Students’ Perceptions About the Use of Android-Based Learning Media in Physical Education Learning

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Abstract

The purpose of this study was to determine students' perceptions of the use of android-based learning media in physical education learning during the Covid-19 pandemic. The research method uses a qualitative survey method on all fourth-grade students of SD Muhammdiyah PK Baturan selected as research samples. This data collection uses a google form containing a questionnaire distributed to students, and then the results are analyzed quantitatively with percentage results. The findings of this study indicate that students are familiar with the use of android-based learning media in physical education learning. 66.7% of students have used android-based learning media in the form of videos, and only 33.3% use Android-based learning media in the form of images. Student perceptions positively affect learning media based on Android Physical Education and Physical Education with a percentage of 80.0%. It is recommended that every teacher in the school be more creative in creating online learning content to be not bored and more effective.

Kata kunci:
Media Pembelajaran Berbasis Android;
Persepsi siswa;
Pembelajaran Penjasorkes;
Pandemi Covid-19

Abstrak

Tujuan penelitian ini adalah mengetahui persepsi siswa dalam penggunaan media pembelajaran berbasis android dalam pembelajaran pendidikan jasmani pada masa pandemi Covid-19. Metode penelitian dengan menggunakan kualitatif dengan metode survei pada seluruh siswa kelas IV SD Muhammdiyah PK Baturan yang dipilih sebagai sampel penelitian. Pengumpulan data ini menggunakan google form yang berisikan anket yang disebarkan kepada siswa kemudian hasilnya dianalisis secara kuantitatif dengan hasil persentase. Temuan penelitian ini menunjukkan bahwa siswa sudah tidak asing lagi dengan penggunaan media pembelajaran berbasis android dalam pembelajaran penjasorkes. Sebanyak 66,7% siswa telah menggunakan media pembelajaran berbasis android berupa video, dan hanya 33,3% dalam penggunaan media pembelajaran berbasis android berupa gambar. Siswa memiliki persepsi positif terhadap media pembelajaran berbasis android pembelajaran penjasorkes dengan persentase 80,0%. Rekomendasi bagi setiap sekolah bahwa guru harus lebih kreatif dalam membuat konten pembelajaran secara daring agar siswa tidak jenuh dan lebih efektif.

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INTRODUCTION

The development of science and technology is so rapid that it spurs every human being to respond to all these developments quickly to follow it. Today's education refers to multi-dimensional education that puts forward a science and technology approach. Teachers and students must pass several challenges and opportunities in order to be able to follow life in this information age. The impact of the development of science and technology on the learning process is to enrich learning resources and media, such as books, films, videos, television, the web, and so on. Professional teachers are required to be able to choose and use various types of learning media around them. Technology has been integrated into PE curriculum development, instructional design, and student achievement assessment.

Learning during the Covid-19 pandemic resulted in extraordinary changes, as if all levels of education were forced to transform to adapt suddenly to do learning from home through online media. The problem in education is that the learning process is not yet uniform, both the standard and the quality of the desired learning outcomes. This is undoubtedly considered heavy by educators and students in delivering material through online learning media. It needs to be also adjusted to the level of education in its needs. The impact will cause physical and psychological (mental) pressure (Basar, 2021). The sudden change in the learning system (due to the covid-19 pandemic) from conventional to online learning certainly influences teachers to prepare materials, models, and learning methods. It is not uncommon for teachers to experience difficulties in mastering IT so that the learning process does not take place optimally. In terms of students, they tend only to be absent and not too actively involved in learning. It can decrease learning motivation, study concentration and impact learning achievement (Wahyuningsih, 2021).

Over the past two decades, various tools, such as pedometers, heart rate monitors, accelerometers, global positioning systems, online learning in PE, and active video games (AVG), have been adopted by physical educators in teaching practice (Sun, 2015). The research results reinforce this by Iyai et al. (2021) that identifying learning skills was surveyed using a questionnaire. Commitment to learning is done to find out how committed students are to learning seriously. The use of smartphones in educational programs makes this device a device that can be used as an alternative in media development. The use of smartphones in education is known as mobile learning technology (m-Learning). The use of m-Learning can positively contribute to participants accessing learning materials or as learning media (Ismanto et al., 2017).

The transformation in education due to the Covid-19 virus outbreak and the 4.0 revolution era has made teachers, and students mentally stressed. With the human resources owned, facilities and infrastructure in accessing the internet become obstacles in implementing online learning. The thinking of teachers who innovate in educating students at this time is very much needed and instilled from now on in order to get quality learning. The transformation of learning that must be carried out in schools must partner with families at home intensively and sustainably. The role of this parent becomes the spearhead in providing a complete home education that will contribute to the growth of attitudes. Thus, a lesson learned from the Covid-19 outbreak and the digital era 4.0 is to give teachers habits in adapting to using learning technology and for parents to be accustomed to educating children as substitute teachers at school (Muhammad & Atsani, 2020).

The Covid-19 condition that still exists today has hampered schools' teaching and learning process because students can only study remotely or online. With the current distance learning conditions, students are required to have and use android, the more excellent the opportunity for using technology devices in the scope of education. Apart from adapting to the strict measures imposed by the government, the emergence of COVID-19 in Thailand has also burdened the entire society. Those in academia and the business sector are strongly advised to work from home and are advised to replace face-to-face interactions with online communication whenever possible (Katewongsa et al., 2020). In response to the pandemic, more than 100 countries around the world are organizing nationwide school closures. However, there is no clear evidence that school closures
effectively reduce the spread of the virus (Isfeld-Kiely and Moghadas, 2014). Physical education is essential in boosting the human immune system and reducing the risk of disease and health conditions during standard times and in today’s precarious conditions (Ainsworth BE, Li F. 2020). Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes from resources (Januszewki & Molenda, 2008). Educators can be nurtured and empowered by building information technology, social media fluency, developing critical thinking skills, project-based learning, problem-solving techniques, assessment of prognosis and diagnosis with timely feedback and reflection, team teaching and a collaborative learning-based curriculum framed for 21st-century students (Nithyanantham et al., 2019).

Candra (Fauzi & Sastra Khusuma, 2020) reports that technology in Indonesia is rarely carried out in learning activities because fear of the adverse effects caused by technology is the main thing for teachers to reject the use of technology in children. The face-to-face learning system has turned into distance learning that utilizes information technology. Thus (Besand, 2020, Mulyanti, Purnama, & Pawinanto, 2020), The current pandemic situation offers unexpected and highly energetic learning opportunities and technical learning opportunities. Learning media is a tool or helpful intermediary to facilitate the teaching and learning process in streamlining communication between students and educators. Learning media is a messenger technology, an intermediary tool that can be used for learning purposes (Arthur et al., 2021).

Previous research on perceived ease of use of media has also been reported to have a strong relationship with attitudes, proving that the more students think e-learning is accessible, the better they behave towards using e-learning during Covid-19 (C et al., 2019). Based on the results of Mustakim (2020) describing students assessing mathematics learning during the covid-19 pandemic using online media as very effective (23.3%), most of them assessing it as effective (46.7%), and assessing it as normal (20 %). Although some students consider online learning ineffective (10%), absolutely none (0%) consider it very ineffective. Meanwhile, in Wibawa, Astuti, Pangestu (Sodiq et al., 2021), the similarities of the research include the aspects studied, namely learning media. The research differences are in the subjects used. Mobile learning media will be very suitable as a learning medium today, which is in line with the rapid development of smartphone devices compared to Personal Computers (PCs), which form a new thought, namely learning can be done anytime and anywhere (Yuniarto et al., 2018). Leveraging the technologies that most interest today's youth and young adults to improve future health outcomes has focused on growing research and practice (Pasco et al., 2017).

Thus the importance of this research is to provide the latest concepts in online learning in the subjects of Physical Education, Sports and health during the Covid-19 pandemic with the concept of mobile learning that has been developed to provide a renewal of student learning in modern times. Based on the description of the background above, this study will discuss students' perceptions about using Android-based learning media in Physical Education Learning during the Covid-19 Pandemic.

METHODS

This study uses a descriptive survey with a survey as data collection. The data collection technique used was by distributing questionnaires which were analyzed quantitatively using percentages. This descriptive research describes the characteristics of a particular event. It is more concerned with what than how or why something happens (Nassaji, 2015) with surveys as its data collection method—collecting data using a questionnaire distributed to the sample. The data collection technique distributes questionnaires and analyzes the results quantitatively using percentages and analytical tools (Brown, 2001). This research took place at SD Muhammadiyah PK Baturan. Samples were selected that could represent the total population of students from class IV. Data were collected from 2 classes, namely class IV A and IV B, with 30 students. The study began by distributing questionnaires to 30 students. The research focuses on students’ perceptions of
android-based learning media in the physical education learning process. The questions in the questionnaire consisted of smartphone ownership, the type of android-based learning media used, students' perceptions of the use of android-based learning media for physical education, sports and health. Students' ability to operate android-based learning media, both computers and android, students' perceptions of one of the learning media in the form of android applications, and the last question about why students choose android-based learning media can be used in the physical education learning process.

**FINDINGS AND DISCUSSION**

This section will present the results of research related to smartphone ownership, the types of learning media used in physical education learning, and student perceptions of the use of android-based learning media.

![Figure 1. Smartphone ownership by the Students](image1)

Figure 1 shows that 100% of the 30 students have smartphones and can show that students will find it easy to interact with teachers when they carry out online learning using android-based learning media.

![Figure 2. Media used by teachers in online learning](image2)

Figure 2 shows that, during distance learning or online, teachers in implementing online learning use video media with physical education, sports, and health to deliver material with a percentage of 66.7%. In comparison, 33.3% of teachers use visual media/images. Students feel bored if the learning process only uses videos and pictures because students need innovation in learning media and teacher methods in delivering teaching materials. This condition requires knowledge and skills as well as confidence in the success of online teaching (König et al., 2020). Mobile device technology is growing rapidly, supported by a variety of operating systems used in it. The Android operating system is one of the most sought-after public today (Wilson, 2020).

The results of this study are in line with Rahma (Maknuni, 2020) that smartphones are one of the factors that can reduce the level of student learning activities. Teachers consider that developing learning media is a time-consuming and complicated activity. This is in line with Mahmudah (Yunus & Fransisca, 2020), which states that most learning media are packaged in print media or printouts in textbooks that are less attractive and less practical to use in the process of
learning activities. It shows that innovation in learning media in accordance with technological developments is needed, especially Android-based learning media. In its development, learning media are needed at various elementary, middle, and even higher education levels. The impact of these technological developments from traditional to modern has resulted in the curriculum in terms of teaching materials also experiencing development (Putra & Aslan, 2020).

Figure 3. The use of android-based learning media for physical education, sports and health

Part of the questionnaire was used to determine students' perceptions of android-based learning media for physical education, sports and health. Students choose "Agree" with 80%, and students choose "Disagree" with a percentage of 20%. This questionnaire shows that most students agree to use android-based learning media to use videos for physical education, sports, and health.

Based on the results of the research above under the research of Ketut et al. (2018), the development of material and content of the Android application-based learning model shows that the trial of this learning model is adequate with an average score of 4.349 (scale 5) and is categorized as "Very Good". These data reflect that the use of ICT plays an essential role in the quality of learning. This is reinforced by Ega Trisna (Titting, Fellyson, Hidayah, Taufik, Pramono, 2016) that all subjects require learning media to support the learning process. One of them is Physical Education, Sports and Health (Penjasorkes). Physical education is essential to allow students to be directly involved in various learning experiences through systematic physical activities, play and sports.

CONCLUSION

Learning physical education for sports and health is done online. 100% of students have smartphones, and 66.7% of teachers apply to learn using video media, while 33.3% of teachers apply visual/image media. Students' perceptions of mobile learning in sports and health physical education show that 80% of students agree, and 20% do not agree to use mobile learning in sports and physical education. The use of mobile learning in physical education, sports and health in the current pandemic conditions is quite helpful and improves the quality and effectiveness of learning. It is hoped that the results of this study can be considered for the sustainability of developing learning media products. For further researchers, it is necessary to involve the role of parents in supporting online learning using smartphones so that students are wiser in time management using smartphones.

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