



Sedentary Behavior of Elementary School Children According to the Perception of Class Teachers and Physical Education Teachers

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Abstract

With the development of technology, it indirectly changes the lifestyle to be more lazy to do physical activity, especially for elementary school children. The method in this study is to use a quantitative approach with a comparative causal method where it is done by comparing the perceptions of class teachers and Physical Education to determine the sedentary behavior of elementary school students spread across cities and districts in East Java. Respondents in this study totaled 78 teachers, of which 43 were class teachers and 35 were physical education teachers. Data were collected through questionnaires via google form with 5 Likert answer scales and analyzed with one sample t-test and independent sample t-test. The results of the study are: 1) Physical activity of elementary school children according to class teachers has not met the adequate criteria set. 2) Physical activity of elementary school children according to Physical Education has not met the adequate criteria set. It can be concluded in this study that the physical activity of elementary school children according to physical education teachers has not met the established adequacy criteria. Meanwhile, according to the class teacher, the physical activity of elementary school children according to the class teacher has not met the adequacy criteria set.

How to Cite

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INTRODUCTION

Changes in information and communication technology in the digital era change the way people live along with the birth of new innovations to answer the needs of society. This change not only answers the needs of the community but also spoils the community at the same time. The presence of smartphones-one of the results of technological development-shows a remarkable change in the way people live. Looking at the picture of children's behavior today, there is a lazy behavior of moving. One of the behaviors in many studies that has been proven to reduce health is sedentary behavior. Symptoms of sedentary behavior are actually the unintended impact of scientific and technological advances, especially technology, information and communication.

Various kinds of information and technology increasingly spoil humans in carrying out daily activities. Starting from advances in the field of transportation that make travel time shorter, the field of telecommunications that makes the world seem like there is no distance because it can do verbal and visual communication, and also the progress of the world internet that can access everything from cyberspace. However, with these advances, there are many negative impacts that occur around us, especially children who have not been able to manage / divide their time. Technological advances cause sedentary behavior which results in hypokinetic / sedentary conditions and is likely to be a risk for diabetes. In general, the negative impacts of sedentary behavior include reducing fitness, worsening cardio-metabolic.

Education is very important for human life, because education is a process of humanizing humans. For this reason, education is one of the processes that can be used as an alternative for character education, so that the realization of human norms. From many studies conducted in the field of physical education, it shows that the physical education curriculum is not appropriate and satisfactory (Ljubojevi, 2016). Education is not only a process that takes place in the classroom. Sports education or physical education is a form of education aimed at encouraging the formation of students in accordance with national goals. Then (Budi, 2019) explains that physical education is one of the subjects that must be followed by students as a means for students to be able to develop their potential through various physical activities. Furthermore, regarding the purpose of physical education, the purpose of physical education is not only to improve stu-

dents' skills in the field of sports or only to improve the physical fitness of students, but physical education has a comprehensive (holistic) goal, namely developing intelligence cognitively, affective and psychomotor.

Education is universal, can be divided into several aspects, one of which is physical education according to (Burstiando, 2017) stated that in learning activities at school students are equipped with various kinds of things from cognitive, affective and psychomotor learning. The learning process can also be used as a sports popularization process, because through basic movements or movement skills in sports can be placed, that's why sports popularization can use learning in physical education sports. Conditions which cause a lack of opportunities for children to do physical activity in physical education, also cause many Physical Education to be unable to achieve the goals of physical education (Sugiarto, 2015). Physical activity has now been built in such a way that it is not just an individual routine activity, but has been built into a formal organization with various regulations made. Physical activity is a condition that requires different levels of movement according to the energy needs expended, so the calories per hour will decrease depending on the level of activity.

Due to advances in science and technology, children in elementary school tend to do less physical activity such as playing, which should be physical but is replaced with games and lack of living a healthy lifestyle (Subekti, 2020) (Sunarwan, 2022) (Setiawan, 2021). Students' high use of information technology makes students' sports activities less active, thus affecting students' low physical activity (Yange, 2018). One of the indicators of lazy student movement is the tendency to decrease students' physical fitness levels and low student participation in physical education and extracurricular sports activities. It is necessary to consider the policy of time allocation requirements in physical education and sports at the education level unit, both in elementary, junior high, and high school. Physical Education (PE) lessons are a vehicle for students to perform various Physical Activities (PA) and sports games (Lin, 2020). Children spend most of their time at school seated or sedentary. Physical education classes are a deterrent to excessive sedentary behavior in schools (da Costa, 2017).

Teacher independence for classroom management is an important component of teacher identity that has implications for the quality of teaching (Lazarides, 2020). Regular physical education in schools has an effect on improving

academic achievement, non-cognitive skills, motor skills and physical activity (Knaus, 2020). Children's involvement in physical education and sports has a positive association with functional body shape (Allen, 2019). Physical education reduces feelings of loneliness and insomnia and disciplined physical education activities have a protective effect on mental health (Madeira, 2019).

With the increasing globalization and modernization of people's lives, lifestyle behaviors have changed substantially in many countries around the world. These changes have brought about a decrease in physical activity and an increase in unhealthy diets. As a result, non-communicable diseases have replaced infectious diseases as a health hazard (Schulenkorf, 2019). For school physical activity promotion initiatives to be accepted and implemented, teacher involvement is fundamental. Therefore, school physical activity promotion should be integrated with and support teaching activities (Bentsen, 2021). Physical activity and exercise play an important role in the primary, secondary and tertiary prevention of various diseases and also to improve productive physical performance and daily living activities (Langhammer, 2018). Physical activity is a condition that requires different levels of movement according to energy expenditure, so calories per hour will decrease depending on the level of activity. There is an assumption that mandating physical education time allocation requirements will lead to adjustments in school time and increase the duration of physical education time, whereas in theory, adolescents will be more physically active and this will improve health problems such as obesity (Landi, 2021). Therefore, increasing the allocation of learning time can provide opportunities for adolescents in schools to be more active and reduce the risk of disease due to sedentary behavior. Adolescents who exercise show greater exercise satisfaction, more favorable health indicators, and higher physical activity compared to those who do not exercise (Lemes, 2021).

In addition to its convenience and practicality, this technology that has become a human need has impacts and consequences in human life in carrying out their life activities. In this digital era, it is important for class teachers and especially Physical Education teachers to continue to remind their students to keep moving and reduce sedentary behavior which has many negative impacts. Therefore, this study aims to determine (1) Does the physical activity of elementary school children according to class teachers meet the adequate criteria set? (2) Does the physical activity of

elementary school children according to Physical Education meet the set criteria? (3) Is there a significant average difference between class teachers and Physical Education on sedentary behavior of elementary school children?.

METHODS

This quantitative research with a comparative causal method was conducted by comparing the perceptions of class teachers and Physical Education to determine the sedentary behavior of elementary school students spread across cities and districts in East Java. Data were collected through an online questionnaire (google form) with 5 Likert answer scales and analyzed with a single mean versus criterion test (one sample t-test) and an independent group mean difference test (independent sample t-test). IBM SPSS Statistics 25 was used to facilitate the calculation of the analysis results. Respondents in this study totaled 78 teachers, of which 43 were class teachers and 35 were physical education teachers.

RESULTS AND DISCUSSION

Respondent Demographics Teacher Gender

Table 1. Descriptive Analysis Output of Classroom Teacher Gender

	Fre-quency	Percent	Valid Percent	Cumulative Percent
Male	5	23,8	23,8	23,8
Female	16	76,2	76,2	100
Total	21	100	100	

Table 1 presents the descriptive frequency of gender of classroom teachers at the primary school level. From the results of the analysis above, it can be seen that most of the class teachers are female, namely 16 teachers (76.2%), and male, namely 5 teachers (23.8%).

Table 2. Descriptive Analysis Output of Gender of Physical Education Teacher

	Fre-quency	Percent	Valid Percent	Cumulative Percent
Male	38	66,7	66,7	66,7,8
Female	19	33,3	33,3	100
Total	57	100	100	

The descriptive frequency analysis output in **Table 2** shows that Physical Education teach-

ers at the elementary education level are mostly male, namely 38 teachers (66.7%) and the rest, 19 teachers (33.3%) are female.

Table 3. Descriptive Analysis Output of Classroom Teachers' Educational Trajectory

	Fre- quency	Percent	Valid Percent	Cumu- lative Percent
S1	14	66,7	66,7	66,7,8
Currently Studying	7	33,3	33,3	100
Total	21	100	100	

Table 3 above shows that there are 7 (33.3%) class teachers who are currently pursuing a bachelor's degree (S1) and 14 (66.7%) class teachers who have completed their bachelor's degree and are not currently pursuing a master's degree.

Table 4. Descriptive Analysis Output of Physical Education Teacher Education Network

	Fre- quency	Percent	Valid Percent	Cumu- lative Percent
S1	50	87,7	87,7	87,7
S2	6	10,5	10,5	98,2
Currently Studying	1	1,8	1,8	100
Total	57	100	100	

Table 4 displays data that there is 1 Physical Education teacher (1.8%) who is currently pursuing undergraduate education, Physical Education teachers (87.7%) who have completed undergraduate education and 6 Physical Education teachers (10.5%) are continuing and pursuing postgraduate education.

Classroom teachers at the primary school level are predominantly female. A mother's instinct as an educator, caregiver is to have patience. The highest level of education for classroom teachers is S1. Classroom teachers choose a less advanced level of education because the material taught in primary schools is easier. In summary, class teachers are mostly female because their role is not only a teacher but also a family. Teaching hours that do not last until late afternoon give female classroom teachers the opportunity to take care of their families. The dual role of teacher and housewife takes up time and energy, so many female teachers put aside their desire to become career women and do not make structural careers

their main choice, so they are not optimal in giving their time to manage learning.

The above description also explains why Physical Education teachers are mostly male and have higher education. In addition, Physical Education material is loaded with physical competence and requires extra physical conditions. Physical Education teachers are required to master all sports taught in elementary schools. However, in the current era, the competence of sports teachers is explained by the creativity of teachers in explaining material to students where according to students that male Physical Education teachers are more creative in presenting material. Female teachers are more communicative and male teachers are more effective in planning learning, changing learning and closing tasks.

The elementary physical education teacher reported that the behavior of the elementary school students under his care was not very active and did not meet the established criteria. Physical Education lessons involve cognitive, affective and psychomotor competencies that are developed through physical fitness, movement skills, emotional control, healthy lifestyles. During this pandemic, Physical Education teachers feel that the aspects that develop in elementary school children are still limited to the development of cognitive and affective competencies. The lack of psychomotor development of elementary school students is because students do not fully get learning assistance from parents because parents assume that sports lessons are lessons that can be done by students themselves. Parents have the perception that sports lessons are only movement lessons, even though movement is not always said to be sports so that Physical Education teachers categorize the physical activity of elementary school students in the low category. Students collect videos containing movements exemplified by the teacher (students watch through gadgets, exposed to screen-time) with inappropriate attitudes (increasing sedentary behavior).

Sedentary comes from the Latin word "sedere" which means "to sit". Therefore, sedentary lifestyle is used to describe behaviors associated with low energy expenditure in the body (Badriyah, 2022). In addition, the increase in obesity prevalence occurs due to a decrease in physical activity due to an increase in sedentary lifestyle. Sedentary lifestyle is a behavioral group with a low amount of physical activity or no physical activity (inactivity) (Badriyah, 2022). The increasing prevalence of obesity in school children is strongly associated with sedentary activities and reduced physical activity (Arundhana, 2016). In

addition to poor diet, excessive sedentary lifestyle can have a negative impact on adolescent health, one of which is obesity (Elysa, 2023). Teenagers spend more time watching television, using computers or cell phones and using games than walking, cycling or going up and down stairs (Elysa, 2023). Sedentary is a child's bad behavior or habits in a person's life that does not do much physical activity or does not do much physical movement so that it has an impact on the incidence of obesity and even obesity, this is exacerbated by unhealthy eating conditions in elementary school children such as careless snacks and low consumption of vegetables and fruit (Rahmad, 2019). Children should be encouraged to go outside and encouraged to join activities such as sports programs (Rahmad, 2019).

Sedentary behavior that occurs in elementary school age students has exceeded the limit and students instead spend more of their sedentary time by playing smartphones and so on (Subagyo, 2022). Based on the provision of healthy lifestyle education to avoid sedentary, nutritious diet and training to improve physical fitness, the results show that most students only do physical activity once a week, namely during PE lessons at school, this is certainly not enough if the goal is to be healthy and improve physical fitness (Dhuha, 2023). Sedentary is any activity with energy expenditure below 1.5 MET or Metabolic Equivalent of Task such as when sitting, lying down (Nafi'ah, 2022). Sedentary lifestyles expend little energy so that the body stores energy in the form of fat, as well as playing gadgets, laptops, television for long durations (Andriani, 2021).

Sedentary behavior is also a risk factor for various metabolic disorders such as high cholesterol, high blood pressure, diabetes, insulin resistance, obesity and so on (Silwanah, 2019). Based on the results of the research conducted (Setyoadi, 2015) showed that there were 14 (82.4%) obese children often engaged in sedentary behavior and 4 (23.5%) in normal weight children with a total average of both 8 hours / week. In the long term, this sedentary behavior will have a negative impact on children's health because it has the potential to cause overweight and obesity (Hasdianah, 2014). Sedentary lifestyle is classified as sitting at home, business center, spending a long time, driving a car or in a car, spending time watching TV, playing games, using gadgets or cellphones, and sitting and relaxing (Mandriyarini, 2017). Sedentary lifestyle can be categorized with a group of behaviors or low or no physical activity (Ambarita, 2021).

CONCLUSION

It can be concluded in this study that the physical activity of elementary school children according to physical education teachers has not met the established adequacy criteria. The lack of psychomotor development of elementary school students is because students do not fully get learning assistance from parents because parents assume that sports lessons are lessons that students can do themselves. Meanwhile, according to the class teacher, the physical activity of elementary school children according to the class teacher has not met the adequacy criteria set.

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