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## THE INFLUENCE OF TRADITIONAL GAMES ON CHILDREN'S GROSS MOTOR SKILLS

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### Abstract

This study has a background problem in the gross motor skills of children at Cipetir 02 Elementary School which are not yet optimal in gross motor skills. This study aims to determine the effect of traditional games on children's gross motor skills. This study uses an experimental method with a pre-test and post-test control group design model conducted on two groups. The population in this study were 74 students in grades 4 and 5 of Cipetir 02 Elementary School. The data collection instrument used the TGMD test. The following are the results of the research data: pre-test results 16.67 and post-test results 20.87. The research hypothesis was tested using the Paired Sample Test with the help of the SPSS program. The results showed a significant effect after being given treatment using various traditional games, indicated by an increase of 18%.

**Keywords:** Traditional Games, Gross Motor Skills

### INTRODUCTION

In the 21st century today, we can hardly avoid the influence of globalization and modernization, like it or not, forced or voluntarily human beings are required to be able to adapt to the development of the times. Technology that is developing very fast and rapidly has made humans more and more modern, almost every day "served" by technology, from waking up to going back to sleep, even in a state of sleep humans are still dependent on technology. Starting from the smallest things to the biggest things such as lifestyle changes.

The emergence of technology-based games also makes it fun for children to play inside the house without doing other activities outside the home. In addition, children can spend their free time on things and activities related to them with modernization, such as going to the mall, eating at restaurants with modern menus and watching movies with friends. The rise of electronic games, video games or other technology-based games has kept children away from traditional games, so that traditional games are dying.

Traditional games are a means of entertainment that is in demand and played by many people, both among students and adults, traditional games are modern. The game itself comes from the word "play" which means doing an activity to please the heart, whether it is using a tool as a medium or not. Play is an activity that is very close to the

world of students and does not rule out the possibility of teenagers and adults. This activity can be done individually or in groups.(Sau et al., 2022)

Motor skills can be developed through play activities. As one example, it can be observed in students who run chase to catch their friends. At first they are not skilled to run, but by playing chase, the students are interested in doing it to become more skilled. Something as simple as this can make students' gross motor skills develop and continue to improve.(Rodríguez, Velastequí, 2019)

Regarding the motor skills of the students of SD Negeri Cipetir 02 grades IV and V are still not good, the fact is that the students have not been able to control the movement of their limbs or coordinate all limbs skillfully due to the lack of physical exercise such as running, jumping, walking in a straight line, walking forward and backward with heels, doing traditional boy-boyan games, jengkol pepet, rubber jumping, engklek, Fortifications, Rainfalls. These six traditional games can train students' gross motor skills by helping students to control their bodies and themselves, can train students to read gestures, move the body. In addition, students will be seen to be active in learning motor skills and have interest and motivation to play the game with a pleasant feeling.

The author feels that he wants to dig deeper about how the six traditional games can train the motor skills of students gradually, especially in students in grades IV and V. The researcher wants to compare among the six games which is best for the students to continue to do and play in order to train and control the movements of the limbs or coordinate all the limbs skillfully. This is what makes the researcher interested in knowing more about traditional games and all aspects related to the motor skills of students. Therefore, the author is interested in conducting a study entitled "The Influence of Traditional Games on Children's Gross Motor Skills".

## ***METHODS***

The method used in this study is a quasi-experimental method with a Pretest-Posttest control group design model. The population in this study is 74 students in grades 4 and 5 of SD Negeri Cipetir 02. In this study, the sampling technique used purposive sampling. Purposive sampling is a non-random sampling method where researchers ensure the citation of illustrations through a method of determining a special identity that matches the research purpose so that it is expected to respond to the research case. From the sampling technique above, a sample of 30 people can be drawn, 15 people from the control group and 15 people from the experimental group with consideration, the first is allowed

by the school only for grades 4-5, the second is children who are addicted to gadgets, the third is chosen a sample from representatives of each class of 15 students.

The data collection instrument in this study uses TGMD-2 (Test of Gross Motor Development-second edition) which is a test tool used to measure motor skills in children. According to Ulrich in Indra Alhanik Sidik (2022) "TGMD-2 is a test to measure the basic movement of children aged 3-10 years".

Table 1. Structure and Items of the TGMD-2 Test

Subtest	Skill	Criteria Performance	Maximum Score
Locomotor	Run	4	4
	Gallop	4	4
	Hop	5	5
	Leap	3	3
	Horizontal Jump	4	4
	Slide	4	4

## RESULTS AND DISCUSSION

This research was conducted from February to April 2025 at SD Negeri Cipetir 02 which is located in Kp. Haurwangi, Village. Haurwangi, Haurwangi District, Cianjur Regency, West Java. The population of this study is 50 students of SD Negeri Cipetir 02, the sampling technique used in this study is purposive sampling, with a research sample of 30 students according to the author's considerations.

The implementation of this research was carried out in two stages of testing, the first is the pre-test which has the purpose of finding initial data before being given treatment . Post-test aims to find final data after conducting a series of training programs 14 face-to-face times, namely, 1 initial test, 12 treatment meetings , 1 final test. Thus, TGMD test data that has been carried out by the students of SD Negeri Cipetir 02 is obtained. The results are as follows:

Table 2. TGMD Pretest & Posttest  
Comparison of Sample Group and Control Group

KELOMPOK SAMPEL					KELOMPOK KONTROL				
NO	NAMA	pre	post	KATEGORI	NO	NAMA	pre	post	KATEGORI
1	Akbar Maulana	16	21	UNGGUL	1	Reza Nurhakim	17	19	KURANG
2	Arvi Ahmad	15	19	KURANG	2	Kalista Lauzah Saenur	15	18	KURANG
3	Karisya Aprilia Agustin	17	21	UNGGUL	3	Albira Putri Sanjaya	16	18	KURANG
4	Pan Reby	16	20	RATA-RATA	4	Qisya Jasmin	16	15	SANGAT KURANG
5	Razka	18	22	UNGGUL	5	Aisyah	17	16	SANGAT KURANG
6	Ramdan Sh	19	23	UNGGUL	6	Kheysa Revalia	18	18	KURANG
7	Rafael	16	20	RATA-RATA	7	Wafi Ahdan Baehaki	16	16	SANGAT KURANG
8	Rafii	15	20	RATA-RATA	8	Raiza Qyamul Azmi	15	15	SANGAT KURANG
9	Nadeva Rusmana	17	22	UNGGUL	9	Taopik Mustakim	17	17	SANGAT KURANG
10	Nafisa Bilkis Pertiwi	16	21	UNGGUL	10	Ahmad Fauzan	16	16	SANGAT KURANG
11	Maulida Musnifah	18	22	UNGGUL	11	Asep Saefullah	17	18	KURANG
12	Putri Arista Febrianti	19	22	UNGGUL	12	Cepi Cahyana	15	15	SANGAT KURANG
13	Zahra Almira	17	21	UNGGUL	13	Zaky Asauqi Alhakim	16	16	SANGAT KURANG
14	Razita Raehani Pertiwi	15	19	KURANG	14	Rozik Azlami Rais	19	18	KURANG
15	Assyla Triana Putri	16	20	RATA-RATA	15	Fatimah Azzahra	18	16	SANGAT KURANG
		16,67	20,87				16,53	16,73	

The following table shows the comparison of the average values between the

sample group and the control group. The results showed that the sample group had an average pre-test score of 16.67 and an average post-test score of 20.87, while the control group had an average pre-test score of 16.63 and an average post-test score of 16.73. The difference in mean values between these two groups showed that there was a significant increase in the sample group.

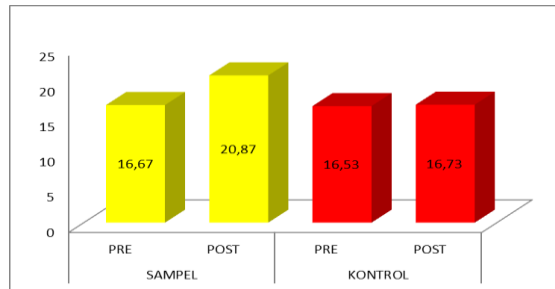


Diagram 1. Pre-test & post-test results of sample and control

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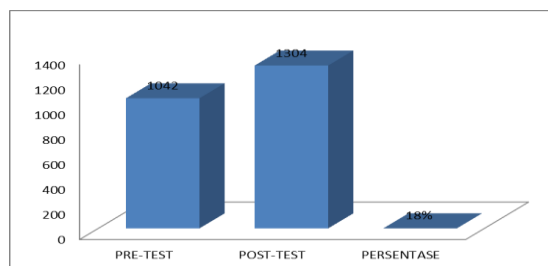


Diagram 1. Percentage

The following diagram shows the percentage improvement in students' motor skills after the treatment process shows the results of the pre-test and post-test with an increase of 18%.

### Testing Requirements Analysis

Data analysis is used to answer previously proposed hypotheses. Before data analysis is carried out, it is necessary to carry out the analysis prerequisite test, namely the normality and homogeneity test. The prerequisite test can be seen as follows:

#### 1. Normality Test

The normality test is used to find out whether the variables in the study have a normal distribution distribution or not. The hypothesis fails to be rejected if the p value is  $> \alpha$  where the value  $\alpha$  5%. The normality test was calculated using the Kolmogorov-smirnov formula

which was processed with the help of the SPSS application. The results can be seen in the following table:

Tabel 1. One-Sample Kolmogorov-Smirnov Test

		15	
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	.49375803	
Most Extreme Differences	Absolute	.149	
	Positive	.149	
	Negative	-.112	
Test Statistic		.149	
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	
Monte Carlo Sig. (2-tailed) <sup>e</sup>	Sig.	.488	
	99% Confidence Interval	Lower Bound	.475
		Upper Bound	.501

## 2. Homogeneity Test

The homogeneity test is a test used to read the results of a hypothesis test using the One Sample T-Test. This homogeneity test is performed to determine whether the average of the unknown population differs from a particular value.

Table 2. One-Sample Test

Test Value = 0						
	t	df	Significance		Mean Difference	95% Confidence Interval of the
			One-Sided p	Two-Sided p		... Lower
PRE TEST	47.986	14	<,001	<,001	16.667	15.92
POST TEST	68.071	14	<,001	<,001	20.867	20.21

## Hypothesis Testing Results

The test used to test the hypothesis "Traditional game methods have an influence/effect on children's gross motor movements". It is by using the Paired Samples Test. Full results can be seen in the following table:

Table 3. Paired Sample

Paired Samples Test										
Pair	Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Significance	
					Lower	Upper			One-Sided p	Two-Sided p
Pair 1	PRE TEST - POST TEST	-4.20000	.56061	.14475	-4.51046	-3.88954	-29.016	14	<,001	<,001

By testing all the before and after data, it was found that all data pairs showed a significance of 0.001 which is smaller than  $\alpha = 0.05$  so that  $H_0$  was rejected with the conclusion that there was an average difference between before and after treatment. A negative sign means that the mean after is higher than before so it can be concluded that the treatment makes a difference in the difference in TGMD. The best data shows that pre-test and post-test have increased by 18%. So the final conclusion is that the treatment or

treatment carried out on the students of SD Negeri Cipetir 02 has an influence on children's gross motor skills.

## **DISCUSSION**

This study aims to determine the influence of traditional games on children's gross motor skills. Based on the pre-test results of 16.67 and the post-test results of 20.87, while in the control group of pre-test results of 16.63, the analysis of the research data showed a significant increase in the sample group and post-test results of 16.73. Meanwhile, the control group showed a less significant increase. The provision of an exercise program with a frequency of 2 times a week for 14 meetings can have an influence on the motor movements of students of SD Negeri Cipetir 02. According to the analysis of the data above, there was an increase in motor motion by 18%. Which data can actually be higher if each student can attend routine training.

Traditional game programs are a good way of learning to improve motor skills, as well as a means to preserve culture (Amalatul, 2021). Traditional games are a way to present a learning material, in terms of its implementation, students are first equipped with theoretical knowledge, therefore there is an influence of traditional games on children's gross motor skills after treatment. Something as simple as this can make students' gross motor skills develop and continue to improve. (Firmansyah & Dede, 2022).

## **CONCLUSION**

Based on research that has been conducted by the author at SD Negeri Cipetir 02 which totals 30 students, the overall pre-test result is 16.67 and the post-test is 20.87. From the results of the pre-test and post-test, a difference of 4.20 and an increase in motor motion of 18%.

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