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The Basic Volleyball Passing Technique Skills Among Physical Education Students of The Class of 2025

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ABSTRACT

Volleyball passing skills represent a fundamental component in the development of technical competence in physical education, as they support ball control, game organization, and the effectiveness of offensive and defensive play. However, variations in students' mastery of basic passing techniques are still commonly found in higher education learning environments. This study aimed to analyze the level of basic volleyball passing skills, specifically the overhead pass and underhand pass, among 165 Physical Education students of the Class of 2025 at Universitas Muhammadiyah Surakarta. This research employed a descriptive quantitative approach using a total sampling technique, in which all members of the population were included as research subjects. Data were collected through standardized volleyball skill tests measuring accuracy, ball control, and movement consistency, and were analyzed using descriptive statistics. The results showed that, overall, students' passing skills were categorized as moderate. Overhead passing obtained an average score of 81.98 and was classified in the good category, with a relatively stable distribution of scores and dominance in the good and moderate categories. In contrast, underhand passing achieved an average score of 76.03, showing greater variation in ability and a dominance of moderate and low categories. These findings indicate that students demonstrate stronger mastery in overhead passing than underhand passing. It can be concluded that Physical Education students possess an adequate foundation in basic volleyball passing skills; however, the mastery of both techniques is not yet optimal or evenly developed. Therefore, more focused, systematic, and balanced training strategies are needed to improve technical consistency and overall volleyball learning quality.

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INTRODUCTION

Sport plays a strategic role in developing physical fitness, motor competence, social behavior, and character values, including discipline, cooperation, and responsibility, making it an essential component of educational systems worldwide (Sistiasih et al., 2019; Bailey et al., 2020; Kirk, 2021). Within physical education, volleyball has been recognized as one of the most widely implemented team sports because it combines technical mastery,

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tactical awareness, perceptual decision-making, and coordinated team interaction simultaneously (Bizzocchi et al., 2021; Costa et al., 2022). Among the core technical components in volleyball, passing represents one of the most fundamental skills because it serves as the basis for offensive construction, serve reception, and defensive transition (Jariono et al., 2023; Gabbett et al., 2021). Inadequate passing proficiency often disrupts ball control continuity, reduces attacking opportunities, and negatively influences team performance outcomes (Ramara et al., 2025).

Passing in volleyball generally consists of two essential forms, namely the underhand pass (forearm pass/bump) and the overhead pass (set pass). Both techniques demand biomechanical precision involving body alignment, lower-limb positioning, trunk stability, arm coordination, and timing of ball contact (Faozi et al., 2019; Sheppard et al., 2020). Effective execution of passing techniques is not merely a product of repetition but results from integrated neuromuscular coordination, motor learning adaptation, and cognitive understanding of game situations (Davids et al., 2021). Therefore, passing skill should be interpreted not solely as a technical indicator but also as a reflection of broader readiness in understanding volleyball dynamics.

In the context of higher education, particularly in Physical Education programs, students are expected to possess both theoretical knowledge and practical competence as future teachers, coaches, and sports practitioners (Jariono et al., 2021). This expectation places basic technical mastery as a foundational graduate competency. Students who lack adequate passing skills may encounter limitations in instructional demonstrations, corrective feedback provision, and practical teaching implementation in school or community sport settings (Metzler, 2021; Casey & Kirk, 2022). Consequently, evaluating volleyball passing skills among Physical Education students is not merely a technical measurement exercise but also an assessment of professional readiness.

Despite its importance, preliminary observations in university-level volleyball instruction frequently reveal disparities in students' passing ability. Some students demonstrate stable technique execution, while others struggle with body posture, inconsistent contact, and poor directional control. These discrepancies are associated with multiple factors, including arm strength, coordination, reaction ability, technical understanding, motivation, and confidence (Irfandi & Rahmat, 2022; Prasetyo et al., 2023). Such conditions indicate the need for a systematic profile of students' passing competence using valid skill assessment indicators.

Research on volleyball passing development has grown substantially in the last decade, particularly in relation to instructional models, motor learning approaches, and skill evaluation methods. Studies have shown that drill-based learning models contribute positively to passing repetition quality and movement automation (Putra et al., 2020; Jariono et al., 2023). Likewise, paired practice approaches enhance interpersonal feedback and improve passing consistency through cooperative repetition (Rahmat et al., 2021). Media-assisted training, including wall-pass exercises and target-based activities, has also demonstrated effectiveness in improving passing accuracy and ball control (Irfandi & Rahmat, 2022).

Recent developments further show the integration of digital technologies in technical skill evaluation, such as motion analysis applications, video feedback systems, and performance-tracking tools, which provide more objective analysis of body mechanics and movement errors (Baca et al., 2021; Hughes et al., 2022). Such technological approaches strengthen the validity of skill assessments beyond conventional observational scoring.

From a biomechanical perspective, studies indicate that successful passing execution is strongly influenced by lower-limb flexion angle, center of mass stability, platform angle formation, and synchronized arm extension (Faozi et al., 2019; Lees et al., 2020). In addition, motor learning literature emphasizes that repeated practice combined with augmented feedback enhances technique retention and transfer into game situations (Schmidt & Lee, 2021; Magill & Anderson, 2022).

Within pedagogical contexts, game-based models such as Teaching Games for Understanding (TGfU) and modified target games have also been reported to improve not only technical passing ability but also tactical awareness and decision-making (Harvey et al., 2020; Oslin et al., 2021). Furthermore, student-centered learning approaches have shown significant potential in increasing motivation and active engagement during volleyball instruction (Casey & Kirk, 2022).

Empirically, prior studies have commonly measured passing using accuracy tests, frequency scores, and observational rubrics involving components such as body posture, contact precision, and movement coordination (Maradina et al., 2026; Nyatara et al., 2026). These multidimensional indicators provide more comprehensive profiling of technical competence compared with single-score assessments.

Collectively, existing literature confirms that passing skills are influenced by technical, biomechanical, pedagogical, and psychological factors. However, much of this literature has concentrated on intervention effects rather than descriptive profiling of baseline skill competence in university students.

Although previous studies have contributed significantly to understanding volleyball passing development, several gaps remain evident. First, many studies have focused predominantly on school students, youth athletes, or beginner populations (Prasetyo et al., 2023; Rahmat et al., 2021), whereas research specifically examining Physical Education university students remains limited. This is problematic because university students differ substantially from novice learners in their educational roles, expected competencies, and professional preparation.

Second, most studies emphasize the effects of training models or interventions designed to improve passing performance (Irfandi & Rahmat, 2022; Jariono et al., 2023), while fewer studies attempt to map or analyze the existing level of basic passing technique skills before intervention. Baseline profiling is crucial because curriculum design and instructional improvements should be informed by actual competency conditions.

Third, previous research often treats passing as a single performance score without decomposing the technical components underlying performance quality. Such

approaches may overlook critical movement deficiencies related to body position, arm alignment, footwork, and visual orientation (Faozi et al., 2019). A more detailed analytical approach is needed to generate a holistic profile of student skill levels.

Fourth, few studies specifically address students of the Class of 2025 as a distinct cohort, despite cohort-based analysis being important for curriculum monitoring and institutional quality assurance. Variations in student preparedness due to prior sport experience, learning exposure, and motor backgrounds may significantly affect competency patterns (Jariono et al., 2021).

Thus, the novelty of this study lies in analyzing the baseline profile of underhand and overhead passing skills among Physical Education students of the Class of 2025 using multidimensional technical indicators. Unlike prior intervention-dominated studies, this research emphasizes competency mapping as a foundation for curriculum development and evidence-based learning design.

Based on these considerations, this study aims to analyze the level of basic volleyball passing technique skills, specifically underhand pass and overhead pass, among Physical Education students of the Class of 2025. This analysis includes evaluating students' technical execution based on body positioning, arm angle, contact precision, footwork coordination, and visual orientation.

Theoretically, this study contributes to strengthening sport science discourse related to technical skill profiling in higher education contexts. It extends existing literature by positioning passing ability not merely as isolated motor performance but as an integrated construct involving biomechanical efficiency, cognitive understanding, and pedagogical readiness (Davids et al., 2021; Magill & Anderson, 2022).

Practically, the findings are expected to provide empirical foundations for curriculum refinement, skill evaluation instruments, and volleyball learning module development in Physical Education programs. The results may also support coaches and lecturers in identifying students' strengths and weaknesses, enabling targeted instructional improvement.

The novelty of this research lies in three aspects. First, it focuses specifically on university-level Physical Education students rather than school-based learners or athletes. Second, it applies a multidimensional technical analysis approach rather than relying solely on general performance scores. Third, it positions competency mapping as a strategic basis for educational planning and sports development programs.

In conclusion, volleyball passing skills represent a fundamental competency in Physical Education because they influence technical performance, pedagogical readiness, and future professional capability. While prior studies have explored training interventions to improve passing, limited research has specifically profiled the baseline passing skills of Physical Education students, particularly the Class of 2025. This study addresses that gap by analyzing underhand and overhead passing techniques using multidimensional indicators, offering novelty in competency mapping and providing empirical support for improving volleyball learning quality at the university level.

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METHODS

This study employed a quantitative descriptive research design aimed at identifying and analyzing the level of basic volleyball passing technique skills among Physical Education students of the Class of 2025. Quantitative research was selected because it enables objective measurement of observable performance indicators and facilitates statistical analysis of technical skill outcomes using numerical data (Jariono et al., 2025; Creswell & Creswell, 2018). This approach is appropriate for studies focusing on skill profiling, where the primary objective is to describe the actual condition of participants' competencies rather than to test causal relationships through experimental intervention. In addition, a survey method supported by direct performance testing was utilized to obtain empirical data regarding participants' technical abilities, consistent with previous studies emphasizing descriptive mapping in sports performance assessment (Sutama et al., 2022; Fraenkel et al., 2019). Quantitative descriptive approaches have been widely recognized in sport sciences as effective for evaluating fundamental motor and technical skills because they allow standardized measurement, comparison, and interpretation of performance distributions (Thomas et al., 2021).

This research was conducted at the sports hall (GOR) of Campus 2, Universitas Muhammadiyah Surakarta, located at Kartasura District, Sukoharjo Regency, Central Java, Indonesia, on March 1–2, 2026. The research setting was selected because it provides standardized volleyball facilities and supports controlled testing conditions necessary for reliable technical skill assessment. Conducting data collection in a uniform environment is important in reducing environmental variability and enhancing internal consistency during performance testing (Bompa & Buzzichelli, 2019; Hopkins et al., 2020).

The population of this study consisted of all active Physical Education students of the Class of 2025 enrolled in volleyball practical courses, totaling 165 students. A total sampling technique was employed, meaning all members of the accessible population were included as research subjects. This sampling strategy was considered appropriate because it eliminates sampling bias and allows the study to represent the entire target cohort comprehensively (Sugiyono, 2019; Etikan & Bala, 2017). Total sampling is frequently recommended in descriptive research involving relatively manageable populations, particularly when the objective is to obtain a complete profile of a defined group (Cohen et al., 2018). Thus, all 165 students who met participation criteria and provided consent were included in the study.

The variable investigated in this research was basic volleyball passing technique skill. Operationally, this variable refers to the students' ability to perform underhand passing and overhead passing in accordance with correct technical principles, including initial stance, execution phase, and follow-through. Skill performance was evaluated through indicators involving body position, arm coordination, ball contact accuracy, movement consistency, and directional control. This operationalization aligns with biomechanical and motor learning perspectives emphasizing that technical skill should

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be assessed as a multidimensional construct rather than a single outcome score (Faozi et al., 2019; Magill & Anderson, 2022). The use of technical components as assessment indicators also strengthens content validity and enables a more comprehensive interpretation of student competency levels (Schmidt & Lee, 2021).

Data collection was conducted using volleyball skill testing and measurement procedures based on the instrument developed by Jariono et al. (2023), consisting of the overhead passing test and underhand passing test. Each participant performed both tests under the same standardized procedure. Participants stood behind the designated test line, while an assessor positioned beside the testing area provided instructions and recorded scores. Each test lasted one minute. Scores were determined based on the number of successful ball contacts reaching the designated target area. Ball contacts failing to reach the target received a score of zero, while contacts touching the target line received the highest value according to scoring criteria. The final score represented the total accumulation of successful attempts during the test duration.

The selected instrument has demonstrated acceptable validity and reliability in previous volleyball skill studies and is considered suitable for evaluating passing proficiency in educational and sport settings (Jariono et al., 2023; Hopkins et al., 2020). Standardization procedures included identical instructions, similar ball specifications, equal testing duration, and uniform court conditions for all participants to minimize measurement error. Such procedural control is critical for improving test reliability and ensuring comparability across participants (Morrow et al., 2016).

Data analysis was conducted using descriptive statistical techniques, including frequency distribution, mean, standard deviation, percentage, minimum and maximum scores, to describe the level of students' passing skills. Categories of skill level were classified into performance criteria such as very good, good, moderate, poor, and very poor based on normative score interpretation. Statistical processing was performed using IBM SPSS Statistics to ensure accurate and systematic data analysis. Descriptive analysis in sports skill studies is essential for generating competency profiles, identifying dominant trends, and providing evidence-based recommendations for instructional improvement (Field, 2020; Thomas et al., 2021). Through this methodological framework, the study was expected to provide a valid empirical mapping of basic volleyball passing technique skills among Physical Education students of the Class of 2025.

RESULTS AND DISCUSSION

Result

Data collection in this study was conducted through a series of volleyball skill tests and direct observations involving 165 Physical Education students of the Class of 2025 during volleyball practical courses at Universitas Muhammadiyah Surakarta. The purpose of the testing and observation process was to obtain an empirical profile of students' mastery of basic volleyball passing techniques in authentic practical situations. The skill

assessment focused on two main variables, namely overhead passing and underhand passing, which were measured using a standardized instrument adapted from Jariono et al. (2023). The assessment indicators covered technical accuracy, movement consistency, ball control, and target precision. The descriptive analysis results are presented as follows.

Descriptive Analysis of Overhead Passing Skills

The results of the overhead passing skill test showed variation in students' performance levels. The highest score obtained was 96, while the lowest score was 74. Descriptive statistical analysis revealed a mean score of 81.98, with a standard deviation of 5.67, indicating moderate dispersion of scores around the average. These findings suggest that, in general, students demonstrated relatively adequate mastery of overhead passing techniques, although differences in individual proficiency remained evident.

Table 1.
Descriptive Statistics of Overhead Passing Skills

Variable	N	Mean	SD	Min	Max	Range
Overhead Passing	165	81.98	5.67	74	96	22

To provide a clearer interpretation of skill levels, the scores were classified into performance categories as shown in Table 2.

Table 2.
Overhead Passing Skill Distribution

Class Interval	Description	Frequency	Percentage
≥ 90	Very Good	16	9.70%
85–89	Good	53	32.12%
79–84	Moderate	51	30.91%
74–78	Low	45	27.27%
≤ 73	Very Low	0	0%
Total		**165**	**100%**

The distribution data indicate that the majority of students were categorized in the good and moderate groups, totaling 104 students (63.03%). Only 27.27% were in the low category, and no students fell into the very low category. This finding indicates that most participants possessed acceptable overhead passing proficiency, especially in target accuracy and ball control.

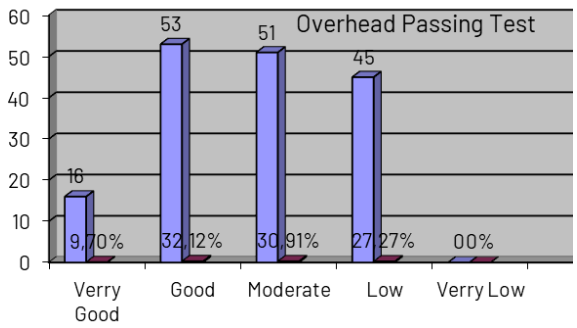

Figure 1.
Overhead Passing Test Results (Bar Distribution)

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Graphically, the bar distribution confirms that the dominant tendency lies in the good and moderate categories, indicating that overhead passing competence among students is generally satisfactory.

Descriptive Analysis of Underhand Passing Skills

Results of the underhand passing test also showed variability in student performance. The highest score obtained was 91, while the lowest was 66. Descriptive analysis produced a mean score of 76.03, with a standard deviation of 7.02, indicating wider dispersion compared with overhead passing performance.

Table 3.
Descriptive Statistics of Underhand Passing Skills

Variable	N	Mean	SD	Min	Max	Range
Underhand Passing	165	76.03	7.02	66	91	25

The distribution of underhand passing skill levels is presented in Table 4.

Table 4.
Underhand Passing Skill Distribution

Class Interval	Description	Frequency	Percentage
≥ 87	Very Good	15	9.09%
80–86	Good	36	21.82%
73–79	Moderate	58	35.15%
66–72	Low	56	33.94%
≤ 65	Very Low	0	0%
Total		**165**	**100%**

The results indicate that the largest proportion of students (35.15%) fell within the moderate category, followed by 33.94% in the low category. Only 21.82% were classified as good, while 9.09% reached the very good category. Compared with overhead passing, underhand passing showed relatively lower performance distribution, particularly in movement consistency and directional accuracy.

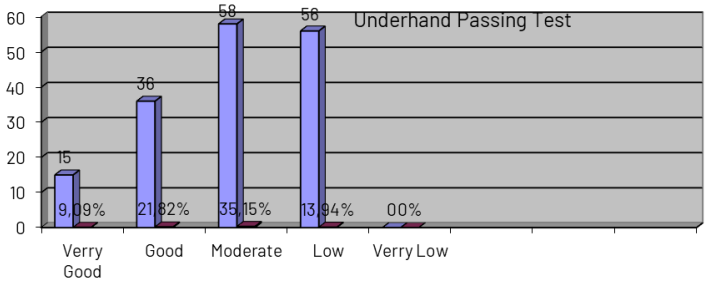

Figure 2.
Underhand Passing Test Results (Bar Distribution)

The graphical distribution shows moderate and low categories as dominant, suggesting that underhand passing remains a technical component requiring further improvement.

Comparative Summary of Passing Skills

To compare the two measured skills, a descriptive comparison was conducted as shown in Table 5.

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Table 5.
Comparison of Basic Passing Skills

Skill Type	Mean	SD	Dominant Category	Interpretation
Overhead Passing	81.98	5.67	Good	Relatively effective
Underhand Passing	76.03	7.02	Moderate	Needs improvement

The comparison indicates that overhead passing skills were superior to underhand passing skills, with a mean difference of 5.95 points. Overhead passing also showed lower variability (SD = 5.67) compared with underhand passing (SD = 7.02), indicating more consistent performance among students.

Overall, the findings indicate that the level of mastery of basic volleyball passing techniques among Physical Education students of the Class of 2025 is predominantly in the moderate category. Overhead passing skills tend to fall within the good category, showing that most students can perform this technique effectively in terms of control and precision. However, underhand passing remains relatively weaker, with many students still categorized as moderate to low. These results imply that although students have acquired fundamental competencies in both passing techniques, improvement is still needed, particularly in movement consistency, body position stability, and directional control in underhand passing. Therefore, more targeted instructional strategies, structured practice models, and continuous skill evaluation are required to optimize mastery of both techniques in a more balanced and comprehensive manner.

Discussion

The findings of this study indicate that the basic volleyball passing technique skills among Physical Education students of the Class of 2025 are generally categorized as moderate, with a clear performance difference between overhead passing and underhand passing. Specifically, overhead passing showed a higher mean score (81.98) than underhand passing (76.03), suggesting that students demonstrated stronger proficiency in overhead passing performance. This difference reflects not only variations in technical mastery but also differences in biomechanical demands, motor control complexity, and learning adaptation associated with each passing skill.

From a motor learning perspective, the relatively better achievement in overhead passing can be explained through the structured and repeatable nature of the movement. Overhead passing relies on coordinated finger control, wrist extension, elbow positioning, and trunk alignment, allowing students to stabilize technique execution more efficiently through repeated practice. According to Schmidt and Lee (2021), motor patterns with clearer movement sequencing and feedback mechanisms tend to be acquired faster in structured learning environments. Similarly, Magill and Anderson (2022) emphasize that repetitive practice with augmented feedback improves movement consistency and technical retention. This theoretical explanation supports the finding that most students fell into the good and moderate categories for overhead passing. Furthermore, biomechanical analyses suggest that overhead passing permits greater control over ball trajectory because the contact point is actively manipulated by

the fingers, enabling more precise directional adjustments (Lees et al., 2020; Sheppard et al., 2020).

Empirical evidence also supports this interpretation. Hanafi et al. (2025) found that mental concentration significantly affects overhead passing accuracy, particularly in maintaining technical precision under task demands. Similarly, Hanafi (2025) reported that systematic training programs positively improve coordination and directional control in upper passing performance. These findings align closely with the current results, indicating that structured instruction likely contributed to the relatively strong overhead passing outcomes observed in this study. Likewise, Ramara et al. (2025) emphasized that mastery of overhead passing forms a critical foundation for offensive organization and defensive preparation, reinforcing its strategic importance in volleyball performance.

The stronger performance in overhead passing may also reflect pedagogical influences. University-based practical instruction often prioritizes passing drills emphasizing repetitive target-oriented practice, which may benefit overhead passing development. According to Metzler (2021), direct instruction combined with task progression is particularly effective for closed or semi-closed technical skills. Similarly, Casey and Kirk (2022) argue that skill acquisition improves when students receive structured corrective feedback and opportunities for deliberate repetition. This pedagogical framework likely contributed to the consistency reflected in the relatively lower standard deviation (5.67) observed for overhead passing.

In contrast, underhand passing showed greater variability and lower average performance, indicating that this technique remains more challenging for many students. Biomechanically, underhand passing requires simultaneous integration of lower-body stability, forearm platform formation, trunk control, anticipatory positioning, and reactive timing, making execution more complex than overhead passing. Davids et al. (2021) note that skills involving dynamic adaptation to external stimuli often require longer learning periods due to higher perceptual-motor demands. Similarly, Faozi et al. (2019) highlight that errors in forearm angle, body posture, or contact timing can substantially disrupt ball control in underhand passing.

This complexity helps explain why many students were concentrated in the moderate and low categories for underhand passing. Fitriyanto et al. (2024) found that paired movement training significantly improves lower passing coordination, suggesting that collaborative repetition may address coordination deficiencies commonly found in novice or developing performers. Likewise, Pratama et al. (2025) reported that wall-media training enhances passing control by increasing repetition volume and immediate feedback. These findings correspond with the present study, implying that lower underhand passing performance may stem partly from insufficient exposure to specific drills targeting these technical demands.

The broader variation in underhand passing performance, reflected in the higher standard deviation (7.02), also suggests individual differences in motor preparedness. Such variation may be associated with differences in arm strength, coordination, balance, or prior playing experience. According to Bompa and Buzzichelli (2019),

technical consistency is strongly influenced by supporting physical capacities and neuromuscular readiness. Similarly, Suchomel et al. (2018) emphasize the contribution of coordination and stabilization capacities to skill performance. Thus, the weaker underhand passing outcomes may not solely reflect instructional issues but also broader individual readiness factors.

Another important interpretation concerns the contrast between educational and competitive sport environments. As noted by Ramara et al. (2025) and Yoga et al. (2025), athletes in club environments generally achieve higher technical performance due to greater training intensity, more frequent evaluation, and stronger performance orientation. In contrast, university students often train within limited course schedules, reducing opportunities for technical refinement. This contextual difference likely contributes to the moderate overall skill levels observed in this study. Fikri et al. (2023) argue that in higher education, technical evaluation should not only measure competency but also inform adaptive learning strategies responsive to student needs. This perspective is highly relevant to interpreting the current findings.

From a pedagogical standpoint, the difference between overhead and underhand passing outcomes suggests a need to rebalance instructional emphasis. The lower achievement in underhand passing indicates that learning strategies should incorporate more targeted interventions, such as increased repetition volume, partner-based drills, target games, and video-assisted correction. Raaiyatini et al. (2024) demonstrated that Project-Based Learning can improve lower passing performance through contextualized problem-solving and active engagement. Similarly, Harvey et al. (2020) found that game-based learning approaches enhance both technical execution and tactical understanding. These models may provide valuable alternatives to conventional drill-dominated instruction.

The use of technology also offers significant implications. Video feedback and motion analysis have been increasingly recognized as effective tools for improving technical awareness and correcting movement errors (Baca et al., 2021; Hughes et al., 2022). For underhand passing in particular, visual feedback may help students identify deficiencies in platform formation, contact timing, and posture that are difficult to perceive through verbal instruction alone. Therefore, integrating video-based evaluation into practical courses may support more efficient technical improvement.

These findings also reinforce the importance of feedback quality. Fadlullah et al. (2025) emphasize that tutorial-based learning media and active learning strategies significantly improve motivation and learning outcomes in volleyball skills. This aligns with Schmidt and Lee's (2021) view that feedback quality often influences skill development more strongly than practice quantity alone. Thus, improving passing competence requires not merely increasing practice duration but enhancing instructional quality.

From a sport science perspective, the present findings support the view that technical skill development is multidimensional, involving biomechanical efficiency, motor learning adaptation, pedagogical design, and psychological readiness. The

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superiority of overhead passing does not imply underhand passing is less important; rather, it highlights that different techniques require differentiated learning strategies. This is consistent with the principle of specificity, which suggests training methods must correspond to the distinct demands of each skill (Bompa & Buzzichelli, 2019).

Overall, the results indicate that while students have acquired foundational passing competencies, further improvement is necessary, particularly in underhand passing. The difference between the two techniques provides an important empirical basis for curriculum refinement, emphasizing the need for more focused practice design, adaptive teaching strategies, and continuous skill evaluation. By strengthening these elements, Physical Education programs can better prepare students not only as learners but as future teachers and practitioners capable of demonstrating and teaching volleyball skills effectively.

CONCLUSION

Based on the results of the study involving 165 Physical Education students of the Class of 2025 in the volleyball practical course at Universitas Muhammadiyah Surakarta, it can be concluded that the overall level of mastery of basic volleyball passing techniques is categorized as moderate. This finding indicates that students have acquired foundational competencies in performing both overhead passing and underhand passing, although the quality of mastery is not yet fully optimal or equally developed across the two techniques.

The findings show that overhead passing skills demonstrated better achievement than underhand passing, with an average score of 81.98 and a standard deviation of 5.67, indicating relatively stable performance among participants. The frequency distribution further showed that most students were concentrated in the good and moderate categories, while no students were classified in the very low category. This pattern suggests that overhead passing has been mastered relatively effectively, particularly in terms of ball control, directional accuracy, and movement consistency. The structured nature of the technique, combined with repetitive instructional exposure during learning activities, likely contributed to this stronger performance.

In contrast, underhand passing skills showed lower achievement, with an average score of 76.03 and a higher standard deviation of 7.02, indicating greater variation in students' abilities. The dominance of moderate and low categories suggests that many students still encounter difficulties in maintaining consistent movement execution, body stability, and accurate ball direction. These findings imply that underhand passing remains a technical component requiring further reinforcement through more targeted and systematic practice.

Overall, although students possess an adequate foundation in basic passing techniques, the results indicate that technical mastery remains unbalanced between overhead and underhand passing. This imbalance highlights the need for improvements in instructional design, training emphasis, and evaluation systems to support more

comprehensive skill development. Therefore, this study concludes that strengthening students' mastery of basic volleyball passing techniques requires not only increased practice quantity but also improved training quality, technical feedback, and adaptive learning strategies.

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Finally, the author hopes that this research may contribute to the development of sports science, particularly in the field of volleyball learning and skill evaluation in higher education. It is also hoped that the collaboration and support provided by all parties involved will continue to inspire future research and innovation in physical education and sports training.

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