

Modification of Sports Games to Increase Students' Interest in Learning
Through Traditional Sports

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Abstract
<p>Objective. The purpose of this study is to determine the impact of modifications to sports games to increase student interest in learning through traditional sports..</p> <p>Materials and methods. This research was conducted on 33 students of XII IPA 7 class at SMAN 6 Garut. The method used in this research is experimental method. In the research design used, this is a one group pretest posttest design. The instrument used in this study is a learning interest questionnaire which has 4 indicators: (1) enjoyment, (2) student involvement, (3) interest, (4) student attention.</p> <p>Results. The results showed that the students' interest in learning increased according to the pretest and posttest scores that were analyzed. The variable of students' interest in learning that has a high increase is the indicator of feeling happy, with a comparison value of the pretest value of 69 increasing to 90 on the posttest, with a difference of 21, the pretest significance value is $0.06 > 0.05$, therefore the value is significant, and the posttest significance value is $0.21 > 0.05$, then the value is also significant.</p> <p>Conclusion. Based on the results of the research conducted on the modification of sports games to increase students' interest in learning through traditional sports, it can be concluded that the modification of sports games using traditional sports is significantly able to increase students' interest in learning. The modifications made were successful in creating feelings of enjoyment, increasing students' involvement, increasing students' interest in learning, and also attracting students' attention to sports learning.</p>
Keywords: game modification, student learning interest, traditional sports

Introduction

Exercise is a physical activity that can improve the quality of an individual's health, make the body feel healthier and fitter, and prevent various diseases (Ihtiarini, 2017). Exercise is a physical need for people to be able to perform daily activities easily without any health obstacles. Exercise is the movement that is specifically performed in accordance with sports that have different goals and directions, so exercise is very important in people's lives. Exercise also affects

the development of physical growth (Mahfud & Fahrizqi, 2020). Sports are divided into 3 pillars, namely recreational sports, competitive sports and educational sports. Sports that are practiced by the community with skills that grow and develop in accordance with the conditions and cultural values of the local community for health, fitness and enjoyment are called recreational sports. Based on data from the Ministry of Youth and Sports of the Republic of Indonesia, the participation of students in sports activities has decreased significantly in recent years. This phenomenon is also confirmed by the results of a survey conducted by the Center for Education Policy Studies (2022), which shows that only 35% of students actively participate in sports activities at school. Of this percentage, most students prefer modern sports such as football and basketball, while interest in traditional sports such as gobak sodor, engklek and egrang is very low, less than 10%. Therefore, sports games are a material that must be improved, not only to increase the interest in learning, but also to preserve the culture that is born from the environment of the homeland community. Interest in learning is a process that involves students' interest in a learning model. It has a positive effect and serves to improve the learner's cognitive ability and create affectivity during the learning process. His interest in the learning process will be influenced by how much or how little effort is made according to what a person is interested in. Interest can be shaped by a strong drive to achieve goals and is very important in the learning process. Students must understand the situation or be able to apply the values of physical education to carry out the process. Interest is not carried from birth, but is obtained from observation, then fosters the urge to participate, interest can be interpreted as a sense of preference and interest in a thing or sports activity without any prompting and coercion from others, with the interest of students, doing these sports activities will cause the activities carried out more beneficial than people who have no interest at all (Azhar R. Sonjaya, 2022).

Physical sports that are related to local culture and traditions are called traditional sports. These traditional sports are usually games that have been passed down from generation to generation. No one knows their origins, who invented them, when they were made, and where they came from. Although the basics are the same, traditional games are usually spread by word of mouth and sometimes undergo changes in name or form. Traditional games are actually activities that are governed by rules that come from previous generations and are played by children for the purpose of excitement. According to Kasyanto (2019), these long-standing folk games must be preserved because, in addition to being fun, entertaining as a sport, and having social value, they can also improve the physical quality of the players. Traditional games can be divided into three

categories: recreational games, competitive games, and educational games. Recreational traditional games are usually played for leisure. Traditional games provide a different way to increase students' interest in learning. Incorporating traditional games into learning activities not only preserves local culture, but can also increase students' enthusiasm for learning. However, the use of traditional sports in the learning process should be adapted to the curriculum and the current needs of the students in order to remain relevant to the learning objectives to be achieved.

Materials and Methods

Study Participants.

The source of data taken in this study were students of class XII IPA 7, consisting of 33 students. The selection of this sample was carried out to 33 students of class XII IPA 7 at SMAN 6 GARUT active in previous sports activities, both outside class hours (extracurricular) and in sports learning at school and also this class was the recommendation of the PE teacher at school because they had a response and effectiveness in learning, so it could further assist researchers in conducting research.

Study organization.

The researchers use quantitative research methods because they want to investigate how traditional sports games can increase students' interest in learning. Quantitative research is a type of research that involves the collection of numerical data through observation, processing, or questionnaires. According to Sugiyono (2018), statistical methods are then used to analyze the collected data. The purpose of this analysis is to arrive at unbiased conclusions..

$$O_1 \rightarrow X \rightarrow O_2$$

Description:

- O1 = Before treatment (pretest)
- X = Given treatment (treatment)
- O2 = After treatment (posttest)

Statistical analysis.

Tabel 1. Analysis of the results of the survey

Statistik	Eksperimen	
	pretest	posttest
N	33	33
Mean	137.9394	168.0606
Median	140	167
Std Deviation	9.101	6.408
Variance	82.934	41.059
Minimum	116	154
Maximum	151	184

Analysis of the data results above shows an average or mean score of 137.93 for the pretest and an increase of 168.06 for the posttest score.

Tabel 2. N Gain Score

indicator	pretest	posttest	post-pre	score ideal (100-pre)	n gain score
Sense of fun	69	90	21	31	0.68
Student Engagement	66	84	18	34	0.53
Student Interest	65	83	18	35	0.51
Student Attention	64	83	19	36	0.53
mean	66	85	19	34	0.56

Analyzing the results of the assessment of students' interest in learning indicators, the highest value is in the indicator of feelings of pleasure with a pretest value of 69 increasing to 90 with a difference of 21.

1. Prerequisite Test
- a. Normality test

Tabel 3. Normality Test Results

Tests of Normality							
	siswa	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
nilai pretest posttest	pretest	.143	33	.086	.902	33	.006
	posttest	.110	33	.200 [*]	.957	33	.211

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

It can be concluded that the pretest significance value is $0.06 > 0.05$, therefore the value is significant, and the posttest significance value is $0.21 > 0.05$, then the value is also significant.

b. Homogeneity Test

**Tabel 4. Homogeneity Result
Test of Homogeneity of Variance**

		Levene Statistic	df1	df2	Sig.
nilai pretest	Based on Mean	1.217	1	64	.274
posttest	Based on Median	1.195	1	64	.279
	Based on Median and with adjusted df	1.195	1	55.889	.279
	Based on trimmed mean	1.195	1	64	.279

This test is required in analysis of variance (ANOVA) to ensure that the assumption of equal variance is met. Judging by the significance value, if > 0.05 , then the sample is declared homogeneous or equal; otherwise, if significance < 0.05 , then the sample is declared non-homogeneous or unequal. This test is required in analysis of variance (ANOVA) to ensure that the assumption of equal variance is met. In the homogeneity test conducted in this study, the value is 0.274, this value shows that it exceeds 0.05 which can be said that the sample is homogeneous or equal.

c. Hypothesis Test

**Tabel 5. Hypothesis Test Results
Paired Samples Test**

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	sebelum diberikan treatment - setelah diberikan tretment	-75.69697	16.95672	2.95179	-81.70956	-69.68438	-25.644	32	.000

In the results of hypothesis testing in this study obtained a significance value of 0.000, the significance value <0.05 indicated that the hypothesis had a significant effect, or H_0 was rejected and H_a was accepted.

Result.

The results of this study show that with the right traditional games, and can be packaged to be more interesting and relevant to the current context of students. Therefore, by treating students with traditional sports, students' interest in learning increases according to the pretest and posttest scores that have been analyzed. The variable of students' interest in learning that has a high increase is the indicator of feeling happy, with a comparative value of the pretest value of 69 increasing to 90 in the posttest, with a difference of 21.

Therefore, the results that can be described are that there is an increase in students' interest in learning from modified sports games through traditional sports, as evidenced by the results of the hypothesis, and also seen from the N Gain Score, where there is a value of one of the highest increasing indicators, which is the indicator of feeling happy, and also from the results of the hypothesis, which obtained a significance value of 0.000, which is <0.005 , which means that the hypothesis that there is a significant effect or H_0 is rejected and H_a is accepted, which means that there is an influence or increase in students' interest in learning through modified traditional sports games.

Discussion

Therefore, by treating the students with traditional sports, the students' interest in learning increases according to the pretest and posttest results that were analyzed. The variable of students' interest in learning that has a high increase is the indicator of feeling happy, with a comparative value of the pretest value of 69 increasing to 90 in the posttest, with a difference of 21. Through the validation of the questionnaire, it is possible to find out whether the interest questionnaire can be used as an instrument for data collection.

It can be concluded that the pretest significance value is $0.06 > 0.05$, so this value is significant, and the posttest significance value is $0.21 > 0.05$, so this value is also significant. This test, followed by a homogeneity test, is needed in the analysis of variance (ANOVA) to ensure that the assumption of equal variance is met. In the homogeneity test conducted in this study obtained a value of 0.274, this value indicates that it exceeds 0.05 which can be said that the sample is homogeneous or equal. The last researcher tests the hypothesis, the results of this test are seen if the significance value > 0.05 then there is no significant difference which means H_0 is accepted and H_a

is rejected, otherwise if the significance value is <0.05 then there is a significant difference which means H_a is accepted and H_0 is rejected. In the hypothesis test results in this study obtained a significance value of 0.000, then the significance value <0.05 stated that the hypothesis had a significant effect, or H_0 was rejected and H_a was accepted.

Conclusion.

Based on the results of the research conducted on the modification of sports games to increase students' interest in learning through traditional sports, it can be concluded that the modification of sports games using traditional sports is significantly able to increase students' interest in learning. The modifications made were successful in creating feelings of enjoyment, increasing students' involvement, increasing students' interest in learning, and also attracting students' attention to sports learning. This research also supports self-determination theory, which states that intrinsic motivation can be fostered through physical activities that provide enjoyment, freedom, and creativity. In addition, modified traditional games also play an important role in preserving local culture among students at school. At the same time, it introduces positive cultural values in the context of education.

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