



The Effect of Traditional Games on Participation of Elementary School Students in Physical Education

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Abstract

Technological developments have positive and negative impacts. One of the negative impacts is the increasing amount of screen time children spend. So that children's participation in learning physical education is disrupted. The purpose of this study, among others, is to see the effect of traditional games on the participation of elementary school students in learning physical education. The method used is quasi-experimental with one group pre-test and post-test design. The research sample amounted to 43 people, consisting of 20 male students and 23 female students. The sample is grade 5 students aged 10-11 years. This research instrument uses a sports participation questionnaire with a scale of 2 "yes" or "no." the dimensions of the instrument include (1) Pre-implementation, (2) Implementation, and (3) Post-implementation/evaluation. The results showed a $p\text{-value} = 0.000 < 0.05$; this means that there is a difference between the average value of the pre-test and the average value of the post-test. This study concludes that traditional games affect the participation of elementary school students in learning physical education.

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INTRODUCTION

Physical education programs in schools are one of the most effective ways, and they have been widely recognized as a means. Their main goal is to promote physical activity in children (Biddle & Mutrie, 2007; Corbin, 2002). Many benefits are obtained from physical education activities, such as physical, social, and emotional benefits, as well as developing knowledge and skills to live a physically active lifestyle (Morgan & Hansen, 2008). Preventing cardiovascular disease (Boreham & Riddoch, 2001) and increasing the components of physical fitness can regulate and prevent overweight and obesity (Gutin et al., 2002; Kimm et al., 2005; Lobstein et al., 2004). Physical activity has also been shown to cause relatively large physiological changes in the immune system (Fauzi, 2020).

Every day, children spend more time at school, and at least 30 minutes of this time is spent on physical activity (Mahar, 2011). Physical activity during school hours can occur during physical education, breaks, and classroom instruction (Mahar et al., 2006); pre- and post-school programs can provide additional opportunities for children to be physically active (Mahar, 2011). However, physical activity among children and adolescents has decreased (Mahar et al., 2006), and more and more children are spending more time on gadgets. Elementary school children who undergo long periods of academic learning often become more restless or restless, and experience decreased concentration (Mahar et al., 2006). The body's susceptibility to disease increases in subjects who are less active and exercise compared to subjects who regularly exercise with moderate intensity (Fauzi, 2020).

Elementary school-age children spend most of their time playing games on smartphones (Fauzi, 2019). This is because electronic media is a central part of their lives (Lissak, 2018). Children and adolescents use digital media devices for an increasingly diverse leisure time. This certainly has a negative impact on the physical, intellectual, and psycho-social development of children if the use of smartphones is not regulated. Children prefer games on gadgets compared to physical activities or games that involve the child's physical. As a result, attracting children to use excessive screen time during the recommended limit of 2 hours per day (Anderson et al., 2010). The consequences of excessive screen time on general health, physical activity, and cognitive and social development have been discussed by many researchers (Iannotti et al., 2009; Must &

Tybor, 2005). Screen time is the activity of using digital media in a certain amount of time.

Traditional games are considered very important in promoting cultural diversity and protecting cultural identity at local, national, and international levels (Adnan et al., 2020). Many traditional games offer the opportunity to take part in different roles in the game (Pic et al., 2019). Traditional games are the first pedagogical tools available to physical education teachers that can be used in physical education programs in schools (Pic et al., 2019). Traditional games require skills that are important for the development of basic motor skills as well as improving children's motor skills (Adnan et al., 2020). Traditional games are expected to restore the stability of children's daily activities so that they can participate in physical activities with an adequate number of hours. For young children, non-digital play-oriented experiences best promote executive function and higher-order thinking skills such as impulse control, emotion regulation, and task persistence and develop motor skills (Lissak, 2018).

Bebentengan

How to play the Bebenengan is as follows:
a. Before starting this game, the students were divided into two groups; b. each is required to choose a post such as a fort, tree, pole, or other object that can be used as a base; c. players are tasked with seizing the opponent's fortress and partially guarding their respective forts; d. Before attacking, each player must attach a hand or foot to his fort to increase strength, e. Players will lose power when an opposing player has just renewed the strength of his fortress or base. f. The losing player will be caught by being made a prisoner in his enemy's fortress; this prisoner can be saved by his group of friends by touching his body. g. The group that is said to be victorious can touch the opponent's stronghold.

Boy-boyan

The game begins by determining groups, both A and B and then the representatives of the groups make suits to determine which are the constituents of the tile fragments resembling pyramids; who wins are the throwers using tennis balls with a distance of approximately three meters. The pitcher must break the pile of tiles until it collapses; when the pile of tiles collapses, the pitcher must avoid the throwing of the tile guard team, and some of the throwing teams arrange the tiles that have been knocked down when the ball is chasing the tile breaking team. The game is said to be over if the first pitcher finishes arranging the tile shards or the ball thrower from

the tile keeper manages to throw the ball throughout the tile-breaking team. After completion, the team that broke the tiles took turns with the team that guarded and threw the ball to the team that broke the tiles.

Every time a child starts a physical education program, they will be given an explanation of the game and what they will learn. Then, the child will warm up first to prepare the student's cardiovascular and musculoskeletal systems for stronger physical activity (Martens, 2012). Furthermore, the child does static stretching systematically first, followed by a warm-up to increase body temperature before doing the core program. Next, the child will do a dynamic warm-up to prepare the body because it is important for all students to warm up before participating in physical education activities (Faigenbaum & McFarland Jr, 2007).

The problem in this research is whether traditional games influence elementary school students' participation in physical education learning?. The aim of this research is to examine the influence of traditional games on elementary school student's participation in physical education lessons.

One way to increase student motivation and overcome monotony and boredom is by playing (Arufe-Giráldez, 2019). Playing is one of human nature and has been present since the existence of these people as a determining tool for learning (Soriano-Pascual et al., 2022). In line with these principles, in the field of physical education, there seems to be a tendency to make sport a fun activity with the prospect that this will facilitate student participation in lifelong physical education (Garn & Cothran, 2006). Based on previous opinions, the researcher took the hypothesis There is an influence of traditional games on elementary school student's participation in physical education learning.

METHODS

The design used in this study is a one-group pre-test and post-test design; this design is commonly used to evaluate those relating to social programs or in the field of human services.(Shek & Sun, 2012). The population in this study is one of the sub-districts in Indonesia, totaling 196 students, and a random sample of 43 people consisting of 20 male students and 23 female students was taken. The sample is grade 5 students aged 10-11 years; it is during this age that children are developmentally ready to learn

basic motor skills that will provide the best opportunity to engage in lifelong health promoting physical activity (Balyi et al., 2013). The entire sample involved in the study had obtained written approval from the school and parents. To see the level of participation of students in physical activity using traditional games using sports participation instruments with a scale of 2 "yes" or "No," the dimensions of the instrument include (1) Pre-implementation; (2) Implementation; (3) Post-implementation/evaluation.

The study used a one-group pre-test and post-test design, so two tests were carried out, namely before and after treatment. Students fill out the participation questionnaire in sports on the pre-test, which describes student participation in conventional programs. Then, after the research program, students will fill out the questionnaire again to see the impact of traditional game programs on student participation.

Students are given a traditional game program for four weeks with a normal duration according to the physical education curriculum that applies in our country, which is 2x35 minutes/week. Physical Education activities at school are recommended to be done at least 60 minutes a week (Woods et al., 2010). Intervention of basic motor skills for four weeks and with a duration of 2x 30 minutes a week can significantly improve the ability of Basic Motor Skills of children aged ten years (Costello & Warne, 2020). However, in practice, the researchers set the frequency by doing additional hours to 2 times a week for four weeks

RESULTS AND DISCUSSION

Based on the calculations carried out using SPSS, the average data was obtained from the Pre-test and Post-test results.

Table 1. Description of the Average Pre-Test and Post-Test

	Test	N	mean	Std. Dev
Participation	Pre	42	9.57	1.36
	Post	44	18.52	1.63

The data above shows that the average value of student participation in physical education before using the traditional game program is 9.57. At the same time, the average value after the traditional game program is 18.52. From these data, it can be seen that there is an increase in the average value of participation before and after treatment.

Table 2. Description of Normality Test Results

	Kolmogorov-Smirnov		
	Statistics	df	Sig.
Score_participant	,281	42	,071

From the data **Table 2** above on the normality test, the value of Sig. 0.071 > 0.05. This shows that the data is normally distributed.

Table 3. Description of Homogeneity Test Results

Levene Statistics	df1	df2	Sig.
2,712	1	84	,103

From the data **Table 3** above in the homogeneity test, the sig value is obtained. 0.103 > 0.05. This shows that all data have the same variation or are homogeneous.

Table 4. Results of the Independent Sample T-test on Student Participation

Variable	Test	N	mean	St. Dev.	Sig. (2-tailed)
Sports participation	Pre	43	9,570	1.363	0.000
	Post	43	18,521	1,634	

From the data **Table 4** above on the results of the independent sample T-test, the value of Sig. (2-tailed) 0.000 < 0.05. This shows that H0 is rejected and H1 is accepted. So, there is an average difference between the pre-test and post-test.

Researchers are very aware that the shift that occurs from early childhood to middle childhood is the beginning of a period of vulnerability to be able to determine the activities carried out. Whether or not the activity continues is based on the child's natural desire, although interventions can be carried out to remain involved in the provided physical education activities. The phase that was feared to appear in the midst of this activity did not happen. This is because the traditional game program provides its own pleasure because of the fun nature of the activity. The transition from early childhood to middle childhood marks an important developmental time when the role of perceived motor skill competence begins to change with respect to the role it plays in traditional games. At this time, they have a higher level of cognitive development and a more sophisticated cognitive capacity to begin to compare themselves with their peers more accurately (Stodden et al., 2008).

By using traditional games in physical education learning, students will not be bound by rules as incompetent because games have play elements that can be fun for children and can train communication, the five senses, and other physical parts of the body. One of the physical activities that children like and that is the child's world is traditional games (Suherman et al., 2019). Using traditional games in learning provides many benefits for children (Kovačević & Opić, 2014). Not only fitness benefits but social effects such as participation rates in physical education programs will increase. This is shown in Table 2, which shows that implementing physical education programs using traditional games has a significant effect on children's participation in physical education programs. The average value of the pre-test is 9.571, followed by the post-test value of 18.522. Participation in sports and play activities as a teenager is a strong indicator of physical activity involvement into adulthood (Tammelin et al., 2003).

The involvement of children in the game is getting stronger, along with the level of mastery of the child towards the game. So, game activities are at a different level than understanding the flow of the game but are already at the stage of wanting to win the game and get recognition. At this level, the child asks to repeat the traditional game because he does not want to lose to the opposing group; this shows that there is competition between groups to achieve victory. This encourages stronger participation, not only because they are involved in physical education programs but also because they want to be involved in a more solid team.

Recognition from other teams and teachers is the key to student participation in traditional games; this can be seen at the end of each game when a team wins. The team showed satisfaction with expressions of joy. As for the losing team, they ask that the game be repeated so they can win the next game. This shows the existence of competition that gives birth to the involvement or participation of students in traditional games in particular and in learning physical education in general.

Basically, sports are activities that teach many things, starting from honesty in playing, respecting friends and opponents, accepting defeat gracefully, and congratulating the winner (Sumantri, 2023). This culture of open-mindedness will become a character if every game in Physical Education is implemented.

CONCLUSION

Physical education learning using traditional games is proven to have a significant impact on the level of student participation. Students not only want to be involved in physical education learning alone, but more than that, they want to be involved in games that involve a solid team and expect victory in every game. This victory will give birth to recognition from other teams as opponents in traditional games.

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