

A Descriptive Analysis of Grade VI Students' Overhand and Underhand Passing Skills in Volleyball at SD Inpres Sailong

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Abstract: **Introduction:** Volleyball is one of the sports taught in elementary school physical education, and passing skills play a crucial role in game performance. Overhand and underhand passing are fundamental techniques that must be mastered by students to support effective ball control and teamwork. However, observations at SD Inpres Sailong indicated that students' mastery of these techniques was still varied. **Method:** This study employed a quantitative descriptive approach involving 12 sixth-grade students at SD Inpres Sailong. Data were collected using a one-minute overhand and underhand passing skill test. Descriptive statistics were used to calculate mean scores and categorize students' passing abilities. **Results:** The results showed that the average overhand passing score was 24.83, categorized as good, with 75% of students falling into the good category. Meanwhile, the average underhand passing score was 21.67, categorized as fairly good, with 50% of students in the good category. Overall, students demonstrated better proficiency in overhand passing than in underhand passing. **Conclusion:** Sixth-grade students at SD Inpres Sailong generally have good overhand passing skills and fairly good underhand passing skills. To achieve balanced development of basic volleyball techniques, greater emphasis and more intensive practice are recommended for underhand passing skills.

A. INTRODUCTION

Physical education, sports, and health are an essential part of the national education system as they contribute to the physical, mental, social, and moral development of students. Physical education not only helps people become healthier physically but also teaches better motor skills, critical thinking, sportsmanship, responsibility, and a healthy lifestyle (Mustofa P.S 2022)

Volleyball is one of the sports taught in elementary schools. It is played by two teams, each consisting of six players, with the aim of scoring points through attacks and defense (Arvini 2022). Volleyball is a complex game that requires movement coordination, strength, balance, speed, and the ability to make quick decisions. Mastering basic volleyball techniques is crucial for playing well, including serves, passing, setting, attacks, and blocks (Arvini 2022).

The overhead pass (passing atas) and underhand pass (passing bawah) are the most important techniques as they determine ball control and team collaboration. Previous research shows that mastering these basic techniques is vital for improving volleyball skills. (Rizkal 2024) found that regular practice assisted by teachers significantly improved students' underhand passing accuracy. (Oktriani 2024) also noted that good body coordination and arm movement control are linked to successful overhead passing. Regular practice and good physical condition are essential for enhancing students' basic techniques and motor coordination.

From the perspective of motor learning theory, elementary school students are in a developmental stage where coordination, balance, and basic manipulation skills are still developing (Schmidt and Wrisberg 2008; Gallahue 2010). Therefore, differences in mastery between overhead passing and

underhand passing may occur due to the complexity of movement patterns and physical demands required by each technique (Coker 2016). These findings indicate that not only physical strength but also proper technique understanding and directed, repetitive practice are needed.

Observations at SD Inpres Sailong show that most students still struggle with proper overhead and underhand passing, despite the importance of these techniques being widely discussed. Common mistakes include unstable body positioning, incorrect ball contact, and difficulty controlling the ball. This indicates that students' basic skills are below the expected standards of the PJOK curriculum.

However, most previous studies have emphasized the importance of training interventions or focused on athlete populations, while descriptive data that objectively illustrate elementary school students' actual passing abilities in real school-based learning contexts remain limited (Rohmad, Marsini, Nevitaningrum 2023; Oktriani 2024). This condition shows that empirical evidence describing students' real skill levels is still needed to support learning evaluation.

Not mastering basic techniques also affects students' psychological and social aspects. Students who struggle with passing tend to have lower confidence and find it harder to cooperate with teammates. Learning basic techniques like overhead and underhand passing is important for sports achievement and building positive character.

Based on this condition, a research gap can be identified, namely the lack of descriptive studies that specifically analyze and compare overhead and underhand passing abilities of elementary school students. Therefore, this research aims to analyze the ability of SD Inpres Sailong students in performing overhead and underhand passing in volleyball. It is hoped that this study will help PJOK teachers evaluate students' skills, develop more effective learning strategies, and improve mastery of basic volleyball techniques in elementary schools. Theoretically, this research also enriches studies on motor learning and the effectiveness of teaching sports skills in elementary schools.

B. METHOD

A quantitative descriptive method was used in this study to describe students' overhead and underhand passing abilities in volleyball.

At SD Inpres Sailong in Pattallassang District, Gowa Regency, on October 13, 2025, this study involved 12 sixth-grade students (6 boys and 6 girls) who were selected using purposive sampling based on how actively they participated in Physical Education lessons, especially volleyball material. The use of purposive sampling was considered appropriate due to the limited population size and the specific criteria required, namely students who had already received volleyball learning materials and were physically able to perform the passing tests. In descriptive studies, a small and focused sample is acceptable when the research aims to obtain an in-depth description of participants' actual skill levels rather than to generalize findings to a broader population.

Data were obtained using a modified basic volleyball skills test, consisting of two parts: overhead and underhand passing tests. Each participant was given one minute to perform repeated passes. Only passes executed with proper technique and body control were counted as successful. The test instrument was adapted from commonly used volleyball skill tests in physical education and coaching practice, which emphasize accuracy, control, and consistency of passing movements (Friermood 1965; Schmidt and Wrisberg 2008). The content validity of the instrument was ensured through expert judgment by physical education teachers and lecturers, who reviewed the test procedures to confirm that they measured essential components of overhead and underhand passing skills.

Researchers directly supervised the testing process to ensure that the results were valid and consistent. In addition to observing body movements, hand coordination, and ball striking positions, additional data was collected through documentation in the form of photos and test result record sheets.

To analyze the data, descriptive statistics were used to calculate values and categorize the results into ability levels: poor (0–10 successful passes), sufficient (11–20), good (21–30), and very good (>30). This categorization refers to performance-based assessment commonly applied in physical education skill evaluation, allowing students' abilities to be interpreted clearly and systematically. Then, the results were interpreted to compare students' abilities in both passing techniques, overhead passing and underhand passing.

C. RESULTS AND DISCUSSION

The research results show that students in grade VI at SD Inpres Sailong have varying abilities in performing overhand and underhand passes. The data analysis included descriptive statistical indicators, namely the mean, standard deviation, minimum score, and maximum score, to provide a clear overview of students' performance levels.

TABLE 1. Descriptive statistics of students' overhand and underhand passing skills

Variabel	Mean	SD	Min	Max
Overhead Pass	24.67	4.05	17	31
Underhand Pass	21.08	4.88	12	29

Table 1 shows that the mean score for overhand passing is higher than that of underhand passing. This indicates that, on average, students demonstrate better mastery of overhand passing skills. In addition, the standard deviation for underhand passing is higher, suggesting greater variability in students' abilities compared to overhand passing.

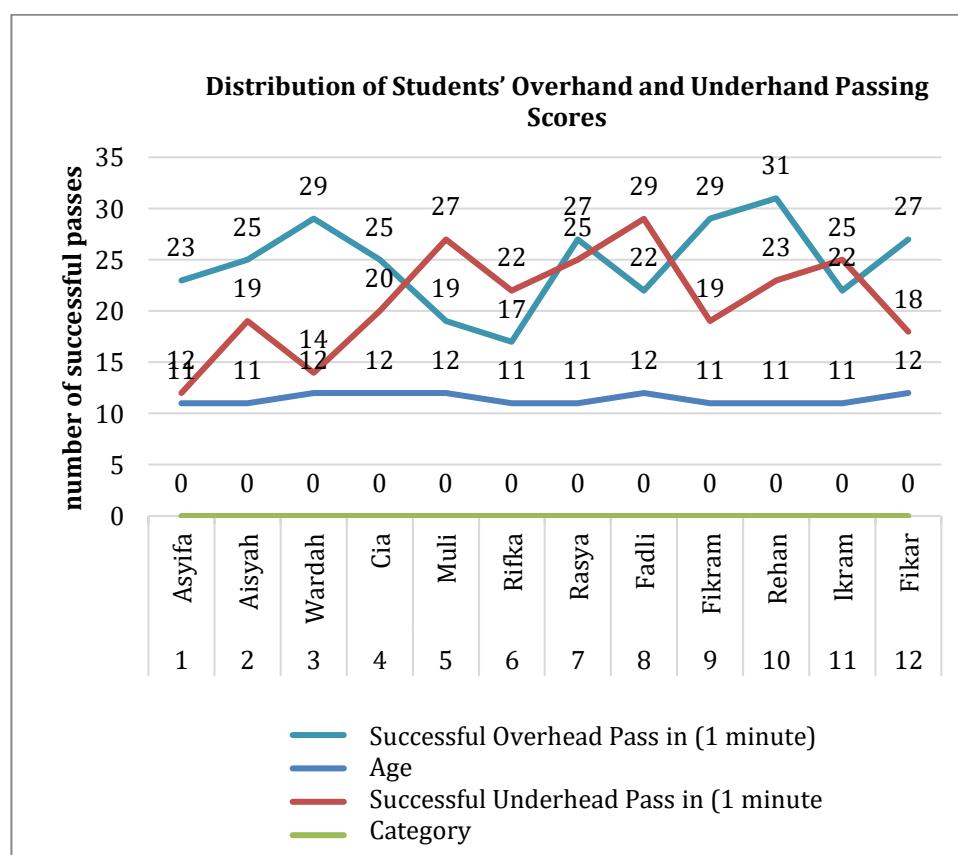


Figure 1. Distribution of students' overhand and underhand passing scores

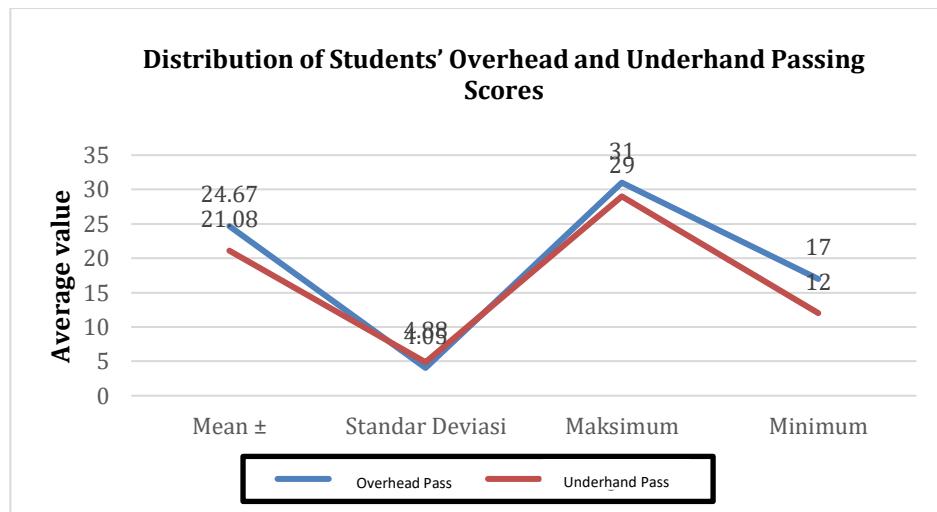


Figure 2. Distribution of students' overhand and underhand passing scores

Figures 1 and 2 show the distribution of students' overhand and underhand passing scores. The overhand passing scores tend to cluster in the higher score range, indicating more consistent performance among students. In contrast, the underhand passing scores are more widely distributed, reflecting greater variability in students' underhand passing abilities.

The difference in students' mastery of overhand and underhand passing can be explained by technical demands and learning experience. Overhand passing involves more natural movement patterns and hand-eye coordination that are already well developed in elementary school students, allowing better control and consistency. In contrast, underhand passing requires greater body stability, correct arm positioning, and coordination of lower body movements, which are still developing at this age. In addition, overhand passing is more frequently practiced during physical education lessons and simple volleyball games, contributing to higher confidence and performance consistency, while underhand passing requires more focused and structured practice.

On the other hand, students' underhand passing skills tend to be lower. The higher variability in underhand passing performance indicates that students experience different levels of difficulty in mastering this technique. The underhand passing technique requires precise body positioning, leg muscle strength, and the ability to correctly align both arms to form an effective contact surface. For elementary school students, these aspects are often challenging.

The factor of playing experience also contributes to this difference in results. In daily play activities, students tend to use the overhead pass more often, for example when performing setups or simple volleyball games. This higher frequency of practice may contribute to greater consistency and confidence in performing overhand passes compared to underhand passes.

A higher standard deviation in underhand passing compared to overhand passing indicates a fairly significant variation in students' ability in the underhand passing technique. This means that some students have greater difficulty mastering this technique, which may be caused by factors such as body stability, arm angle accuracy, and upper body muscle strength that are still in the developmental stage at elementary school age, as explained in the Theory of Children's Motor Development.

Further discussion shows that these results support the findings of (Oktriani 2024) and (Rizkal 2024) which stated that lower passing in elementary school students requires intensive practice to improve skills. The use of direct measurement through volleyball skill tests in this study ensures that the data collected is objective and reflects the students' actual abilities, in accordance with (ARI SETIAWAN SUBEDE 2020).

Previous research has shown that intensive training can significantly improve underhand passing, but contrary to these findings, it highlights the importance of appropriate training duration and methods. Practicing basic volleyball techniques such as underhand passing needs to be carried out gradually and

structurally (Virna Githa Valia, Sunanto, Muhammad Thamrin Hidayat 2025) with a focus on training strategies due to more complex motor coordination (Magi 2016).

Mastery of motor skills such as volleyball passing is influenced by the stage of a child's development (Schmidt and Wrisberg 2008) and children find it easier to adapt simple movements like overhead passing (Coker 2016). The development of motor abilities in elementary school children also affects ball control (Gallahue 2010) Direct skill tests provide more accurate results regarding students' abilities (Friermood 1965).

(Sisca Rahmawati, Adang Sudrazat 2024) stated that overhead passing is easier to teach to beginners because the movement is more natural. The importance of repetitive practice and the use of audiovisual media to improve volleyball technique was mentioned by (Ryan Gunawan 2020), while (Griffin and Butler 2005) suggested that learning volleyball in elementary schools should use a game-based approach to increase motivation.

D. CONCLUSIONS AND SUGGESTIONS

Based on the results of this study, it can be concluded that sixth-grade students at SD Inpres Sailong demonstrate better mastery of overhand passing than underhand passing in volleyball. The higher mean score and more consistent performance in overhand passing indicate that this technique is more easily mastered by elementary school students.

Underhand passing skills, however, show greater variability and lower average scores, suggesting the need for increased instructional attention. Physical education teachers are encouraged to provide more frequent and varied underhand passing exercises, with an emphasis on correct body posture, arm coordination, and gradual skill progression.

For future research, it is recommended to conduct experimental studies involving larger samples and structured training programs to examine the effectiveness of specific learning strategies in improving underhand passing skills among elementary school students.

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