



The Influence of Gobak Sodor Traditional Games towards Students' Agility and Teamwork

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Abstract

Traditional sports are a type of sport that exists in a certain area, based on the culture of that area. Traditional games are physical activities that are carried out consciously and deliberately and use traditional rules that have been passed down from generation to generation by the community. The traditional game that researchers used to conduct this research was the traditional game gobak sodor. The gobak sodor game is a team sport consisting of more than two people in one group. The aim of this research is to describe the influence of the traditional game Gobak Sodor on students' agility and cooperation so that there is no need for a comparison class (control class) so that conclusions can be drawn whether there is an influence of the traditional game Gobak Sodor on students' agility and cooperation. The sample in this study was 29 students at SDI Imam Ahmad Bin Hanbal taken using purposive sampling technique. This research uses a quantitative approach with an experimental research method, one group pretest posttest design. Shuttle run test for agility, observation of cooperation to determine the level of cooperation and documentation. Statistical calculations using SPSS 26 paired sample t test. The data shows that there is a significant influence of traditional gobak sodor on the agility of fourth grade elementary school students.

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INTRODUCTION

Physical education plays a crucial part in education and as stated in Permendikbud (Regulation Of the minister of Education, Culture, Research and Technology) Number 24 of 2016 concerning core competencies and basic competencies of subjects in the 2013 curriculum, Physical Education, Sport and Health is a stand-alone subject. Physical fitness frequently becomes an interesting topic. Numerous studies about the importance of physical education have been conducted, not only through extra but also intra-learning play an important role to improve the physical and mentality of students to prepare the non-material physical well. Physical fitness is a person's ability to perform physical tasks that require strength, endurance and flexibility. This can be achieved with regular exercises.

The health-related components of physical fitness are aerobic ability, muscular strength, muscular endurance, flexibility and body composition associated with improved health. One of the physical fitness components is agility, an agile person who is able to change direction and body position quickly and precisely while moving without losing balance and awareness of body position. The games that will be applied must be varied so that all students are able to participate in the game. Through these games, the students are expected to have a high spirit of sport and education values were absorbed easily by the students. Games are an activity that is carried out with a sense of pleasure, voluntarily, earnestly and obtaining pleasure from playing. Physical education is remarkably in line with the characteristics of traditional games that include cognitive, affective and psychomotor elements. Traditional games are physical activities that are carried out consciously and

intentionally. These traditional games use customary rules that passed down from generation to generation. Learning traditional games is more focused on developing students' physical fitness and preserving the nation's culture that has been abandoned by the new generation. The cause is that they prefer modern games and technical games choices. In the practice, teachers do not need to insist on expensive equipment. It can be done by utilizing the existing school environment and inexpensive materials that are affordable for the children. Traditional games are very helpful for children's development, for instance the children's physical and mental development who are able to train the intelligence of the left and the right brain. Gross motor skills are movements controlled by the whole body, such as moving, going up and down the stairs, running, jumping, throwing, kicking, and others that allow one of the coordinated physical activities to train the agility.

Traditional games that researchers use to conduct this study are the traditional games of gobak sodor. The game of gobak sodor is a team sport consisting of more than two people in one group. The game of gobak sodor not only relies on teamwork but also it is a sport with complex motor elements that are important fundamentally for children's motor development. The purpose of this back-and-forth process is that the competitor must be able to return without being caught by the opponent in the designated field area.

Teamwork is a collaborative effort from two or more people to achieve the common goal. As a function of time, with the emergence of new, more modern meaning and so does teamwork definition. Throughout the play, children will gain the experience related to knowledge. Considering the complexity of problems that are characteristic of

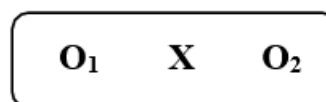
teenage students, teamwork is applied in the learning process, it is related closely to the personality behavior of each individual.

This process also occurs in physical education, where several methods are used in various learning materials. Such as basketball, soccer, volleyball, traditional sports and other learning that requires a lot of teamwork. Therefore, to achieve effective and efficient educational goals, researchers pay more attention to issues related to agility and teamwork that can be used as a tool to achieve educational goals. In the initial observation conducted by the researchers at a private elementary school in Purwakarta, the result showed that traditional games were only used for fitness and killing the sports time, it is not to improve the agility and the teamwork in students.

METHODS

The type research approach used to conduct this study is quantitative research design. "Quantitative research is a method for testing a theory by examining the correlation between variables"(Creswell W. John, 2014). In this study used experimental research methods with the Pre-Experimental Design Method, where the researchers observe one main group and the other is no control group to compare with the experimental group (Creswell W. John, 2014). The use of this method is based on the research objectives, namely to describe the effect of traditional gobak sodor games on students' agility and teamwork thus this study does not need comparison class (controlled class). This research uses the One-Group Pretest-Posttest design, which is a design that includes one group that was given a pretest before the treatment and the posttest was given after the treatment.

Therefore, the treatment can be known accurately, because it can be compared with the situation before and after the treatment (Creswell W. John, 2014). the research design used can be seen as described by (Sugiyono, n.d.) in the following column:



Picture .1 One Group Pretest and Post-test Design

Description:

O1: Pretest

X: Treatment O2: Posttest (Final test)

Participants

Participants in this research were SDI Imam Ahmad Bin Hanbal Elementary School students. Choose the same or similar class and be familiar with traditional sports material.

Sampling Procedures

1. Population

Populasi is a generalization area consisting of objects/ subjects that have certain qualities and characteristics set by the researchers to investigate and to draw the conclusions (Sugiono, 2013). Furthermore, the population is a group of individuals who have the same or relatively similar characteristic(Creswell W. John, 2014). The population of this research were all fourth-grade students of SDI (Islamic Primary School) Imam Ahmad Bin Hanbal.

2. Sample and Sampling Research

Sample taken in this study is using Nonprobability Sampling technique. By using this kind of

sampling using Purposive sampling technique. Purposive sampling is a sampling technique with certain considerations (Sugiono, 2013). The consideration was to choose a class sample which is already familiar with traditional physical education materials, but the students are still low in applying it. To be concluded, the sample in this study was class IV with a total quantity of 24 students.

Materials and Apparatus

Data collecting technique used in this study is test, observation and documentation.

- a. Test
 - 1) Purpose
To measure the individuals' agility to change the direction.
 - 2) Tools and facility
 - a) Stopwatch
 - b) Open field
 - c) Evaluation sheets
 - 3) The Implementation
 - a) Draw two connected lines 30 feet (9 meters) apart.
 - b) Keep two wooden blocks (2x2x4 inches) behind one of the lines.
 - c) From the starting position behind the line, start with the command, "ready, Start!"
 - d) Run to pick the first block, return to the starting line and store the block behind the line, run again to pick up the second block, and run until crossing the finish line.
 - 4) Assessment
 - a) The tests are given two attempts
 - b) The best of the 2 traces is recorded
 - c) The ability to turn on each foot should not be tested
 - d) Subjects should be encouraged not to step over the line too much as this will increase their time

The reason for taking the shuttle run test is to ease for children to improve their ability in motor movement, one of which is agility. Since this test only goes back and forth 4 times and the distance is not too far (9 meters) so the students do not experience excessive fatigue.

Observation

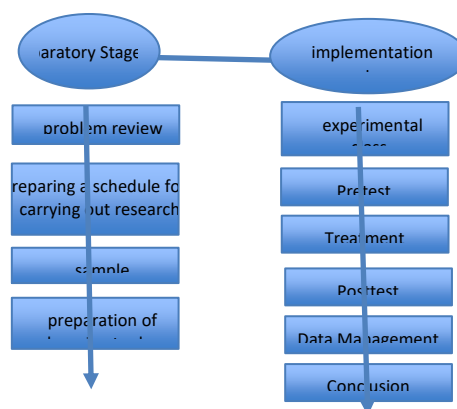
Observation is defined as systematic observation recording of symptoms that appear on the object under investigation. Observation is carried out each meeting and the data obtained from this observation is in the form of recording students' teamwork skill in the observation sheet that has been prepared and carried out by the students. This observation sheet is a list of notes that lead to increased students' teamwork during the learning process, namely by using peer assessment carried out by one student against another student in a group.

Documentation

The documentation used is student worksheets, observation sheets, assessment sheets, and analysis sheets for the instruments being tested.

Procedures

Research procedures are the steps taken in conducting the research. This plays a crucial role to obtain the best result. Therefore the authors tried to describe the research procedure in the form of the following image:



Design or Data Analysis

After the data is collected, the data are analyzed using data processing techniques. The data analysis used by the researchers in this study aims to answer the questions listed in the identification of problem formulations. The data analysis method used is the parametric statistical analysis method using IBM SPSS Statistics 26 software and Microsoft Excel 2019. The data obtained from the research results were tested for normality tests before being used to test the hypothesis.

1. Normality Test

Normality test is a procedure used to determine whether data comes from normally distributed population or is in a normal distribution (Nuryadi et al., n.d.). The normality test conducted by the researchers is the Shapiro Wilk test. That is, what is considered is the level of conformity between certain theoretical distributions, this test determines whether the scores in the sample can be reasonably ascribed to a population with a certain distributive. In this study, the normality test was carried out using a histogram with IBM SPSS Statistics 26 software, while the test criteria are as follows:

Accept H_0 if Sig value > 0.05
Reject H_0 if Sig value $< 0,05$

Decision-making guidelines:

- a. Sig value or significance < 0.05 then the distribution is not normal.
- b. Sig value or significance > 0.05 then the distribution is normal.

2. Homogeneity Test

In addition to testing the distribution of values to be analyzed, it is necessary to test homogeneity in order to be sure that the groups that make up the sample come from a homogeneous

population. Homogeneity is sought with the F test of pretest and posttest data using the help of the SPSS program. The homogeneity test is carried out using the anova test, if the analysis results show a p value $>$ from 0.05, then the data is homogeneous, but if the data analysis results show a p value $<$ from 0.05, then the data is not homogeneous.

3. Hypothesis Test

Hypothesis testing in this study is a t-test. The test carried out is the Paired Sample t-test test. Paired Sample t-test is one of the hypothesis testing methods where the data used is not free (paired) (Nuryadi et al., n.d.) In this study, hypothesis testing was carried out using a histogram with SPSS version 25 software.

The test criteria used are:

- a. If value (sig) is less than 0.005 (p $<$ 0.05) it means that t-value is significant which means that the scores of the two groups are significantly different and H_0 is rejected.
- b. If the (sig) value is greater than 0.05 (p $>$ 0.05). It means that the t-value is not significant, in other words that there is no significant difference in the score of the two groups and H_0 is accepted.

RESULT

a. Normality Test

The normality test is intended to determine whether the variables in the study have normal distribution or not. This normality test calculation uses the Shapiro Wilk formula with processing using the help of SPSS version 26 software. The fundamental for decision making is to determine the normality of a data is if the value of $L_{count} > L_{table}$ then H_0 is accepted. The statistical hypothesis used is as follows:

H₀ : the sample is normally distributed

H₁ : the sample is not normally distributed

In this study the criteria used are if the sig value $\geq 0,05$ then the data is normally distributed and if the sig value $\leq 0,05$ then the data is not normally distributed (Sinaga et al, 2022, p. 58). The result of the pretest score of normality test are presented in the table 4.5 below:

Table 1. Normality Test Result

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Pretest	.154	29	.078	.960	29	.321
Posttest	.137	29	.175	.959	29	.315

a. Lilliefors Significance Correction

From the result of table 4.5 above, it can be seen that the data have p value (Sig) > 0.05, hence the pretest and posttest data are normally distributed. Since all the data are normally distributed, the analysis is able to continue with the homogeneity test.

b. Homogeneity Test

The homogeneity test is used to determine whether there is homogenous sample data or not. This test is a requirement before conducting other tests and is used to ensure that the data group does come from a population that has the same variance (homogenous). This test is assisted by SPSS software version 26. The test hypothesis is as follows:

H₀ : The pretest score of shuttle run agility is homogenous

H₁ : the shuttle run agility posttest score is not homogenous

The decision-making criteria are determined if the sig value > 0,05 then H₀ is accepted, and if sig < 0,05 then H₀ is

rejected or H₁ is accepted. The result if the homogeneity test calculation can be seen in the table 4 as follows:

Table 2. Homogeneity Test Result

		Test of Homogeneity of Variances			
		Levene Statistic	df1	df2	Sig.
Kejuruan, Shuttle Run	Based on Mean	1.323	1	56	.255
	Based on Median	1.100	1	56	.299
	Based on Median and with adjusted df	1.100	1	55.353	.299
	Based on trimmed mean	1.314	1	56	.257

Based on table 4.6, it can be seen that the homogeneity test results obtained a significant value of 0,257 which is greater than the significance level value. Thus, it can be concluded that the population in this study has a homogenous value or the data comes from a population with the same value.

C. Hypothesis Test

Based on the result of the normality and homogeneity tests that have been carried out, it is known that the pretest scores of both classes are normally distributed and homogenous. The next difference test is carried out using the t test. The t test is used for statistical analysis of two independent samples. The formulation of the test hypothesis in the t-test is as follows:

H₀ : There is no effect of tradisional gobok sodor game on the agility of fifth grades students of SDI Imam Ahmad Bin Hanbal.

H₁ : There is an effect of the traditional game of gobak sodor on the agility of the V grade students of SDI Ahamad bin Hanbal.

In this study, the t test was carried out using SPSS version 26 software. Decision-making benchmarks as follows: If the sig value > 0,05 then H₀ is accepted and H₁ is rejected and if the value sig <

0,05 then H0 is rejected and H1 is accepted.

The results of the pretest t test of learning outcomes are as follows:

Table 3. T Test Results

		Paired Samples Test						
		Paired Differences						
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	Sig. (2-tailed)
					Lower	Upper		
Pair 1	Pretest - Posttest	1.154	.86297	.16025	.82622	1.48274	7.204	.000
		48						

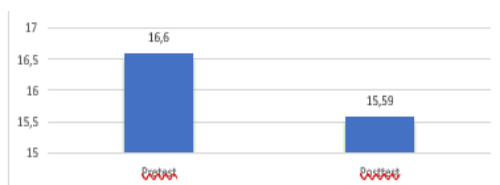
According to the result of t test analysis in table 3 shows that the significance value is 0.00. This states that it is less than 0.05, it can be concluded that H0 is rejected and H1 is accepted. This means that there is an effect of traditional gobak sodor games on the agility of fifth grade students of SDI Imam Ahmad Bin Hanbal.

Tables & Figures

Table 4.. Descriptive Statistics of Pretest and Posttest Data

	N	Descriptive Statistics				
		Minimum	Maximum	Sum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Pretest	29	14.19	19.87	485.79	16.7514	.28817
Posttest	29	13.43	18.00	452.31	15.5969	.23868
Valid N (listwise)	29					

Based on table 4 above, it can be concluded that the average (mean) score for the pretest is 16.6 and the posttest is 15.59. Then for the pretest the minimum score was 14.19 and the maximum score was 19.87. Meanwhile, the posttest obtained a minimum score of 13.43 and a maximum score of 18.



Graf 1. Diagram average of pretest and posttest results

Based on Figure 1 above, it shows that the shuttle run agility of fourth grade elementary school students at the pretest had an average of 16.6 seconds and increased at the posttest an average of 15.59 seconds after being given treatment with the traditional game Gobak. Sodor.

DISCUSSION

Based on the t-test analysis which had been conducted, there are several things that can be known to draw a conclusion. According to the results of the analysis, it shows that the traditional games of gobak sodor has a positive impact on increasing the agility of grade V elementary schools' students. The magnitude of the increase in agility is 8.74%. the increase in ability that occurs due to the association of knowledge obtained by the students at the previous meeting with new knowledge and the association is getting stronger when it is done repeatedly.

One of the traditional games is gobak sodor. The benefits of the games are to increase cohesiveness, to entertain yourself, to foster creativity and to shape personality. This game is a teamwork game because there is social interaction between individuals. There are the benefits that this game is played by teamwork, such as to develop social relationships with their playmates. Team members who get their turn to guard will guard the field, the way they guard is the horizontal line and they are also trying to cross the boundary line that has been determined as a free boundary line. For those who are assigned to guard the vertical boundary line, their job is to guard the entire vertical boundary line located in the center of the field. Based on the discussion above it can be concluded that the traditional game of gobak sodor is very suitable for increasing ones' agility and teamwork. It

has been proved by this research that the effect of gobak sodor games in the agility and teamwork of IV elementary school students is significant. From the observation, it is known that most students of SDI Imam Ahmad have difficulty in doing the teamwork. From this observation it is also known that there are some students who are classified as very passive and some others are classified as very active. There are at least 3 students in the active category who have aggressive behavior. This makes it difficult for these students to work as a team. Students' observation data related to students' teamwork skill before the action was taken. This showed that only a few children had good teamwork. The observation data related to students' teamwork skills before the action is taken shows that the students in the criteria are not good as many as 16 out of 24 students, or it is 76,19%. Furthermore the students with good enough criteria have as many as 2 out of 24 students or it has 9,52 %, and there are 3 out of 24 students in good criteria or it has 14,28 %.

CONCLUSION

According to data analysis and discussion of traditional sport gobak sodor highlights the agility and teamwork of students IV grade as follows:

1. There is a significant influence of traditional gobak sodor on the agility of fourth grade elementary schools' students.
2. There is a significant effect of traditional gobak sodor on the teamwork of fourth grade elementary schools' students.

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