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# **ORIGINAL RESEARCH**

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# Survey on the Effectiveness of the Online Learning Process Due to the Coronavirus Pandemic in Physical Education

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#### Abstract

Background: Since the outbreak of the coronavirus covid-19 in Indonesia, education has offered online learning. Online learning requires system support, namely hardware (smartphone, tablet, or laptop/personal computer), internet network, and human resources. However, the implementation of online learning encounters several challenges and obstacles, especially online learning in physical education in elementary schools.

Objectives: The purpose of this study was to determine and examine the effectiveness of the online learning process due to the coronavirus pandemic in Physical Education and Health subjects at SD Negeri 6 Sumbermanjingkulon, Pagak District, Malang Regency.

Methods: This study used a descriptive research design with a survey method. This study involved 48 elementary school students. The data collected through a questionnaire method or a google form-based questionnaire that has been tested for validity by an expert. Data analysis was carried out on five indicators in the study. The indicators consist of student interest, interest, benefits, learning facilities and infrastructure, and quality of interaction.

Results: The results of the study indicate that the effectiveness of online learning at SD Negeri 6 Sumbermanjingkulon is in the criteria of being quite effective with a percentage of 46.90%. Conclusion: Based on the results of the study, it shows that overall online learning in physical education and health subjects is quite effective, but the percentage obtained between quite effective and ineffective is only a slight difference.

Keywords: online learning, physical education, coronavirus.

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### INTRODUCTION

In early 2020, a case occurred that shocked the whole world. This case began with information from the World Health Organization (2020) which stated that there was an unclear case of pneumonia in Wuhan City, Hubei Province, China. As this case developed, the World Health Organization designated this case as a worldwide pandemic which is troubling. This case continued to grow until there were reports of deaths in China. On February 12, 2020, WHO officially designated this novel coronavirus disease in humans as Coronavirus Disease (covid-19).

The World Health Organization (WHO) has designated the corona virus as a pandemic because it has spread to more than 100 countries in the world. WHO itself defines a pandemic as a situation when the entire world's population is likely to be exposed to this infection and potentially some of them fall ill. Coronavirus has an impact on various sectors of life such as economic, social, including education. The United Nations Educational, Scientific and Cultural Organization (UNESCO) stated that the corona virus outbreak had an impact on the education sector. Nearly 300 million students are disrupted from school activities worldwide and are at risk of impacting their future educational rights.

As a result of the outbreak, learning in Indonesia was instructed to be conducted online in accordance with the Circular Letter of the Secretary General of the Ministry of Education and Culture No. 36603/A.A5/OT/2020 dated March 15, 2020. Online teaching and learning activities mean that educators and students do not meet face-to-face but use media assistance such as video conferencing using the help of the internet. Waryanto & Insani (2013) stated that one of the uses of the internet in education is distance learning.

Online learning is a new adaptation, so it is not easy to implement, especially since both teachers and students are not familiar with online learning. Before the COVID-19 Pandemic, many educational institutions offered online learning for some courses. In contrast, some other institutions find online learning difficult to go through the steps to prepare courses and programs (Fidalgo, Thormann, Kulyk, & Lencastre, 2020). This situation will also affect the material delivered to students and will also have an impact on the achievement of learning objectives. Therefore, it is important to know whether online learning results in effective learning during a pandemic. Recently, Dewantara & Nurgiansah (2021) conducted a study involving 1,000 students and reported that 79% of students expressed their desire to carry out offline learning. Kharisma, Roesminingsih, & Suhanadji (2020), in their study, also reported that 88.17% of respondents wanted online learning socialization; 69.89% of respondents chose online learning through google classroom; 45.16% chose the video tutorial learning model. Hamdani & Priatna (2020) tested the effectiveness of online learning during the pandemic, the teacher's digital literacy ability, the level of adaptation of students to new learning models, internet network connections, online learning costs, application convenience levels, and online learning commitments during the pandemic. The study reported that overall, online learning was concluded to be effective with a percentage of 66.97%.

These studies were limited to teacher and student responses to online learning and the effectiveness of online learning at the elementary school level. Studies that examine the effectiveness of online learning in physical education subjects at the elementary school level have never been carried out. Physical education subjects are subjects with material that is dominated by physical activity. A pandemic situation that requires students to study from home can also impact decreasing levels of physical activity (Nurhadi, 2020), learning behavior, social and health (Ulfa & Mikdar, 2020; Alfitri & Widiatrilupi, 2020).

This study seeks to examine the effectiveness of online learning in physical education subjects at the elementary school level. This study aimed to determine the effectiveness of online learning in physical education subjects at State Elementary School 6 Sumbermanjingkulon, Malang Regency.

# METHODS

# Study Design and Participants

This research is a quantitative descriptive study so that it can provide an overview of what will be studied in the form of numbers and measured with certainty. This study aims to determine the effectiveness of online learning in physical education and health subjects, therefore the method used in this study is a survey. Survey research is research that does not give any treatment to respondents, only collects data using standardized instruments, such as questionnaires, tests and so on. The population in this study were all students of State Elementary School 6 Sumbermanjingkulon, Pagak sub-district, Malang district, totaling 92 students. While the sample is 60% of the total population, so the calculation of the number of samples obtained is 48 students.

# **Research Instruments**

In this study, the data collected through a questionnaire method or a google formbased questionnaire that has been tested for validity by an expert. The questionnaire used in this study uses a closed structured questionnaire which in this case uses a Likert scale in its assessment, using the four answer options that have been provided and will get a score between 4, 3, 2, and 1. expressed by numbers and calculations using standard methods assisted by Microsoft Excel 2010 software, which were then matched with the score interpretation criteria table.

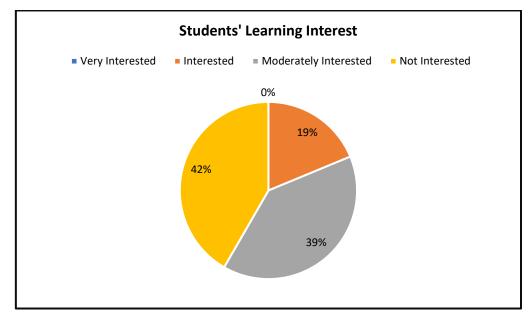
# Data Analysis

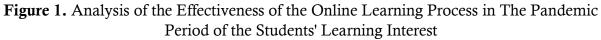
Data analysis was carried out on five indicators in the study. The indicators consist of student interest, interest, benefits, learning facilities and infrastructure, and quality of interaction. The following will present the results of the analysis of the five indicators of students at State Elementary School 6 Sumbermanjingkulon in participating in the online learning process in physical education and health subjects.

#### RESULTS

# 1. The Effectiveness of The Online Learning Process in The Pandemic Period of The Students' Learning Interest Aspect

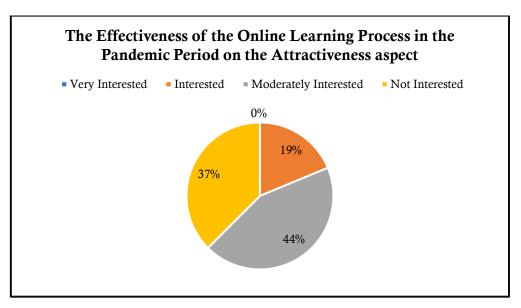
The results of the analysis showed that 9 (19%) students stated that they were interested, 19 (39%) students stated that they were quite interested, and 20 (42%) students stated that they were not interested (Figure 1).





# 2. The Effectiveness of the Online Learning Process in the Pandemic Period on the Attractiveness Aspect

The results of the analysis showed that 9 (19%) students stated that they were interested, 21 (44%) students stated that they were quite interested, and 18 (37%) students stated that they were not interested (Figure 2). With online learning, students can be as creative as possible, they can learn with media such as YouTube and other media *platforms* that can support the learning process.



**Figure 2.** The Effectiveness of the Online Learning Process in the Pandemic Period on the Attractiveness aspect

# 3. The Effectiveness of the Online Learning Process in a Pandemic Period Learning Benefits Aspect

The results of the analysis showed that 15 (27%) students stated that useful, 20 (31%) students stated that fairly useful, and 13 (37%) students stated that useless (Figure 3). This means that students understand the benefits of online learning. Benefits of online learning. There are a lot of these, including practical and flexible, fun learning experiences, making it easier to refine and store learning materials.

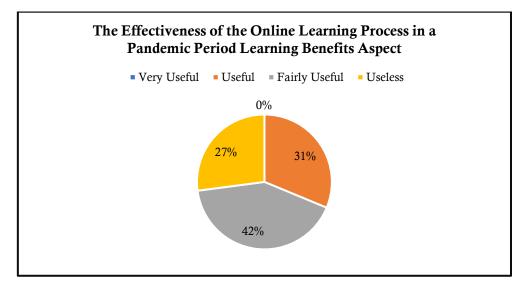
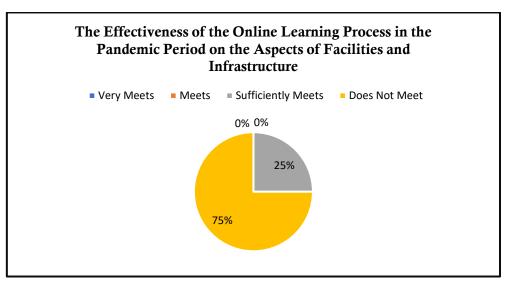
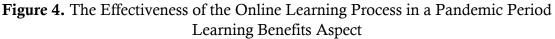


Figure 3. The Effectiveness of the Online Learning Process in a Pandemic Period Learning Benefits Aspect

# 4. The Effectiveness of the Online Learning Process in the Pandemic Period on the Aspects of Facilities and Infrastructure

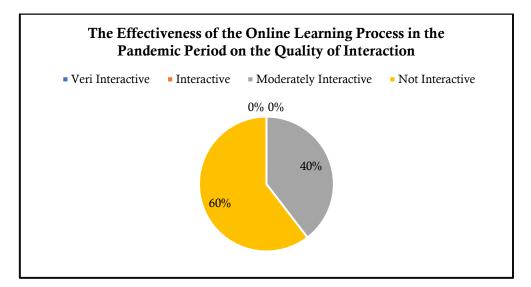
The results of the analysis showed that 12 (25%) students stated that sufficiently meets, and 36 (75%) students stated that doesn't meet (Figure 4). With this percentage, students state the costs and facilities for online learning in the subjects of physical education and health cannot be met. Online learning does utilize technology so that learning requires facilities such as a laptop or computer and also an internet network. Meanwhile, only a small percentage of students can meet the facilities in participating in online learning.

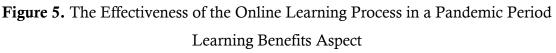




# 5. The Effectiveness of the Online Learning Process in the Pandemic Period on the Quality of Interaction

The results of the analysis showed that 19 (40%) students stated that moderatelt interactive, and 29 (60%) students stated that not interactive (Figure 5).





# DISCUSSION

Online learning is learning that is done using the help of internet network media which is done by teachers and students virtually. Online learning can be done anywhere, anytime and with anyone. In today's era, online learning is very easy to do because of the rapid development of technology. Online learning is currently being used by the world of education in the midst of the Coronavirus pandemic. This study aims to determine and examine the effectiveness of the online learning process due to the coronavirus pandemic in physical education and health subjects at State Elementary School 6 Sumbermanjingkulon, Pagak District, Malang Regency. The variables measured included interest in learning, attractiveness, benefits of learning, facilities and infrastructure and quality of interaction. The results of the research on the sub-interest of students in participating in online learning get a percentage of 47.39%, which means that the motivation of students in participating in online learning during the coronavirus pandemic at State Elementary School 6 Sumbermanjingkulon is included in the category effective enough. This is almost similar to research conducted by Rahmawati, et al (2021) which said that asking students to take physical education online learning was included in the high category, with the hope that students would maintain a high interest in participating in physical education learning, while maintaining health and endurance. body. Another study conducted by Suprianto, et al (2021) also said the same thing, namely that students had a very high interest in participating in physical education learning during the Covid-19 Pandemic and were expected to maintain their interest in participating in learning.

The second sub-interest, namely the attractiveness of participating in physical education online learning, obtained a percentage of 50.17%, which means that the attractiveness of students in participating in learning from during the coronavirus pandemic at State Elementary School 6 Sumbermanjingkulon is in the quite effective category. Through online learning, students can be as creative as possible, they can learn with media such as YouTube and other media *platforms* that can support the learning process. In line with what is described by Tung (2000) with online learning students can use a wide variety of learning resources. Research conducted by Sulisworo & Agustin (2017) showed that the results of student responses in learning after using e-learning as a learning medium, there was an increase in student interest quite well. Interest will lead to a desire to visit the e-learning more often. This is because e-learning is easy to operate, the ease of navigation system makes the media easy for users to follow.

The third sub-interest, namely the benefits of physical education online learning, which was participated by students during the pandemic period, obtained a percentage score of 52.52%, which means that students participating in online learning during a pandemic at State Elementary School 6 Sumbermanjingkulon fall into the category effective. Benefits of online learning There are a lot of these, including practical and flexible, fun learning experiences, making it easier to refine and store learning materials. According to Widakdo and Fananie (2020) by utilizing information technology, many young people currently use online applications for online learning. Applications that are widely used by students are teacher's room, quipper, smart class, study house, and zenius. The emergence of the creativity of the younger generation to create an online learning platform based on this application is very helpful for distance learning.

The fourth sub-interest, which is about the facilities and infrastructure of students in participating in online learning, physical education obtained a percentage score of 32.28%, which means that the facilities and infrastructure of students in participating in online learning during a pandemic at State Elementary School 6 Sumbermanjingkulon are included in the category ineffective. Online learning does utilize technology so that learning requires facilities such as a laptop or computer and also an internet network. Meanwhile, only a small percentage of students can meet the facilities in participating in online learning. According to the Ministry of Education and Culture of the Republic of Indonesia (2014) are as follows: 1) Increasing the availability of education services; 2) Improving the affordability of education services; 3) Improving the quality and relevance of education services; 4) Increase equality in obtaining quality education services; and 5) Increase the certainty/guarantee of getting good quality education services.

The last sub, which is about the quality of student interaction in participating in online learning, physical education obtained a percentage score of 44.78%, which means that the quality of student interaction in participating in online learning during a pandemic at State Elementary School 6 Sumbermanjingkulon is included in the category effective enough. With online learning communication between students and teachers and also between students can improve. Mustofa et. al (2019) also explained that one of the benefits of online learning is that it can increase the level of learning interaction between students and teachers and also allows learning interactions to occur from anywhere and anytime.

From the explanation of the five indicators above (interest in learning, interest, learning benefits, facilities and infrastructure, and interactive quality), then it will be

processed again to get a conclusion whether online learning in physical education and health subjects is effective or not. Overall, the data processing method is the same as the data processing for each indicator, which differs in the number of categories used. Overall, the results of data analysis obtained from the distribution of questionnaires to 48 students of State Elementary School 6 Sumbermanjingkulon obtained results in the quite effective category with a percentage of 46.90%.

# CONCLUSION

Based on the results of the questionnaire that was distributed to 48 students at SD Negeri 6 Sumbermanjingkulon, the results were in the quite effective category with a percentage of 46.90%. This still needs to be improved again in order to obtain more effective learning so as to improve the quality of learning and student learning outcomes. The effectiveness of online learning in the pandemic period of students as a whole in participating in online learning for physical education and health subjects at SD Negeri 6 Sumbermanjingkulon which includes interest in learning, attractiveness, benefits of learning, facilities and infrastructure, and quality of interaction is quite effective. Of the five attitude sub-variables that have been studied, the only sub-variable that is still in the less/not seen category is the facilities and infrastructure in participating in online learning. Physical education teachers at SD Negeri 6 Sumbermanjingkulon have made various efforts to make learning always effective and maximize so that the points that support learning can be fulfilled. Good cooperation from students, the school, and the family environment plays a role in efforts to maximize the effectiveness of online learning during this pandemic.

Based on the results of the study, it shows that overall online learning in physical education and health subjects it is quite effective, but the percentage obtained between quite effective and ineffective is only a slight difference. In fact, there are still many students who complain about online learning because online learning is expensive, besides that there are some teachers who are not proficient in using technology. Therefore, there should be training for teachers on the use of technology or the use of online learning media. The agency should also provide assistance in the form of smartphones or internet quotas every month to students who are less fortunate.

It is hoped that this research will be useful as an evaluation of learning, especially at SD Negeri 6 Sumbermanjingkulon and as a reference material for further research, because it is very important for teachers to master technology or online learning media as a benchmark and as a reference in designing what kind of learning should be done by the teacher, therefore further research is very necessary to do. Further research can also be continued by examining more deeply about the effectiveness of online learning in participating in learning other subjects.

# CONFLICT OF INTEREST

The author hereby declares that this research is free from conflicts of interest with any party.

# AUTHOR'S CONTRIBUTION

Pranata contributed to preparing concepts, formulating methods, conducting research, and editing the final version. Kurniawan contributed to processing the results, interpreting, and drawing conclusions.

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