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Difficulties of Future Physical Education Teacher for Elementary School in Attending Synchronus Online Learning during Covid-19 Pandemic

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Abstract

Covid-19 pandemic, started from the beginning of 2020, has changed the learning process in all levels of education in Indonesia. One of the changes is the shift from face-to-face learning into online learning. This research was aimed at finding out the difficulties faced by Physical Education students in joining a synchronous online learning during the pandemic. The study was a mixed-method study with an exploratory approach. The instrument used in the study was a questionnaire containing close-ended and open-ended questions distributed through a Google Form. The link was shared through WhatsApp. The study involved 118 Physical Education students as participants. The result of the study showed that there were four major obstacles faced by the students in attending a synchronous online learning, including technical problems, internet coverage problems, internet quota problems, and environment problems. In addition, the findings also showed that an effort to facilitate online learning has been given by providing internet quota for most of the students. However, it was not sufficient to support a number of synchronous online learnings. The study concludes that those problems became a barrier for students to comprehend the materials optimally and to communicate interactively during the lesson. It is suggested that, to gain an optimal outcome of the synchronous online learning, the betterment and support regarding the technical aspect should be given, such as the development of internet service coverage and internet quota provision.

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INTRODUCTION

Due to the outbreak of the COVID-19, various restrictions on social life and education have been imposed to slow the spread of COVID-19 in many countries around the world (Filiz and Konukman, 2020). The changes in education involve the transition of face-to-face learning into an online learning format, including in the higher education level. When the transition from face-to-face to virtual (online) environments is implemented, the Physical Education Teacher Education students appear to suffer the most due to the characteristics of Physical Education (Lu, Barrett and Lu, 2020). They are required to adjust to the new online teaching methods (Domokos *et al.*, 2020). Meanwhile, students have different backgrounds and capacities in engaging in online learning. Therefore, different students may exhibit varying levels of engagement in various course components, such as activities, format of the assignments, communication and collaboration tools, types of assessment, and teaching strategies (Wang, 2007).

The sudden change from face to face to online learning may bring obstacles and is perceived differently by students. Time constraints, tool-related problems, lack of reflection, peers' network connection problems, and language barriers are viewed as challenges (Park and Bonk, 2007). In lecturers' point of views, teaching online also have a number of challenges, such as complex technology, time consumption related to more open-ended schedules, less content to cover, difficult interactions and less direct contact, handling multiple things at the same time, overwhelming stress, and difficulties in giving motivation (Lu, Barrett and Lu, 2020). According to the study of Domokos et al, 2020, there is a reduction in the students' motivation in constantly and actively participating in the online classes (Domokos *et al.*, 2020). On the other hand, according to (Sujarwo, Ridwan and Siradjuddin, 2020), in the midst of a pandemic, students consider online learning to be helpful, although not entirely efficient.

Online learning is divided into synchronous and asynchronous online learning. Both of the formats of learning have their own strengths and weaknesses. In asynchronous learning, students have an opportunity to set and to decide their own learning. In this type of online learning, lecturers provide materials and assignments to be learnt by the students independently in the most accessible and engaging format, such as audio-visual media, which can be used as a way to motivate and to attract students to learn as argued by (Sumarsono and Anisah, 2019). However, students also perceived that the asynchronous course content is challenging, lacks a sense of community, and working during their asynchronous class time (Barbour, McLaren and Zhang, 2012).

Synchronous learning also has strengths and weaknesses. In synchronous online learning, students can interact virtually with their friends and lecturers through certain platforms. The findings of (Park and Bonk, 2007) study show that learners valued instructors' support, spontaneous feedback, multiple perspectives, and meaningful interactions. Furthermore, students felt a need for a sense of social presence and connecting to others in the course (Park and Bonk, 2007). Therefore, students mostly enjoyed their online school courses and the synchronous classes, the ability to control their own learning, and the technology as positive aspects of their experience (Barbour, McLaren and Zhang, 2012). However, due to extensive time pressures, the synchronous interactions mostly focused on task-related issues (Park and Bonk, 2007).

Most of the studies of online learning due to the Covid-19 pandemic have not focused on one online learning format, synchronous or asynchronous learning format.

The studies mostly focused on general aspects. Meanwhile, the study focusing on the obstacles in synchronous and asynchronous online learning are scarce and are not carried out in 2020, when the pandemic occurred in different countries with different economic status. Therefore, the purpose of the study was to find out the major obstacles faced by the students in attending a synchronous online learning, especially Physical Education Teacher Education students. Therefore, the latest and accurate depiction of the specific barriers could be recognized, which would be beneficial for formulating the solution.

METHOD

Study Design

The study was a mixed-method study employing exploratory study approach.

Population

The population of the study was the Faculty of Sport and Health Education students of a University in Indonesia. The samples of the study were 118 Physical Education Teacher Education students aged -21-year-old from various family and living area backgrounds.

Data Collection Technique

The study was carried out in 2020. The data were collected through a self-administered questionnaire. The questionnaire was constructed in Google Form and distributed through WhatsApp application. The data were collected for a week, from 14 October 2020. Google Form was chosen to lessen the direct contact with respondents as a preventive effort of the Covid-19 virus infection. The participants involved in the study had agreed to be involved in the study by checking the agreement box in the questionnaire.

Data Analysis

The obtained data were categorized and coded. After the data were categorized and coded, the data were then analysed through a descriptive statistical analysis, including percentage. The interpretation and general conclusion were then taken from the result of analysis.

RESULT & DISCUSSION

The study was aimed to discover various obstacles faced by students during attending synchronous online learning. In synchronous online learning, more internet quota and technical preparedness are required than in asynchronous learning due to the direct interaction between students and lecturers through certain platforms. Therefore, the study mostly obtained information related to technical aspects of obstacles in attending synchronous learnings.

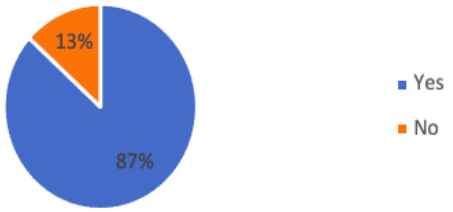

Figure 1. Internet quota funding

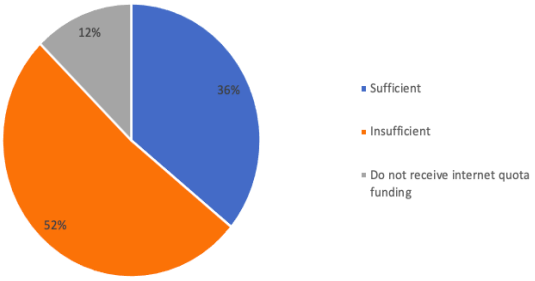

Figure 2. Internet quota sufficiency

Figure 1 shows that the majority of the students had received internet quota funding (87%). Only a small number of students who did not receive internet quota funding (13%). However, most of the students (52%), see Figure 2, perceived that the internet quota funding was not sufficient to support full online learning. It indicated that the students had to expend their own source of funding to conduct the online learning process during the campus closure

due to the Covid-19 pandemic.

Secondly, due to the closure of the campus, the students should carry out the learning process outside the campus. The environment prepared might be different due to the different backgrounds of the students. The place and its conductivity to learn online learning are presented in **Figure 3, 4,** and **5**.

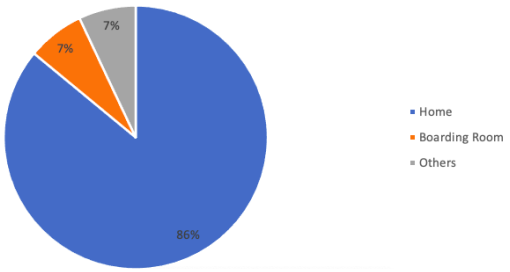

Figure 3. Place for synchronous learning

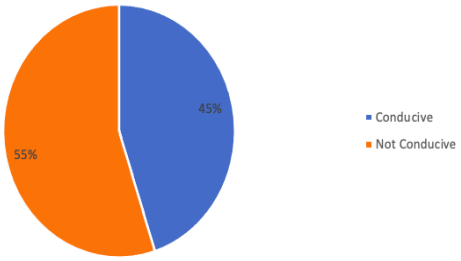

Figure 4. Conductivity

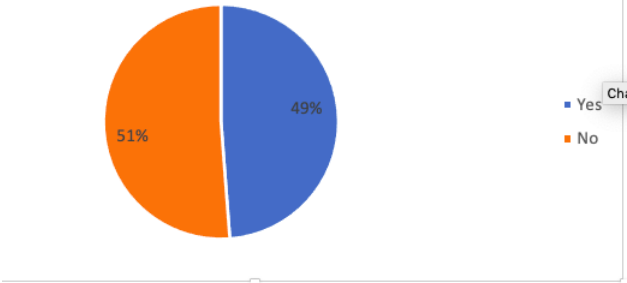

Figure 5. Internet service coverage

Figure 3 explains that most of the students conducted synchronous online learning at home (86%). Only a small number of students attended the synchronous online learning in their boarding room (7%) and other places (7%). Figure 4 shows the conductivity on the places chosen to conduct asynchronous online learning. More than half of the students (55%) stated that their place for learning was not conducive. Meanwhile, almost half of them (45%) conveyed that their place for learning was conducive. Furthermore, according to Figure 5, the internet service coverage in more than half of the student place for learning was not sufficient (49%), while in almost half of the students was sufficient (51%).

Thirdly, synchronous online learning should be supported by compatible devices and other technical supports as the learning is conducted interactively. Figure 6 summarizes the technical problems as the barriers in attending the synchronous online learning smoothly.

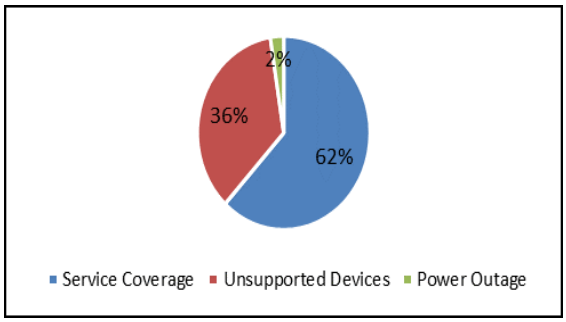

Figure 6. Technical problems

Figure 6 shows that technical problems faced by students include internet service coverage and stability, unsupported devices, and power outage. The majority of students (62%) stated that internet service coverage and stability became technical problems that occurred during synchronous online learning which affected the quality of voice and video during learning. Furthermore, almost half of the students (36%) used unsupported devices to attend the synchronous online learning which disrupted the interaction and material comprehension during learning. The last problem is power outage. For a small number of students (2,5%), power outages highly affected the synchronous learning. The power outage closed down certain internet service providers used by the students that they complete-

ly could not continue the session.

The obtained data showed that the students face four types of technical difficulties, including internet quota, internet service coverage, environment, and technical aspects. The most frequently faced problem was internet quota limitation, internet service coverage, unconducive environment, and technical problems (such as devices, camera, and speakers). Those problems surely affected synchronous online learning as synchronous online learning requires all of those aspects to run smoothly and interactively, especially to comprehend the material and to discuss in discussion sessions.

Synchronous online learning provides a real time interaction for both students and lecturers during the instruction. It offers flexibility to the students and teachers (Zydney, Warner and Angelone, 2020) and, according to (Szeto, 2014), both the face-to-face and online students attained similar learning outcomes (Szeto, 2014). However, synchronous online learning also has limitations (Wang, Huang and Quek, 2018). According to the result of the study, the students face four major problems. First, the majority of the students did not have sufficient internet quota to complete the online teaching learning process. It is probably due to high use of internet data to follow the online learning, which was not supported by financial readiness to provide the sudden online learning transition format. In response to this problem, the data also show that most of the students received internet quota funding, whether from University or Government. However, the funding might be insufficient, especially for a synchronous learning platform that requires a high use of internet data, so the students were required to provide the internet quota necessity by themselves. It indicates that online learning needs to consider financial issues. It is relevant with the research of (Sife, Lwoga and Sanga, 2007) that one of issues to be taken into account when integrating ICTs in teaching and learning practices is the cost for each specific technology.

Secondly, the internet service coverage became the problems faced by students during the synchronous learning. This obstacle had an impact on the smoothness of the learning process, especially in communication. The student might miss some of the delivered materials due to the bad internet service coverage. It indicates that the internet services have not been evenly distributed in the student area or need more improvement and development to meet the high demand during the pandemic. This finding is relevant with the statement of (Sife, Lwoga and Sanga, 2007) that in most developing countries, ICTs have not permeated to a great extent in many higher learning institutions, due to many socio-economic and technological circumstances (Sife, Lwoga and Sanga, 2007).

Another problem faced by students in attending synchronous learning is the unconducive environment. In a synchronous online learning, the student should provide their own learning space. According to the result of the study, more than half of the students found that their learning space was not conducive. For example, there were a lot of children in their surroundings that might distract their focus. It shows that social support is also important in attending a synchronous learning. According to the study of (Hadullo, Oboko and Omwenga, 2018), one of the influential factors of the quality of the e-learning system is social support. In addition, according to (Nur *et al.*, 2019), creating and providing a conducive environment by considering the student capability is essential in Physical Education Learning.

The last problem faced by the students is technical problems related to their synchronous online learning devices, such as microphone and camera. This problem af-

fected the students' comprehension and engagement in attending synchronous learning. Meanwhile, the engagement level of the online students is vital (Wang, Quek and Hu, 2017). This finding is relevant with previous research that the essential factor during synchronous learning was adequate infrastructure (Romero-Hall and Vicentini, 2017) and technical issue (Mcbrien, Cheng and Jones, 2009), such as the quality of audio (Wang, Huang and Quek, 2018). Those technical and technological issues require an immediate betterment, as according to (Politis and Politis, 2016), the readiness of the online learners with educational communication technologies had a positive influence on their liberal arts knowledge.

The existence of several obstacles in the implementation of online learning is expected to be an evaluation in the future so that we will be ready when we face similar situations (Sujarwo, Ridwan and Siradjuddin, 2020). It is found that technology management, support from management, increased student awareness to use E-learning systems, and the demand of a high level of information technology from instructors, students, and universities were the most influential factors for E-learning during COVID-19 (Alqahtani and Rajkhan, 2020). Based on the perspective of students in this research, related to online learning in the midst of COVID-19 pandemic, the government, teachers, and schools should spend efforts to accommodate students' conditions, such as lack of financial support and internet access availability (Sujarwo, Ridwan and Siradjuddin, 2020).

CONCLUSION

Challenges faced by Physical Education Teacher Education (PETE) students have emerged by the occurrence of the COVID-19 pandemic. One of the challenges is the shift from face-to-face learning to online learning. Currently, online learning is conducted through two types of learning, including synchronous learning and asynchronous learning. Synchronous communication has a great potential for providing interactive learning for an optimal learning outcome during the pandemic. However, according to the result of the study, without the appropriate instructional support, the synchronous communication could not be automatically successful. The result of the study showed that there were four major obstacles faced by the students in attending a synchronous online learning, including internet quota sufficiency, internet service coverage, technical problems, and environment problems. Those problems prevented students from comprehending the given materials and having a smooth interactive communication during the lesson. Therefore, to gain an optimal outcome of the synchronous learning, the betterment, support, and concern regarding the technical aspects and financial readiness should be given.

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