



Students' Perceptions Toward Practical Online Learning in Physical Education: A Case Study

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Abstract

This research aims to evaluate the e-learning system in practical courses in the Physical Education Department based on psychomotor learning outcomes. The research method used is descriptive qualitative, using a survey design with a cross-sectional type for program evaluation. In this case, the program analyzed for evaluation is online-based learning in practical courses based on psychomotor learning outcomes during the Covid 19 pandemic. Questionnaires, interviews, observations, and documentation were used for the data collection. The results explain students' perceptions of the use of online learning media. The interviews results emphasize the following indicators; 1) readiness, 2) facilities and infrastructure, 3) strategies and models, 4) syntax, 5) response, 6) assessment form, 7) success rate, 8) difficulty, 9) overcoming obstacles, 10) weaknesses and strengths, 11) Effectiveness. The research proves that online-based practical learning can be implemented. It is proven by students' and lecturers' perceptions regarding the plan, implementation, and evaluation of psychomotor learning. It has been explained comprehensively, especially for the use of media and evaluation of learning used, which is highly highlighted by students and lecturers. Although there are limitations regarding other supporting facilities and infrastructure, it will be a note for further research using different research methods.

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INTRODUCTION

As we currently know and experience, there has been a global outbreak of the COVID-19 pandemic, resulting in a high death rate. The negative impact of the COVID-19 outbreak has disrupted almost all sectors, from the economic sector to the education sector. The changes in learning form also impact parents, students, and teachers (Mariati, Djazilan, Nafiah, & Hartatik, 2022).

Facts emerged that students and lecturers are both experiencing difficulties during the COVID-19 pandemic. Physical education students feel they cannot be optimal in carrying out the learning process, especially for practical courses. Theoretical cognitive learning is not really a problem, but practical or psychomotor learning, such as applying organic, neuromuscular, intellectual, social, cultural, emotional, and aesthetic learning resulting from various physical activities' selection process, becomes a severe problem. It is due to the fact that students used to carry out practical learning directly during the courses. Furthermore, the interaction process and the teachers' control tend to be less practical and technical constraints as a supporting tool. These changes make students less responsive and contribute less to the learning process (Muslimin & Harintama, 2020). It can be seen from the assignments collected that they consistently exceed the predetermined time limit. Some students, indeed, always come late to the virtual class meeting.

Media is closely related to the development of information and communication technology. All activities are related to collecting, processing, storing, disseminating, and presenting relevant, accurate, and timely information. Advances in information and communication technology also

influence the world of education. This is in the learning process where the 2013 curriculum (Indonesia Curriculum) uses information and communication technology (Mulya, Lengkana, & Agustriyani, 2021). Google Classroom, Zoom, Google Meet, YouTube, and other online platforms are employed to deliver the material to students. The Learning Management System widely used in the learning process has been researched, including in the physical education field, and it is proven effective (Rahman et al., 2020).

Online learning systems should promote students' autonomy and activate their metacognitive awareness, so it can make students more independent and creative (Rahman et al., 2021). Lecturers may benefit from the online learning system. It will be more innovative and easier to update plans, teaching materials, models, and evaluation of learning based on current needs to facilitate controlling student assignments. Carrillo & Flores (2020) explained that the COVID-19 outbreak created a new learning environment for students and lecturers who prepare for the requirements of the education program and the conditions under which universities and schools have to keep running. Meanwhile, (Zarzycka, Krasodomska, Mazurczak-Mąka, & Turek-Radwan, 2021) stated that active participation in distance classes and high expectations of online learning positively affect the communication and collaboration process among students. This research contributes to the distance learning literature as it adds to our distance learning understanding amid a pandemic from a theoretical point of view.

The practical learning concept is packaged using several existing applications. Commonly, students and lecturers both practice each movement material, then record it using video,

which will later be shared using specific virtual applications. While evaluating the learning process, students and lecturers agreed on the assessment rubric that became a reference to assess skills. It is done to obtain fairness in the learning process and get positive feedback from students. According to (J. Yu & Jee, 2021), appropriate and quality feedback must be provided for the successful implementation of learning; educators must prepare ahead and reduce technical errors and motivate students continuously (Lengkana et al., 2020). Therefore, to prepare for the new normal, regulations need to be issued to provide sufficient time for educators to teach students in real-time, ensuring consistent and quality planning, implementation, evaluation of learning, and feedback. This phenomenon initiates this research to analyze online-based learning in practical learning in physical education.

METHODS

This research employs a qualitative method in conjunction with a case study approach. Qualitative research describes and analyzes phenomena, events, social activities, attitudes, beliefs, perceptions, or thoughts of people individually or in groups (Creswell, J. W., & Clark, 2017). In addition, the case study is a type of approach used to investigate and determine an event or problem that occurred by collecting various kinds of information, which is processed to obtain a solution to resolve the period as a result (Thomas, 2021). The author uses a case study approach because online-based physical education learning has been going on for about two years. However, the form of learning evaluation for psychomotor material still looks quasi-objective and not comprehensively visible. Therefore, this study aims to describe how the

perceptions of first-year students and lecturers regarding learning planning, implementation, and evaluation of online-based physical education learning are seen in the psychomotor aspects of learning.

Participants

The subjects in this research are undergraduate students of the Physical Education Department. To determine the participants, a purposive sampling technique was used. Purposive sampling is a non-random sampling technique where the researcher determines the sample by specifying specific characteristics under the research objectives, meaning that it can answer the research problem (Campbell et al., 2020). Researchers make these characteristics so that the participants taken later can meet the research criteria. The specific criteria in selecting the sampling are new students in the first year: it will be easier for researchers to see all forms of the learning process up to a comprehensive evaluation from the start of entering college. Besides that, the character of new students is still in an atmosphere of enthusiasm for learning. Therefore, it will be seen how the attitudes caused by students in learning online-based practical materials. The participants were grouped into three categories: a Level 1 group, a Level 2 group, and a Level 3 group; due to the limitations of the researcher in collecting data to make it efficient. The number of participants was 133 people consisting of 65 male students and 60 female students, and eight lecturers who supported practical courses.

Procedures

This research uses questionnaires, observations, and interviews to collect data. Questions and observations are sent using a Google form. To begin, the questionnaire is an indirect data

collection technique (the researcher does not directly ask the respondent) that contains questions that must be answered by the participants in the form of open, structured, and closed questions. The questionnaire was used to find a concrete picture of practical learning, both in terms of learning motivation and the atmosphere of online-based practical exams. The preferred format of the learning motivation questionnaire based on the Likert scale was adapted from (Joshi, Kale, Chandel, & Pal, 2015). The data collected is then aggregated to determine each student's motivation for learning, categorizing them as having a low or high level of motivation. Data collection using interviews is a technique of researchers and resource persons to collect data: techniques that are carried out face-to-face and direct question and answer (Bains et al., 2021). The interview was performed through video call and directly face-to-face depending on the readiness and distance of the respondent's residence as a consideration to assist researchers in understanding the central phenomenon and answering various problems. The next consideration depends on individual accessibility, costs, and time available (Creswell, J. W., & Clark, 2017).

The considerations are the limitations in the number, distance, and effectiveness of research during the covid 19 pandemic. It could be due to the difficulty of arranging a meeting schedule, because the respondent's request is based on the recommendation of physical distance, or because the locations are far apart so that interviews can be conducted by combining the questions. Linguists experts tested the questions for validation (Harvey in Lukman Nul Hakim 2013). The next stage of data collection is observation. Researchers make observations based on the research object to be observed with

the five senses (Canals, 2017). The observation method used in this research is participatory observation, in which the observer remains stationary and active throughout the process of observing the object being studied. Researchers face observation in online learning (Andrew, Wallace, & Sambell, 2021).

Design or Data Analysis

The data analysis technique used in this research is Miles and Huberman's interactive analysis (Sadikin, 2020). At the same time, the data analysis stages consist of data validation, data collection, data reduction, data presentation, and concluding (Juliya & Herlambang, 2021). First, the testing stage of data validity or checking research data is accomplished through data triangulation and technical triangulation, followed by intensive observation, member check, and discussion with other individuals or groups. In the second stage, creating a list of questionnaire statements, questions for interviews, data collection, and data analysis was carried out to determine the extent of online physical education students. Further, it compiled a list of interview questions based on question indicators that the participants will ask—in the third stage, distributing questionnaires and conducting in-depth interviews with practical teaching lecturers and students in practical learning activities. In the fifth stage, the research data is a list of all the questions asked to the participants, followed by describing the research data. Analyzing the data results and coding the data described in the manuscript for each respondent from lecturers and students (Hruschka et al., 2004) are the final stages.

RESULT

The data for this research was compiled from questionnaires and interviews involving 125 students and eight lecturers. The participants are the Level 1 group, Level 2 group, and Level 3 group. It was conducted through an online system. University policies emphasize the use of online activities for lecturing. In this situation, it is possible to conclude that most students as participants of this research have never encountered an offline, face-to-face learning process, but the majority of them had a hybrid learning. Some of them do not interact with fellow students in real life. The interaction process with lecturers happens only with the Zoom meeting and WhatsApp applications.

Consequently, the education process that they are familiar with is on the online network through online education media, such as groups on WhatsApp, zoom, google meet, and through e-learning offered by universities such as SPADA and SPOT (University coursework website). All tasks, such as assignments, can also be completed and managed online. As a result, the subject of this study can be classified as severe due to the challenges and pressures resulting from the COVID-19 pandemic that has ravaged the education field.

Students' perceptions of online learning media

The in-depth analysis result is gathered toward students' perceptions of various types of online lecture media. Lecturing media during the COVID-19 period that mainly were used were Whatsapp, Google Classroom, Zoom, Google Meet, email, SPADA, SPOT (University lecture website), and YouTube. These applications make it easier for lecturers and students to send soft copies of lecturing materials, voice

notes, and discussions and ask questions virtually. According to survey data, 133 participants expressed the percentage use of media during the online learning process: Whatsapp (15.0 %), Google Classroom (25.6 %), Zoom/Google Meet (13.5 %), Email (15.0%), SPADA/SPOT (11.3%) and Video/Youtube (19.5). The result is in line with the research of (Husamuddin, Sakti, & Wulandary, 2022) that teachers are increasingly using online media for education due to the ease of access to services such as Whatsapp, Google Classroom, Zoom, and Google Meet. The use of YouTube videos is also a solution in learning physical education. This is conveyed by (Quennerstedt, 2013) that Practical learning can be presented through audiovisual media in the form of YouTube videos as a means of demonstrating the correct way of working to students using demonstrations. Whatever educational media are used, they all contribute to optimizing the educational process. However, the participants' interest is consistent and should be the focus. For a more detailed explanation, figure 1 presents the online learning media satisfaction:

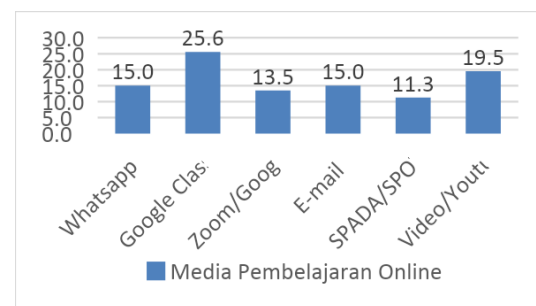


Fig 1. Online Learning Media

Students' perceptions of the online-based practical lecture materials

In the lecturing process, there are various types of lecture materials distributed by lecturers to students in visual, audio, and audiovisual, such as modules, photos, videos, audio

recordings, and video conferences. While the type of lecture material desired by students mostly tends to be motion demonstration videos (Jenny, Hushman, & Hushman, 2013; Laughlin, Hodges, & Iraggi, 2019; C.-H. Yu, Wu, Wang, Chen, & Lin, 2020), For some reason, they want not only material taken from YouTube, but also wants the lecturer to demonstrate it. Lecturers need to guide and regulate the learning process in the classroom so that the situation is conducive and the form of attention that students want is prioritized (Pratama & Mulyati, 2020). Because the learning presented is a movement activity, the instrument used to assess the participants' movement learning abilities is an assessment rubric to assess the participants' series of motion processes (Cone & Cone, 2011; Little & Hall, 2017; Tolgfors, 2018). For more details, the researcher presents the interview data below as a result of analyzing qualitative data, providing coding on the data, presenting the data, and verifying the data using the N-Vivo application.

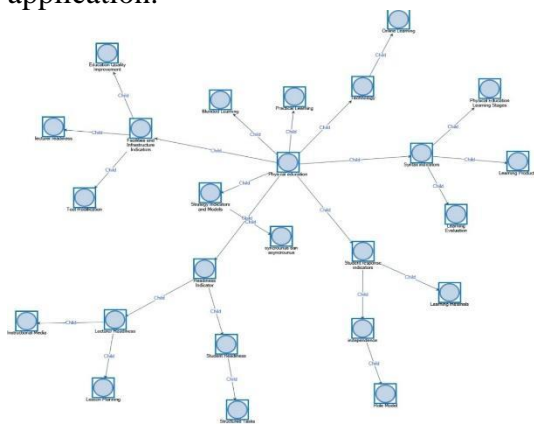


Fig 2. Analysis of Interview Data by N-Vivo

Based on the concept map image from the interviews with participants above, the researcher identifies; that (1) readiness indicators of all elements in carrying out the teaching and learning

process activities are appropriate or categorized as good. It is shown by the ability to adapt to technological changes, training organized by other parties (collaboration), and alignment of training followed by regular training independently by lecturers and students. It is in line with the opinion of Churiyah, Sholikhah, Filianti, & Sakdiyyah (2020); Hashim & Tasir (2014) that the learning process must continue to be carried out with efforts to meet educational service standards. Therefore, the principle of readiness in various ways to support the implementation of learning must continue to be pursued. (2) The facilities and infrastructure indicators prepared to support online-based practical learning have been well prepared by lecturers and students. Facilities and infrastructure are eight national education standards of Indonesia that are essential. Schools provide supplies and equipment intending to improve the quality so that the teaching and learning process runs as it should (Ramli, Muljono, & Afendi, 2018; Schreurs & Al-Huneidi, 2012). Infrastructure facilities will attract prospective students even though they are not a top priority. (3) The strategies and models indicators used in the online learning process in practical courses are appropriate and in line with the plans and designs in the lectures. The use of online learning strategies and models dramatically affects the success rate of students in learning (Kooiman, Sheehan, Wesolek, & Retegui, 2017). (4) the syntax indicators used in the online learning process in practical courses follow the learning plan. Learning steps are part of a lesson plan that is a guide in delivering material. Therefore, it is crucial to adhere to the signs in learning planning (Laili & Aliyah, 2021). (5) the response indicators for the practical material taught in the online learning process in practical courses are very

enthusiastic, even though it is challenging to practice at home because it is inadequate. They have to go to the nearest school or sports field to be able to practice. Student response is significant. This can maintain conduciveness in the learning process; without a response to improving the quality of learning outcomes, it is felt that it will be very lacking (Talaghir, Olaru, & Iconomescu, 2021). (6) assessment indicators forms related to psychomotor learning outcomes have been well performed in the online learning process for the practical courses. Lecturers have carried out their duties to provide assessments using rubrics on assignments given to students and vice versa. Students have carried out their duties to collect assignments in the form of theoretical and video studies motion assignments for the lecturer to be assessed. Students will find it easier to imitate movements from exemplary examples. Therefore educators must be proficient in every movement because all the examples of motion they learn will always be displayed in front of students (Douglah, 2021). (7) the level of success indicators in the online learning process for psychomotor to practical material in the online learning process have a moderate level of success. The practical learning process is challenging to be performed online, but students can anticipate the issues and the advantages that have been learned. The assessment rubric used by the lecturer is explained one by one to anticipate the mistakes of the movement technique. (8) Difficulties or obstacles indicators that often occur in the online learning process regarding psychomotor learning are related to the internet network. Implementing distance learning by utilizing the internet network sometimes creates its own problems (Baticulon et al., 2021). (9) The next is overcoming obstacles and difficulties in

the online learning process indicators. Lecturers have provided theoretical material and motion demonstrations through various virtual media such as google classroom, WhatsApp group, SPADA, email, and youtube. Students also use the same media to collect structured assignments given by the lecturer. (10) Weaknesses and strengths indicators in the online learning process for teaching practical materials relate to the technology used. Previously lecturers and participants did not utilize technology for the teaching and learning process, but they are now accustomed to using various virtual media. The drawback is that it cannot be optimized for studying motion tasks without being directly accompanied by a lecturer. It is not compelling enough because it is not directly handled and evaluated in the field. (11) The last is the effectiveness of the online learning process indicator in terms of practical material. It is considered less effective. The offline learning process carried out usually is more optimal in terms of classroom management. In contrast, online learning is challenging to adapt to the practical task given because it cannot be evaluated directly. It is possible for those who have low enthusiasm to be left behind with those who have high motivation. They incidentally will explore the given practical tasks. In other words, practical courses need direct assistance in improving the quality of movement taught to students.

DISCUSSION

The explanation above shows that online-based learning in practical courses can be carried out well—several indicators staying positive and going well according to the lesson plan. For example, lecturers and students use various learning media, depending on

mutual agreement. When viewed from the learning steps, it is found that the learning process is by the procedure. Other findings, such as student feedback as respondents, are very well intact. It was following the research results conducted by J. Yu & Jee (2021). They argue that feedback is essential for online practice. Further, the requirements for an excellent online-based physical education learning process are (1) the University must provide sufficient time and technical support; (2) educators need to be trained in web-based environments before online teaching is carried out, and (3) educators must find ways to encourage student involvement and fairways to conduct evaluations. The indicators show that the online learning strategy uses two learning processes: synchronous and asynchronous (Hrastinski, 2008).

The synchronous process uses virtual zoom, while the asynchronous one uses Google classroom and Whatsapp groups. Every week the meeting uses the PJBL learning model. They were given practical assignment material during the meeting through a video broadcast to be studied and practiced at each student's place. They were given the task of making video products uploaded to google classroom to get responses from other students for pair correction. As a result, the teaching and learning process has been going well. In line with the research results Filiz & Konukman (2020) from various European countries such as North Macedonia, Turkey, and Hungary, a survey of the management of learning strategies in physical education has been carried out. The results obtained are that each country has a different strategy for Physical education learning. However, it is carried out in two ways: synchronous and asynchronous.

However, it is undeniable that there are also negative statements, such as a meager learning success rate from a

psychomotor point of view even though the cognitive taxonomy level is quite good (Hidayah, Wangid, & Wuryandani, 2022). It was revealed that the practical learning process is challenging to conduct online. They cannot spot the specific errors they made in the techniques learned even though the lecturers have provided teaching materials and instructions for implementing these techniques. However, cognitively, they understand the basic technical steps.

The indicators of obstacles and online learning disadvantages in the implementation of practical learning impact the low quality of the practical motion due to the inefficient online learning process. In contrast to theoretical courses, they can still catch up with the material. However, it is different from practical courses that require direct assistance in improving the quality of movement. Indicators of supporting infrastructure include such as uneven network coverage. Besides that, learning support tools must be borrowed from the nearest school, even if the tools used are not available. Another alternative is to modify the tools.

CONCLUSION

According to the findings of this study, the types of media that students like are google classroom, zoom/google meet, and whatsapp. At the same time, the types of curricular materials that students prefer are motion learning videos. Practical online courses can be carried out well. Several indicators state positive effects and working in accordance with the learning plan. However, it is undeniable that there are also drawbacks, especially obstacles and online learning issues. The implementation of practical learning and its impact on students' achievement in practical courses are caused by an ineffective online learning

process. Meanwhile, for cognitive achievement, students can still catch up.

Practical courses require direct assistance in improving the quality of movement. By visiting the nearest school, supporting infrastructure indicators such as network coverage and learning support tools can be fulfilled. Even if the tools used are not available, another alternative is for students to modify the tools. The online practical learning process has to be changed for the suggestions because it is less effective. Institutions must facilitate supporting facilities and infrastructure for online learning by providing an online learning laboratory. As a recommendation, practical learning can be carried out through blended learning.

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