



JUARA: Jurnal Olahraga

E-ISSN 2655-1896 ISSN 2443-1117

<https://doi.org/10.33222/juara.v7i2.1676>



Impact of the COVID-19 pandemic on Physical Activity and Student Achievement

Alan Alfiansyah Putra Karo Karo^{1*}, Dimas Arif Hidayat², Ricky Fernando Pasaribu³, Firdo Aginta Silalahi⁴ & Liliana Puspa Sari⁵

^{1,2,3,4,5}Sekolah Tinggi Olahraga dan Kesehatan Bina Guna, Jl. Alumunium Raya No.77, Tj. Mulia Hilir, Medan City, North Sumatra 2024, Indonesia

*e-mail: alanalfiansyahputra03@gmail.com

Info Artikel

Article History:

Received 13 February 2022

Approved 12 July 2022

Published 22 July 2022

Keywords:

Covid 19, Physical Activity, Learning Achievement

Abstract

This COVID-19 pandemic situation is considered unfavourable for some parties due to several factors such as restrictions on activities outside the home and sometimes feeling overwhelmed with many tasks while at home. So the purpose of this research is to see the impact of the Covid-19 pandemic on physical activity and student achievement. The subjects in this study were students who voluntarily filled out a questionnaire distributed through social media. A total of 124 respondents were collected. The 124 students were divided into five categories of levels of physical activity. There are 26 students in the shallow category, 67 students in the low class, 23 in the medium category, eight students in the high sort and 0 in the very high category. The intensity of physical activity during the pandemic in a week shows five students do not do physical activity at all a week, 74 students do one physical activity a week, 25 students do 2 or 3 times physical activity a week, ten students do 4 or 5 times physical activity a week, and ten students do 6 or 7 times of physical activity in a week. While the student achievement of 124 students seen as many as 98 students are in a complete category or the percentage of 79.03%, and as many as 26 students are in the incomplete category or the rate of 20.97%. The average value of student learning outcomes in physical education subjects is 80.60. Based on the study results, it can be concluded that students' physical activity during the COVID-19 period was included in the low category with an intensity level of physical activity once a week. The student achievement is at a high level of completeness.

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✉ Alamat korespondensi: Strett Alumunium Raya No. 77 Medan Deli, 20241, Indonesia

E-mail : alanalfiansyahputra03@gmail.com

INTRODUCTION

The impact of Covid-19 has spread to various fields, one of which is education.

Minister of education Nadiem Anwar Makarim issued Circular Letter No. 3 of 2020 on education units regarding the

implementation of education in the coronavirus disease emergency period, with this learning transferred to homes using online methods to prevent and break the chain of spread of COVID-19. At this time students are required to have excellent health even with limited circumstances.

Covid-19 originated from the Wuhan area of China. The spread of Covid -19 is so fast and deadly, transmission through physical contact is transmitted through the mouth, eyes and nose. Covid-19 has an impact on social life ((Mok et al., 2021)). In the span of just a few months, the COVID-19 virus has managed to spread to many countries in Asia. One of the countries experiencing the impact of Covid 19 is Indonesia. Corona virus is a virus that can attack living things, both animals and humans.

It has been almost 3 years that online learning has been implemented. It is also interspersed with offline learning that has a predetermined schedule, so that social restrictions can still be implemented properly. Since the issuance of Circular No. 4 of 2020 from the Ministry of Education and Culture, regarding the implementation of education policies in the emergency period of the spread of Corona Virus Disease (Covid-19), the Learning from Home process is carried out with the following provisions: (a) BDR through online/distance learning implemented to provide a meaningful learning experience for students, without being burdened with the demands of completing all curriculum achievements for grade promotion and

graduation; (b) BDR can be focused on life skills education, including regarding the Covid-19 pandemic; (c) BDR learning activities and assignments may vary between students, according to their individual interests and conditions, including considering access gaps or learning facilities at home; (d) evidence or products of BDR activities are given qualitative and useful feedback from the teacher, without being required to give quantitative scores or scores

However, another opinion stated that according to (Zoumpourlis et al., 2020), the Covid-19 pandemic caused many aspects to be disrupted in life because it was to prevent the spread of the virus. This can be seen from online classes to the closing time of shopping centers that are too early. The restrictions imposed (physical distancing) could disrupt the daily routine activities of tens of millions of people (Barrett et al., 2021); (Jarvis et al., 2020). It is possible that staying in the house for a long time can lead to an increase in the behavior of sitting, lying down, playing games, watching television, and using mobile devices thereby making energy expenditure less and consequently leading to an increased risk of non-communicable diseases (Chen et al., 2020).

Physical activity is any body movement caused by the work of skeletal muscles and increases the expenditure of energy and energy. Regular and adequate levels of physical activity can reduce the risk of hypertension, coronary heart disease, stroke, diabetes, various types of cancer, improve

muscle and cardiorespiratory fitness, improve bone and functional health, reduce the risk of falls and fractures of the hip or spine and for energy balance and weight control (Grida et al., 2020)).

Physical activity is one thing that is needed by the body to maintain the physical condition and health of the individual itself (Sutapa et al., 2020); (I Made Dwi Sastra Wargama, Soegiyanto, 2018). So it can be interpreted that physical activity is one of the physical needs of each individual, if we are less in doing physical activity, it will affect the health of our bodies.

The importance of exercise because exercise is a factor in shaping one's health. Regular physical activity will improve physical condition and immunity for a person. Immune immunity is very necessary for everyone to protect themselves from disease or virus attacks, for example, the corona virus which is endemic in all countries in the world.

On the other hand, the current COVID-19 pandemic situation is deemed unfavorable for some parties. Due to several factors, such as slow networks in some areas, sometimes feeling overwhelmed by the many assignments given, difficulty concentrating on learning, limited internet quota and making psychologically constrained students. So, most students (including myself) prefer to learn face to face. The online learning process requires students to study independently, with the hope that students can have independence in a good learning process so that they are able to follow

the learning process and get good learning outcomes.

Previous research said that currently, teachers and students face problems regarding the learning media used during online learning for physical education. Meanwhile, most students stated that online learning for physical education during this pandemic has not been fully effective (Mujiono, M., & Gazali, N, 2020). The policy of studying at home due to the Covid-19 pandemic has an impact on the learning of Physical Education in Schools (Hidayat, A. K, 2020)

Education during the Covid-19 Pandemic which is now a major factor in problems in the world of education, schools are now limited to face-to-face or called offline. Now the government requires schools to change the learning system to online. This slightly makes students and teachers experience difficulties in learning, because schools have to change the system in learning, namely through the internet, which initially teachers use the media system and teach face to face, because of the Covid-19 pandemic, finally teachers and students are limited by distance in learning, and finally the effectiveness in learning is a little problematic because there are several factors that interfere with learning, including sometimes students in online learning have few problems, such as among students who do not have gadgeted to learn online and sometimes students are constrained by signals in their respective villages.

Learning achievement is the ability obtained by children after learning activities. A person can be said to have succeeded in learning if he is able to show a change in himself. These changes include in terms of thinking skills, skills, or attitudes towards an object. The achievement that is expected through the online learning process is the achievement of student learning mastery which refers to the Minimum Completeness Competence characterized by students who score in accordance with the specified and even exceed the . Based on the above, the researchers focused on conducting research entitled the impact of covid-19 on students' physical activity and academic achievement.

The urgency in this research is where the COVID-19 pandemic is a new thing, so it is necessary to study the impact experienced so that efforts can be designed to overcome difficulties due to the impact of Covid-19 as an effort to adapt to new habits. The purpose of the study was to analyze changes in student activities based on percentages, number of students' completeness due to the pandemic, in order to be able to prepare and do the right things in the era of adapting new habits. The pandemic still exists but some activities must continue so that productivity does not stop, the hope is to contribute to the behavior of adapting new habits.

METHODS

The type of research used in this study is to use quantitative methods of survey

methods. In survey research, the researcher asks several people (called respondents) about past or present beliefs, opinions, characteristics of an object and behavior (Groeneveld et al., 2015). The subjects of this study were students who voluntarily filled out questionnaires sent via social media and used google forms to collect the results of the questionnaires as many as 124 respondents.

The data collection technique used in this research is a questionnaire with 5 levels to see physical activity. In conducting research, a researcher must use a good measuring tool, which is called a research instrument. The instrument used in this study was the Physical Activity Questionnaire Adolescents (PAQ-A) (Kowalski, K. C., Crocker, P. R., & Donen, 2004). PAQ-A was developed to determine the physical activity of students, more precisely for adolescents aged 14-20 years. It has 9 questions to determine the level of student activity.

Meanwhile, to measure the expected achievement through the online learning process is the achievement of student learning mastery which refers to the Minimum Mastery Competence characterized by students who get scores according to what is determined and even exceed it. Especially for completeness learning physical education subjects is 75%. So, students are considered to have achieved if they can get a minimum score of 75.

Before the researcher conducted item validity (Peterson & Merunka, 2014), the researcher gave a questionnaire to students whose characteristics were homogeneous with

the sample to see the level of readability of the sample against the questionnaire given by the researcher, to reduce the error rate in the validation of the questionnaire items. To calculate the validation of a given item, the SPSS 22 application is used. In addition to being valid, the instrument must also meet reliability standards. An instrument is said to be reliable if it can be trusted to collect research data.

In calculating the reliability of the instrument, the researcher uses Cronbach's Alpha formula to find the reliability of the instrument whose score is in the form of a scale (Ursachi et al., 2015). In quantitative research, data analysis is an activity after data from all respondents is collected (Ngulube, 2015). Where the activities in data analysis are: grouping data based on variables and types of respondents, tabulating data based on variables from all respondents, presenting data for each variable studied, performing calculations to answer the problem formulation.

FINDINGS AND DISCUSSION

The type of research used in this study is to use quantitative methods of survey

methods. The number of respondents as many as 124 respondents. In this research, the instrument used is a questionnaire of physical activity and academic achievement motivation. Respondents were asked to put a tick (✓) in the available column according to the actual situation and this study used a Likert scale with a range of 5 (five).

Findings

Of the 124 students have been divided into 5 categories of levels of physical activity. There are 26 students in the very low category, 67 students in the low category, 23 students in the medium category, 8 students in the high category and 0 students in the very high category. The intensity of physical activity during the pandemic in a week shows 5 students do not do physical activity at all in a week, 74 students do 1 physical activity a week, 25 students do 2 or 3 times physical activity a week, 10 students do 4 or 5 times physical activity in a week, and 10 students do 6 or 7 times of physical activity in a week.

Table 2. Student Activities Based on Percentage

No	Criteria	%
1	Very low	20.97
2	Low	54.03
3	Currently	18.55
4	Tall	6.45
5	Very high	0

Of the 124 students who have achieved graduation based on the minimum completeness criteria for physical education subjects, it is 75. Based on the data results, it can be seen that 98 students are in the complete category or in

the percentage of 79.03% and as many as 26 students are in the incomplete category or in the percentage of 20.97%. . The average value of student learning outcomes in physical education subjects is 80.60.

Table 2. Number of Students' Completeness

No	Criteria	Students
1	Not Completed	26
2	Completed	98

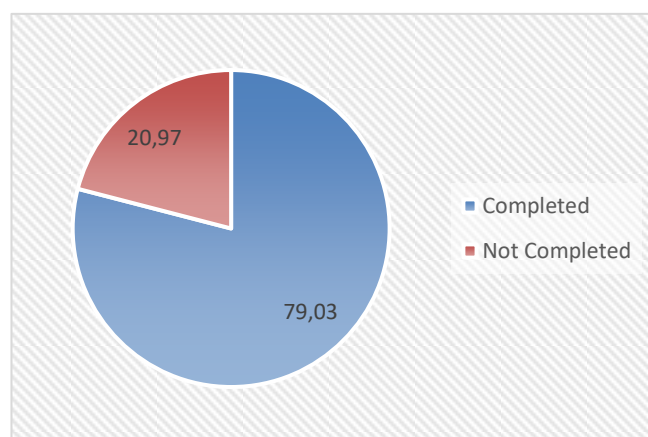


Figure 2. Student Achievement

Discussion

Currently maintaining cleanliness and maintaining the body in prime condition is an obligation, one of which is by doing physical activity. Physical activity is beneficial for children's growth and helps reduce the risk of exposure to a disease. Physical activity plays an important role in children's cardiovascular health, musculoskeletal health, mental and behavioral health, as well as physical, social, and cognitive development (Lobelo et al., 2020).

With limited movement and not much time, students can stretch between learning

times, doing it periodically for a short time to relax muscles and smooth blood flow (Wicaksono & Djamil, 2020). Another study from the results of the level of physical activity above showed that 67.5% of students had a low level of physical activity, 26.2% of students had a moderate level of physical activity and 6.2% of students had a high level of physical activity (Khotimah & Wahjuni, 2021). So it can be said that awareness of the importance of doing physical activity to maintain fitness during this pandemic has not been carried out by all students of SMAN 1 Driyorejo.

Online learning, demands active, collaborative involvement between teachers and parents to monitor and assist students. In the conventional learning system, parents relatively do not feel obliged to provide assistance in the learning process of their students/children (Pokhrel & Chhetri, 2021). Parents focus on their main tasks and functions; take care of the household and work for a living. Children's education is entirely the task of teachers in schools. However, online BDR really needs the presence of parents as teachers for their children, just like teachers in schools.

The inability of parents to understand what their children are learning further complements the obstacles faced when learning online. Parents who are expected to play an active role in accompanying their children during online learning during the Covid-19 period are actually faced with such conditions (Dong et al., 2020).

Academic achievement cannot be influenced by motivation alone, but from several supporting factors behind it. Efforts need to be made to improve the quality of learning during the Covid-19 pandemic. Research by (Riadnya et al., 2021) Based on the descriptive statistical analysis used to test the hypothesis, the results of the study can be concluded, there is an impact of the COVID-19 pandemic on online learning motivation for PJOK subjects. The resulting impact is the lower learning motivation of PJOK students due to the application of online learning from the impact of the covid-19 pandemic.

Another study also stated that PJOK learning during the COVID-19 pandemic was relatively low (Komarudin & Subekti, 2021). 19 are included in the "very satisfied" category 0 students or 0% percentage, the "satisfied" category 5 students or a percentage of 6.02%, the "quite satisfied" category 16 students or a percentage of 19.28%, the "not satisfied" category 36 students or the percentage of 43.38%, the category "very dissatisfied" 26 students or a percentage of 31.32%, so that the satisfaction of class VIII students of SMP Negeri 14 Yogyakarta is low.

CONCLUSION

Based on the results of the research, related to the physical activity of students during the COVID-19 period, they were in the low category with the level of intensity of physical activity being once a week. Meanwhile, for student learning achievement is in a high level of completeness.

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