The quantitative research method is one type of research whose specifications are systematic, well-planned and clearly structured from the start to the making of the research design. The technique used in data collection using survey techniques through online questionnaires using the Google Form platform.

3.   RESULTS AND DISCUSSION

The shift of the education system from face-to-face to online learning has certainly made many parties take part in this, such as creating a special educational platform for online learning. Figure 1 shows several special educational platforms for online learning that are often used by lecturers and students of the University of Muhammadiyah Prof. DR HAMKA graduate school. The population in this study were all postgraduate students at the faculty of postgraduate school University of Muhammadiyah Prof. DR. HAMKA in 2020. This is because students in 2020 are students who experience firsthand the beginning of the government policy of "learning from home" are therefore considered relevant in this study. The population in this study was 316 people.

Figure 1 shows that there were 316 respondents using the platform Zoom as the supporting application in the online-based distance learning process. Whereas, other respondents preferred to use the Google Classroom, the WhatsApp and other applications in conducting the learning activities through the agreement and features provided by each platform.
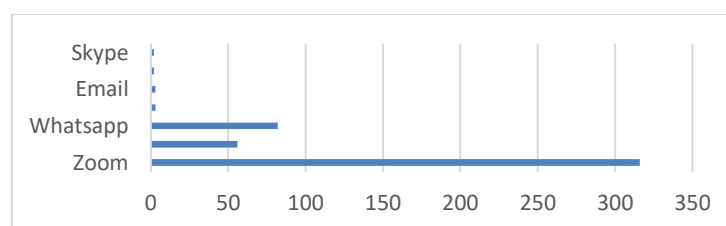

Figure 1. Online learning platform

Online learning makes learning and teaching activities more relaxed and less rigid like face-to-face learning, but this causes lecturers to often not teach on time (late in entering online classes) for various reasons. Figure 2 shows the opinions of postgraduate students at the University of Muhammadiyah Prof. DR HAMKA regarding the timeliness of teaching lecturers in online learning. From Figure 2, it is known that there were 3012 respondents stating that the lecturers implemented their online-based distance learning or the online lecturing on time in accordance with the schedule.
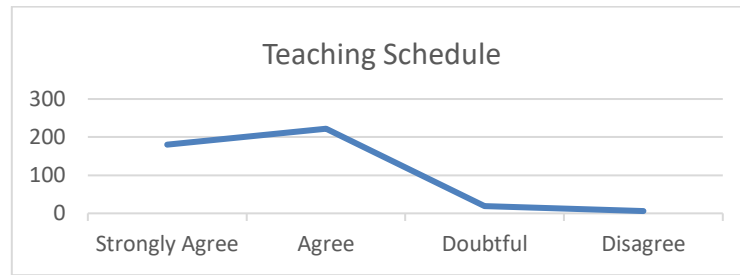
Figure 2. Timeliness of teaching lecturers in online learning

In face-to-face learning it has become a habit for every lecturer to assign assignments to students at the end of class meetings. Figure 3 shows the opinions of postgraduate students at University of Muhammadiyah Prof. DR. HAMKA related to lecturer activities assigning assignments to students in online learning. It is also shown that 398 respondents stated that the lecturers continually gave individual or group tasks each time they did their online lecturing or their online-based distance learning.
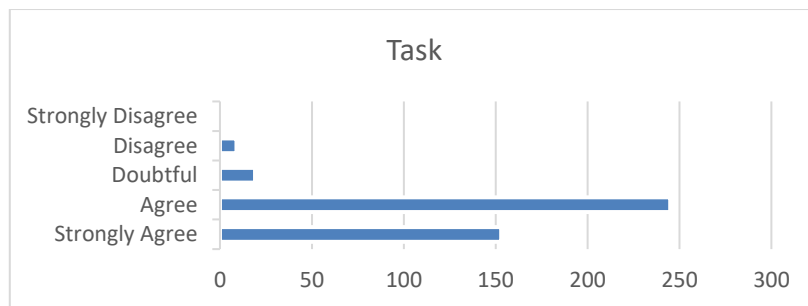

Figure 3. Lecture assigning assignments

Two-ways communication in learning activities is important in the process of absorbing knowledge by students, in online learning students tend to be more passive and not focus on learning. Figure 4 shows the opinions of postgraduate students at University of Muhammadiyah Prof. DR HAMKA is related to the existence of Two-ways communication in online learning. The data also revealed that there were 408 respondents stating that there was a two-ways communication between the lecturers and the students during online lecturing or their online-based distance learning activities.
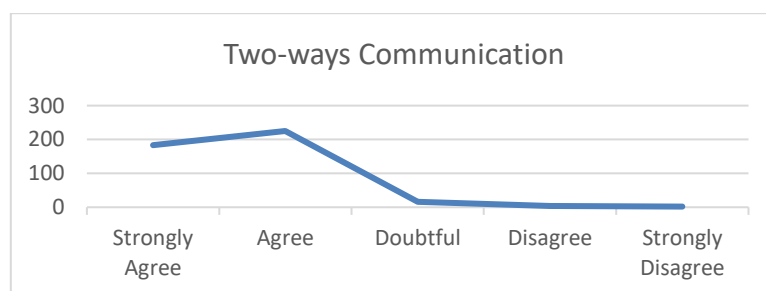

Figure 4. Two-ways communication in online learning

Every change is certainly followed by every obstacle or rejection, this is common because the ability to keep up with change is not evenly matched plus changes that come suddenly as a result of natural disasters or disease outbreaks. Figure 5 shows the opinions of postgraduate students at University of Muhammadiyah Prof. DR. HAMKA related to the obstacles to online learning.
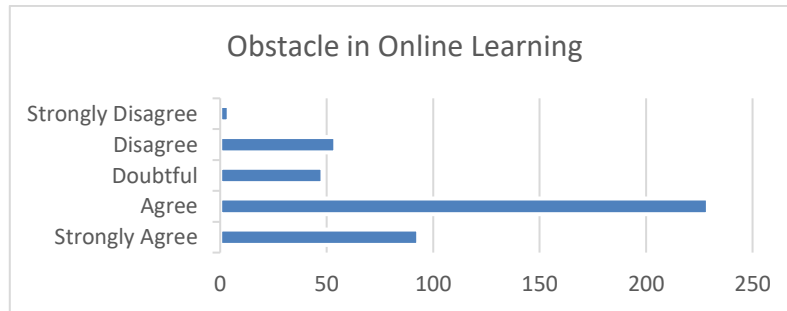
Figure 5. Obstacle in online learning

There were 412 respondents said that during online lecturing or online-based distance learning, some significant obstacles that disturbed the learning process occurred. There are many obstacles in implementing online learning, ranging from economic barriers to technical barriers. Economic barriers are due to the lack of ability to own a smartphone or gadget to take online classes and the lack of ability to purchase internet quota to access online classes. Meanwhile, the technical barriers that are often faced include a lack of understanding in the use of technology and the limited network around the neighborhood which makes accessing online classes difficult. Figure 6 shows obstacle faced by the students during online learning.
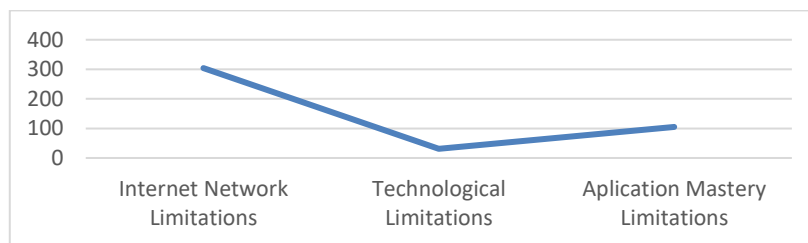

Figure 6. Various obstacles that often occur in online learning

There were 304 respondents revealing that the limited internet became the hindrance in doing the online lecturing. There were 31 respondents stated technology obstacles hindered the online lecturing, and 105 respondents said that the limitation of the use of the application hampered the online lecturing.

The application of e-learning requires both infrastructure and readiness organizational culture. This readiness is known as e-learning Readiness. Measurement of e-learning Readiness is carried out so that organizations can find out level of readiness. By knowing the level of readiness, the organization can determine the policy or strategy to be determined. Based on the results of observations carried out by the survey method to students and lecturers of the Postgraduate School of University of Muhammadiyah Prof. DR. HAMKA more using the Zoom platform and WhatsApp as a means of e-learning education even though an agency platform (UHAMKA online learning) has been provided. But in its implementation, there are still many shortcomings. The university has providing supporting facilities and infrastructure for the smooth implementation of e-learning, such as continuing to improve the UHAMKA online learning platform which is specifically provided for e-learning as well as conducting human resources training. However, the provision of technology infrastructure and human resource training is not at all ensure the successful implementation of e-learning. Most students and lecturers find it difficult to find a good internet network for learning activities.

When the COVID-19 outbreak spreads around the world and declared as pandemic, school activities (teaching and learning) shifted to online teaching. It was government decisions regarding the closure of schools, colleges and universities. Therefore, making online teaching is the best way to continue education [40], [41]. The same readiness was demonstrated by the Chinese Government under the "Postpone Classroom No Stop Learning" policy to continue standard online teaching and learning activities during the period of the uncertain situation of COVID-19 [42].

Online learning is indeed a solution to keep learning amid the pandemic. However, apart from having a positive impact, implementation online learning during this pandemic also experienced several obstacles experienced by teachers, students, and parents of students. Most of the teachers stated that teaching time is reduced and it is feared that it could have an impact on student achievement. In addition, not a few teachers, including senior teachers, still do not understand how implementing an online learning system, coupled with connections the internet is unstable because it is used simultaneously and simultaneously [43]. Another obstacle is when using a digital platform such as Zoom to conduct a meeting. In this case, not all students are capable access and participate in the meeting. The reason is at that hour people students' parents are working outside the home and there are some of them who are still not technological literacy [44].

Students are still familiar with the face-to-face learning system. Adapting to online learning certainly takes time for students. It takes a gradual process so that students are able to accept changes to the new learning system for them. Another obstacle is experienced by parents of students. Not all parents of students have gadget or computer connected to the internet, as well as it is swelling of the allocation of funds in order to meet the need for internet quota for learning online goes without a hitch. This is certainly become the burden to the parents of students considering that during this pandemic. Many parents of students lost their jobs because some of them are laid off. Apart from that, some of the parents also less accustomed to accompany students while studying at home to support online learning [45]. It is on this occasion that teachers, students, and parents need to work together in order to realize better learning so that interest student learning and student achievement can improve even during a pandemic like this time.

4.   CONCLUSION

This research found that 316 respondents used the platform Zoom as the supporting application for online-based distance learning process. While other respondents choose to use the Google Classroom, WhatsApp and other applications in executing the learning activities through the agreement and based on the features provided by each platform. In the next, dealing with the online lecturing or online-based distance learning process, it is presented that there were 302 respondents stating that the lecturers did their tasks on time in line with the schedule. There were 398 respondents said that their lecturers gave the tasks continually. There were 408 respondents saying that a two-ways communication existed between the lecturers and the students. Another 412 respondents stated that some significant obstacles disturbed the learning process and 304 respondents said the limited internet hampered the learning process. Meanwhile, 31 respondents stated that that the limited technology hindered the learning process. At last, there were 105 respondents saying that the limited use of applications became the hindrances in implementing the learning process. We believe that understanding the scope of e-learning can provide a positive color to the world of education by opening all time and space boundaries so that everyone can get a decent education.

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