

Modification of Volleyball Game in Learning to Increase Student Interest at Yapis Timika Middle School

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Abstract

This study aims to increase the interest of students at Yapis Timika Middle School through Modifying Volleyball Games in Learning in the 2023/2024 Academic Year. The population of this study was all 35 students of class VIII A and 25 students of class VIII B at Yapis Timika Middle School, totaling 60 people. This research uses the classroom action research method (classroom action research) with a test questionnaire technique, which consists of two cycles, each cycle consisting of 2 meetings. The data source in this study was the eighth grade students of SMP Yapis Timika in the 2023/2024 academic year which were divided into two classes, namely VIII A and VIII B. The instrument used for data collection in this study was an observation sheet in the form of a student interest test questionnaire in PJOK learning modification of volleyball games. The problem in this study is whether the modification of volleyball games in learning can increase the interest of students at SMP Yapis Timika. The results of the study showed that the modification of volleyball games in physical education to increase student interest in the 2023/2024 academic year. Student learning interest increased from 45.66 in the initial conditions to 56.93 in the first cycle and increased to 80.2 at the end of the cycle II. Student learning outcomes increased from 11.27 in the initial conditions to 23.27 in cycle I and increased to 34.54 at the end of cycle II. The conclusion is that the modification of the volleyball game can increase the interest of students at Yapis Timika Middle School in the 2023/2024 Academic Year. Based on the research results, the suggestion put forward is that the modification of the volleyball game can be implemented and developed in the physical education and health learning process at school.

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1. INTRODUCTION

Pratiwi (2021) states that physical education is all human activities that are selected and implemented according to the desired goals. According to Reza (2021), Physical activities for physical education can be through sports or non-sports. sports. The focus is on improving human movement. More specifically, physical education is concerned with the relationship between human movement and other educational areas: the relationship between the development of the physical body and the mind and soul.

The goals to be achieved through Physical Education, Sports, and Health include the development of the individual as a whole. This means that the scope of physical education is not only physical, but also mental, emotional, social, and spiritual aspects (Adang Suherman, 2000:22 in Rakhman A, 2011:1). In general, the objectives of physical education are classified into categories:

- 1) Physical Development,
- 2) Psychological Development,
- 3) Motor Development,
- 4) Development Social.

The above objectives will be achieved if there is a good interaction between teachers and students, with the teacher as educator and the student as educated, resulting in a positive response from the students. This response results in behavioral changes in a general sense, which are globally encompassed in the cognitive, affective, and psychomotor aspects. These three terms are commonly used as communication tools among educators to achieve the desired results (Rusli Lutan, 2004:35) in (Nugroho, YA. 2011:24). However, basically physical education itself is education through physical activity, which includes skills and movement development from various sports, one of which is volleyball.

Volleyball is a sport that is quite popular among the public. easy to play and can be a means of entertainment, besides that it trains physical health (Hidayat W, 2017:3). In addition, Volleyball is a complex game and is popular among all levels of society. This is proven by the large number of fields and people who play volleyball in every region, even in remote villages (Pujiantoet al., 2019).

From the opinion above, it can be categorized that volleyball is a light sport and It's fun. But it's different for the students of Yapis Timika Middle School, the students don't feel it. the lightness and fun of playing volleyball at school. Based on a survey I conducted in April 2025 in Yapis Junior High School, Timika.

The Results of the Observation Questionnaire Survey of Interest in Volleyball Games is clear that students' interest in volleyball is low. This is shown in class VIII A, out of 35 students, only 10 students are willing to play volleyball, a percentage of 28%. Likewise, in class VIII B, which has a percentage of 36% of 25 students, only 9 students participate in volleyball. Of the total of 60 students, only 19 students are willing to play volleyball, a percentage of only 32%.

Another factor that makes students less interested in playing volleyball in the learning process given by physical education teachers at Yapis Timika Middle School is that the media used by teachers are still conventional, there is a lack of infrastructure and there is no variation in providing volleyball practice, so that students feel bored, fed up, and unenthusiastic, and are not challenged, ultimately students are less interested in playing volleyball.

Learning media is anything that can be used to convey messages or information in the teaching and learning process so that it can stimulate students' attention and interest in learning (Pintek P, 2021). Learning media is also a source of information or knowledge for students and also learning media as a learning resource is a component of the learning system that includes messages, people, materials, tools, techniques and tools that can influence student learning outcomes (Elisa E, 2022). To overcome this, a teacher must be able to design a learning process plan so that it becomes an effective strategy to achieve learning objectives and enjoyable learning. Besides being enjoyable, learning media must be able to provide a pleasant experience and meet the individual needs of students (Arsyad, 2014:25).

The use of instructional media during the orientation phase of learning will significantly contribute to the effectiveness of learning and the delivery of messages and lesson content. In addition to building student motivation and interest, instructional media can also help students improve their understanding, present data in an engaging and credible manner, facilitate data interpretation, and condense information.

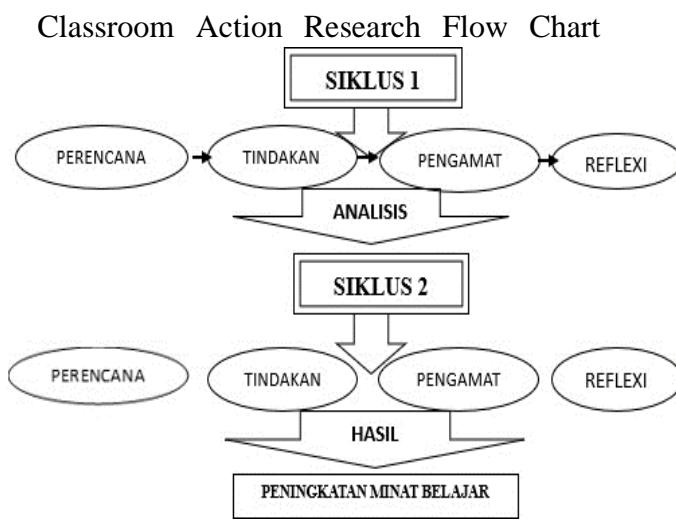
Seeing the problems explained above, namely, the low interest of students of SMK Yapis Timika in volleyball games in accordance with the description of one of the functions of learning media, namely building and increasing student interest by modifying learning, especially in volleyball material. Therefore, the researcher is interested in conducting research with the following research title: "Modification of Volleyball Game in Learning to Increase Student Interest at Yapis Timika Middle School"

2. RESEARCH METHODS

This type of research is classroom action research, using direct observational data from classroom learning processes. This data is then analyzed through several stages in cycles. The descriptive approach aims to provide an overview of students' interest in volleyball at Yapis Timika Middle School.

According to Ali (1987:7), research is carried out primarily to find a basis for practical knowledge in order to improve conditions and situations that are limited in a limited way. This is often done in situations or circumstances that are currently taking place. The criteria for implementing the action are: (1) This research is a consumer or user of the research results, (2) The research takes place in a situation where solving important problems is carried out so that the results are needed to change the actions or behavior of the researcher, the behavior of other people or to compile a framework/*Frame Work*.

The research design in this study also represents the working procedures of the research framework, which focuses on increasing student interest in participating in the Physical Education and Health learning process. The framework or working procedures referred to in this study are a cycle of activities consisting of two cycles. Each cycle includes planning, action, observation, and reflection, as shown in the figure below:



(Source: Rakhman, A. 2011)

The cyclical actions in this study were carried out in two meetings. Cycle 1 discussed and explained the modifications to be implemented in volleyball. Cycle 2 implemented the volleyball modifications for the sample students. Each cycle consisted of four stages: planning, implementation, observation, and reflection.

There are 3 data collection techniques in this study, namely:

a). Documentation methods

The documentation method is a data collection method that obtains data from written sources (Arikunto 2006:158). With this, the research obtained data in the form of the number of students and data on student interest before conducting classroom action research.

b). Observation Method

Observation methods are used to assess teaching and learning activities (KBM). This method is implemented before and during classroom action research, and during classroom action research. Researchers conduct direct observations in the field to collect data on the ongoing learning process.

c). Questionnaire Method

According to Ali (1987:37), questionnaires are seen as a research technique that has many similarities with interviews except in its implementation, questionnaires are carried out in writing

while interviews are carried out orally, therefore questionnaires are often also called written interviews. The questionnaire method in this study consists of 3 types, first, the student interest condition questionnaire, this questionnaire is useful for finding out how much interest students have in following the warm-up using the game method. Second, the interest questionnaire is given before and after the action. And finally, the student response questionnaire regarding the application of the game model provided.

3. RESEARCH RESULT

1. Pre-Cycle Test Results

Before conducting Cycle I and Cycle II, the researcher conducted a pre-cycle test. The results of the pre-cycle test were used to assess students' interest levels before the research was conducted. These pre-cycle test results served to determine the initial state of student interest. The test scores were then used to compare and determine the completion standards for Cycle I and Cycle II.

The test conducted was a student interest test. The number of students who took the pre-cycle test was 60 students consisting of 35 boys and 25 girls of class VIII of SMP Yapis Timika. The results of the pre-cycle test can be seen in the description of table 4.1 below (See Appendix Page 46) it can be seen that the average result of the student interest test in the pre-cycle reached 45.66 or is in the low category. This average value cannot be said to be satisfactory because the results have not yet reached 80%.

This can also be seen in the conclusion of the table below describing that out of 60 students, there are 0 students or 0% who achieved a very high predicate. A total of 20 students or 33.33% who obtained high scores, namely between 65-84, then there are 3 students or 5% who obtained medium scores, namely between 55-64. There are 4 students or 6.66% who obtained low scores, namely between 40-54 and there are 33 students or 55% who obtained very low scores, namely between 20-39. So the total of low scores added with very low scores is 37 students or 61.66%.

Pre-cycle Student Interest Test Results Table

NO	NILAI INTERVAL	KRITERIA	F	%	RATA-RATA NILAI	KETUNTASAN
1	85-100	Sangat Tinggi	0	0	$= \frac{2740}{60}$ $= 45,66$ $X 100 \%$ $= 55 \%$	$\frac{33}{60}$
2	65-84	Tinggi	20	33,3333		
3	55-64	Sedang	3	5		
4	40-54	rendah	4	6,66667		
5	20-39	Sangat Rendah	33	55		
JUMLAH			60	100		
JUMLAH RENDAH + SANGAT RENDAH			37	61,6667		

2. Results of Cycle I Research

Cycle I is a comparative and problem-solving action from the pre-cycle. Therefore, the actions of cycle I were carried out to increase interest in PJOK learning in general and specifically in learning volleyball material as well as changing student behavior in learning. The results of the research in cycle I are detailed in the table below describing that the average result of the student interest test in cycle I reached 60.67 or is categorized as moderate. This average value cannot be said to be satisfactory because the results still have not reached 80% classical completion. Furthermore, it can also be seen that the conclusion from table 4.4 describes that out of 60 students, there are 36 students or 60% who achieved a very high predicate of 85-100. There are 24 students or 40% who obtained very low scores, namely between 20-39. So, the total of low scores is added to the very low score, namely there are 24 students or 40%.Student Interest

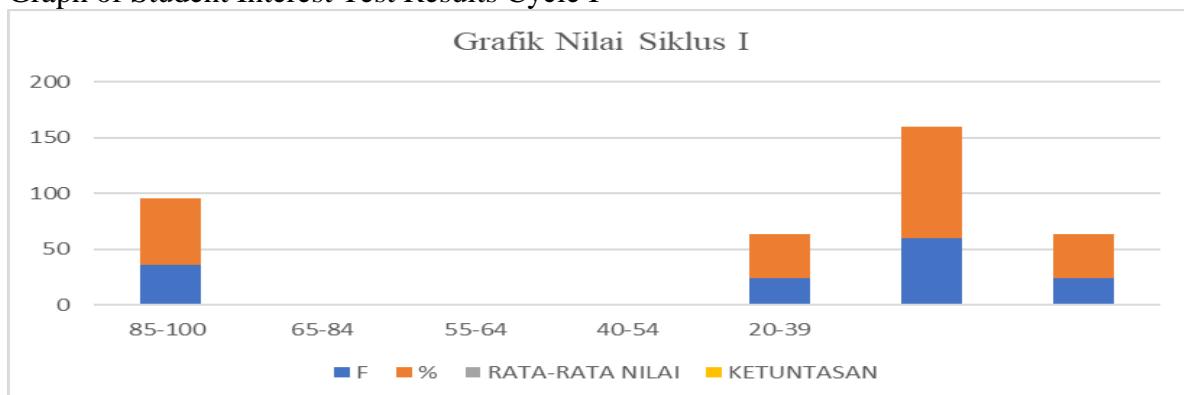
Test Results Table for Cycle I

The table data above shows that the results of the student interest test in cycle I have not

NO	NILAI INTERVAL	KRITERIA	F	%	RATA-RATA NILAI	KETUNTASAN
1	85-100	Sangat Tinggi	36	60	= $\frac{3416}{60}$	$\frac{36}{60}$
2	65-84	Tinggi	0	0		
3	55-64	Sedang	0	0		
4	40-54	rendah	0	0	= 56,93	
5	20-39	Sangat Rendah	24	40		
JUMLAH			60	100		
JUMLAH RENDAH + SANGAT RENDAH			24	40		

yet reached the classical completion rate, namely 80% with an average score of 70-80, or in the high and very high categories. This average score cannot be said to be satisfactory because the results still do not reach the classical target. The average score in cycle I was 56.93 and showed an increase of 11.26 compared to the average score in the pre-cycle. For more details, see the graph of the Student Interest Test Results for Cycle I below:

Graph of Student Interest Test Results Cycle I



Based on the results of the first cycle test above, the low and not yet achieving classical completeness of student interest scores is caused by several influencing factors, namely internal and external factors. These internal factors come from the students themselves, and external factors are student activity and the media used. This can be proven by the student interest test data in the first cycle, which states that the results are still lacking. The average score of the female student interest test only reached 56.93 and is categorized as low, while the number of students who achieved the high and very high categories is 36 or 60%. Thus, student interest needs to be improved again because the results have not yet reached the classical target. Improvements are needed so that students are able to achieve even higher results. Therefore, there must be a second cycle action, and it is hoped that it can improve scores and change student behavior in a positive direction towards PJOK learning, especially in the volleyball material.

3. Results of Cycle II Research

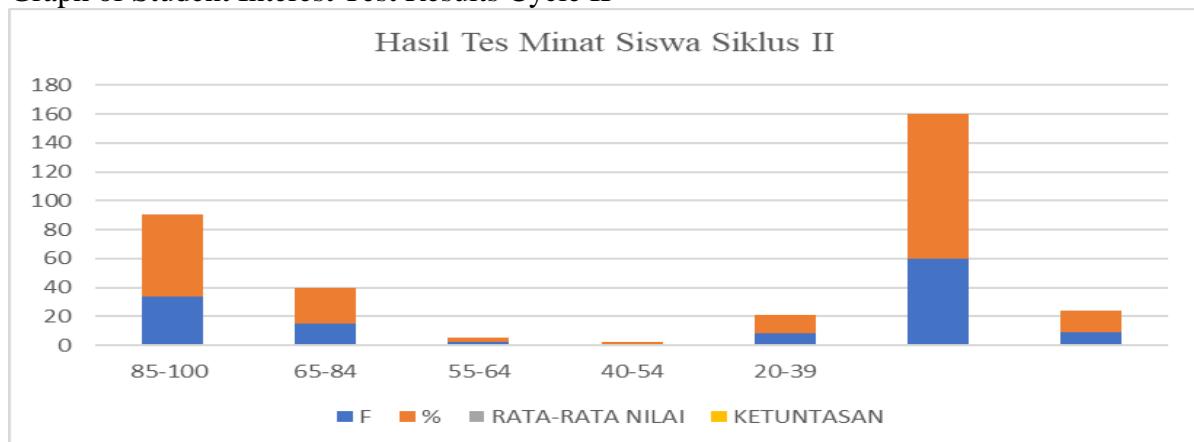
Cycle II is a corrective action and problem-solving from Cycle I. Therefore, the action of cycle II is carried out to increase interest in learning PJOK, especially in volleyball, and to change student behavior in learning. The results of the research in cycle II describe that the average result of the student interest test in cycle II reached 80.2, which is categorized as High. The average value can be said to be satisfactory because the results have classically reached 80% completion. Furthermore, it can also be seen that the conclusion from Table 4.6 describes that out of 60 students, there are 34 students or 56.67% who achieved a very high grade, namely 85-100. There are 15 students, or 25% who obtained a high category score. If added up as a whole, the high and very high categories, namely, there are 49 students or 81.66%. Furthermore, there are 2 students or 3.33% who obtained medium scores, namely between 55-64 and there was 1 student or 1.66%

in the low category and there were 8 students or 13.33% who obtained very low scores. So, the total of low scores added to the very low scores, namely 9 students or 15% (see table below). Student Interest Test Results Table for Cycle II

NO	NILAI INTERVAL	KRITERIA	F	%	RATA-RATA NILAI	KETUNTASAN
1	85-100	Sangat Tinggi	34	56,67	= $\frac{4812}{60}$	$\frac{34+15}{60}$
2	65-84	Tinggi	15	25		
3	55-64	Sedang	2	3,333		
4	40-54	rendah	1	1,667	= 80,2	X 100 %
5	20-39	Sangat Rendah	8	13,33		
JUMLAH			60	100		
JUMLAH RENDAH + SANGAT RENDAH			9	15		= 81,66 %

Based on Table 3.3 which has been described above with the reduction in the percentage of student interest in the low and very low categories automatically the average percentage of student interest scores in the high and very high categories increased and it can be concluded that student interest in cycle II has reached the desired and high category, namely with an average interest score of 80.2 and achieving classical completeness of 81.66% in the high category. Thus, student interest has reached the expected target because the results are maximum. We can see a similar thing in the graph of student interest test results in cycle II below:

Graph of Student Interest Test Results Cycle II



4. RESEARCH DISCUSSION

After analyzing the interest test data, evidence was obtained that the use of volleyball game modifications can increase the interest of class VIII A and VIII B students of Yapis Timika Middle School in the 2023/2024 Academic Year. The discussion of the results of this study is based on the results of the pre-cycle, the results of cycle I, and the results of cycle II. The discussion of the results includes the results of the research results acquisition test referring to the scores achieved by students when asked to fill out a questionnaire on student learning interest in volleyball game modifications in learning.

Increasing Student Interest in Learning

The Physical Education and Health (PJOK) learning process using modified volleyball games in Cycles I and II always begins with apperception, which involves asking various argumentative questions to encourage students to think critically. The teacher/researcher then explains all the activities the students will undertake. The interest test results are then summarized to obtain the overall results of the test. The interest test results can be seen in the table below:

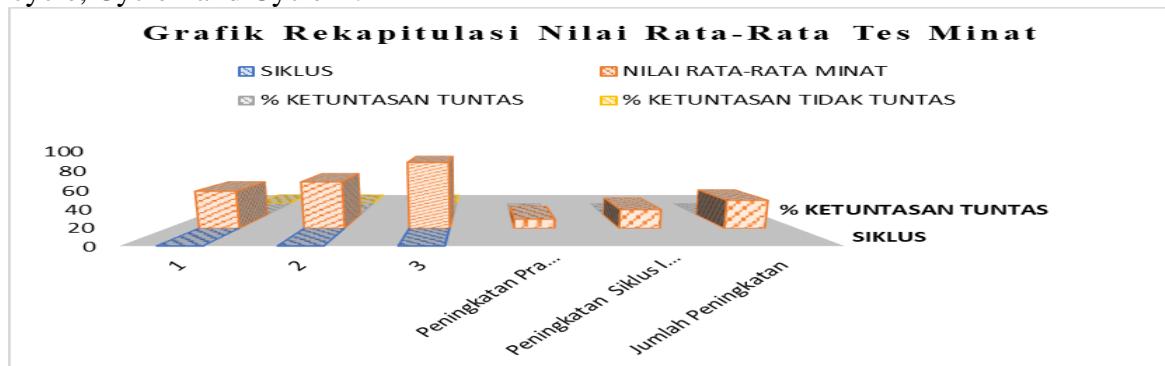
Summary Table of Average Values of Interest Test Results with Completion in Pre-cycle, Cycle I and Cycle II.

NO	SIKLUS	NILAI RATA-RATA MINAT	% KETUNTASAN	
			TUNTAS	TIDAK TUNTAS
1	Prasiklus	45,66	45%	55%
2	I	56,93	60%	40%
3	II	80,2	81%	19%
Peningkatan Pra Siklus Ke Siklus I		11,27	15%	
Peningkatan Siklus I ke Siklus II		23,27	21%	
Jumlah Peningkatan		34,54	36%	

Based on the recapitulation of interest test results from pre-cycle to cycle I, cycle I to cycle II, it can be explained that the results of the student interest test in each cycle showed an increase. The description of Table 4.7 is explained in detail as follows. The pre-cycle results show that the average value of student interest was 45.66. From this average, it can be seen that student interest in volleyball learning is low because it is in the range of 40-54. This low interest test score needs to be improved further. To improve student scores, guidance and a more varied learning model are needed. Therefore, in this study, a modification of the volleyball game was used in learning.

Students who previously had an average score of 45.66 were able to increase it to 56.93 in cycle I, and in cycle II, it increased to 80.2, in accordance with the completion target set by the teacher (researcher) in cycles I and II. For more details, we can see together in the graph below:

Summary Graph of Average Values of Interest Test Results with Completion in Pre-cycle, Cycle I and Cycle II.



From the graph above, it can be seen that the results of the student interest test in cycle I achieved classical completeness of 60%, which is included in the moderate category because it is in the range of 55-

64. Thus, the results have not yet reached the target value that has been set, which is classically 80% completeness, but basically there is a significant increase in student interest, but not that large. This is due to internal factors from the students themselves and external factors. The results of the student interest test in cycle II achieved classical completeness of 81%.

From the percentage of completion data, it can be seen that the average value of student interest is included in the high category, which is in the range of values between 65-84. The achievement and increase in these values mean that the target set by the teacher (researcher) in cycle I and cycle II has been met, which is 80% classical completion. This is in line with the low percentage of incompleteness in cycle II, which is 19% dominated by female students because it is caused by external conditions in the field, namely outdoor fields exposed to sunlight, which is common and most female students limit themselves to spending long periods in the hot sun. With

Thus, cycle III actions are no longer necessary. Therefore, it can be concluded that the use of volleyball game modifications applied to PJOK learning can help students facilitate PJOK learning. Furthermore, student creativity and cooperation are also increased. By having a high interest, students will be motivated to work towards achieving their goals and objectives because they are increasingly confident and aware of their improvement, importance, and benefits. For students, this interest is very important because it can motivate and shape student behavior in a positive direction, so they are able to face all obligations or demands, difficulties, and bear the risks in their studies. Interest will be able to determine the level of achievement of goals, so the greater the interest, the greater the motivation, and thus the greater the success of learning.

On the other hand, those whose interest is in the low category appear indifferent, easily discouraged, and their focus is not on the subject, which results in students experiencing learning difficulties. Interest drives organisms, directs actions, and chooses learning goals that are considered most useful for individual life. Based on the description of the research data, it shows that the learning interest of students at Yapis Timika Middle School in the 2023/2024 academic year is in the high category. Of the four supporting factors listed in the interest test questionnaire, it shows that the media factor is the biggest supporter of high interest, while the creativity factor is the lowest supporting factor. The high interest of Yapis Timika Middle School students in physical education subjects has a positive impact on their learning outcomes. In addition, according to observations by the sports teacher of Yapis Timika Middle School, with the provision of volleyball game modifications in learning, Yapis Timika Middle School students appear to use their remaining learning time more often to play volleyball.

5. CONCLUSION

Based on the results of the research and its discussion, the researcher concluded that there was an increase in student interest with the modification of volleyball games in PJOK learning for students of SMP Yapis Timika after the provision of volleyball game modifications by the researcher, because it is basically one way to increase student interest. The increase in student interest was seen from the pre-cycle interest test, cycle I, and cycle II. The average value in the pre-cycle was 45.66, which is included in the low category. While the average value in cycle I reached 56.93, which is included in the medium category. Thus, there was an increase of 11.27. In cycle II, the average value that had been achieved was 80.2, which is included in the high category. Thus, there was an increase from cycle I of 11.27 to 23.27, with a total increase in the average value of 34.54 from the results of the previous pre-cycle.

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