

Evaluation of Passing Proficiency in Volleyball Matches among Extracurricular Participants at Muhammadiyah Ahmad Dahlan Metro Junior High School

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Abstrak

Penelitian ini bertujuan untuk menganalisis kemampuan lompatan voli pada siswa ekstrakurikuler SMP Muhammadiyah Ahmad Dahlan Metro menggunakan pendekatan deskriptif kualitatif dengan dukungan analisis kuantitatif. Subjek penelitian berjumlah 25 siswa yang mengikuti tes praktik lompatan, pengamatan teknik, dan wawancara dengan pelatih. Hasil menunjukkan bahwa kategori “cukup baik” mendominasi dengan 77,5%, diikuti oleh 10% “sangat baik”, 3% “kurang baik”, dan kurang dari 9,5%. Rata-rata pengamatan teknik adalah 3,6 (kategori “cukup baik”), dengan indikator tertinggi pada posisi tubuh dan komunikasi, serta terendah pada konsistensi dan arah bola. Secara keseluruhan, keterampilan passing siswa cukup baik, namun mereka perlu meningkatkan akurasi dan konsistensi melalui latihan yang lebih intensif dan bervariasi.

Kata kunci: Volleyball, Kemampuan Menyerang Rendah, Kegiatan Ekstrakurikuler, Siswa SMP

Abstract

This study seeks to evaluate the proficiency of volleyball underpasses among extracurricular students at Muhammadiyah Ahmad Dahlan Metro Junior High School, employing a qualitative descriptive methodology supplemented by quantitative analysis. The research involved 25 students who completed a passing practice exam, underwent technique observation, and participated in an interview with a coach. The results indicated that the category was predominant at 77.5%, followed by 10% very good at 3%, and less than 9.5%. The mean technical assessment was 3.6 (indicative of a commendable category), with the most favorable metrics in body positioning and communication, and the least favorable in consistency and ball trajectory. Students exhibit commendable passing skills; however, they must enhance their accuracy and consistency through more rigorous and diverse practice.

Keywords: Volleyball, Subpar Passing Proficiency, Extracurricular Activities, Middle School Students

1. INTRODUCTION

Sport is a fundamental component of education that significantly contributes to character development, motor skill enhancement, and the physical fitness of pupils (Rosmi, 2016). Participation in sporting activities provides kids with physical advantages as well as social qualities, like discipline, teamwork, sportsmanship, and responsibility (Sukardi, 2022). Volleyball is among the most popular sports in educational institutions. This sport necessitates proficient coordination of movements, collaboration, and sufficient understanding of fundamental methods to ensure the game operates effectively. In the realm of education, volleyball extracurricular activities serve as a vital avenue for students to express their interests, cultivate their potential, and enhance their playing skills in a systematic manner beyond formal instructional hours. The efficacy of volleyball instruction is markedly affected by students' physical fitness levels, encompassing endurance, strength, and agility, which are essential for enhancing their passing skills (Almunawar, 2020). Analysis of overhead passing skills in volleyball indicates that fundamental techniques, such as underhand passing, are essential for an effective game plan. This underscores the need of acquiring fundamental passing skills for comprehensive game strategy, corroborating your findings (Setiawan, 2025).

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In volleyball, mastery of both upper and lower passing methods is crucial, necessitating regular practice and effective instruction (Aryaduta, 2024). Proficiency in fundamental skills is a crucial factor that influences a team's success. The fundamental methods comprise serving, passing, smashing, and blocking, all of which are interconnected in formulating a game strategy (Ramadhani & Nugroho, 2020). Among these strategies, passing plays a pivotal role as the initial step in orchestrating offensive maneuvers and countering adversarial assaults. Bounce ball activities enhance underhand passing skills in volleyball by refining control and accuracy (Pamukti et al, 2025). Effective passing enables the accurate delivery of the ball to colleagues, facilitating seamless game coordination (Kurniawan et al., 2021). The failure to execute accurate passes is frequently the primary reason for a team's inability to establish a successful playing pattern. Firdaus and Fahrizqi (2023) indicate that there is a substantial correlation between arm muscular strength and underhand passing proficiency in volleyball. Exercises aimed at enhancing arm muscle strength can augment passing proficiency. This underscores the significance of physical conditioning (arm strength) in enhancing passing, which aligns with the study's objective to evaluate students' physical preparedness for proficient passing. Consequently, enhancing passing proficiency is a crucial emphasis in volleyball coaching at the educational level (Ngolo et al., 2018).

According to Mu'ammam (2023), game-based methods significantly enhance underhand passing skills, demonstrating that such training is more effective in engaging students' interest in skill improvement. Enhancing underhand passing proficiency by paired drills resulted in considerable improvements in ball control and precision (Riksandi et al., 2024). This underscores the efficacy of game-based approaches in engaging students and enhancing passing skills, along with your emphasis on the necessity for diverse training methodologies. Rigorous partnered passing activities can enhance middle school students' underhand passing technique efficiently and swiftly (Riksandi, 2025).

According to Majid & Mariani (2025), a comparative analysis of fundamental volleyball skills indicates that senior students exhibit superior passing abilities compared to juniors, highlighting the significance of extended training and experience in the mastery of basic methods. The volleyball extracurricular activities at Muhammadiyah Ahmad Dahlan Metro Junior High School provide as a platform for students to cultivate their interests and talents in sports, particularly in volleyball. This activity is conducted routinely and overseen by qualified instructors to ensure an enjoyable educational experience while enhancing technical abilities. Nevertheless, first findings indicate a continued disparity in student abilities, particularly with passing skills. Pratama et al. (2025) assert that research on underhand passing drills indicates that concentrated repetition with uniform passes can rapidly enhance passing technique. Some kids exhibit proficient fundamental technical skills, but others continue to struggle with ball control, body positioning, and effective collaboration. Drill techniques for enhancing underhand passing skills in volleyball are successful in yielding substantial progress for students. This underscores the efficacy of drill techniques in enhancing skill development (Suhadi et al., 2022). This underscores the necessity for a more profound analysis of students' passing capabilities to ensure that the coaching delivered is more precise. Project-based learning approaches can enhance underhand passing skills by offering a practical approach and actively engaging students (Raaiyatini et al, 2024).

An evaluation of passing proficiency is required to determine the degree of students' competence in understanding fundamental techniques and the influencing elements. In the realm of extracurricular activities, passing proficiency is influenced not only by an individual's motor skills but also by factors such as training, motivation, physical fitness, and

the caliber of coaching provided (Yahya Putra, 2020). This research employs a qualitative approach to thoroughly delineate the factual conditions of students' passing abilities, encompassing the strengths and flaws that emerge during training and gameplay implementation. The analytical results can inform the development of more successful and sustainable training programs in the future.

This research is essential as it significantly enhances the quality of volleyball extracurricular coaching in educational institutions. The study's findings are anticipated to assist coaches in recognizing common technical faults, enhancing training methodologies, and maximizing students' potential for improved performance. This research can serve as a reference for schools in enhancing sports extracurricular activities to better align with student needs. An exhaustive examination of passing proficiency aims to enhance students' technical skills while fostering the principles of cooperation, discipline, and sportsmanship, which are fundamental objectives of physical education in educational institutions.

2. METHOD

This study uses a qualitative descriptive approach with the support of simple quantitative analysis to describe the passing ability of volleyball extracurricular students at Muhammadiyah Ahmad Dahlan Metro Junior High School. As stated by Sugiyono (2021), the qualitative approach is used to analyze the training process, supporting factors, and constraints, while the quantitative approach is used to assess the results of the passing skills test.

The subjects of the study are students participating in volleyball extracurriculars who actively participate in training at Muhammadiyah Ahmad Dahlan Metro Junior High School (number of students).

Data Collection Instruments and Techniques

Data is collected through:

1. Passing ability test (hands-on practice) students perform *forearm passing* to the target 20 times.
2. Score: passing right to target = 3 points; fairly accurate = 2 points; less accurate = 1 point; fail = 0 points.
3. The formula calculates the success percentage:

According to Astuti and Arso (2024), the impact of basic volleyball training on passing skills is very important because passing is a fundamental technique that determines the success of the game, and structured training will significantly improve this ability. Observation of passing techniques using an assessment sheet with 7 indicators (body position, arms, ball contact, direction, control, communication, and consistency), using a scale of 1–5. Semi-structured interviews with the coach and some students to explore the training process and the obstacles faced. Documentation in the form of photos and videos of exercise activities.

Data Analysis Techniques

Quantitative data from the results of the passing test were analyzed with descriptive statistics, including the calculation of average scores, percentages, and frequency distributions, using the formula:

with = the frequency of the score category, and = the number of students. The Sturges formula determines the number of classes:

Class width:

Qualitative data is analyzed through the stages of data reduction, data presentation, and a conclusion drawn. Triangulation is carried out by comparing test results, observations, and interviews to ensure the validity of the data (Agustianti et al., 2022).

3. RESULT AND DISCUSSION

This study aims to analyzed the ability of bottom passing in volleyball in students who participate in extracurricular activities at Muhammadiyah Ahmad Dahlan Metro Junior High School. The research subjects amounted to 25 students who had participated in routine exercises for one semester. Data collection was carried out through a direct practical test in the form of forearm passing towards the target, with as many as 20 attempts.

Based on the test results of 25 students, it was obtained that the category was quite dominating with a percentage of 77.5%, followed by the good category at 10%, the very good category at 3%, and the poor category at 9.5%. As noted by Azizah and Sudarto (2022), the target wall method in underhand passing drills can improve passing accuracy, especially in controlling the direction of the ball. This relates directly to your findings that emphasize the need to improve passing direction and control, particularly through specific training methods. These results show that most students have understood the basic techniques of the bottom passing, but still experience obstacles in terms of accuracy and the strength of ball direction. According to Nugraha (2024), underhand passing drills in extracurricular activities can improve students' underhand passing skills. The use of repetitive training methods can improve basic techniques quickly and effectively. Based on Budiman & Bujang (2025), pair passing drills have a significant impact on improving underarm passing skills among students, rapidly improving basic techniques. This supports the emphasis in your study on repetitive exercises to improve passing skills.

As stated by Saputra and Pratama (2022), "Training methods for passing to improve basic volleyball passing skills have a significant impact on students' technical abilities, especially in the underhand passing category." This quote highlights how focused training on basic passing skills has a significant impact, supporting your observations. From the results of the above frequency distribution, it appears that the majority of students (77.5%) are in the sufficient category, indicating that their lower passing ability is already in the developing stage, but has not yet reached optimal technical stability."

Table 1. *Frequency Distribution of Passing Ability Below Volleyball Extracurricular Students*

Ability Categories	Percentage Range	Frequency (f)	Percentage (%)
Excellent	85 – 100	1	3%
Good	70 – 84	3	10%
Enough	55 – 69	19	77,5%

Less	< 55	2	9,5%
Sum	—	25	100%

From the results of the above frequency distribution, it appears that the majority of students (77.5%) are in the sufficient category, indicating that their lower passing ability is already in the developing stage, but has not yet reached optimal technical stability. As stated by Pangesti et al. (2024), the development of underhand passing skills for junior high school extracurricular activities aims to improve basic techniques through systematic and repeated practice. The good (10%) and excellent (3%) categories indicate that there are a small number of students who have mastered passing techniques well. In comparison, the poor category (9.5%) indicates that there are still students who need special attention, especially in body position when receiving the ball and hand-arm coordination.

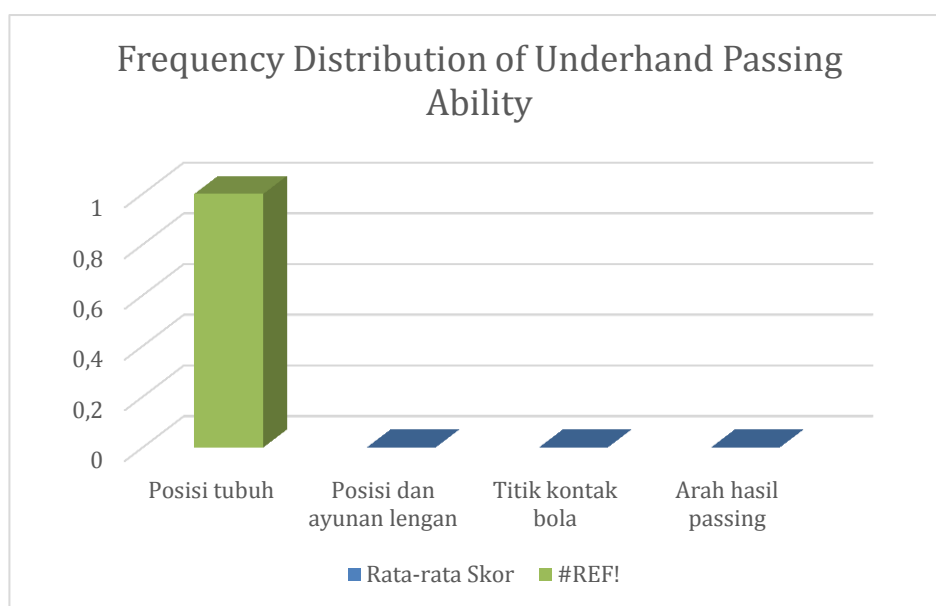


Figure 1. *Frequency Distribution of Lower Passing Ability*

This study analyzes the passing ability of extracurricular volleyball students of Muhammadiyah Ahmad Dahlan Metro Junior High School through practical tests, technical observations, and interviews. Based on the test results, most students were in the sufficient category (77.5%), indicating that passing ability has developed but is not completely stable. The development of underhand passing skills for junior high school extracurricular activities aims to improve basic techniques through systematic and repeated practice (Paramita, 2024). Focused passing drills, such as paired passing, have been shown to improve precision and consistency in volleyball underhand passing, essential for effective gameplay (Hadi & Sudijandoko, 2022). These drills, when integrated into regular training sessions, can address the inconsistencies and directional issues observed in the students' performance. The results of the observation of passing techniques using seven indicators (body position, arms, ball contact, direction, control, communication, and consistency) showed an average overall score of 3.6 in the category of quite good. The highest indicators were found in body position (4.1) and communication (4.0), while the lowest were in consistency (3.2) and passing direction (3.3).

Table 2. Average Observation Results of Lower Passing Technique

No	Passing Technique Indicators	Average Score	Category
1	Body position	4.1	Good
2	Arm position and swing	3.7	Fair
3	Ball contact point	3.5	Fair
4	Direction of passing results	3.3	Fair
5	Control the power of the ball	3.4	Fair
6	Team communication	4.0	Good
7	Consistency of movement	3.2	Fair
Overall average		3.6	Fairly Good

In general, students' underpassing skills are quite good, but improvements need to be focused on direction control and consistency of movement. Focused training on basic passing techniques, such as underhand passing, plays a crucial role in improving students' passing skills and their overall game performance (Adil et al., 2023). More regular exercises, technique variation, and direct supervision from coaches have the potential to significantly improve basic passing skills. According to Hermaya (2024), the use of repetitive training methods can improve basic techniques quickly and effectively.

The bar graph depicts the average score comparison of each lower passing technique indicator. The highest scores were on body position and communication indicators. At the same time, the lowest were on consistency and ball direction, indicating the need for further training to improve technique accuracy and stability. As stated by Widodo et al. (2025), training methods for passing to improve basic volleyball passing skills have a significant impact on students' technical abilities, especially in the underhand passing category. Free passing drills offer a flexible approach to training, enabling students to focus on improving their technique through repeated practice in dynamic conditions (Arifin, 2023). These drills allow for continuous refinement of skills in various game-like situations, ultimately leading to better consistency and ball direction over time.

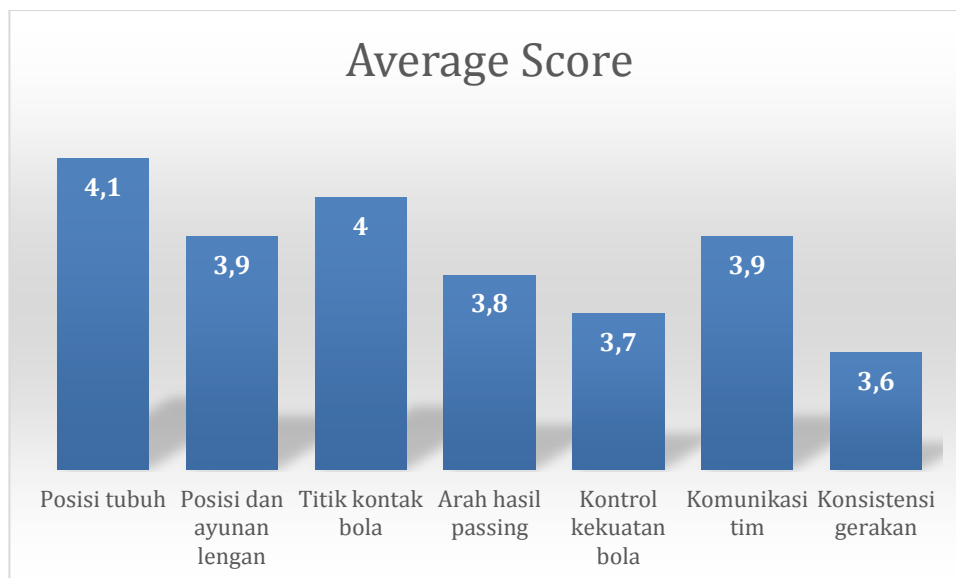


Figure 2. Average Score Chart of Observation Score of Lower Passing Technique

Based on the results of the above study, these results show that most students have been able to perform basic movements of the lower passing with fairly correct technique. However, there are still shortcomings in terms of the precision of ball direction and the control of the force of the punch. Training methods for passing to improve basic volleyball passing skills have a significant impact on students' technical abilities, especially in the underhand passing category (Irawan & Solih, 2025).

4. CONCLUSION

The results of this study show that the majority of volleyball extracurricular students at Muhammadiyah Ahmad Dahlan Metro Junior High School demonstrate a sufficient level of passing ability, with 77.5% of students in this category. A smaller percentage of students fall in the good (10%), very good (3%), and lacking (9.5%) categories. These findings indicate that while the basic passing techniques are generally mastered, there is still room for improvement in terms of movement accuracy and consistency.

The study suggests that to improve the passing skills of students, more structured and intensive training should be implemented. The findings support the idea that training should focus on refining basic techniques such as underhand passing, which, when practiced systematically and regularly, can lead to significant skill development. As indicated by previous research, structured training contributes to better performance and the ability to apply passing techniques effectively in competitive settings. Therefore, coaches should focus on creating training programs that not only emphasize basic skills but also incorporate varied techniques to increase the students' overall performance and accuracy.

Future research could explore the impact of different training methods on volleyball passing skills, such as the effects of video analysis or technology-based feedback systems. Additionally, longitudinal studies could assess the long-term effects of consistent training on skill retention and performance improvement. Comparing the effectiveness of structured training across different age groups or skill levels would also provide valuable insights into optimizing training for diverse student populations. Finally, investigating other factors that

may influence passing ability, such as psychological factors (motivation, confidence), could further enhance the understanding of skill development in volleyball.

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