# The Effect of Traditional Game-Based Play-Teach-Play Learning Methods on the Physical Fitness of Grade VI Elementary School **Students**

### Diky Surya Irawan<sup>1</sup> Rahmat Permana<sup>2</sup> Budi Hendrawan<sup>3</sup>

Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, Universitas Muhammadiyah Tasikmalaya, Tasikmalaya Regency, West Java Province. Indonesia<sup>1,2,3</sup>

> Email: dickysurya.irawan12@gmail.com1 rahmatumtas@gmail.com2 hendrawan budi@umtas.ac.id3

#### Abstract

This study aims to determine the effect and effectiveness of the traditional game-based play-teach-play learning method on the physical fitness of class VI students at SDN 2 Parumasan. This type of research uses quantitative with quasi-experimental methods. The design used in this study is the nonquivalent control group design. The population in this study were all students of class VI at SDN 2 Parumasan with a sample of 24 students. Data analysis techniques using observation, interviews, and tests. The assessment instrument used is the TKJI test instrument. Data analysis used paired sample t-test and independent sample t-test. Based on the results of the study, the results of this study were obtained by calculating the results in the paired sample t-test table at the pretest and posttest obtained sig (2-tailed) of 0.000. Ho is accepted if sig (2-tailed) > 0.05. And for the independent sample t-test in the posttest in the experimental group and in the posttest in the control group, a sig (2-tailed) of 0.000 was obtained. The decision made from these results is that Ho is accepted if sig (2-tailed) > 0.05. Because the sig (2tailed) value is 0.000, it means that 0.000 < 0.05 then Ho is rejected in other words Ha is accepted. Based on these data, it can be concluded that there is an influence of the traditional game-based play-teachplay learning method on physical fitness and is also effectively used for elementary school students in grade VI SDN 2 Parumasan.

Keywords: Play-Teach-Play Method, TKJI, Traditional Games, Physical Fitness, Elementary School



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

#### INTRODUCTION

Sport is one of the oldest forms of human culture and has been practiced by various tribes and nations around the world. Because sports are basically human cultural activities that maintain their existence and life. Sport itself was created by the community in the form of a game that takes advantage of the surrounding conditions so that these activities are meaningful and beneficial to themselves and the people in their environment.

Exercising habits are one of several aspects that affect physical fitness. Sport is a physical activity according to certain methods and rules with the aim of increasing the efficiency of bodily functions, the end result of which is to improve physical fitness. According to Mikdar (2006: 45) physical fitness is the ability of a person's body to carry out daily tasks and work without causing significant fatigue, so that the body still has reserves of energy to cope with the additional workload. According to Muhajir (2007: 5-7) "Physical fitness is the ability and ability of the body to make adjustments (adaptation) to the physical burden given to it from work carried out every day without causing excessive fatigue".

Physical fitness is an important component in child development. However, today many children are not physically active and tend to choose playing gadgets or watching television as their hobbies. This can make children less healthy and fit. Indonesian Data Sources (SDI) 2006

shows the fitness condition of our society: 1.08% fall into the very good category; 4.07% good; 13.55% moderate; 43.90% less; and 37.40% less (Cholik and Maksum, 2007). Research related to physical fitness by Sulistiono (2014: 223) found that the results of research with a sample size of 721 students, data collection was carried out cross-sectionally in Bandung City and Majalengka Regency. The results of the study show that: the fitness level of students is not entirely in good condition. There were still 42.27% of elementary school students with low levels of physical fitness, 36.87% of junior high school students and 46.11% of high school students.

Based on the results of the research above, we can see that the level of physical fitness of students in Indonesia is in bad condition, because the level of fitness of students is very low. Therefore, physical fitness must be owned by every child, so that every child can receive lessons in a fresh condition and not feel tired when the learning process takes place. From the results of observations made at one of the schools, namely SDN Sirnagalih and SDN 2 Parumasan, the author sees a lack of student interest in the physical education learning process taught by the teacher due to the lack of mentality of these students because some students cannot carry out sports activities due to ridicule or bullying from other students so that students have no passion and enthusiasm in carrying out these activities physical activity instructed by the teacher. Therefore, resulting in a low level of physical fitness of students, then the teacher does not provide motivation to children so that children are less enthusiastic and do not make enough effort or effort to increase success in learning which results in not achieving satisfactory success as expected. In addition, the learning methods or learning methods applied by the teacher are not varied so that students quickly become bored with what is being taught.

To overcome this problem, the traditional game-based play-teach-play learning method can be applied as an alternative to developing the physical fitness of elementary school children. This learning method is a combination of games (play), teaching (teach), and playing (play). Through traditional games, children will be more interested and feel at home in physical activity, so that they can improve physical fitness. In addition, traditional games can also foster cultural and historical values contained in these games. This will add to children's insight into the culture and history of the nation, as well as increase their love for their homeland. Thus the traditional game-based play-teach-play learning method can provide positive benefits for the development of physical fitness and also cultural values in elementary school children. The purpose of this study was to determine the effect of traditional game-based play-teach-play learning methods on physical fitness of elementary school students, and to determine the effectiveness of traditional game-based play-teach-play learning methods on jamsnai fitness.

#### **RESEARCH METHODS**

This study uses a type of quantitative experimental research. with a quasi-experimental method. The design used in this study is the nonquivalent control group design. This design involved two groups of subjects, one was given experimental treatment (experimental group) and the other was not given treatment (control group). The population in this study were all students of class VI at SDN 2 Parumasan with a sample of 24 students. For the distribution of control and experimental groups, namely by using a purposive sampling technique, each of which was 12 students. Data collection techniques are using observation, interviews, and practice tests. The instrument used was the Indonesian physical fitness test (TKJI) in order to determine the level of physical fitness of elementary school students in the control group which was not given treatment and the experimental group which was given treatment. To analyze the data in this study, namely the normality test, homogeneity test and hypothesis testing consisting of paired sample t-test and independent sample t-test.

# Vol. 2 No. 2 September 2023

## RESEARCH RESULTS AND DISCUSSION Data Analysis Test Results Normality test

Table 1. Normality Test TKJI Test for Control and Experiment Groups

TKJI Test Result							
Class	Koln	Conglusion					
Class	Statistic	df	Sig.	Conclusion			
Control Class Pretest	.136	12	$0.200^{*}$	Normal			
Control Class Posttest	.183	12	0.200*	Normal			
Pretest Experimental Class	.221	12	0.109	Normal			
Experimental Class Posttest	.187	12	0.072*	Normal			

In the normality test results, the conditions apply: if the p-value is greater than 0.05, the data is declared to be normally distributed. Conversely, if the p-value is smaller than 0.05, the data is declared not normally distributed. From the above data analysis it can be seen that for the control group at the pretest the p-value was 0.200, while in the posttest the p-value was 0.200. This means that because the significance level is greater than 0.05 (sig > 0.05) it is stated to be normally distributed, then H0 is accepted. As for the experimental group, the pretest p-value was 0.109, while the posttest p-value was 0.072. This means that because the significance level is greater than 0.05 (sig > 0.05) it is stated to be normally distributed, then H0 is accepted.

### **Homogeneity Test**

Table 2. Pretest and Posttest Homogeneity Test

Test of Homogeneity of Variance								
Levene Statistic df1 df2 Sig.					Information			
Posttest	Based on Mean	1.576	1	22	.223	Homogeneous		
Pretest	Pretest Based on Mean .378		1	22	.545	Homogeneous		

Homogeneity test is carried out to determine the similarity of variance, or to test that the data obtained comes from a homogeneous population. This homogeneity test uses statistical Lavene. The decision-making criteria is if the significance value based on mean is greater than 0.05 (Sig > 0.05) then the data is homogeneous, and vice versa if the significance value based on mean is less than 0.05 (sig < 0.05) then the data inhomogeneous. From the results of the analysis it is known that the statistical lavene value in the posttest is 1.576 and the significance value is 0.223 which is greater than 0.05, so it can be concluded that the data has the same variance or the data is homogeneous. Whereas in the pretest it is known that the statistical lavene value is 0.378 and for a significance value of 0.545 it is greater than 0.05, it can be concluded that the data has the same variance or the data is homogeneous.

### **Hypothesis Testing**

This study used the t-test, namely the paired sample t-test and the independent simple t-test.

### **Paired Sample T-Test**

The results of the paired simple t-test using SPSS 26 can be seen in the following table:

Table 3. Paired Sample T-Test Test Pretest and Posttest

tuble 3.1 an ea sample 1 Test Test Tetest and Tostlest
Paired Samples Test

	Paired Differences							
	C+d		Std.	95% Confidence Interval of		<b>+</b>	df	Sig. (2-
	Mean	Std. Deviation	Error	the Difference		L  -	ui	tailed)
	Deviation	Mean	Lower	Upper				
pretest - postest	-5.167	1.850	.534	-6.342	-3.991	-9.672	11	.000

The test results of the paired sample t-test on the pretest and posttest obtained a sig (2-tailed) of 0.000. The decision made from these results is that Ho is accepted if sig (2-tailed) > 0.05. Because the sig (2-tailed) value is 0.000, it means that 0.000 < 0.05 then Ho is rejected in other words Ha is accepted. This means that there is an influence of the traditional game-based play-teach-play learning method on the physical fitness of class VI elementary school students at SDN 2 Parumasan.

#### **Independent Sample Test-T-Test**

The results of the independent sample t-test using SPSS 26 can be seen in the following table:

**Table 4. Average Value of Independent Sample T-Test Results** 

Group Statistics								
	Std. Error Mean							
TKJI	Posttest Experiment	12	18.08	1.929	.557			
Result	Posttest Control	12	13.58	2.466	.712			

It can be seen in the table above that there is an average or mean value in the experimental class posttest of 18.08 and 13.58 in the control group posttest. This value means that the average experimental class is higher than the control class average.

Table 5. Test T-Test Independent Test Sample T-Test Posttest Experiment and Posttest Control

Table 5. Test 1-Test independent Test sample 1-Test 1 ostiest Experiment and 1 ostiest control									
Independent Samples Test									
	for Eq	e's Test uality iances		t-test for Equality of Means					
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference		nfidence l of the rence Upper
Equal Variances Assumed	.796	.382	4.979	22	.000	4.500	.904	2.626	6.374
Equal Variances Not Assumed			4.979	20.791	.000	4.500	.904	2.619	6.381

Meanwhile, the results of the independent sample t-test in the posttest in the experimental group and in the posttest in the control group obtained a sig (2-tailed) of 0.000. The decision made from these results is that Ho is accepted if sig (2-tailed) > 0.05. Because the sig (2-tailed) value is 0.000, it means that 0.000 < 0.05 then Ho is rejected in other words Ha is accepted. This means that there is an average difference in the results of the physical fitness test between groups using the traditional game-based play-teach-play learning method, in other words the method is effective for use in elementary school students.

### Discussion

This discussion describes the results of research on the effect of game-based play-teachplay learning methods on the physical fitness of fourth grade elementary school students at

Vol. 2 No. 2 September 2023

SDN 2 Parumasan. To overcome this, it is necessary to have creative and innovative methods that are able to attract students to more easily accept the learning taught by the teacher. One of them is the traditional game-based play-teach-play learning method. This method is used when the characteristics of students are not happy to hear explanations of concepts from their teachers, do not like training to improve skills and find it difficult to focus on the material provided. (Rahmat Permana, 2018). The researcher applied the play-teach-play learning method based on traditional games, because it is related to the low level of physical fitness of students at SDN 2 Parumasan.

The traditional game-based play-teach-play learning method offers a fun and interactive approach to learning. By combining traditional games with learning, the play-teach-play method provides a holistic and fun learning experience for students. Students not only learn theoretically, but can also experience and apply these concepts or skills in real contexts. This method also increases student motivation, assists in the development of social, cognitive, and motor skills, and activates active participation and involvement of students in the learning process.

Based on the hypothesis testing that has been done by paired sample t-test and independent sample t-test, the hypothesis (Ho) is rejected and the working hypothesis (Ha) is accepted. This means that there is significant influence and difference in value between the control group and the experimental group on the level of physical fitness of students at SDN 2 Parumasan. The influence of the traditional game-based play-teach-play learning method on students' physical fitness has a positive and effective impact on learning, with this model it can be interpreted that the play-teach-play model through traditional games is an efficient and effective way to improve the physical fitness of elementary school students and can be used as a solution to overcome these problems.

#### **CONCLUSION**

Based on the results of the study it can be concluded that the results of this study obtained the calculation of the results in the paired sample t-test table at the pretest and posttest obtained sig (2-tailed) of 0.000. The decision making Ho is accepted if sig (2-tailed) > 0.05. And for the independent sample t-test on the posttest of the experimental group and the posttest of the control group, a sig (2-tailed) of 0.000 is obtained. The decision made from these results is that Ho is accepted if sig (2-tailed) > 0.05. Because the sig (2-tailed) value is 0.000, it means that 0.000 < 0.05 then Ho is rejected in other words Ha is accepted. Based on these data, it can be concluded that there is an influence of the traditional game-based play-teach-play learning method on physical fitness and is also effectively used for elementary school students in grade VI SDN 2 Parumasan.

#### **BIBLIOGRAPHY**

Darmawan, I. (2017). Upaya Meningkatkan Kebugaran Jasmani Siswa Melalui Penjas. Jip, 7(2), 143–154. http://ejournal.unikama.ac.id/index.php/jrnspirasi

Mikdar, U.Z. 2006. Hidup Sehat: Nilai Inti

Permana Rahmat, F. N. I. (2018). Efektivitas Metode Pembelajaran Pendidikan Jasmani Play-Teach-Play Terhadap Peningkatan Kebugaran Siswa Sekolah Dasar. 3(1)

Subekti, N., Juhrodin, J., & Mulyadi, A. (2020). Permainan Tradisional Dalam Pembelajaran Pendidikan Jasmani untuk Meningkatkan Kebugaran dan Motivasi Belajar. Journal of Sport Coaching and Physical Education, 5(1), 55–62.

Sugivono. (2013). Metode Penelitian Pendidikan. Bandung: Alfabeta, CV

Sukintaka.1992. Teori Bermain untuk D2 GSD Penjaskes. Jakarta: Depdikbud.

Sulistiono. 2014. Kebugaran Jasmani Siswa

Ulfah, W. A. (2019). Pengaruh Metode pembelajaran Pembelajaran Play Teach Play Terhadap Hasil Belajar Pasing Bawah Bola Voli Siswa Kelas Viii Smp Negeri 2 Sungailiat. Jurnal Pendidikan Glasser, 3(1), 134. https://doi.org/10.32529/glasser.v3i1.158