# Long Passing Accuracy Level of IPPKM Football School Players in Kerinci Regency

Aidil Abdika<sup>1A-E\*</sup>, Hendri Munar<sup>2B-D</sup>, Wawan Junresti Daya<sup>3B-D</sup>

<sup>1,2,3</sup> Universitas Jambi, Jambi, Indonesia

aidilabdhika11@gmail.com<sup>1\*</sup>, hendrimunarfik@unja.ac.id<sup>2</sup>, wawanfik@unja.ac.id<sup>3</sup>

#### **ABSTRACT**

This study aims to determine the long passing accuracy level of IPPKM Football School players in Kerinci Regency. This descriptive research employed a survey method with test and measurement instruments. The population consisted of 65 IPPKM Football School players in Kerinci Regency, with a purposive sampling technique selecting 20 players aged 17 years. The Bobby Charlton long passing test was used as the research instrument. Data analysis utilized descriptive statistics to categorize performance levels. The findings revealed that the long passing accuracy of IPPKM Football School players in Kerinci Regency showed 8 players (40%) in the good category and 12 players (60%) in the moderate category. No players achieved excellent, poor, or very poor categories. These results indicate that the long passing accuracy level of IPPKM Football School players demonstrates adequate performance that requires further improvement through systematic training programs.

#### **ARTICLE HISTORY**

Received: 2025/09/17 Accepted: 2025/10/02 Published: 2025/10/08

#### **KEYWORDS**

Long passing; Accuracy; Football; Youth development; Technical skills.

#### **AUTHORS' CONTRIBUTION**

- A. Conception and design of the study;
- B. Acquisition of data;
- C. Analysis and interpretation of data;
- D. Manuscript preparation;
- E. Obtaining funding

Cites this Article

Abdika, Aidil; Munar, Hendri; Daya, Wawan Junresti. (2025). Long Passing Accuracy Level of IPPKM Football School Players in Kerinci Regency. Competitor: Jurnal Pendidikan Kepelatihan Olahraga. 17 (3), p.2507-2514

### INTRODUCTION

Football is recognized as the world's most popular sport, captivating millions of players and spectators globally with its dynamic nature and technical demands (Buldú et al., 2018). In youth football development, technical skills acquisition represents a fundamental cornerstone for players to participate effectively in competitive matches and maintain strategic ball possession throughout gameplay. The modern evolution of football has increasingly emphasized the importance of precise technical execution, particularly in passing abilities that form the foundation of successful team coordination and tactical implementation (Memmert et al., 2017). Among the essential technical skills in football, passing represents one of the most frequently executed techniques during matches, with long passing being particularly crucial for tactical flexibility and game control strategies.



Recent advances in football performance analysis have emphasized the critical importance of passing accuracy as a key performance indicator that distinguishes elite players from their less skilled counterparts in competitive environments (Badawi & Nasrulloh, 2021). Long passing specifically serves multiple tactical purposes, including changing the point of attack, creating unexpected scoring opportunities, relieving defensive pressure during intense gameplay, and facilitating quick transitions between defensive and offensive phases (Clemente et al., 2020). The ability to execute accurate long passes has become increasingly important in modern football, where teams utilize sophisticated passing networks and complex tactical formations to gain a competitive advantage over their opponents. Contemporary research has demonstrated that successful teams consistently show superior passing accuracy rates and connectivity patterns within their tactical structures (Buldú et al., 2018).

Network analysis research has demonstrated that passing networks and tactical actions in football are intrinsically interconnected, with successful teams displaying superior passing accuracy and sophisticated connectivity patterns throughout their gameplay (Gazali et al., 2020). This understanding has led to increased emphasis on developing comprehensive passing skills from youth developmental levels, where fundamental techniques are established and refined through systematic training approaches. Studies focusing on youth football development have consistently shown that systematic training programs specifically designed around passing skills can significantly improve overall player performance, technical proficiency, and tactical understanding of the game (Gaviria Alzate et al., 2025). The integration of decision-making elements within passing training has proven particularly effective in enhancing both technical execution and cognitive processing capabilities among young players.

The development of football schools (SSB) throughout Indonesia, particularly in Jambi Province and the broader Kerinci Regency region, has gained considerable momentum in recent years as grassroots football initiatives expand. These specialized institutions play increasingly crucial roles in nurturing young talent, developing fundamental technical skills, and providing structured pathways for player advancement within the Indonesian football system (Daryono, 2019). However, limited empirical research has been conducted to systematically assess the current technical abilities of players enrolled in these football schools, particularly regarding specialized skills such as long passing accuracy and tactical execution. This research gap represents a significant limitation in understanding the effectiveness of current youth development programs and identifying areas requiring improvement (Li et al., 2025).

Recent research has highlighted the fundamental importance of passing path analysis in determining subsequent shot outcomes, suggesting that the quality and precision of passing sequences significantly impact overall team performance and goal-scoring effectiveness. Advanced studies utilizing machine learning approaches have revealed that passing decisions and execution quality are influenced by complex interactions between perceptual information processing and associative knowledge accumulated through training experience (Merlin et al., 2024). Additionally, comprehensive studies on pass

accuracy have revealed that improved passing performance represents a prominent determinant of success in competitive football, demanding effective interaction between complex behavioral patterns and sophisticated cortical dynamics that develop through systematic training exposure (Vanrenterghem et al., 2024). The implementation of artificial intelligence and deep learning technologies in football training has shown promising results in optimizing technical skill development among youth players.

Given the limited research focusing on youth football development within the Indonesian context and the recognized importance of long passing skills in contemporary football strategy, this comprehensive study aims to systematically assess the long passing accuracy level of IPPKM Football School players in Kerinci Regency. The research findings will provide valuable empirical insights for coaches, players, and football development programs throughout the region, contributing to evidence-based improvements in youth training methodologies. Furthermore, this investigation will establish baseline performance data that can inform future longitudinal studies tracking skill development over time. The results will also contribute to the broader understanding of technical skill distribution among Indonesian youth football players and support the development of targeted intervention strategies.

#### **METHODS**

This study employed a comprehensive descriptive research design utilizing a systematic survey method with standardized test and measurement instruments to ensure objective and reliable data collection (Hardani et al., 2020). The quantitative approach was specifically selected as it provides precise measurements of technical performance through validated testing procedures that can be replicated across different populations and settings. This methodological choice allows for statistical analysis and meaningful comparisons with established performance norms in youth football development research. The research design followed established protocols for sports performance assessment, incorporating best practices from contemporary football research methodologies.

The research was conducted at the IPPKM Football School field located in Koto Majidin Mudik Village, Air Hangat District, Kerinci Regency, over a comprehensive period from June 12 to July 12, 2025, ensuring adequate time for thorough data collection and participant preparation. The total population comprised 65 active IPPKM Football School players representing various age groups and skill levels within the institutional program. Using a purposive sampling technique based on specific inclusion criteria, 20 male players aged 17 years were systematically selected as the research sample, ensuring homogeneity in developmental stage and reducing age-related performance variations. The specific inclusion criteria included: (1) active participation in regular training sessions for a minimum of six months, (2) a minimum of one year of structured football experience within organized programs, (3) absence of current injuries that could potentially affect performance outcomes, and (4) voluntary consent to participate in the research study.

## **RESULTS AND DISCUSSION**

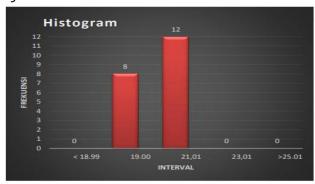
#### Result

The comprehensive descriptive analysis of long passing accuracy test results obtained from 20 IPPKM Football School players revealed distinct performance distribution patterns that provide valuable insights into the current technical abilities of the participant population. Statistical analysis demonstrated a sample mean score of 279.5 points with a standard deviation of 44.19 points, indicating moderate variability in performance levels across participants. The distribution of scores showed concentration in the moderate to good performance ranges, with no participants achieving either extreme performance categories (excellent or very poor). These statistical parameters provide foundation data for performance classification and comparative analysis with established norms in youth football development research.

**Table 1.**Long Passing Accuracy Test Results

Category	Interval	Frequency	Percentage
Excellent	> 341.18	0	0%
Good	247.28 - 341.17	8	40%
Moderate	153.38 - 247.27	12	60%
Poor	59.48 - 153.37	0	0%
Very Poor	< 59.48	0	0%
Total		20	100%

The performance distribution analysis revealed that 40% of participants (n=8) achieved good long passing accuracy levels, demonstrating competent technical execution and consistent accuracy in their passing attempts. The majority of participants, representing 60% of the sample (n=12), demonstrated moderate performance levels, indicating adequate basic skills with room for systematic improvement through targeted training interventions. Notably, no participants achieved excellent performance levels, suggesting that advanced technical proficiency in long passing requires additional development focus within the current training program structure. The absence of participants in poor or very poor categories indicates that all players possess fundamental long passing capabilities, providing a solid foundation for skill enhancement programs.



**Figure 1.**Distribution of Long Passing Accuracy Performance

The histogram representation clearly illustrates the concentration of performance levels within the moderate to good range, creating a normal distribution pattern that suggests consistent baseline training effects across the participant group. This distribution pattern indicates that the current IPPKM Football School training program successfully establishes fundamental long passing skills among participants but requires enhancement to develop advanced accuracy levels. The clustering of performance in the middle ranges suggests an opportunity for implementing differentiated training approaches to address individual player needs and accelerate skill development outcomes (Abdika et al., 2025).

#### **Discussion**

The research findings align substantially with recent empirical studies indicating that passing accuracy in youth football populations can be systematically improved through structured training approaches that incorporate both technical and tactical components. The predominance of moderate performance levels (60%) observed in this study suggests that while participants possess foundational long-passing capabilities, significant potential exists for enhancement through targeted coaching interventions that address specific technical deficiencies. Contemporary research emphasizing the integration of decision-making elements within technical training supports the need for comprehensive program development that extends beyond basic skill repetition (Steiner, 2018). The current performance distribution indicates that IPPKM Football School players have established basic technical foundations but require advanced training methodologies to achieve elite performance levels.

Recent comprehensive studies have emphasized the fundamental importance of tactical thinking programs in systematically improving ball control and passing accuracy among youth player populations across different developmental stages. The current research results provide strong empirical support for implementing comprehensive training programs that simultaneously address technical execution, cognitive decision-making processes, and tactical understanding within realistic game contexts (Gaviria Alzate et al., 2025). The performance levels observed in this investigation reflect typical developmental patterns found in youth football populations, where players demonstrate competent basic skills while requiring structured advancement to achieve higher proficiency levels. Research has consistently shown that systematic progression through increasingly complex training scenarios significantly enhances both technical accuracy and tactical decision-making capabilities.

Several interconnected factors may substantially influence the observed performance levels, requiring a comprehensive analysis to understand the complete developmental context. Research has demonstrated that passing accuracy demands sophisticated interaction between behavioral execution patterns and complex cortical dynamics, with experienced players consistently showing distinctive visuospatial processing capabilities and enhanced attentional strategies developed through extensive training exposure (Vanrenterghem et al., 2024). The moderate performance

levels observed in this study may reflect the current developmental stage of participants, their accumulated training exposure within the IPPKM program, and the specific methodological approaches employed in their technical skill development. Advanced neurological research has revealed that superior passing accuracy correlates with specific cortical activation patterns and enhanced movement variability control that develops through systematic practice.

Decision-making processes have been shown to significantly influence movement variability and overall performance outcomes in football-specific tasks that incorporate realistic game constraints and pressure situations. The absence of participants achieving excellent category performance suggests that current training methodologies within the IPPKM program may benefit substantially from incorporating enhanced decision-making elements, game-specific constraints, and variable practice conditions to stimulate advanced skill development (Fernández-Valdés et al., 2023). Contemporary training approaches that integrate cognitive challenges with technical execution have demonstrated superior outcomes compared to traditional repetitive drill methods. The implementation of small-sided games, tactical scenarios, and pressure-based training environments could potentially elevate performance levels across the participant population.

Modern football training approaches utilizing cutting-edge artificial intelligence technologies and deep learning methodologies have demonstrated significant promise in optimizing youth football development outcomes through personalized feedback and systematic progression monitoring (Otte, 2021). These technological advances could potentially be integrated into existing IPPKM training programs to provide more precise performance feedback, identify individual technical deficiencies, and accelerate overall skill acquisition rates (Merlin et al., 2024). Research has shown that Al-assisted training programs can achieve over 90% accuracy in technical point prediction and provide real-time feedback that enhances learning efficiency. The integration of such technologies could address the current performance distribution patterns by providing targeted interventions for individual player development needs.

The fundamental importance of passing networks in contemporary football tactical analysis cannot be understated, as they directly relate to team success indicators, performance outcomes, and competitive effectiveness at all levels of play. The current research findings suggest that while IPPKM participants demonstrate adequate baseline long passing abilities, systematic improvement initiatives are necessary to meet the increasingly demanding requirements of competitive football environments (Chacoma & Billoni, 2025). Network analysis research has revealed that successful teams consistently demonstrate superior passing accuracy rates, enhanced connectivity patterns, and more sophisticated tactical coordination that stems from individual player technical proficiency. The development of these capabilities requires systematic training approaches that progress from individual skill development to complex team coordination exercises.

## CONCLUSION

The comprehensive long passing accuracy assessment of IPPKM Football School players in Kerinci Regency revealed that 40% of participants demonstrated good performance levels while 60% achieved moderate accuracy standards, indicating adequate baseline technical capabilities with substantial room for systematic improvement. These empirical findings suggest that the current training program successfully establishes fundamental long passing techniques among participants but requires strategic enhancement to develop advanced accuracy levels necessary for competitive football success. The statistical distribution of performance levels provides valuable baseline data for program evaluation and future development initiatives within the IPPKM Football School system. The research contributes significantly to understanding technical skill distribution among Indonesian youth football players and provides foundation data for comparative analysis with similar institutions.

The notable absence of participants achieving excellent category performance indicates that current training methodologies require systematic enhancement to develop elite-level long-passing accuracy capabilities among the player population. This finding suggests opportunities for implementing progressive training programs that incorporate advanced technical instruction, tactical decision-making components, variable practice conditions, and technology-assisted feedback mechanisms to optimize individual player development outcomes. The concentration of performance in moderate to good categories demonstrates consistent training effects but indicates the need for differentiated approaches to address individual player development requirements. Future program development should focus on creating systematic progressions that challenge players appropriately while maintaining engagement and motivation throughout the learning process.

#### **REFERENCES**

- Abdika, A., Munar, H., & Daya, W. J. (2025). Long passing accuracy level of IPPKM football school players in Kerinci regency. Competitor: Jurnal Pendidikan Kepelatihan Olahraga, 1(1), 1–10.
- Badawi, A., & Nasrulloh, A. (2021). Survei Analisis Biomekanik Passing Pada Pemain Sepakbola Private Training Pati. Jurnal Literasi Olahraga, 2(4), 273–278. <a href="https://doi.org/10.35706/jlo.v2i4.6628">https://doi.org/10.35706/jlo.v2i4.6628</a>
- Buldú, J. M., Busquets, J., Martínez, J. H., Herrera-Diestra, J. L., Echegoyen, I., Galeano, J., & Luque, J. (2018). Using network science to analyse football passing networks: Dynamics, space, time, and the multilayer nature of the game. Frontiers in Psychology, 9, 1900. <a href="https://doi.org/10.3389/fpsyg.2018.01900">https://doi.org/10.3389/fpsyg.2018.01900</a>
- Chacoma, A., & Billoni, O. V. (2025). Identification and optimization of high-performance passing networks in football. In an arXiv preprint. <a href="https://arxiv.org/html/2502.01444v1">https://arxiv.org/html/2502.01444v1</a>

- Clemente, F. M., Sarmento, H., & Aquino, R. (2020). Player position relationships with centrality in the passing network of World Cup soccer teams: Win/loss match comparisons. Chaos, Solitons & Fractals, 133, 109625. <a href="https://doi.org/10.1016/j.chaos.2020.109625">https://doi.org/10.1016/j.chaos.2020.109625</a>
- Daryono, D. (2019). Survei Tingkat Kesegaran Jasmani Pada Peserta Ekstrakulikuler Sepakbola Di Sma Negeri 2 OKU. Halaman Olahraga Nusantara (Jurnal Ilmu Keolahragaan), 2(1), 21–28. <a href="https://doi.org/10.31851/hon.v2i1.2402">https://doi.org/10.31851/hon.v2i1.2402</a>
- Fernández-Valdés, B., Husted, H. M., & Moras, G. (2023). Decision making influences movement variability and performance of high-level female football players in an elastic resistance task. Frontiers in Psychology, 14, 1175248. https://doi.org/10.3389/fpsyg.2023.1175248
- Gaviria Alzate, S. J. O., Higuita, D. A., Jaramillo, A. F., & Machado, J. A. (2025). Impact of a tactical critical thinking program (TPCT) on ball control and passing accuracy in U-8 football players: A quasi-experimental study. International Journal of Sports Science & Coaching. <a href="https://doi.org/10.1177/17479541251335229">https://doi.org/10.1177/17479541251335229</a>
- Gazali, N., Hasrion, & Sari, M. (2020). Meningkatkan Kemampuan Teknik Dasar Shooting Sepakbola Melalui Metode Bagian. Edu Sportivo: Indonesian Journal of Physical Education, 1(1), 16–24. <a href="https://doi.org/10.25299/es:ijope.2020.vol1(1).5119">https://doi.org/10.25299/es:ijope.2020.vol1(1).5119</a>
- Hardani, Andriani, H., Ustiawaty, J., Utami, E., Istiqomah, R., & Fardani, R. (2020). Metode Penelitian Kualitatif & Kuantitatif (1 (ed.)). Pustaka Ilmu. <a href="https://www.pustakailmu.co.id">https://www.pustakailmu.co.id</a>
- Li, X., Wang, Y., & Zhang, M. (2025). The optimization of youth football training using deep learning and artificial intelligence. Scientific Reports, 15, 8190. https://doi.org/10.1038/s41598-025-93159-2
- Memmert, D., Lemmink, K. A. P. M., & Sampaio, J. (2017). Current approaches to tactical performance analyses in soccer using position data. Sports Medicine, 47, 1–10. <a href="https://doi.org/10.1007/s40279-016-0562-5">https://doi.org/10.1007/s40279-016-0562-5</a>
- Merlin, M., Pinto, A., Moura, F. A., & Torres, R. da S. (2024). Who are the best passing players in professional soccer? A machine learning approach for classifying passes with different levels of difficulty and discriminating the best passing players. PLoS ONE, 19(5), e0304139. <a href="https://doi.org/10.1371/journal.pone.0304139">https://doi.org/10.1371/journal.pone.0304139</a>
- Otte, F. W. (2021). Contemporary Skill (Acquisition) Training Methods in Specialist Football Goalkeeper Coaching. Deutsche Sporthochschule Köln.
- Steiner, S. (2018). Passing decisions in football: Introducing an empirical approach to estimating the effects of perceptual information and associative knowledge. Frontiers in Psychology, 9, 361. <a href="https://doi.org/10.3389/fpsyg.2018.00361">https://doi.org/10.3389/fpsyg.2018.00361</a>
- Vanrenterghem, J., Deschamps, K., & Palmans, T. (2024). Behavioral and cortical dynamics underlying superior accuracy in short-distance passes. Behavioural Brain Research, 471, 114766. https://doi.org/10.1016/j.bbr.2024.114766