



## The Effect of Warming Up with Estafet Ball Game Method on Student's Interest in Learning PJOK

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### ABSTRACT

*This study aims to determine The Effect of the Warming Up with Estafet Ball Game Method on Student's Interest in Learning PJOK, this type of research is experimental with a quantitative approach, the total sample is 55, namely the experimental sample of 28 students and a sample of 27 students at SDN Batah Barat 2. The instrument is playing an interaction of the ball game and getting a questionnaire. Analyst data uses validity which is said to be valid because the value of  $r\text{-table} > 0,361$  and reliability is said to be reliable because it is greater than 0,05. Then the big data analysis technique uses a prerequisite test more than the normality test with a normal distribution because it is greater than 0,05. Namely the experiment with the result of 0,680 and the control class 0,290. The homogeneity test is said to be homogeneous because  $0,793 > 0,05$ . And test the hypothesis using an independent t-test. Based on the independent t-test, there is no significant effect because the value obtained is 0,897. This means that  $H_0$  is rejected in the warm-up method of the estafet ball game, and the interest in learning PJOK has no significant effect.*

**Keywords:** Interest; warm-up; game; PJOK learning.

### INTRODUCTION

Education is the process of learning the knowledge, skills, and habits of a group of people that are passed down from one person to another. generation to generation through teaching, and training. Education is an activity which is a process to develop spiritual abilities and attitudes which include mental, intellectual and even spiritual aspects (Bangun, 2016). Education has changed because of COVID, so Education is carried out online. One of the educations affected by COVID is Physical Education. Physical education is a learning process to improve physical fitness and develop motor skills, knowledge, sportsmanship and emotional intelligence. Physical education (Penjas)

is a place to develop a healthy lifestyle that can help students to train physical stability and motor skills (Indrawani, 2019). One of the learning materials taught in schools is material on physical education where the material is physical and health material that is closely related to sports. The sport itself is done so that a person gets a balance in his body, a healthy body has a good level of physical and spiritual health (Ardianti, 2018). However, due to the COVID-19 pandemic, sports activities have been disrupted. This is a serious problem in the world of education. All students do not want boredom in their lives, because boring learning is something that is not fun. This is due to the teaching and learning process that does not begin with something that attracts students' interest in PJOK learning, and as a result, the learning objectives are not achieved (Musitoh, 2018). One way is through small game activities in the warm-up (Lusianti, 2015).

Warming up is an activity that contains movement to support core activities before the next exercise. Warming up is useful to warm the temperature of the muscles, improve blood flow and increase the entry of oxygen into the body. Each lesson, warming up plays an important role in bringing children or instilling a first impression on students about what will be done at the core of learning. Through physical education learning in the form of playing, it is hoped that students can participate actively and in the end, they have a meaningful, interesting, and fun experience.

Playing is a fun human activity, especially for children. In general, learning with a playful approach model is because playing can increase students' interest in participating in physical education activities (Halidin, 2014). The game referred to here is a small ball game whose material is adjusted to competency standards. This game is specifically designed to foster student enthusiasm and joy so that students are respected in learning Physical Education (R.A Septiana, 2020). One of the games that can be applied in the warm-up is the estafet ball game.

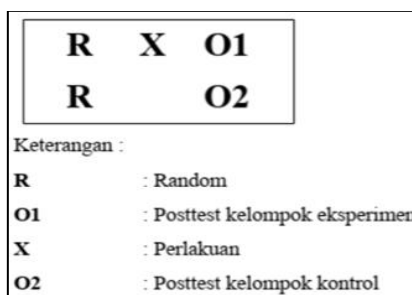
Estafet ball game is a game that is usually played by elementary school children and is played in groups, this game can give children fun, happiness, and joy and can foster student interest in learning. Interest is a feeling of interest, attention, or more desire that someone has for something, without any encouragement. Interest in learning has a very big influence on learning outcomes because if the subject matter studied is not following interests, students will not learn well. After all, it is not interesting for them. Students will be lazy to study and will not get satisfaction from the lesson (Aprijal A, 2020)

Based on the results of observations that I made at the UPTD SDN Batah Barat 2,

the interest of students who took part in PJOK learning using a warm-up in the form of a game was sufficient. For students' interest to continue like that and it is hoped that it will increase, even more, a new, more interesting method is needed, namely using the warming up method in the form of an estafet ball game. Estafet ball game is a game that is modified from estafet running and is usually played by elementary school children who are played in groups and rely on teamwork, this game can give students fun, joy, and happiness. However, the warm-up method of the estafet ball game method is still unclear. Based on the above background, the researcher is interested in taking the title "The Effect of Warming Up with Estafet Ball Game Method on Student's Interest in Learning PJOK".

## **METHOD**

In this research, the type of research used is the experimental method with a quantitative approach. While the design in this study is using the Randomized Posttest Only Control Design. The population used is all male and female students from grade 1 to grade 6 at SDN Batah Barat 2, where the total number of students is 149 students. The sampling technique used is cluster random sampling, where each population has an equal opportunity to be selected as a member of the sample by random or lottery (Sugiyono, 2013). Researchers need 2 classes that will be research samples because what is needed is the existence of an experimental group and a comparison group, namely the control group, wherein the lottery of the selection of the sample group appears in two classes, namely class IV and class V, from the 2 classes the researcher draws again to determine the class which is the experimental group and the other as the control group. In cluster sampling, not individuals, but groups or areas are selected. The reason the author took this technique is that all populations have the same rights to be members of the research sample and there is no difference to make the control group and the experimental group because the selection is random or lottery (Lusianti, 2015). Variables Independent Variables: Giving a ball game estafet, Bound Variables: Students' interest in taking PJOK lessons.



**Image 1.**  
 Treatment Research

Where O1 indicates an assessment after treatment (posttest) for the experimental group and X is a treatment and O2 indicates an assessment after treatment (posttest) for the control group. In the prerequisite test, three tests must be done, namely, normality test, homogeneity test, and hypothesis testing. To test normality in this study using the Kolmogorov Smirnov Shapiro Wilk test on the SPSS For Windows 21 program with a significant level of 95%. The homogeneity test was carried out using the Levene test, from the results of the two Levene tests with SPSS, the value was 0.849, which means  $> 0.05$ , meaning that the two classes are not significantly different, so it means that the variance of the two classes being compared is homogeneous. The technique that will be used to test the hypothesis is to use a t-test, namely a different t-test (independent t-test) (Sugiyono, 2013).

## RESULTS AND DISCUSSION

### Validity Test Results

Validity in this study is used as a measuring tool that indicates the level of validity or validity of an instrument. To test the validity of this instrument, the *IMB SPSS v21.0*. With the test criteria if  $r_{\text{arithmetic}} > r_{\text{table}}$  with  $= 0.05$  then the measuring instrument is declared valid and vice versa if  $r_{\text{arithmetic}} < r_{\text{table}}$  then the measuring instrument is declared invalid. Based on the criteria, the results of the test trials that have been carried out from 13 questions there is 1 question that is not valid, both for the control class and the experimental class, more details can be seen in the table as follows

**Table 1.**  
 Test Validity Test Results

	R Table	Score_Total Control	Description	Score_Total Experiment	Description
Item_1	0.361	.783**	Valid	.673**	Valid
Item_2	0.361	.708**	Valid	.565**	Valid
Item_3	0.361	.827**	Valid	.551**	Valid

	R Table	Score_Total Control	Description	Score_Total Experiment	Description
Item_4	0.361	.854**	Valid	.363*	Valid
Item_5	0.361	.873**	Valid	.708**	Valid
Item_6	0.361	.734**	Valid	.560**	Valid
Item_7	0.361	.693**	Valid	.563**	Valid
Item_8	0.361	.815**	Valid	.646**	Valid
Item_9	0.361	.729**	Valid	.577**	Valid
Item_10	0.361	.790**	Valid	.660**	Valid
Item_11	0.361	.685**	Valid	.588**	Valid
Item_12	0.361	.355	Invalid	.729**	Valid
Item_13	0.361	.630	Valid	.348	Invalid

### Reliability Test Results

With the test criteria if  $r_{\text{Alpha}} > r_{\text{table}}$  with  $\alpha = 0.05$  then the measuring instrument is declared reliable and vice versa if  $r_{\text{Alpha}} < r_{\text{table}}$ , the measuring instrument is declared unreliable. To test the reliability of a written test, the *IBM SPSS v21.0 application* was used. The results of the reliability test can be shown in the following table

**Table 2.**  
Control Class Reliability Test Results

Cronbach's Alpha	N of Items
.928	12

**Table 3.**  
Experimental Class Reliability Test Results

Cronbach's Alpha	N of Items
.849	12

The results of the calculation of the reliability test for the control class are 0.928 while for the experimental class it is 0.849, this proves that the scale results from the practice results have a level of reliability, this is evidenced by the test criteria which if  $r_{\text{Alpha}} > r_{\text{table}}$  is declared reliable.

### Normality Test Results

After processing the data using the IBM SPSS version 21.0 application, the calculation results were obtained from the student data. This normality test is used to determine whether the given instrument is normally or not normally distributed, with a significance level of 0.05 criteria, if the significance obtained  $> 0.05$  then the sample comes from a normally distributed population, but if the significance obtained is  $< 0.05$  then the sample does not come from a normally distributed population.

**Table 4.**  
 Normality Test Results

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistics	Df	Sig.	Statistics	df	Sig.
Experimental results	,214	54	,100	,864	54	,680
Control results	,339	54	,100	,637	54	,290

The test was carried out at a confidence level of 0.05 from table 3, it can be concluded that the test of both stages has normal distribution for both the experimental class and control class because it meets the criteria, for the experimental class the sign results are 0.680 and the control class is 0.290.

### Homogeneity Test Results The homogeneity

Test of variance is very necessary before comparing two or more groups so that the differences are not caused by differences in the rough data used to test the homogeneity of variance, the following are the results of the homogeneity test in this study

**Table 5.**  
 Homogeneity Test Results

Levene Statistic	df1	df2	Sig.
.793	1	52	.377

Based on the homogeneity test criteria, if the value of sig. > 0.05 then the data is assumed to have the same variance, but if the value of sig. <0.05 then the data is assumed to have unequal variance. The results of the homogeneity test above show that the data has the same variance as the sig value. 0.793 which means greater than 0.05 or (0.793 > 0.05).

### Test Results Independent Sample T-test

For independent test results Independent Sample T-Test can be seen in the following table

**Table 6.**  
 Test Results Independent Sample T-test

		Levene's Test for Equality of Variances			t-test for Equality of Means				95% Confidence Interval of the Difference	
		F	Sig.	df	Sig.	. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Result	Equal variances assumed	,793	,377	-	52	,897	-,222	1,703	-3,640	3,196
	Equal variances not assumed			-	48,239	,897	-,222	1,703	-3,646	3,202

From the results table above, the following description can be obtained

Based on the results of the Independent Sample T-Test in table 6 shows that the experimental class and control class got 0,897 (in 2-tailed). This means that the warming up of the estafet ball game method on student interest in PJOK subjects has no significant effect. Maybe warming up of estafet ball game method no agree for students. This is probably because it still requires adaptation. Because the warm-up for the estafet ball is only given one try, it is likely that students are not used to it and are still confused about the method of the game. Meanwhile, in the control group, conventional warming up is usually done at school, so the children adapt to conventional warming up. Observing the ball estafet game can be improved or repeated several times so that students can adapt more easily to this game.

## CONCLUSIONS AND SUGGESTIONS

### Conclusions

The researcher concluded that from the results of the research and discussion, it was concluded that the warm-up of the estafet ball game method on student interest in PJOK learning in the 2021/2022 school year was included in the sufficient category. The results are shown in detail as follows: (1) Based on the results of the research that has been carried out, it can be said that the research was not successful, because the values obtained in the independent t-test class and control test, namely the experimental class had no significant effect. maybe the estafet warm-up game is not suitable for elementary school students, (2)

Based on the normality test that has been tested, the measuring instrument used is normal. Because the value obtained is greater than 0.05, the experimental class got a significant result of 0.680 and the control class was 0.290, and (3) Based on the results of the independent sample test, the t-test for the control class and the experimental class got a value of 0.897. This shows that H<sub>0</sub> is rejected, which means that the warming up of the estafet ball game method on students' interest in PJOK learning has no significant effect. This is probably because it still requires adaptation. Because the warm-up for the estafet ball is only given one try, it is likely that students are not used to it and are still confused about the method of the game. Meanwhile, in the control group, conventional warming up is usually done at school, so the children adapt to conventional warming up. Observing the ball estafet game can be improved or repeated several times so that students can adapt more easily to this game.

### Suggestion

To another researcher: Please learn about the effect of warming up the replacement ball game more, so students can understand this lesson.

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