



Improving Basic Badminton Long Serve Skills through Demonstration Activities

La Ode Muammar Kadas Hidayat¹, Marsuna²

^{1 2} Universitas Halu Oleo, Indonesia

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Corresponding Author:

La Ode Muammar Kadas Hidayat
laodemuammarkadashidayat@uh.ac.id

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Abstract

This study aims to improve the basic skills of long serve in badminton through demonstration activities for students of SMP Negeri 15 Kendari. The study used a classroom action research design implemented in two cycles, each consisting of planning, action implementation, observation, and reflection. The subjects were 37 students of class VIII.B. Data were collected through observation sheets of teacher and student activities and long service learning outcomes tests, then analyzed descriptively by percentage. The results showed an increase in all indicators: student activity increased from 60% in cycle I to 90% in cycle II; teacher activity increased from 72.73% to 100%; and classical completeness of learning outcomes increased from 70.27% (26 out of 37 students) in cycle I to 94.59% (35 out of 37 students) in cycle II. Thus, demonstration activities in PJOK learning are proven to improve students' basic skills of long serve in badminton. Demonstration activities are suggested as an alternative learning method for movement skills in physical education.



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Introduction

Badminton is a popular sport and is an important subject in Physical Education, Sports, and Health (PJOK) learning in schools ([Sadzali, 2024](#); [Kumesan, 2025](#)). One of the basic skills that students must master is the serve, especially the long serve, because the serve is the opening shot that determines the course of the game. However, mastery of basic long serve skills among students at the school level is still often low and requires appropriate learning strategies ([Zai & Hendrawan, 2024](#); [Yane, 2016](#)). Similar conditions are also found in badminton serve learning in various schools, so learning innovations are needed to improve students' skills and learning outcomes ([Kurniawan et al., 2018](#)).

One approach considered appropriate for learning movement skills in Physical Education (PJOK) is demonstration activities, which present learning by demonstrating or showing students a movement so they gain a clear understanding before practicing it. Research in physical education shows that demonstrations improve the clarity and accuracy of movement reproduction and student engagement in learning ([Susila & Pratama, 2022](#)).

Theoretically, the effectiveness of demonstration activities is rooted in the concept of observational learning. Observing a movement model, especially when combined with physical training, has been shown to significantly contribute to motor skill mastery ([Mustafa & Sugiharto, 2020](#)). The characteristics of the model and the way the demonstration is presented also determine how well students learn new skills. Demonstration activities are highly relevant in learning the long serve in badminton because this skill requires complex motor coordination, including the starting position of the body, racket grip, arm swing, shuttlecock contact point, and shot direction. Through teacher demonstrations, students can directly observe the correct movement stages, making it easier to understand and accurately imitate the long serve technique. Thus, demonstration activities have the potential to help students reduce movement errors and improve their mastery of the long serve skill.

Based on initial observations in class VIII.B of SMP Negeri 15 Kendari, students' basic badminton long serve skills are still low. In the pre-cycle stage, only 46% of students (17 out of 37 students) achieved the Minimum Completion Criteria (KKM), while most students were not yet able to perform the long serve movement correctly.

This condition indicates that the ongoing learning process has not been fully able to help students master the long serve technique optimally.

Several previous studies have reported that demonstration methods are effective in improving learning outcomes and motor skills in various sports. However, research specifically examining the application of demonstration activities to improve basic badminton long serve skills in junior high school students is still limited, especially in the context of physical education learning in Kendari City. Therefore, research is needed that can provide empirical evidence regarding the effectiveness of demonstration activities in improving badminton long serve skills in junior high school students. Based on these problems, this study aims to determine and improve basic badminton long serve skills through the application of demonstration activities.

Method

This type of research is classroom action research conducted in two cycles. Each cycle consists of four stages: planning , acting , observing , and reflecting. This two-cycle design aligns with PTK practices in physical education (PJOK) learning, which aim to gradually improve learning processes and outcomes ([Khaerunnisa et al., 2024](#)).

The research was conducted at SMP Negeri 15 Kendari, with 37 students in grade VIII.B. The intervention involved implementing demonstration activities in the long serve badminton lesson, where the teacher demonstrated the long serve movement step by step, followed by practice by the students. This type of demonstration/modeling-based learning has been used to improve basic badminton serve skills ([Marwan et al., 2023](#)).

Data collection techniques were carried out through (1) teacher activity observation sheets, (2) student activity observation sheets, and (3) badminton long serve learning outcome tests at the end of each cycle. Data were analyzed descriptively using percentages. The research success indicators were determined as follows: teacher and student activities reached a minimum of 80%, and classical learning completion reached a minimum of 75% of students obtaining a score according to the KKM (score 71).

Results

Observations of student activity during the long service learning process using the demonstration method showed an increase from cycle I to cycle II. In cycle I, 6 out of 10 (60%) student activity indicators were implemented, while in cycle II, this increased to 9 out of 10 (90%). A summary is presented in Table 1.

Table 1. Percentage of Student Activity Implementation in Cycles I and II

Cycle	Implemented Indicators	Percentage Implemented	Indicator Not Implemented	Percentage Not Implemented
Cycle I	6 out of 10	60%	4 out of 10	40%
Cycle II	9 out of 10	90%	1 of 10	10%

Based on Table 1, student activity in cycle I (60%) had not yet reached the success indicator of 80%, while in cycle II (90%) it had exceeded this indicator. This indicates that student engagement and activeness during the learning process increased after the corrective actions were implemented. Furthermore, the results of observations of teacher activity also increased. In cycle I, the implementation of teacher activities reached 8 out of 11 indicators (72.73%), then increased to 11 out of 11 indicators (100%) in cycle II, as presented in Table 2.

Table 2. Percentage of Teacher Activity Implementation in Cycles I and II

Cycle	Implemented Indicators	Percentage Implemented	Indicator Not Implemented	Percentage Not Implemented
Cycle I	8 of 11	72.73%	3 of 11	27.27%
Cycle II	11 of 11	100%	0 of 11	0%

The increase in the implementation of teacher activities from 72.73% to 100% shows that teachers are increasingly optimal in managing learning using the demonstration method, especially after improving aspects of providing motivation, conveying learning objectives, and providing opportunities for students to ask questions in cycle II.

Student learning outcomes showed a significant increase in classical mastery. In cycle I, 26 students (70.27%) completed the course, while 11 students (29.73%) did not. In cycle II, the number of students who completed the course increased to 35 (94.59%), with only 2 students (5.41%) not completing the course. The summary is presented in Table 3.

Table 3. Percentage of Student Learning Outcomes Completion in Cycles I and II

Cycle	Number of Students Completed	Percentage of Completion	Number of Students Not Yet Complete	Percentage Not Completed
Cycle I	26 of 37	70.27%	11 of 37	29.73%
Cycle II	35 of 37	94.59%	2 of 37	5.41%

Based on Table 3, classical completeness in cycle I (70.27%) has not reached the 75% standard, while in cycle II (94.59%) it has exceeded that standard. Thus, the research success indicators have been achieved in cycle II, both in terms of teacher and student activities and student learning outcomes.

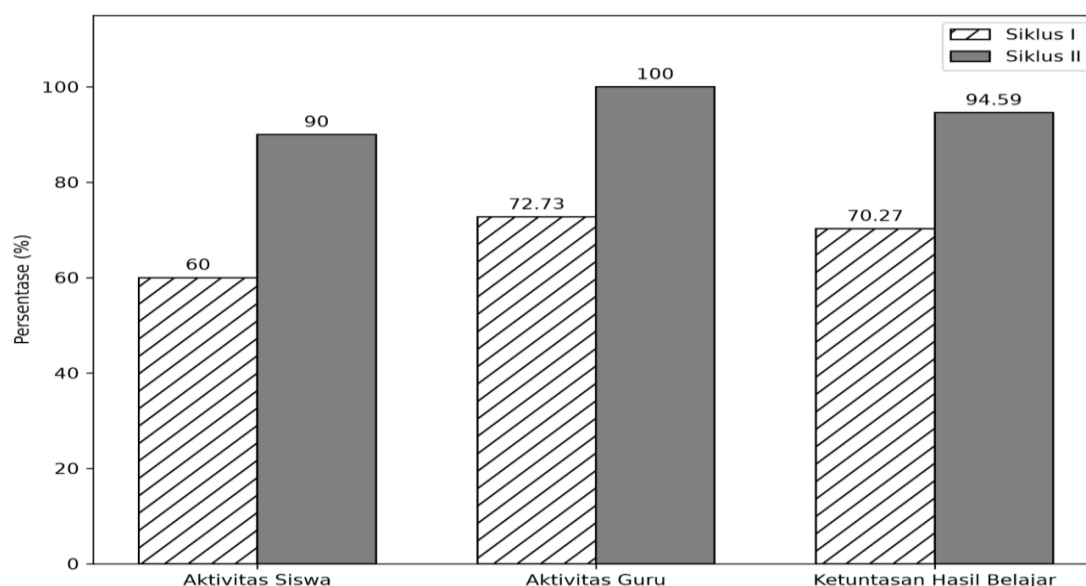


Figure 1. Comparison of Indicator Achievement between Cycle I and Cycle II

Discussion

The observed improvement in long serve skills in this study confirms that demonstration activities are an effective strategy for learning movement skills in Physical Education, Sports, and Health (PJOK). This improvement is not only evident in students' skill scores but also in the consistency of technique execution from one cycle to the next. This finding aligns with recent research showing that demonstrations significantly improve students' movement technique execution in physical education (Rusli et al., 2021). Through live demonstrations, students gain a complete and clear visual representation of the stages of the long serve movement, from the initial stance, to the connection, and to the follow-up, making it easier for them to imitate the correct movement pattern and correct any errors that arise during practice.

Theoretically, this skill improvement can be explained through the mechanism of observational learning. When students repeatedly observe a movement model and

then combine it with physical practice, they form a more accurate internal representation of the movement. This representation serves as a reference when students evaluate their own movements, gradually improving their ability to detect and correct errors (Zai & Hendrawan, 2024). In other words, demonstrations not only provide visual examples but also provide students with a framework for independently monitoring and refining their movement performance.

The quality and presentation of demonstrations by teachers also determine the effectiveness of learning. Demonstrations that are presented clearly, with the right perspective, at a pace that can be followed, and with emphasis on critical movement parts are easier for students to understand and imitate. This explains why the increase in teacher activity to reach 100% in cycle II contributed directly to increased learning activities and student skills (Ghorbani & Bund, 2016). Teachers who actively demonstrate, observe, and provide direct corrective feedback create a learning environment that is more responsive to students' movement needs, so that the process of skill mastery becomes faster and more focused.

The findings of this study reinforce those of a similar study that applied classroom action research to improve badminton serve skills and learning outcomes in schools (Khaerunnisa et al., 2024), as well as studies that applied other innovative learning models to badminton serve material (Dai, 2025). The consistency of the findings across these studies indicates that the demonstration-based approach has good transferability across various movement skills learning contexts at the school level, particularly for materials that require technical precision such as the badminton serve.

This study has several limitations that should be considered when interpreting its results. First, the scope of the study was limited to a single class in a single school, so specific student, teacher, and learning environment characteristics may influence the results. Second, the analysis used was descriptive percentages, thus not being able to test statistical significance or control for confounding variables. Therefore, generalization of the findings should be done with caution. Further research is recommended to involve larger and more diverse samples, compare demonstrations with other learning methods through experimental designs, and use inferential analysis to obtain stronger evidence regarding the effectiveness of demonstrations in learning movement skills in Physical Education (PJOK).

Conclusion

The implementation of demonstration activities has been proven to be effective in improving students' basic long serve skills in badminton during Physical Education (PJOK) learning, as seen from the increase in skill scores from cycle I to cycle II. This occurs because demonstrations provide clear visual examples of movements so that students can more easily imitate and correct their movements, supported by increased teacher activity in demonstrating and providing feedback. Thus, demonstrations can be an appropriate learning strategy for movement skills that require technical precision, although generalization of the results still needs to be done carefully considering the limited scope of the study.

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