

Tengoh-tengohan as traditional game from south sumatera in improving elementary school students physical fitness at SD Negeri 112 Palembang

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Abstract: This research aims to determine whether there is an increase in physical fitness through traditional games for class IV students at SD Negeri 112 Palembang city. The design used in this research is a quasi-experimental (*for the experiment*). The subjects of this research were class IV students at SD Negeri 112, with a total of 28 students consisting of 16 male students and 12 female students. Data collection uses tests, with an instrument in the form of TKJI for ages 10-12 years. The data analysis technique uses t-test analysis, through the prerequisite tests for normality and homogeneity. The results of hypothesis testing using the t-test get t_{count} of -3.630 is greater than the t table of 1.740 ($-3.630 > 1.740$), so there is a significant difference between the data before and after treatment. The increase in the average is clearly visible because there was an increase of 1.45 from 13.83 to 15.28. If described in percentage, the increase is 10.48%. Thus, it can be concluded that there is an increase in physical fitness through traditional games for class IV students at SD Negeri 112 Palembang city.

Keywords: Throat, Traditional games, Physical Fitness

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INTRODUCTION

Physical education is an educational process that utilizes physical activities that are planned systematically and methodically with the aim of developing and improving individual physical abilities both organically, neuromuscularly, perceptually, cognitively and emotionally within a national education system framework (Ministry of National Education, 2003: 1). As a physical education teacher, you must be able to differentiate between teaching physical education for physical fitness and training sports for achievement. A physical education teacher can direct his talented students to join a club so they can achieve achievements in certain sports. Meanwhile, in school, a teacher must teach according to the existing curriculum with the aim of physical education achievement. One way of achieving physical education can be measured by the level of physical fitness of students. If a student's level of physical fitness is good, it means that the student is serious about participating in the physical education learning process at school, apart from children's activities outside of school who like to play. Through traditional games, children

have the opportunity to reveal their potential and stimulate the development of social skills. Apart from that, it also has the characteristics of using facilities in the environment without having to buy it, involving many children and having game rules. This is confirmed based on Setiawan's research, which states that traditional games can be a means of developing and training children's social skills, training children to socialize, be able to work together well with friends, have an empathetic attitude towards others, train students to be responsible for their tasks. given, and train healthy, honest and fair competition (Yuli Setiawan, 2016).

The emergence of various modern games that really attract children's interest, such as gadgets and other fun games, make children appear to be engrossed in playing in cyberspace individually, thereby not giving children the opportunity to socialize. This will lead to a passive, apathetic attitude and inability to face the realities of life. If this is allowed to drag on, it is feared that it could hinder the development of gross motor skills in children and trigger obesity due to lack of movement. Apart from that, children's social emotional abilities do not develop optimally because they like to be alone (Yani, 2017).

This Tenggo-tenggo game is given to upper class students, because this game is quite complex, so lower class students still cannot play it. Apart from using the game tenggo tenggo, another traditional game used is gobak sodor. This is intended to add variety to training so that students do not feel bored, so that students still enjoy moving, and students' level of physical fitness improves or increases. Several relevant studies that have been presented have the same variables as

The research carried out is related to children's social development. The novelty in this research is that it is different from previous research, this research specifically emphasizes the physical fitness of students who are stimulated by the traditional game of tenggo-tenggo. This game has the feel of a group game which gives children the opportunity to socialize. In the local language of Baturaja (OKU), tenggo-tenggo means guessing. This game is a group game consisting of 2 groups where each group consists of a minimum of 10 people. This game is played by girls aged 6 – 13 years. In this game the designated group leader is asked to predict/guess where the small stone is hidden by holding it in the hands of members of the opposing group. If they are correct, the group will be declared the winner and then jump together, crouching, step by step until the finish line. On the other hand, if the group makes a mistake in guessing/guessing, then the opposing group takes turns hiding small stones from the group members so that they can then guess/guess (Zinal Abidin, 1985). This game teaches children to follow the rules of the game, be patient in waiting for their turn to play, have empathy for the party who wins and learn to accept defeat if the group loses in the game, teaches togetherness, solidarity among group members and children learn to be together in developing strategies to win the game.

Based on the initial observations of the research team at SDN 112, Palembang City, there are still class IV female students aged 9-10 years who are not able to cooperate with their peers when playing, children often talk loudly (shout) to their friends, there are still

female students who are accompanied and waited on by people. old during the learning process, it is still seen that children play alone and do not join in with their peers, children are not yet able to share toys or stationery with friends, there are still many children who want to win alone and even dominant children are seen when playing, and most children are still in groups according to their preferences . In the group there are still passive children who tend to be indifferent and do not participate in group tasks. According to information from his teacher, the child never played traditional regional games. Seeing the reality in the field and based on relevant research is the reason for conducting this research.

The aim of this research is to find out whether students' physical fitness can be stimulated with the traditional game, namely Tenggo-h-tenggo-han. The benefit of this research is to stimulate development and physical fitness through the traditional game of tenggo-h-tenggo-han, so it is hoped that this game will still be played by children as an alternative to optimize physical fitness.

METHOD

The method used in this research is *quasi-experimental (quasi experimental)*. In this case, what will be studied is efforts to improve the physical fitness of class IV students at SD Negeri 112 Palembang, through traditional games with a one group design with initial and final tests. (*the one group pretest-posttest designs*). According to Suharsimi Arikunto (2006:212) research design can be described as follows:

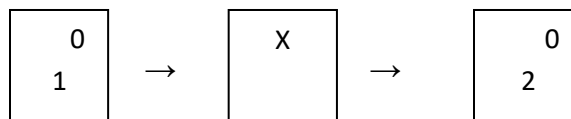


Figure 1. Research design

Description: O1: pretest / initial test

X : improvement treatment with traditional games

O2: posttest / final test

A. Operational Definition of Research Variables

Efforts to improve physical fitness are efforts to improve a person's ability to be able to carry out daily work effectively and efficiently without causing excessive fatigue so that they can still enjoy their free time, by providing treatment to students through traditional game activities and then carrying out tests using TKJI, so that differences in

implementation can be seen.

B. Place and Time of Research

1. Research Place

The place for conducting research or collecting data in this research is planned to be carried out at SD Negeri 112 Palembang. Meanwhile, the treatment by providing the gobak sodor game is also carried out in the school yard or in the field at SD Negeri 112 Palembang.

2. Research time

The time used in this research was from March 19 to April 19 2024 or one month with 8 meetings.

C. Research Subjects

The subjects in this research were all fourth grade students at State Elementary School (SDN) 112 aged 10-12 years. Because all class IV students were 10–12 years old, all class IV students at SDN 112 Palembang were used as research subjects. In Sugiyono's opinion (2006: 85) saturated sampling is a sampling technique when all members of the population are used as samples. This is often done when the population is relatively small or less than 30, or researchers want to create generations with a very small degree of error. In other words, this research is population research. because the entire population in this study will be used as a sample or research subject.

D. Research Instruments and Data Collection Techniques

1. Research Instrument

The research instrument used in this research was a test.

2. Data Collection Techniques

The data collection technique used in this research is observation, practical tests or actions and measurements. The test used is the Indonesian physical fitness test (TKJI) in 1999 issued by the Department of National Education (DEPDIKNAS) and the physical fitness and recreation center for children aged 10-12 years. The test items consist of a short distance running test of 40 M, a sitting lying test, a bent elbow hanging test or a hanging body lift test, an upright jumping test and a 600 M running test.

a. Test series

1. Run 40 meters, the aim is to measure speed.
2. Hang bent elbows, the aim is to measure the strength and endurance of the arm and shoulder muscles.
3. Lying down for 30 seconds, the purpose is to measure the strength and endurance of the

abdominal muscles.

4. Jump upright, the aim is to measure muscle explosive power and explosive power.
- b. Running 600 meters, the aim is to measure cardiac endurance, blood circulation and breathing.
- c. The 1999 Physical Fitness Test has Reliability and Validity. The test series for children aged 10-12 years has the reliability for men is 0.911 and for women is 0.942, while the validity level for men is 0.884 and for women is 0.897.
- d. Tools and facilities
The tools and facilities used in the research are: 1. running track; 2. stopwatch; 3. flagstart; 4. pile; 5. scaled board for jumping; 6. chest number; 7. single crossbar; 8. chalk powder; 9. eraser; 10. test form; 11. whistle; 12. stationery

e. Implementation Provisions

TKJI is a series of tests, therefore all test items must be carried out sequentially and without interruption. The tests include: 1. Run 40 meters; 2. hanging bent elbows; 3. lie down and sit for 30 seconds; 4. jump upright; 5. run 600 meters to determine the level of physical fitness according to the norms of the Indonesian Physical Fitness Test for 10-12 year olds. The steps for classifying the physical fitness of TKJI students are:

a. Rough Results

The achievement of each test item achieved by children aged 10-12 years who have taken the test is "rough result". A child's physical fitness level cannot be assessed directly based on the achievements they have achieved, because the units of measurement required for each test item are not the same, namely;

- 1) For the bending elbow hanging test item, time measures (minutes and seconds) are used.
- 2) For the lying down and hanging body lift tests, the unit of measurement is the number of repetitions of the movement (how many times).
- 3) For upright jumping test items, use the unit of measurement for height (centimeters).

b. Test Scores

The rough results are still different units of measure

These differences need to be replaced with the same unit of measurement. This replacement unit of measurement is "Value". The participant's physical fitness test score is obtained by first converting the rough results of each test item into a score. After the rough results of each test item are converted into scores, the next step is to add up the scores from the five test items. The summation

results are the basis for determining the physical fitness classification of children aged 10 - 12 years.

c. Test Instructions

Physical fitness assessments for teenagers who have taken the Indonesian Physical Fitness Test are assessed using a score table (to assess the achievement of each test item).

Table 1. Indonesian Physical Fitness Values for Children Aged 10 - 12 Years

Mark	Run 40 Meter	Hanging Bent Elbow	Lying down 30 seconds	Jump upright	Run 600 Meter	Mark
5	s.d.- 6,3"	51" above	23 and above	46 and above	s.d. 2'09"	5
4	6,4" - 6,9"	31"-51"	18-22	38-45	2'10"-2'30"	4
3	7,0" - 7,7"	15"-30"	12-17	31-37	2'31"-2'45"	3
2	7,8" - 8,8"	5"-14"	4-11	24-30	2'46"-3'44"	2
1	8,9" -dst	4" -dst	0-3	23 dst	3'45" dst	1

Source: TKJI 1999

Table 2. Indonesian Physical Fitness Values for Girls Aged 10-12 Years

Mark	Run 40 Meter	Hang your elbows buckling	Lying down 30 seconds	Jump upright	Run 600 Meter	Mark
5	s.d.- 6,7"	40" and above	20 and above	42 and above	s.d. -2'32"	5
4	6,8"-7,5"	20"-39"	14-19	34-41	2'33"-2'54"	4
3	7,6"- 8,3"	8"-19"	7-13	28-33	2'55"-3'28"	3
2	8,4"-9,6"	2"-7"	2-6	21-27	3'29"-4'22"	2
1	9,7" -dst	0"-1"	0-1	20 dst	4'23" dst	1

Source: TKJI 1999

Table 3. Indonesian Physical Fitness Test Norms (TKJI)

No.	Number of Values	Classification
1	22-25	Very Good (BS)
2	18-21	Good (B)
3	14-17	Medium (S)
4	10-13	Less (K)
5	5-9	Less Once (KS)

Source: TKJI 1999

RESULTS

Research data includes data *pre test* and data *post test* from the research conducted. from the data *pre test* and data *post test* level of physical fitness of class IV students at SD Negeri 112 Palembang. The following is a description of the data obtained: Data *pre test* The level of physical fitness of class IV students at SD Negeri 112 Palembang, obtained a maximum score of 21, a minimum score of 8, a mean of 13.83, a median of 14.50, a mode of 15 and a standard deviation of 3.42. The following is the frequency distribution table obtained.

Table 4. Data Frequency Distribution *Pre Test*

No.	Number of Values	Classification	Frequency	Percentage
1	5-9	Less Once (KS)	2	11,11%
2	10-13	Less (K)	11	33,33%
3	14-17	Medium (S)	13	44,44%
4	18-21	Good (B)	2	11,11%
5	22-25	Very Good (BS)	0	0,00%
Amount			28	100,00%

Based on the table above, it can be seen that most of the fourth grade elementary school students at SD Negeri 112 Palembang at the time *pre test* have a moderate level of physical fitness. In detail, 2 students (11.11%) have the least category, 11 students (33.33%) have the least category, 13 students (44.44%) have the medium category, 2 students (11.11%) have the category good, and 0 students (0%) have the very good category. The highest frequency is found in the 14-17 interval class or in the medium category, so it can be concluded that at the time *pre test* Most of the fourth grade students at SD Negeri 112 Palembang have a moderate level of physical fitness.

When depicted in the form of a histogram, then the following is a histogram of the

frequency distribution of the data *pre test*

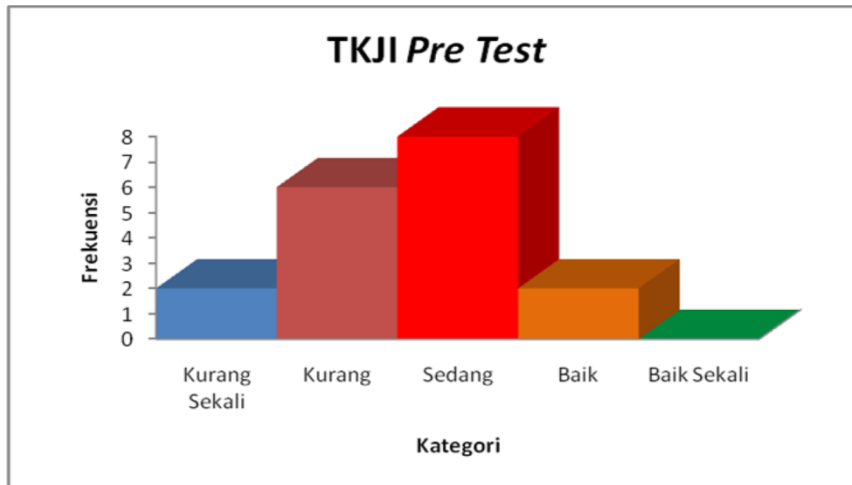


Figure 2. Data Histogram *Pre Test* Students' Physical Fitness Level

Post test data is based on data obtained from the results of the measurement test at that time *post test*.

Results of descriptive analysis of data *post test* The level of physical fitness of class IV students at SD Negeri 112 Palembang obtained a maximum score of 22, a minimum score of 10, a mean of 15.28, a median of 15, a mode of 17 and a standard deviation of 3.38. The following is the frequency distribution table obtained.

Table 5. Data Frequency Distribution *Post Test*

No.	Number of Values	Classification	Frequency	Percentage
1	5–9	Less Once (KS)	0	0,00%
2	10–13	Less (K)	6	27,78%
3	14–17	Medium (S)	18	50,00%
4	18–21	Good (B)	3	16,67%
5	22–25	Very Good (BS)	1	5,56%
Amount			28	100,00%

Based on the table above, it can be seen that most of the fourth grade elementary school students at SD Negeri 112 Palembang at the time *post test* have a moderate level of physical fitness. In detail, 0 students (0%) had the very poor category, 6 students (27.78%) had the poor category, 18 students (50.00%) had the moderate category, 3 students (16.67%) had the good category, and 1 student (5.56%) had a very good category. The highest frequency was in the 14–17 interval class or in the medium category, so it can be concluded that during the pre-test most of the fourth grade students at SD Negeri 112 Palembang had a medium level of physical fitness.

If depicted in the form of a histogram, the following is a histogram of the frequency distribution of students' current physical fitness levels *post test*.

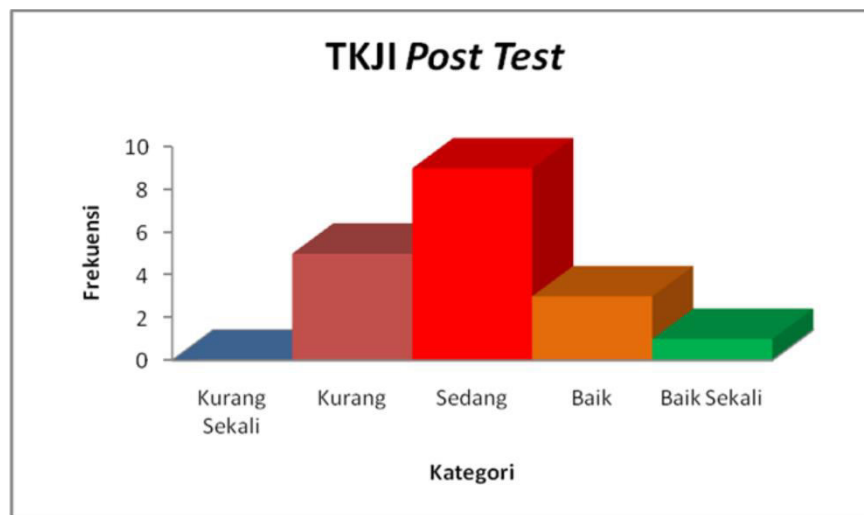


Figure 3. Data Histogram *Post Test* Students' Physical Fitness Level

The research results showed that after learning with traditional games the level of physical fitness of students increased significantly, namely by 10.48% from before learning through traditional games. This is a very positive thing for the development of physical education, because it is hoped that the results of this research can be applied to classroom learning, namely by providing learning through traditional games can effectively increase students' physical fitness levels. By increasing students' physical fitness, students will not easily feel excessively tired when doing activities. For this reason, it is hoped that in physical fitness training (to maintain physical fitness) it is enough to do traditional games regularly because the traditional *Tenggoh-tenggohan* game is very easy for the public and can be played anywhere, just have a large enough yard or place and several students who can be divided into 2 groups.

CONCLUSION

Based on the results of data analysis, hypothesis testing and discussion presented in the previous chapter, the conclusion of this research is as follows: "There is an increase in physical fitness through traditional games for class IV students at SD Negeri 112 Palembang." Learning with a play approach was able to improve the physical fitness of class IV students at SD Negeri 112 Palembang. This means that the playing approach is wrong an appropriate effort to improve the physical fitness of class IV students at SD Negeri 112 Palembang.

SUGGESTION

Based on the results of the research conducted, suggestions that can be given are as follows:

1. For students to further improve their physical fitness training, one of them is by playing, whether traditional games or modern games that encourage students to move actively. For example, playing Teggoh-tenggohan, chasing, and so on.
2. Teachers are expected to be able to provide effective training in learning, so that students' physical fitness levels will increase, one of which is by using a play approach.
3. For future researchers, it is important to add research subjects with a larger scope and with more varied treatments or learning models.

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