

Application of the Throwing Catch Ball Method in Improving Learning Outcomes Volleyball Upper Passing at Junior High School Negeri 13 Palembang

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ABSTRACT

This research employed a collaborative approach between the researcher and the teacher through the Classroom Action Research (CAR) method. The research was carried out over four face-to-face meetings, divided into two cycles, with each cycle consisting of two sessions. The purpose of this study was to determine the extent to which the implementation of the throw-and-catch ball method in volleyball learning could improve the overhead passing skills of students in Junior High School 13 Palembang. The subjects of this study were 10 students from Junior High School 13 Palembang. Data collection was conducted using observation sheets. The results of the study showed an improvement in overhead passing skills in volleyball through the application of the throw-and-catch ball method. Based on descriptive qualitative data analysis, the average student score in Cycle I was 22, which increased to 30 in Cycle II, indicating progress. The learning mastery level also improved from 63% in Cycle I to 85% in Cycle II, showing an increase of 22%.

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AUTHORS' CONTRIBUTION

A. Conception and design of the study;
B. Acquisition of data;
C. Analysis and interpretation of data;
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INTRODUCTION

Physical education is an important component in the education system that functions as a means to achieve educational goals as a whole (Wardan, 2021). Through a series of structured physical activities, physical education not only trains physical abilities and body health, but also helps individuals in the process of adapting to various aspects of development such as neuromuscular coordination, thinking skills (intellectual), social interaction, understanding cultural values, emotional control, to the formation of ethical attitudes. Thus, physical education has an integral role in forming a person who is balanced physically, mentally, socially, and morally (Iyakrus, 2019). According to Nugraha (2015), Physical education is an inseparable element of the entire educational process, which is realised through learning

experiences based on movement activities. Through these experiences, students are encouraged to develop physical abilities, improve motor skills, and develop cognitive aspects. In addition, physical education also contributes to social and emotional growth and strengthens spiritual values that shape character and personality holistically. From the opinion above, it can be concluded that physical education not only discusses physical but also cognitive, motoric, social and spiritual aspects. Sports are one of the effective ways to maintain and improve body health, and have a significant role in supporting the quality of human life (Siswahyudinata et al., 2024).

Various types of sports activities can be done as a means of maintaining fitness, one of which is through sports games. Examples of these sports games include volleyball, basketball, soccer, badminton, tennis, and various other games. Sports are now no longer seen as just a hobby activity that is done to maintain health, seek pleasure, or strengthen togetherness. Its rapid development has made sports a part of the lifestyle of modern society. Moreover, sports have also transformed into an industry with high economic value, where sports activities are packaged professionally to generate profits and open up business opportunities in various sectors (Syadzwinia et al., 2024). Learning is a process that can take place through formal and non-formal education. In the implementation of formal education, both educators and students are required to be more innovative so that the expected educational goals can be achieved (Abdul Istiqal, 2018). Factors that cause limited and undeveloped student abilities are that the learning methods used by teachers are too monotonous, a teacher does not know the character of the student before providing teaching materials, a teacher does not master the teaching materials, physical education teachers are not following their fields of knowledge (Wardan, 2021). The use of appropriate learning methods for students who are learning overhead passing will facilitate the implementation of the teaching and learning process in order to achieve the set goals (Ruslan, 2021). Modifications in learning are intended to improve learning outcomes and student interest, so that they can experience an optimal learning experience (Saputra, A. D., Hartati, & Asyik, Z., 2023).

According to Haprabu, E. S. (2017), Modifications and games as tools to facilitate students in understanding basic passing techniques. One of the learning methods that can be used to improve volleyball overhead passing skills is the throw-catch method. According to Sistiasih (2022), throwing a ball is a game that is designed to be simple and easy to play, especially in the context of physical education. This game is made by considering the rules of the game, how to play, the number of players, and the size of the field, so that it can attract children's interest. The goal is to provide a fun and educational playing experience. Volleyball is a type of sport that is part of the core material in physical education lessons (Rizal & Kasriman, 2020). Volleyball is a game played by two teams of two to six people on a field measuring 30 square feet (9 square meters) for each team, and the two teams are separated by a net and compete to reach 25 points first (Abizar et al., 2021). Playing volleyball provides various benefits, such as helping to form good posture in terms of anatomy, physiology, health, and physical fitness. From a mental perspective, this sport is also beneficial for psychological development, personality formation, and character that is in accordance with social values.

Volleyball is classified as a fairly complex sport, and not everyone can play it easily (Duhe & Haryanto, 2021). This is because the game requires good coordination of movements so that each existing technique can be performed optimally (Arte & Wahyudi, 2020). The basic techniques in volleyball that need to be mastered include serving, passing, blocking, and smashing. In the game of volleyball, there are various basic techniques that need to be mastered, such as serving, passing, blocking, and smashing (Sistiasih & Pratama, 2021).

Overhead passing is a technique for passing the ball using the tips of the fingers placed above the head. According to (Widodo et al., 2025), in its application, the ball coming from above is received with the hand position slightly in front and above the head in order to provide optimal control. This technique functions to direct the ball accurately to teammates or even directly to the opponent's territory. The success of the overhead pass has a major influence on the smoothness and results of the game. How to do an overhead pass is that the fingers are wide open, and both hands form a bowl, almost facing each other (Fitria et al., 2024). Before touching the ball, the knees are slightly bent until the hands are in front at nose level. The angle between the elbow and body is $\pm 45^\circ$. The ball is touched by straightening the legs and arms.

METHODS

This research is a type of Classroom Action Research (CAR), which is carried out collaboratively between researchers and physical education teachers at SMP Negeri 13 Palembang. The purpose of this study is to improve the ability to pass overhead in volleyball through learning based on the game of throwing and catching balls. The study uses the CAR model with four main stages: planning, implementing actions, observation, and reflection. These four stages are interrelated and form a cycle of classroom action (Widhiasto et al., 2020). The research was carried out in 2025, taking place on the volleyball court of SMP Negeri 13 Palembang. The focus of the research is the use of the throwing and catching game method to improve the ability to pass overhead in volleyball, with the research subjects being students in the school class. The data sources for this study include: (1) students in the class as participants whose overhead passing skills are observed; (2) physical education teachers who act as collaborators in delivering the material on the game of throwing and catching numbered balls; and (3) researchers who are tasked with observing and evaluating the effectiveness of learning methods in improving student abilities. Data were collected through participatory observation methods, which directly involved researchers in learning activities (Arikunto et al., 2015). In addition, a test method was also used to determine the extent to which students' learning outcomes had developed, especially in terms of throwing and catching techniques as part of overhead passing. The test instrument included an assessment of standing posture, how to hold the ball, throwing techniques, and catching. The assessment was carried out using a table-shaped observation sheet that was arranged to assess students' practical skills. Data analysis used a quantitative descriptive method to assess the level of learning completion and the average class score, which was presented in the form of percentages and numbers.

RESULTS AND DISCUSSION

Result

Based on the research results, it can be concluded that the passing ability of students at SMP Negeri 13 Palembang has increased through the application of the ball throwing and catching method. This increase can be seen from the results of observations, where the average score of students before the action was 13. After the action was carried out in cycle I, the average score increased to 30, indicating an increase of 17 points. Furthermore, in cycle II, the average score of students rose again to 34, meaning that there was an increase of 4 points from the previous cycle. This volleyball throwing and catching method has proven to be effective in improving students' passing ability. In addition, this method also makes the training process more enjoyable because it is in the form of a game, and is able to train cooperation and togetherness between students.

Classroom Action Research (CAR) conducted in two cycles aims to determine whether the application of the ball throwing and catching method can improve the passing results of students at SMP Negeri 13 Palembang. The results of observations in the first cycle showed an increase in volleyball passing skills, although the increase had not achieved optimal results as expected. A more significant improvement was seen in the second cycle, which was influenced by the more active and communicative role of the teacher. In this cycle, the teacher succeeded in raising students' enthusiasm for learning, so that many students became more enthusiastic and liked learning about overhead passing with the throw-catch method because it was packaged in the form of a game. In addition, in the second cycle, the teacher provided explanations and examples in a more creative way, so that students could more easily understand the material and skills taught. Students' understanding also increased thanks to the repetition of the first cycle. A comparison of students' volleyball passing results at the pre-action stage, cycle I, and cycle II can be seen in the following table.

Table 1.

Recapitulation of the conditions for improving passing scores for students in pre-cycle, cycle I, and cycle II.

No	Name	Pre-Cycle	Cycle 1	Cycle 2	Description
1	A	10	20	34	Improve
2	B	12	20	32	Improve
3	C	9	22	30	Improve
4	D	11	24	30	Improve
5	E	15	30	26	Improve
6	F	20	19	32	Improve
7	G	18	21	30	Improve
8	H	16	18	30	Improve
9	I	9	28	34	Improve
10	J	9	26	30	Improve
Total		129	228	308	

Based on the table above, it can be seen that there is an increase in the ability to pass the volleyball through the application of the throw-catch method. More details can be seen in the following table:

Table 2.

Results: Average value and percentage of completion of Upper Passing

Description	Pra Cyclus	Cyclus 1	Cyclus 2
Average value	12	22	30
Percentage of completion	49%	63%	85%

For more clarity on the results of passing the volleyball using the throwing and catching method from the initial data to cycle II, see the following diagram:

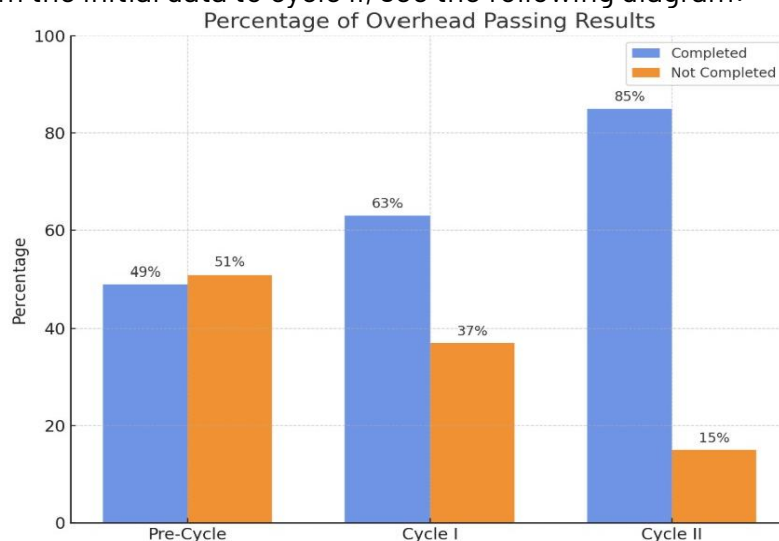


Figure 1.

Percentage of Overhead Passing Results

It can be concluded that using the volleyball throw-catch method can improve the volleyball upper pass. The results obtained in the second stage are the basis for research and a guide to ensure that this research is limited to the second stage because it has met the action hypothesis and achieved the previously determined success indicators.

Discussion

The results of the observation assessment in the second cycle of the application of the throw-catch method to improve the results of volleyball passing by students of SMP Negeri 13 Palembang showed significant improvements. The ability of students to apply the throw-catch method has undergone positive changes, especially in the upper passing technique in volleyball. At the pre-cycle stage in the trial of doing the upper pass, the percentage of completion obtained was only 49% or was still categorised as lacking. Then, after the pre-cycle experiment, the researcher used the throw-catch method in learning volleyball upper passing in cycle I and the percentage of success obtained was 63% or sufficient. This still cannot be said to be successful because the level of completion obtained was still small. Then, after cycle I, the researcher returned to using the throw-catch method in learning volleyball upper passing in cycle II, and the percentage obtained increased to 85% or was categorised as good. This success cannot be separated from the teacher's skills in arousing students' enthusiasm for learning the upper passing movement, so that they do not get bored easily. This method is presented

in the form of a game, which motivates students to continue learning. In addition, in cycle two, the teacher also showed better responsiveness and communication compared to cycle one. This shows that the application of the throw-catch method to improve the results of overhead passing in volleyball is a fairly effective and good method.

This finding is in line with research conducted by Sulistiadinata (2020), which states that the use of tools in overhead passing learning can improve students' skills in the technique. The difference between this study and previous studies lies in the focus of modification, where this study modifies the learning method, while previous studies focused more on modifying learning tools. Then, in (Fitria et al., 2024) in their researchers stated the results. In cycle I, the results of the study showed that as many as 2 students achieved completion with a very good category, 11 people were in the good category, and 12 people were in the sufficient category. Thus, the total number of students who completed reached 25 people, while 9 students had not completed and were in the lower category. In cycle II, the number of students who achieved completion increased to 27 people, consisting of 4 people in the very good category, 13 people in the good category, and 10 people in the sufficient category. 7 students had not completed the course in the least category. The average score of students in cycle I was 74.5%, while in cycle II it increased to 78.5%, indicating an increase of 4%. The level of learning completion also increased from 73.5% in cycle I to 79.4% in cycle II, an increase of 5.9%.

Based on the increase in the average score and percentage of completion, it can be concluded that the application of ball modification through the 4 vs 4 throw and catch game is effective in improving student learning outcomes. Furthermore, in the study (Hariyanto et al., 2024) it was stated that in cycle I, the results of the study showed that 1 student achieved the very good category, 4 students in the good category, and 5 students in the sufficient category, so that a total of 10 students were declared complete. As many as 4 students did not complete and were in the lower category. In cycle II, 2 students reached the very good category, 5 students in the good category, and 4 students in the sufficient category, so that 11 students were declared complete, and 3 students did not complete in the less category. The average value of students increased from 72.5% in Cycle I to 77.5% in Cycle II, showing an increase of 5%. The percentage of student learning completion increased from 71.4% in Cycle I to 78.5% in Cycle II, showing an increase of 7.1%. From this study, it was concluded that the ball-throwing and catching method was effective in improving the passing ability of students.

CONCLUSION

The results of the study in cycle I at SMP Negeri 13 Palembang showed that 2 students achieved completion with a very good category, 2 students with a good category, 1 student was in the sufficient category, and 7 were lacking, so that the total number of students who achieved completion was 3. Meanwhile, 7 students had not completed and were included in the lacking category. In cycle II, the number of students who completed increased to 10 people, with details of 2 students in the very good category, 6 students in the good category, and 2 students in the sufficient category. Meanwhile, students who had not completed were 7 people in the lacking category. The average score of students in cycle I was 22, and increased to 30 in cycle II, indicating an

increase. The level of learning completion also increased from 63% in cycle I to 85% in cycle II, an increase of 22%. Based on this increase, it can be concluded that the application of the ball throwing and catching method is effective in improving student learning outcomes at SMP Negeri 13 Palembang.

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