

## The Effect of Traditional Games on the Level of Physical Fitness of Class XII Students of SMA Negeri 1 Semarang



Ahmad Badawi<sup>1</sup>, Ahmad Basri Arya Putu Yahya<sup>2</sup>, Achmad Exvan Yusuf<sup>3</sup>, Agus Miftah<sup>4</sup>

<sup>1,2,3,4</sup>Physical Education Health and Recreation, Faculty of Sports Science, Semarang State University, Sekaran, Mt Pati District, Semarang City, Central Java, Indonesia

**ABSTRACT:** Physical fitness is very important and is needed by students to carry out activities every day. The purpose of this research is to know the influence given from the application of traditional games to class XII students of SMA Negeri 1 Semarang. The method used in this study is experimental. Population in this research is all students of class XII and the number of samples used were 36 students who were selected using the purposive sampling method. The results of the data analysis using the paired samples test obtained information on the actual value significance of  $0.000 < 0.05$  which can be concluded that there is a significant effect of traditional games on the level of physical fitness of class XII students at SMA Negeri 1 Semarang.

**KEYWORDS:** Traditional Games, level of physical fitness

### INTRODUCTION

Education is a process that people do their whole lives. It helps them grow and learn. Physical education is an important part of school because it helps people learn. Physical education tasks can help people move more, which is important because movement is a part of life [1]. [2] Through participation in athletics and other physically active pursuits, Indonesian society as a whole can expect to see improvements in its overall health as well as in its rate of growth and development. It is imperative that schools provide students with access to physical education because engaging in physical activity in the form of activities helps students maintain both their physical fitness and their overall health [3]. Traditional games passed down from generation to generation have many benefits besides preserving culture and as a national character, also for the pleasure of playing for the players, then they are also beneficial for psychological development, increasing creativity, agility, motivation, and also as a means of sport to increase physical fitness [4]. On the basis of the opinions of a number of specialists, it is possible to make the assertion that physical activity is very essential for everyone to engage in in order to support the physical health of each individual and enable them to participate in the full range of activities that make up a typical day, from the least active to the most active.

From the results of observations in the field in class XII SMA Negeri 1 Semarang in physical education, students are in warm-up before entering the material learning lack of enthusiasm and laziness because they have to run around the field 3 times round and in the core material many students are silent because they feel tired when they have warmed up. Students' physical health may suffer as a result of these issues, and students' ability to follow the learning process of others may be impeded.

It is essential to have differences in the warm-up that is provided by the instructor so that it is diverse, creative, and innovative so that it can sufficiently meet the requirements of students in terms of exercise and physical fitness by providing warm-up activities. This is necessary as a result of the problems that were discovered by researchers. Students will be more interested in participating in the activity if it begins with a game, which can increase the amount of exercise activities that students engage in. In this particular instance, the researcher has the notion to utilize the conventional gobak sodor game.

Traditional games are an important component of a country's cultural heritage and should be protected, researched, and developed. This is because, in addition to their value as games, traditional games have the potential to be further developed as sports, which can help participants improve their overall physical health [3]. [5] As well as being a form of creativity, it is intended that traditional sports can also serve as a form of physical exercise. Pedagogical uses of classic games are warranted. Beyond that, it's an Indonesian folk game based on his own creative output and cultural norms, from which he expects players to glean some sort of moral or spiritual lesson [6]. Based on the expert's description, it can be said that the game traditional is an original Indonesian cultural heritage that can be applied in the physical education learning process and must be preserved because

## The Effect of Traditional Games on the Level of Physical Fitness of Class XII Students of SMA Negeri 1 Semarang

it has many benefits for the physical fitness of every human being because in the modern era like today the millennial generation does not know traditional games.

From the results of the explanation above, the researcher is interested in giving the traditional game of gobak sodor to class XII students of SMA Negeri 1 Semarang, so the theme of this research is: "The Influence of Traditional Games on the Level of Physical Fitness of Class XII Students of SMA Negeri 1 Semarang".

### RESEARCH METHOD

This study employs the Pre-Experimental Designs method, with the experimental outcomes serving as the dependent variable. This is possible because there are no control variables and the sample was not selected at random [7]. The design of this study was the One-Group PretestPosttest Design, i.e., there was an initial test before treatment was administered, and treatment can be determined more precisely by comparing conditions before and after administration of treatment [8]. The population for this study consists of all students in class XII at SMA Negeri 1 Semarang, with 35 students serving as the sample. For data analysis, the Hypothesis Test (mean comparison analysis) Paired-Samples T-test was utilized.

### RESULTS AND ANALYSIS

The data collected and analyzed were the results of physical fitness evaluations administered to students using the Indonesian Physical Fitness Test (TKJI). Pretest data and posttest data are to be evaluated. The data description will be categorized according to the TKJI category. Following is a description of the data based on the pre- and post-testing categories.

**Table 1. TKJI frequency distribution pretest**

Interval Class	Category	Frequency	Percent Cumulative
22-25	Very Good	0	0%
18-21	Good	8	23%
14-17	Currently	22	63%
10-13	Poor	5	14%
5-9	Very Poor	0	0%
Amount		35	100%

From the data in table 1, we can deduce that eight pupils scored in the "good" range, twenty-two in the "medium" range, and five in the "less than" range on the first exam. There were no students who scored extremely well on the researcher's first exam, and there were also no students who scored exceptionally poorly.

**Table 2. TKJI frequency distribution Posttest**

Interval Class	Category	Frequency	Percent Cumulative
22-25	Very Good	3	9%
18-21	Good	26	74%
14-17	Currently	6	17%
10-13	Poor	0	0%
5-9	Very Poor	0	0%
Amount		35	100%

From the results of the exposure in table 2 posttest there were results of improvements that occurred in students with the results of 3 students in the very good category, 26 students in the good category, 6 students in the medium category and in the less and very poor category there were 0 students.

#### 1. Normality Test Results

**Table 3. Data normality test results pretest-posttest**

Group	Sig	$\alpha = 0,05$	Information
Pretest	0,152	0,05	Normal
Posttest	0,160		Normal

## The Effect of Traditional Games on the Level of Physical Fitness of Class XII Students of SMA Negeri 1 Semarang

According to the findings of the test for uniformity found in table 3, Shows the results of data analysis where in the group pretest there is a significance value of  $0.152 > 0.05$  while in the group posttest there is a significance value of  $0.160 > 0.05$  from the results of the analysis of the data that is in value pretest and posttest greater than 0.05 then get concluded that the data is normally distributed.

### 2. Homogeneity Test

Table 4. Homogeneity test results

Levene Statistic	df1	df2	sig	Information
1,915	1	70	0,171	Homogen

Based on the findings of the homogeneity test in table 4, it can be inferred that the data is uniform because the sig value is  $0.171 > 0.05$ .

### 3. Hypothesis Testing

Table 5. Paired Samples Test

Group	Mean	Std. dev	t	df	sig
Pretest-	-3.417	2.020	-10.151	35	0.000

Based on the results of hypothesis testing in table 5 withuse Paired Samples Test on groups pretest and posttest with a mean value of -3.417, valuestd. deviation of 2.020 at a t value of -10.151 while at a Sig value of  $0.000 < 0.05$  which can be concluded that there is a significant influence of traditional games on the level of physical fitness of class XII students at SMA Negeri 1 Semarang.

According to the results of the performed data analysis, it is consistent with previous research conducted by [1] arguing that freshmen can benefit from an increase in their fitness levels if they participate in more conventional activities while they learn about physical fitness. In that case, based on the findings of an investigation by [9] The benefits of using a conventional game to improve pupils' exercise levels were elucidated. Next, based on the findings of a study by [10] Not only can the implementation of the traditional gobak sodor game improve students' physical fitness, but it can also enhance children's problem-solving skills.

## CONCLUSIONS

Based on the background of the problems found and the theory supported by experts and the methods and data analysis carried out by researchers to solve themproblem exist, then the research conducted can be concluded that there isinfluence significantly giving traditional games to the level of physical fitness of class XII students of SMA Negeri 1 Semarang.

## REFERENCES

- 1) L. T. Arifin and I. N. Haris, "Pengaruh Penerapan Permainan Tradisional Terhadap Kebugaran Jasmani Siswa Kelas VIII SMPN 1 Ciasem Kabupaten Subang (Studi eksperimen Pada Siswa Kelas VIII SMPN 1 Ciasem)," *J. Biomekanika*, vol. 4, no. 1, pp. 1– 7, 2018, [Online]. Available: <http://ejournal.unsub.ac.id/index.php/FKIP/article/view/222>
- 2) M. S. Taufik, "Meningkatkan Teknik Dasar Dribbling Sepakbola Melalui Modifikasi Permainan," *Maenpo*, vol. 8, no. 1, p. 26, 2018, doi: 10.35194/jm.v8i1.914.
- 3) K. Kusnandar, D. U. Purnamasari, P. J. Nurcahyo, and E. Darjito, "Pengaruh Permainan Tradisional Banyumas Gol-Golan Terhadap Tingkat Kebugaran Jasmani Siswa Sekolah Dasar Di Kabupaten Banyumas," *Phys. Act. J.*, vol. 1, no. 1, p. 18, 2019, doi: 10.20884/1.paju.2019.1.1.1996.
- 4) D. O. Mudzakir, "Pengaruh Permainan Olahraga Tradisional Terhadap Motivasi Belajar Dalam Pembelajaran Penjas Kelas V Sekolah Dasar Negeri Dadap 2 Indramayu," *J. MAENPO J. Pendidik. Jasm. Kesehat. dan Rekreasi*, vol. 10, no. 1, p. 44, 2020, doi: 10.35194/jm.v10i1.941.
- 5) Gatot Margisal Utomo and Harwanto, "Penerapan Permainan Tradisional Dalam Upaya Meningkatkan Kebugaran Jasmani Pada Mahasiswa Penjas Angkatan 2019 Universitas PGRI Adi Buana Surabaya," *J. Kejaora (Kesehatan Jasm. dan Olah Raga)*, vol. 6, no. 1, pp. 197–202, 2021, doi: 10.36526/kejaora.v6i1.1153.
- 6) M. Nur and F. A. Widiyatmoko, "Implementasi Permainan Tradisional Untuk Meningkatkan Keaktifan Gerak Siswa," *Jendela Olahraga*, vol. 4, no. 1, pp. 61–65, 2019, doi: 10.26877/jo.v4i1.3028.
- 7) Sugiyono, *Metode Penelitian Pendidikan*. Bandung. 2015.

## The Effect of Traditional Games on the Level of Physical Fitness of Class XII Students of SMA Negeri 1 Semarang

- 8) Nurdiansyah, Sofyan, M. Surya, and M. Yani, "Peningkatan kebugaran jasmani melalui permainan tradisional pada remaja daerah pesisir pantai desa pagatan besar kecamatan takisung tanah laut," *J. Pendidik. Olahraga*, vol. 11, no. 2, pp. 293–299, 2022.
- 9) W. Aulia, S. Suryansah, and O. B. Januarto, "Pengaruh Permainan Tradisional Terhadap Tingkat Kebugaran Jasmani Siswa SMP: Literature Review," *Sport Sci. Heal.*, vol. 4, no. 1, pp. 94–102, 2022, doi: 10.17977/um062v4i12022p94-102.
- 10) Gustira, Y. Nurani, and S. Wulan, "Permainan Tradisional Petualangan Gobak Sodor dan Kemampuan Pemecahan Masalah," vol. 7, no. 1, pp. 1173–1185, 2023, doi: 10.31004/obsesi.v7i1.4071.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.