

Analysis of Underhand Passing Ability in Volleyball Games of Extracurricular Students at SMPN 4 Kelapa Bangka Belitung

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Abstrak

Penelitian ini bertujuan untuk menganalisis kemampuan passing bawah dan kesulitan yang dialami oleh siswa dalam olahraga voli di SMPN 4 Kelapa Bangka Belitung, serta merumuskan strategi pembelajaran yang sesuai dengan kebutuhan siswa. Penelitian ini menggunakan pendekatan deskriptif kuantitatif dan kualitatif dengan melibatkan sejumlah siswa sebagai subjek penelitian. Data kuantitatif diperoleh melalui hasil penilaian kemampuan passing bawah, sedangkan data kualitatif dikumpulkan melalui observasi, wawancara dengan guru pendidikan jasmani, dan dokumentasi aktivitas pembelajaran. Hasil menunjukkan bahwa sebagian besar siswa memiliki kemampuan passing bawah dalam kategori baik (40%), diikuti oleh cukup (26,7%) dan buruk (13,3%). Kesulitan utama yang dihadapi siswa terletak pada posisi siap dan postur (33,3%), diikuti oleh kesulitan dalam kontak bola (26,7%) dan pengendalian arah serta pengendalian bola (23,3%), sementara 16,7% siswa tidak mengalami kesulitan yang signifikan. Temuan ini menekankan pentingnya mengembangkan pembelajaran yang terarah, menarik, dan berbasis kebutuhan untuk meningkatkan keterampilan passing bawah, memperkuat koordinasi motorik, serta menumbuhkan kerja sama, sportivitas, dan motivasi untuk berlatih dalam voli.

Kata kunci: kemampuan passing bawah, kesulitan siswa, voli, perkembangan pembelajaran

Abstract

This study aims to analyze the underhand passing ability and difficulties experienced by students in volleyball at SMPN 4 Kelapa Bangka Belitung, as well as to formulate learning strategies that are appropriate to the students' needs. This study uses a quantitative and qualitative descriptive approach involving a number of students as research subjects. Quantitative data were obtained through the results of underhand passing ability assessments, while qualitative data were collected through observation, interviews with physical education teachers, and documentation of learning activities. The results showed that most students had underhand passing ability in the good category (40%), followed by sufficient (26.7%) and poor (13.3%). The main difficulties for students were in the ready position and stance (33.3%), followed by difficulties in ball contact (26.7%) and controlling direction and ball control (23.3%), while 16.7% of students did not experience significant difficulties. These findings emphasize the importance of developing directed, interesting, and needs-based learning to improve underhand passing skills, strengthen motor coordination, and foster cooperation, sportsmanship, and motivation to practice in volleyball.

Keywords: underhand passing ability, student difficulties, volleyball, learning development

1. INTRODUCTION

Education is a process that includes three main aspects, namely individual development, societal roles, and contributions to the national community, with the main goal of optimizing the potential of students as a whole (Utami, R. F., & Arifin, 2023; Kurniawan & Hidayat, 2021; Sulastri et al., 2020). One form of education that is regulated in the curriculum is Social Physical Education, Sports, and Health (PJOK), which is implemented systematically

History:

Received : 2 March 2026

Revised : 2 March 2026

Accepted : 4 March 2026

Published : 8 March 2026

Publisher: Horizon Edukasi Prima Indonesia

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and in a planned manner through various physical activities (Mahendra, 2020; Prasetyo & Nugroho, 2022). Physical education in secondary schools has a strategic role in shaping the character, discipline, and physical fitness of students through planned physical activities (Muntianik & Sasmita, 2023; Imran & Yusuf, 2024; Wibowo, 2021; Husni et al., 2022). One of the sports that is social and much sought after by students is the volleyball game (Saputra & Firmansyah, 2021; Rahman & Lestari, 2020).

Volleyball is not only a game that demands physical strength and motor coordination, but also instills the values of teamwork, responsibility, and communication (Kurniawan et al., 2021; Capel & Whitehead, 2020; LaE Academy, 2025). In learning PJOK, volleyball functions as a medium for developing social skills, strengthening social interaction, and increasing the spirit of sportsmanship in students (Zulfikar et al., 2021; Champions & Putra, 2024; 21K School, 2025). Through this activity, students learn to truly understand the dynamics of the game, from teamwork to mastering the basic techniques that form the foundation of volleyball (Sitorus, 2025; Akhmady, 2022; Rahayu & Santoso, 2023). Among these basic techniques, underhand passing plays a crucial role because it determines the team's success in defending the ball and building an effective attack (Sitepu et al., 2024; Aurelia & Pratama, 2023; Nugroho & Yulianto, 2021).

Field observations show that volleyball learning activities at SMPN 4 Kelapa Bangka Belitung have not yet fully demonstrated optimal basic technical skills. Inaccurate movements when receiving the ball, unstable hand positions, and difficulty controlling the ball's direction are still common among students, which is in line with findings that many junior high school students experience similar problems in basic volleyball techniques (Rahmawati & Dewi, 2020; Nasution & Harahap, 2022). This situation indicates the need for attention to the quality of basic technical skills that form the foundation of the game, particularly underhand passing (Sahabuddin, 2025; Hariyanto & Putra, 2023).

Passing the underhand is a fundamental volleyball technique that maintains continuity of play by receiving and controlling the ball from the opponent (Ilham et al., 2019; Akhmady, 2022; Sitorus, 2025). This technique requires good coordination between body position, arm muscle strength, and precise timing of contact with the ball (Aurelia & Pratama, 2023; Hasanah & Fikri, 2021). Many students understand the concept theoretically but are unable to apply it consistently on the field (Hidayat & Syahputra, 2021). Inappropriate body positioning, misdirected ball movement, or lack of rebound power are often the reasons for failure to defend the ball (Wahyudi & Prakoso, 2022; Effendi & Malik, 2020). This indicates that the understanding and skills of underhand passing techniques still need in-depth analysis so that coaching can be more targeted (Putri & Mahmud, 2023; Lestari & Widodo, 2024).

Regular and varied practice can improve motor coordination and enhance the accuracy of underhand passes (Akhmady, 2022; Sitorus, 2025; Muharram & Arif, 2021). However, optimal training results will only be achieved if students have a solid understanding of correct technique and guidance from a teacher who can effectively correct movement errors (Marta et al., 2025; Imran & Yusuf, 2024). Therefore, analyzing underhand passing ability is the first step in determining how well a student's skills have developed and what areas need

improvement (Aurelia & Pratama, 2023; Effendi & Malik, 2020).

Conditions at SMPN 4 Kelapa Bangka Belitung indicate that volleyball learning activities have been routinely implemented, but have not been accompanied by comprehensive technical skill evaluations, a situation which is also reported in several other schools (Riyadhoh & Sari, 2022; Ramadhan & Supriyadi, 2021). Many students are enthusiastic about participating in the lessons, but their ability levels vary (Nasution & Harahap, 2022). Some are already able to pass well, while others still struggle to maintain the direction and stability of the ball (Putra & Hidayat, 2020). Limited field facilities and a busy school schedule also impact the effectiveness of learning (Sulastri et al., 2020; Wibowo, 2021). This situation emphasizes the importance of analyzing underhand passing ability to obtain an objective picture of students' skill levels and the challenges they face during practice (Hariyanto & Putra, 2023; Lestari & Widodo, 2024).

Underhand passing is not only a technical skill, but also plays a role in character building and teamwork (Kurniawan et al., 2021; Champions & Putra, 2024). Through this practice, students learn to communicate, strategize, and trust each other in game situations (LaE Academy, 2025; CapnPete, 2024). In addition to the physical aspects, this activity fosters sportsmanship, discipline, and responsibility in students (Champions & Putra, 2024; 21K School, 2025). Mastering basic techniques can foster self-confidence and motivate them to continue honing their volleyball skills (Saputra & Firmansyah, 2021; Hasanah & Fikri, 2021).

Based on the description above, this study aims to analyze the underhand passing ability of volleyball students at SMPN 4 Kelapa Bangka Belitung. The focus of the study is directed at determining the extent to which these basic technical skills have been mastered by students and identifying factors that influence training outcomes (Putri & Mahmud, 2023; Aurelia & Pratama, 2023). The results are expected to provide input for physical education teachers in designing more effective and contextual learning strategies, thereby significantly improving the quality of students' volleyball skills (Imran & Yusuf, 2024; Sahabuddin, 2025; Sitorus, 2025).

2. METHOD

This study uses a quantitative and qualitative descriptive approach with the aim of objectively describing students' underhand passing skills in volleyball at SMPN 4 Kelapa Bangka Belitung. This approach was chosen so that the research results not only display numerical data but also provide a concrete picture of the students' skill implementation on the field. The research subjects were 30 students who participated in volleyball learning activities at the school. Subject selection was carried out using purposive sampling with the consideration that students who were actively involved in volleyball activities had relevant experience and skills for analysis. Data collection techniques were carried out through several methods, namely observation, underhand passing skills tests, short interviews, and documentation. Observation was used to directly observe the implementation of underhand passing techniques by students during the learning activities, including aspects of body position, arm swing, and ball direction. Skills tests were used to assess individual abilities measurably

through the implementation of underhand passing with a certain number of opportunities. Short interviews were conducted with physical education teachers to obtain additional information regarding the training process and difficulties faced by students, while documentation in the form of photographs and observation notes were used as supporting data for the research.

Quantitative data obtained from the test results were analyzed using descriptive statistics to determine the average and percentage of student abilities. The formula used is:

Average (Mean):

where = average value, = respondent score, = number of respondents. $\bar{X} = \frac{\sum X_i}{N}$

$$\bar{X} = \frac{\sum X_i}{N}$$

Percentage (%):

where = frequency of a particular answer, = total respondents. $\frac{f}{N}$

$$\text{Percentage} = \frac{f}{N} \times 100\%$$

Qualitative data from observations, interviews, and documentation were analyzed using qualitative descriptive techniques and content analysis to identify gaps between student abilities and expected competencies, as well as learning aspects that need to be developed. Data validity was maintained through triangulation between sources. The research process began with planning, data collection through observation, questionnaires, interviews, and documentation, followed by data analysis, interpretation, and the development of recommendations for developing effective and enjoyable short-distance running learning.

3. RESULT AND DISCUSSION

This study involved 30 students at SMPN 4 Kelapa Bangka Belitung as subjects. Quantitative data were obtained through a questionnaire regarding students' interests and difficulties in learning underhand passing in volleyball. Meanwhile, qualitative data was obtained from observations, interviews with PJOK teachers, and documentation in the form of notes, photos, and videos.

Table 1. *Frequency Distribution and Percentage of Students' Abilities and Difficulties in Learning Underhand Pass in Volleyball*

Assessment Aspects	Frequency (f)	Percentage (%)
Very good underhand passing ability	6	20
Good underhand passing ability	12	40
Underhand passing ability is sufficient	8	26.7
Poor underhand passing ability	4	13.3
Difficulty in ready position and stance	10	33.3
Difficulty in contacting the ball	8	26.7

Difficulty in direction and control of the ball	7	23.3
Didn't experience any significant difficulties	5	16.7

Based on the table, it can be seen that the majority of students have good underhand passing skills (40%), but there are still some students who need additional training to improve their technique. The most dominant difficulties are experienced in the ready position and horse stance (33.3%), followed by difficulties in making contact with the ball (26.7%) and maintaining direction and control of the ball (23.3%), while a small number of students did not experience any difficulties (16.7%).

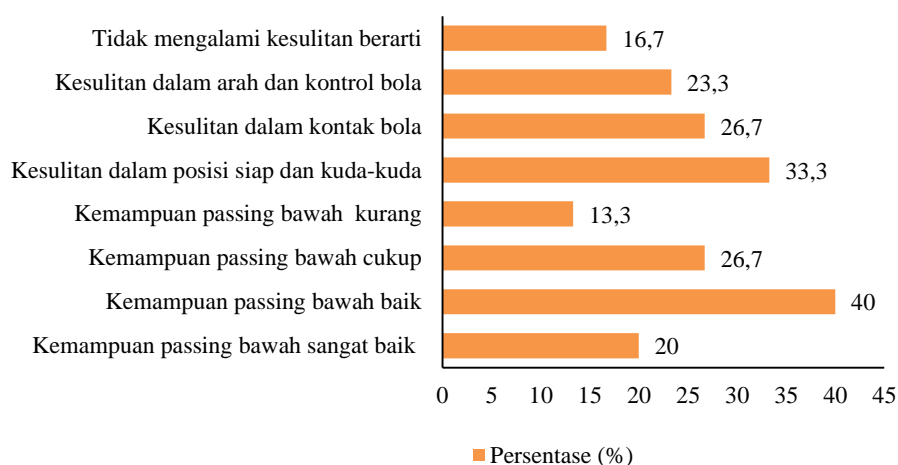


Figure 1.Percentage Distribution of Ability *Underhand Pass*

The bar graph above shows the distribution of underhand passing abilities and difficulties experienced by students in volleyball at SMPN 4 Kelapa Bangka Belitung. The bar with the highest percentage is in the category of good underhand passing abilities (40%), indicating that most students have mastered the basic technique quite well. However, there are still 26.7% of students who are in the adequate category, and 13.3% of students with poor abilities, so there is a need for more targeted training. In terms of difficulties, the ready position and horse stance are the most dominant obstacles (33.3%), followed by difficulties in ball contact (26.7%) and ball direction and control (23.3%). Meanwhile, only 16.7% of students did not experience significant difficulties, indicating the need for intensive guidance so that all students can achieve optimal performance in underhand passing techniques.

The results of the study indicate that students' underhand passing skills in volleyball are classified as good, with the majority of students (40%) demonstrating adequate technical mastery and stable ball control. However, there are still students with sufficient (26.7%) and less than adequate (13.3%) skills, indicating a variation in skill levels among students at SMPN 4 Kelapa Bangka Belitung. This finding indicates the need for a more personalized learning approach so that each student can develop according to their individual abilities. (Utami, RF, & Arifin, 2023). Difficulty analysis showed that the main challenges for students were in the ready position and stance (33.3%), followed by difficulties with ball contact (26.7%) and ball direction and control (23.3%). Field observations and interviews with coaches confirmed that factors such as lack of body coordination, inaccurate hand position, and minimal repeated practice contributed to these results.

The importance of implementing more targeted, engaging, and needs-based training strategies in volleyball learning. Physical education (PJOK) teachers need to increase the number of basic technique drills, such as the ready position, ball contact, and passing control, through a gradual approach and fun mini-games. A variety of training models will help students improve motor coordination, reaction time, and confidence while playing on the court. Overall, developing needs-based learning not only improves passing skills but also fosters a spirit of cooperation, sportsmanship, and motivation to continue practicing in a positive and supportive environment.

4. CONCLUSION

This study shows that students generally have good underhand passing skills in volleyball, although some still require additional guidance and practice to achieve optimal results. The main difficulties experienced by students lie in the ready position and stance, followed by difficulties in ball contact and controlling the direction of the pass. These findings emphasize the importance of developing targeted, varied, and needs-based learning to make the training process more effective and enjoyable. This approach not only improves the technical skills of underhand passing but also fosters cooperation, sportsmanship, and motivation to practice in students.

5. ACKNOWLEDGEMENT

The author would like to thank all parties who have provided support in carrying out this research. Special appreciation is extended to the Head of SMPN 4 Kelapa Bangka Belitung, PJOK teachers, and all grade VI students who were willing to be research subjects.

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