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Assessment of Volleyball Overhead Passing Skills Among Male High School Students in an Extracurricular Program

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Abstract. The results indicate that 20% of the students fell into the "very good" category, 30% into "good," 25% into "moderate," 20% into "poor," and 5% into "very poor." These findings demonstrate that the basic overhead passing skill level of the volleyball extracurricular students at SMAN Pakusari generally falls within the "good" category. The results suggest that the routine practice conducted during extracurricular activities has a positive impact on improving This study aims to analyze the skill level of the basic volleyball overhead pass technique among students participating in the extracurricular program. A descriptive quantitative research approach was employed, with a sample of 20 male students selected via proportional sampling. Data were collected through an overhead passing skill test, in which each student performed 10 overhead passes toward a designated movement coordination, ball trajectory accuracy, and the students' mastery of basic techniques.

Keywords: Overhead pass; volleyball; extracurricular; skills

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INTRODUCTION

Education plays a vital role in enhancing the quality of human resources. Through education, individuals can develop knowledge, skills, and good character (Santi et al., 2022). Physical education is a component of education that prioritizes physical activities and healthy lifestyle patterns (Sinuraya et al., 2020). In practice, physical education does not focus solely on movement skills; it is a subject with unique characteristics, as it involves the integrated development of three learning domains: cognitive, affective, and psychomotor (Pininggit et al., 2024). In addition to physical education for students in general, there is also physical education for students with special needs, namely adaptive physical education (Widiyanto & Ramadhani, 2021).

Volleyball is a sport that is already popular among students (Pangestu et al., 2021). Olahraga memiliki peranan penting dalam kehidupan manusia, Selain dapat menjaga kesehatan dan kebugaran tubuh, olahraga juga dapat menjadi sarana untuk mengembangkan minat dan bakat (Indarto et al., 2018). In the school environment, the development of interests and talents in sports can be pursued through extracurricular activities. These activities provide students with the opportunity to develop their abilities in alignment with their personal interests. One sports activity that attracts significant student interest is the volleyball extracurricular program (Pakaya et al., 2024).

Volleyball is a sport played by two opposing teams. Each team has six players (Yusmar et al., 2017). As a sport frequently played in competition, volleyball can be played on both outdoor and indoor courts (Asnaldi, 2020). In the game of volleyball, there are several basic techniques that every player must master, including the serve, passing, the smash, and the block (Keswando et al., 2022). One of the fundamental techniques a volleyball player must master involves both footwork and body movement (Yono et al., 2024). Mastery of these various fundamental techniques is crucial in volleyball, as each technique serves an interconnected function in facilitating an effective game. Players who have a strong command of these fundamentals will be better equipped to play the game effectively (Prastio Rosadi & Nur, 2025).

In the game of volleyball, the passing technique is one of the most important skills that a player must master (Achmad et al., 2019). Passing is used to receive, control, and direct the ball to a teammate. Good passing skills enable players to retain possession while simultaneously building an attack. Therefore, mastering passing techniques

requires attention during volleyball training, particularly for students participating in extracurricular activities

In volleyball, passing is generally categorized into underhand passing and overhand passing. Overhand passing is a technique performed using the fingertips when the ball arrives at shoulder height or higher. This technique is frequently used to set the ball for a teammate prior to an attack (Evriansyah Lubis & Agus Muhammad, 2017). Executing an overhead pass requires good coordination among the positioning of the feet, body, hands, and fingers, as well as concentration to gauge the ball's direction and speed

The overhead pass is a technique that requires precision, coordination, and good movement control, rather than just power. Players must pay attention to body posture, hand and finger positioning, and the point of contact with the ball to control and direct it accurately. This technique is typically executed using the fingers above the head to set up a teammate before initiating an attack. Errors in any aspect of the movement can result in an inaccurate trajectory and disrupt the flow of the game. In volleyball extracurricular activities, the abilities of individual students naturally vary. These differences can be attributed to factors such as playing experience, training intensity, physical condition, movement coordination, motivation, and understanding of basic volleyball techniques (Sulton et al., 2021). Participants with more experience and a higher frequency of training likely possess a different level of technical mastery compared to those who have only recently joined the extracurricular activity. Therefore, a measurement is required to assess the overhead passing skill level of each participant.

Analyzing overhead passing skills is important as it provides insight into how well extracurricular participants have mastered this fundamental volleyball technique. Such analysis reveals the extent of the participants' proficiency in executing the overhead pass and identifies specific technical aspects requiring improvement. The resulting information can serve as a basis for evaluating the training process, allowing the training regimen to be tailored to the participants' actual conditions and needs.

The volleyball extracurricular program at SMAN Pakusari serves as a platform for students to develop their athletic skills and interests. Participants possess varying levels of ability; consequently, their mastery of fundamental techniques—particularly the overhead pass—differs from one student to another. This situation requires a clearer understanding through an analysis based on skill assessments.

Poor overhead passing ability can affect the overall flow of the game (Sembiring et al., 2026). Errors in passing can result in the ball failing to reach a teammate accurately, thereby rendering the game strategy less effective. Conversely, strong overhead passing skills enable players to control the ball and deliver precise passes to their teammates. Therefore, overhead passing proficiency is a key aspect that requires attention during the training of students participating in volleyball extracurricular activities.

Based on the foregoing, research is needed to determine the overhead passing skill level of students participating in the volleyball extracurricular program at SMAN Pakusari. This study is expected to provide an objective overview of the participants' overhead passing abilities and serve as a basis for evaluating training activities. Furthermore, the findings are expected to assist the extracurricular coach in designing training programs that are appropriate for the participants' skill levels.

METHOD

This study employs a quantitative descriptive approach aimed at determining the proficiency level of basic overhead passing skills in volleyball among students participating in the extracurricular program at SMAN Pakusari (Maulita Meidisya & Paryadi, 2026). A quantitative descriptive approach is utilized to obtain an objective and systematic overview of a phenomenon based on numerical data gathered through fieldwork (Jamil et al., 2022). This approach aligns with the research objectives, as the researcher does not administer specific interventions to the subjects but instead measures and assesses the students' overhead passing abilities based on the results of the administered skills tests.

The research-population comprises the entire set of objects or subjects possessing specific characteristics that are the focus of the study. In this research, the population consists of all 20 students participating in the volleyball extracurricular activity at SMAN Pakusari. A sample is a subset of the population selected to serve as the data source for a study (Fajri et al., 2023). Given that the population size in this study is relatively small, the entire population was included in the sample using the total sampling technique. This technique is based on the principle that when the population size is fewer than 100 individuals, all members can be included in the sample, thereby allowing the obtained data to provide a more comprehensive representation of the population's characteristics (Indra et al., 2026).

The variable examined in this study is the basic technical skill of the overheadpass in volleyball. The overheadpass is a fundamental technique that plays a crucial role in building and organizing attacks during a volleyball match (Nugraha & Yuliawan, 2021). Executing an overheadpass involves using the fingertips and requires good coordination between body posture, hand positioning, and the trajectory of the incoming ball (Izzuddin & Widyanti, 2021). Consequently, mastery of the overheadpass technique can serve as an indicator for assessing students' volleyball skill levels.

The instrument used in this study was a volleyball overhead passing skill test (Muris et al., 2024). During the test, each participant was given the opportunity to perform ten overhead passes toward a designated target. Assessment results were based on the number of balls accurately directed at the target and the precision of the overhead passing technique. To ensure greater objectivity in the assessment, the observation process was conducted by two evaluators using a prepared observation sheet.

The data obtained from the test administration were subsequently processed using quantitative descriptive statistical analysis. The scores achieved by each participant were then grouped into five skill-level categories: very good, good, moderate, poor, and very poor (Hanafi et al., 2025).

Table 1. Score Ranges for Classifying Volleyball Overhead Passing Skill Levels

No	Value Interval	Category
1	86 - 100	Very Good
2	71 - 85	Good
3	56 - 70	Currently
4	41 - 55	Not enough
5	≤ 40	Very less

Next, the percentage for each category was calculated based on the frequency of participants falling into that category, using a predetermined percentage formula (Sarinta Br Karo & Maya Sari, 2021).

$$\mathrm{P} = \frac{F}{N} \mathrm{X}\ 100\%$$

Information :

P : Percentage

F : Frequency

N : Number of tests

RESULT AND DISCUSSION

Result

Research data were obtained from overhead passing skill tests administered to volleyball extracurricular participants at SMAN Pakusari and subsequently analyzed using SPSS software. Descriptive statistical analysis of the total scores revealed data from 20 participants, with a minimum score of 35 and a maximum score of 90, resulting in a score range of 55. The mean total score was 68.20, with a standard deviation of 15.829 and a variance of 250.560. The relatively high standard deviation indicates a wide dispersion of scores among the participants; this implies that the overhead passing abilities of the extracurricular participants varied significantly, ranging from those with low proficiency to those demonstrating excellent skill.

Tabel 2. Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Total score	20	55	35	90	68,20	15,829	250,560
Valid N (listwise)	20						

Table 3. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total score	,095	20	,200*	,954	20	,408

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Next, a normality test was conducted to determine whether the total score data followed a normal distribution. The Kolmogorov-Smirnov test yielded a statistic of 0.095 with a significance value (Sig.) of 0.200, while the Shapiro-Wilk test yielded a statistic of 0.954 with a significance value of 0.408. Both significance values exceeded 0.05 ($p > 0.05$); therefore, it can be concluded that the total score data for the overhead passing skill followed a normal distribution.

Table 2. Frequency Distribution of Volleyball Overhead Passing Skill Levels

No	Value Interval	Category	Frequency (F)	Percentage (%)
1	86 - 100	Very Good	4	20%
2	71 - 85	Good	6	30%
3	56 - 70	Currently	5	25%
4	41 - 55	Not enough	4	20%
5	≤ 40	Very less	1	5%
	Amount		20	100%

Discussion

The distribution results indicate that 30% of the students fall into the "good" category, while 20% are classified as "very good." Additionally, 25% of the students are in the "moderate" category, with the remaining 25% falling into the "poor" and "very poor" categories. Overall, it can be concluded that the proficiency level of basic overhead passing skills among students participating in the SMAN Pakusari extracurricular program falls within the "good" category.

Based on the research findings, the overhead passing skills of the volleyball extracurricular participants at SMAN Pakusari yielded an average score of 68.20, with a minimum score of 35 and a maximum of 90. According to the applied classification norms, this average falls into the moderate category. This indicates that, overall, the participants possess adequate ability in performing overhead passes but still need to improve their mastery of the technique. Overhead passing skills rely not only on strength but also require accuracy, coordination, and good movement control. Inaccuracies in execution—whether regarding body position, hand and finger placement, or the moment of contact with the ball—can affect the direction and outcome of the pass(Evriansyah Lubis & Agus Muhammad, 2017). Therefore, the extracurricular participants still need to enhance their mastery of each technical element to perform overhead passes with greater accuracy and effectiveness..

A standard deviation of 15.829 and a difference of 55 between the highest and lowest scores indicate considerable variation in the overhead passing skill levels among the participants. These differences in ability may be attributed to several factors, such as playing experience, training frequency, physical condition, movement coordination, motivation, and understanding of basic volleyball techniques (Sulton Andara et al., 2021). Participants with more experience and regular training attendance are expected to possess superior skills compared to those who have only recently joined the extracurricular activity. However, since these factors were not directly analyzed in this study, this hypothesis requires verification through future research.

Based on the normality test results, the participants' total score data exhibited a normal distribution. This was confirmed by the Kolmogorov-Smirnov test (significance value of 0.200) and the Shapiro-Wilk test (0.408). These results indicate that the data met the assumption of normality, allowing the mean score to be used to represent the

participants' overall ability. However, the participant who obtained the lowest score—35—still warrants attention during the skills evaluation. Inadequate overhead passing ability can result in the ball not being directed accurately to teammates, thereby disrupting teamwork and game effectiveness (Sembiring et al., 2026).

CONCLUSION

Research conducted on volleyball extracurricular participants at SMAN Pakusari reveals that their overall overhead passing ability falls into the moderate category. This is evidenced by a mean score of 68.20—with a minimum of 35, a maximum of 90, and a standard deviation of 15.829—indicating a variation in skill levels among the participants. Normality tests show that the data are normally distributed, with Kolmogorov-Smirnov and Shapiro-Wilk significance values of 0.200 and 0.408, respectively. These findings suggest that while the participants' overhead passing skills are reasonably developed, there is still room for improvement to achieve optimal results. Consequently, the extracurricular coach is encouraged to implement training tailored to individual abilities: reinforcing basic technique mastery for those who are less proficient while providing more varied drills for those with higher skill levels. Furthermore, future research should examine factors potentially influencing overhead passing skills—such as playing experience, training intensity, and physical condition—using a larger sample size to yield more in-depth insights.

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