



Sedentary Behavior of Elementary School Students During the Covid-19 Pandemic

Dwi Rizky Aditia Putra*, Anira

Physical Education, Universitas Pendidikan Indonesia, Indonesia

Article Info

Article History:

Received April 2022

Revised June 2022

Accepted July 2022

Available Online October 2022

Keywords:

covid-19, life style, sedentary behavior

Abstract

Restrictions on social activity due to the Covid-19 pandemic had an impact on sedentary behavior. The purpose of this study was to investigate the physical fitness and sedentary behavior of elementary school students. The method of this study used quantitative descriptive research. The sampling technique used in this study was the total sampling. This study involved 89 students (male = 46; female = 43) as the samples. The instrument used in this study was the Adolescent Sedentary Activity Questionnaire (ASAQ). The data analysis employed the Microsoft Office Excel 2016 computer program. Based on the results of the research, sedentary behavior of the samples on weekdays (11 hours 45 minutes) and weekends (8 hours 49 minutes) were in the high category. This condition is concerning because it can cause many health problems in children. This research can be a reference for teachers to play a role in cultivating a healthy and active lifestyle. Researchers, for further research, are suggested to expand the size of the sample and update the instrument to gain more comprehensive results.

*Correspondence Address : Jl. Dr. Setiabudhi 229. Bandung, Indonesia
E-mail : aditiaputra981@gmail.com

INTRODUCTION

The Covid-19 pandemic has posed many challenges to education in Indonesia. Almost all activities are at home and this policy is also called a lockdown. Lockdown can prevent the spread of the Covid-19 virus, this policy is carried out by the government by carefully considering the consequences, both economically and socially. Lockdown activity is part of the laws and regulations that have been explained in Law Number (No). 11 of 2008 on Health Quarantine. The impact of Covid-19 has forced all activities to be carried out by maintaining physical distance. This is done to minimize the spread of the Covid-19 virus. Minister of Education and Culture, Nadiem Anwar said that the principle of issuing education policies during the Covid-19 pandemic was to prioritize health and safety (Wulandari & Agustika, 2020). The more time used in carrying out sedentary activities then provide greater opportunities in reduce energy expenditure.

In addition, developments in technology and science have had a significant impact on people's lifestyles, including students. Equipment that becomes sophisticated and instantaneous encourages a person to tend to be more lazy to move and do less physical activity which increases a sedentary lifestyle in children (Tremblay et al., 2011). Lifestyle people living in adoptive housing westernized lifestyle such as activities which initially requires human physical energy now everything is made easier with help technology. Sedentary behavior is a group of behavior which occurs when sitting or lying down requires a huge expenditure of energy low, such as sitting or lying down while watching television, playing electronic games, reading, and so on.

The results of research on school-age children show that when weekend sedentary lifestyle increased 4.98 hours/day from weekday which has an average of 3.55 hours/day. This increase was due to the time opportunity to carry out a sedentary lifestyle more frequently weekend compared to weekday. Sedentary lifestyle behavior in children can be influenced by several supporting factors such as economic

status, parental education and the environment (Setyoadi et al., 2015)

The results of Carson et al. (2015) show that a sedentary lifestyle occurs at the early stages of growth and development, namely ages 2-5 years. Children in their early years spend 34% - 96% of their time awake. The results stated that the child was obese spend more time on engage in sedentary behavior such as reading in my spare time, using computer, playing games, and using passive transportation to school such as motorbikes, cars and buses. A sedentary lifestyle has a negative effect on health, and makes it an important issue in the world of health. Increased use of time sedentary on weekends due to opportunity for sedentary time behavior more than when weekdays

Likewise with research on children and adolescents regarding patterns of behavior that persist and are measured objectively regarding other important health and developmental outcomes, such as health-related fitness, bone health, or psychosocial, motor and cognitive development, have not been reviewed. Encourages a person to tend to be lazy do less physical activity which increases a sedentary lifestyle in children (Tremblay et al., 2011).

The impacts of a sedentary lifestyle include cardiometabolic disorders, respiratory disorders (asthma), psychosocial disorders (anxiety/depression) and include growth and development disorders (Cliff et al., 2016). Obesity is a multifactorial disease caused by interactions between factors internal and external. In addition, a sedentary lifestyle is a cause of obesity in adolescents in Yogyakarta, physical activity and a sedentary lifestyle have an effect of 53.9% on obesity (Rahmad, 2019).

The sedentary lifestyle during the Covid-19 period has increased because many sports facilities have not yet been opened and may not be used by the general public. This results in children choosing to play with media such as gadgets. Sumarno (2020) said that the COVID-19 pandemic had a short-term impact on the continuity of learning and this impact will be felt by all people related to education, both in villages and cities.

METHOD

This research was conducted using a quantitative descriptive method. The method used in this research is a quantitative method.

Sample

The sample used in this study was 89 fifth-grade students at SDN Karyamulya, West Bandung Regency. In this study, researchers use total sampling in determining the sample of the population. The reason researchers use total sampling is because the total population is less than 100, and the entire population is used as a sample. In sampling, gender is not differentiated because it has no influence on the data taken, but in detail the data between men and women is still included. So that the data sources obtained in this study are as follows:

Table 1. Sample Distributions

Age	Man	Woman	Amount Student
11 years old	34	39	73
12 years old	12	4	16
Total	46	43	89

Data Collection Technique

The survey method is used to obtain data from certain places by distributing questionnaires, tests, structured interviews and so on (Arifin, 2020). This research uses survey and experimental methods including a quantitative approach (Sugiyono, 2018). The data from this study are in the form of numbers and analysis using statistics. So the researchers chose descriptive research using survey methods and a quantitative approach to find out how elementary school students' sedentary lifestyle was during the Covid-19 pandemic.

Data Analysis

The collected data were analyzed using descriptive statistics. Sugiyono (2018) descriptive statistics are the presentation of data through tables, graphs, diagrams, pictograms, calculations of mode, median, mean, standard deviation and others.

RESULT & DISCUSSION

The data obtained through the ASAQ questionnaire in this study used a quantitative descriptive method. To be able to provide an overview of the results of research on physical fitness and sedentary lifestyle, they are presented in the table below.

Table 2. Sedentary Lifestyle

Frequency	Average	Category
Weekdays	11 : 45	Height
Weekend	08 : 49	Height

Based on the table of two sedentary behaviors during a pandemic in class V students with a total of 89 students, the average sedentary time on working days (weekdays) of 11 hours 45 minutes, namely in the "High" category and on holidays (weekend) of 8 hours 49 minutes, which is in the "High" category.

Sedentary behavior is divided into two parts of the activity, namely based on working days (weekdays) and holidays (weekends). The average grade V students perform higher sedentary behavior on weekdays for 11 hours 45 minutes and on holidays it decreases by 8 hours 49 minutes, with a "low" category of 2% or two children, then a "moderate" category of 16% or as many as 14 children and the category "High" As much as 82% or as many as 73 children.

This is because on weekdays children sit a lot and use computers for school, in line with research conducted by Guo (2021) which states that during the pandemic students have increased their screen time by five hours/day to study online. Sophisticated and instantaneous encourages a person to tend to be more lazy to move and do less physical activity which increases a sedentary lifestyle in child (Tremblay et al., 2011). Guidelines in other studies state that children should spend no more than two hours/day staring at screens (Tanaka et al.,

2018). By the recommendations of the Canadian 24-Hours Movement Guidelines For Children and Youth which limits sedentary behavior to only two hours/per day (Prince et al., 2020).

Pandemic conditions like this greatly affect all aspects, one of which is fitness and a sedentary lifestyle for elementary school students, because they must be forced to feel different things from using conventional learning to online learning. On the other hand, the Covid-19 pandemic has also led to technological developments, taking on many roles related to human work so that they become more practical in everyday life and cause humans to become less active (Laksono & Hidayat, 2019). This also has an impact on children or adolescents, they tend to practice sedentary lifestyles because they spend more time with mobile phones and do less physical activity (Bigman et al, 2015).

Zanjani et al (2015) stated that family support plays an important role in the development of a healthy lifestyle. Families can encourage or discourage children from engaging in healthy behaviors by providing consequences, praise or complaints. Elementary school children spend more time studying on weekdays than on weekends. This behavior should be minimized by the role of parents towards their children by supervising their children while playing with gadgets. Genetic factors contribute to incidence of obesity in children (Duncan et al., 2011). The research results show some Most respondents with obesity have history of parents who are overweight or obesity by 70.6%, by 17.7% Some of them have both parents overweight or obese. Lifestyle changes among children with Higher socio-economic classes included decreased and increased physical activity sedentary life, reinforced by plenty cultural changes associated with globalization.

According to Tulak (2021) the role of parents in supervising children in using gadgets during a pandemic like today is still lacking. Another factor that can affect the use of gadgets in children is the education provided by their parents to their children. Through the educational method that is taught to their children,

parents should know the side effects of using gadgets, but it tends to be that most parents provide gadget facilities to be used as learning media. It is proven the results of other studies showing that parents' socio-economic factors influence children's sedentary activities (Setyoadi et al, 2015). This is proven by the higher the socio-economic level of parents, the easier it is for parents to provide facilities such as gadgets that support children in carrying out screen time activities. As a result, children who are addicted to games are believed to be more aggressive in many ways (Mulya and Safari, 2020). family with A high level of education has a tendency to be sedentary behavior as much as 61.1%, while at other groups tend not to do so sedentary behavior was 37.4%. while the number of respondents who often practice sedentary behavior with parents with parents' income is greater than the minimum wage group of 19 respondents was (77.8%).

According to Dheri (2021) excessive use of time to play online games disrupts daily life. Children should be able to use gadgets for their learning needs such as; programs for basic knowledge of reading, arithmetic, history, geography, and so on. The influence of friends and family has a very important role to overcome the low level of sedentary behavior.

One of them is the role of parents who can change bad habits that affect a sedentary lifestyle, they can spend time together or activities that require more energy expenditure of physical activity (Ramadhani & Bianti, 2017). In addition, the school environment, such as the support of teachers and school friends, can improve a child's active lifestyle. Teachers must also be able to motivate children to be wise in using technology.

CONCLUSION

Based on the results data processing and analysis, it was concluded that the sedentary lifestyle of fifth-grade elementary school students during working time (weekdays) is in the "high" category dan in off time (weekend) is in the "high" category.

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