



Technical performance analysis of a newly promoted professional futsal team: Evidence from Rafhely FC in the 2024–2025 Indonesian pro futsal league

Muhammad Alief

Universitas Negeri Padang,
INDONESIA

Masrun

Universitas Negeri Padang,
INDONESIA

Ardo Okilanda*

Universitas Negeri Padang,
INDONESIA

Vega Soniawan

Universitas Negeri Padang,
INDONESIA

Bram Sujadesman

Universitas Negeri Padang,
INDONESIA

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Abstract

Background: Newly promoted professional futsal teams often encounter challenges in adapting to the competitive demands of elite leagues, making objective performance evaluation essential for evidence-based coaching. Despite the growing interest in futsal performance analysis, studies examining season-long technical performance indicators in Indonesian professional clubs remain limited.

Aim: This study aimed to evaluate the technical performance of Rafhely FC throughout the 2024–2025 Indonesian Pro Futsal League season using objective match performance indicators.

Method: A quantitative descriptive design was employed using observational data from all 22 league matches. Match statistics, including goals scored, goals conceded, scoring time, dominant foot, shots on target, and match outcomes, were collected through video-based performance analysis and analysed using descriptive statistics.

Results: Rafhely FC demonstrated inconsistent performance throughout the season, recording four wins (18.18%), two draws (9.09%), and sixteen losses (72.73%). The team showed greater goal-scoring productivity during the final ten minutes of matches, predominantly using the right foot. However, limited shot conversion efficiency and a higher number of goals conceded than scored reduced overall competitive performance.

Conclusion: The findings indicate that Rafhely FC requires improvements in attacking efficiency, defensive organisation, and tactical consistency. Objective technical performance analysis provides valuable evidence for supporting coaching decisions and strategic planning in professional futsal.

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INTRODUCTION

Futsal has evolved into one of the most competitive indoor sports, attracting widespread participation from professional athletes, coaches, and spectators across different regions of the world. The sport is characterized by high-intensity gameplay that requires players to perform rapid technical actions, tactical decision-making, and continuous physical movements within a limited playing area (Esposito et al., 2024; Ju et al., 2022; J. N. N. Ribeiro et al., 2025; Rico-González et al., 2022; Sansone et al., 2023). Unlike outdoor football, futsal is played in a smaller court with fewer players, resulting in a faster pace of play and more frequent technical interactions between

*Corresponding author:

Ardo Okilanda, Universitas Negeri Padang, Indonesia

ardo.oku@fik.unp.ac.id ✉

teammates and opponents. These characteristics demand exceptional levels of ball control, passing accuracy, shooting efficiency, spatial awareness, and tactical coordination throughout the match. Success in professional futsal is therefore determined not only by players' physical capacity but also by their ability to execute technical skills consistently under dynamic competitive conditions. As the level of competition continues to increase, professional clubs are required to optimize both individual and collective performance through systematic evaluation and continuous tactical adaptation. Modern coaching practices increasingly emphasize the use of objective performance data to understand technical strengths and identify weaknesses that may influence match outcomes (Cossich et al., 2023; Lord et al., 2020; Mateus et al., 2024). The availability of detailed match statistics has transformed performance evaluation from subjective observation into evidence-based analysis capable of supporting strategic decision-making. Consequently, technical performance analysis has become an indispensable component of elite futsal, enabling coaches to design more effective training programmes and improve competitive performance throughout a league season. These developments indicate that comprehensive technical evaluation is fundamental for understanding how professional teams perform and adapt within increasingly demanding competitive environments.

The rapid professionalization of futsal has encouraged national leagues to strengthen competitive standards while motivating regional clubs to compete at the highest level of domestic competition. In Indonesia, the Pro Futsal League represents the highest competitive platform where clubs are expected to demonstrate technical excellence, tactical maturity, and organizational consistency throughout an entire season. Among the participating clubs, Rafhely FC emerged as one of the representatives from West Sumatra after successfully earning promotion to the professional league, reflecting the continued development of futsal within the region. Entering the highest level of competition presents considerable challenges because newly promoted teams must quickly adapt to stronger opponents, higher match intensity, and more demanding tactical situations. These adaptation challenges frequently influence technical consistency and ultimately affect competitive results during the inaugural season. In addition to facing experienced clubs with well-established playing systems, promoted teams often encounter differences in squad depth, player quality, competitive experience, and tactical flexibility (Gisbert-Pérez et al., 2024; Mackreth & Bond, 2021). Such conditions require coaching staff to evaluate team performance using objective indicators rather than relying solely on subjective impressions obtained during matches. Comprehensive technical evaluation provides valuable information regarding offensive productivity, defensive organization, finishing effectiveness, and overall match performance under different competitive situations (Canossa et al., 2020; Otero-Saborido et al., 2021; Plakias et al., 2024; Stafylidis et al., 2025). Understanding these performance characteristics is particularly important because they provide practical guidance for designing targeted training interventions and improving tactical preparation throughout the season. Therefore, systematic performance analysis represents an essential approach for supporting the long-term development and competitive sustainability of newly promoted professional futsal teams.

Recent advances in sports performance analysis have demonstrated that objective match statistics provide valuable insights into the technical and tactical characteristics of elite team performance. Various performance indicators have been widely used to evaluate offensive efficiency, defensive stability, scoring patterns, shooting effectiveness, and overall competitive outcomes across different team sports. Despite these developments, existing studies have predominantly focused on physiological responses, physical performance, isolated technical variables, or tactical behaviours, whereas comprehensive evaluations integrating multiple technical indicators throughout an entire professional futsal season remain relatively limited (Goes et al., 2021; Gomes et al., 2024; J. N. Ribeiro

et al., 2024; Rico-González et al., 2020; Sekulic et al., 2021; Spyrou et al., 2020; Zhang et al., 2026). Furthermore, empirical investigations involving newly promoted professional futsal clubs have received considerably less scholarly attention despite their unique adaptation processes and competitive challenges. The limited availability of season-long technical performance analyses restricts the ability of coaches and practitioners to identify consistent performance trends and formulate evidence-based improvement strategies. A comprehensive understanding of technical performance requires the integration of multiple objective indicators that collectively describe both attacking and defensive effectiveness under real competitive conditions (Gonzalez-Rodenas et al., 2020; Lopez-Valenciano et al., 2022; Lord et al., 2020; Plakias et al., 2024; Vella et al., 2022). Such an integrated analytical approach enables a more holistic interpretation of team performance than assessments based on single performance variables alone. It also facilitates the identification of performance patterns that may not be observable through conventional match evaluation methods. Generating comprehensive evidence from objective technical indicators is therefore essential for strengthening scientific knowledge and improving coaching practices within professional futsal. Consequently, this study seeks to address this gap by providing a comprehensive technical performance analysis of Rafhely FC throughout the 2024–2025 Indonesian Pro Futsal League season using multiple objective match statistics to support evidence-based performance evaluation and strategic decision-making.

Recent studies have demonstrated substantial progress in sport performance analysis by investigating technical-tactical behaviours, match performance indicators, and their relationships with competitive outcomes across various sports. Existing research has primarily examined technical-tactical performance in professional soccer, including the influence of technical and physical variables on match outcomes, running performance characteristics, and collective tactical behaviours, while other studies have focused on technical-tactical analyses in combat sports and racket sports such as wrestling, judo, taekwondo, and table tennis, highlighting the growing application of objective performance analysis across elite competitions (Atici et al., 2025; Barthelemy et al., 2024; Brandão Kashiwagura et al., 2021; Lago-Peñas, García-Calvo, et al., 2023; Miarka et al., 2020; Otero-Saborido et al., 2021). Furthermore, systematic reviews have emphasized the importance of technical and tactical match analysis as a scientific approach for evaluating athlete and team performance, while also recommending the integration of key performance indicators to improve evidence-based coaching and performance monitoring (Low et al., 2020; Vella et al., 2022). Nevertheless, the existing literature predominantly focuses on individual performance variables, specific tactical behaviours, or sports other than futsal, with relatively limited attention devoted to comprehensive season-long technical performance analyses of professional futsal teams. Moreover, empirical studies involving newly promoted professional clubs remain particularly scarce, despite their unique competitive challenges associated with adapting to elite-level competition. Consequently, there remains a significant research gap regarding the integration of multiple technical performance indicators including goals scored, goals conceded, scoring time distribution, dominant foot, shots on target, and match outcomes within a single analytical framework to evaluate the competitive performance of newly promoted professional futsal teams throughout an entire league season. Therefore, this study addresses this gap by providing a comprehensive technical performance analysis of Rafhely FC during the 2024–2025 Indonesian Pro Futsal League season, offering empirical evidence to support objective performance evaluation and evidence-based coaching in professional futsal.

This study aimed to conduct a comprehensive technical performance analysis of Rafhely FC as a newly promoted professional futsal team competing in the 2024–2025 Indonesian Pro Futsal League. The study specifically evaluated the team's competitive performance through objective

match statistics collected across an entire league season. Multiple technical performance indicators were examined, including goals scored, goals conceded, scoring time distribution, dominant foot used for finishing, shots on target, and match outcomes. These indicators were selected to provide a comprehensive representation of the team's offensive and defensive performance under competitive conditions. The study also sought to identify performance patterns that contributed to the team's overall competitive results throughout the season. By integrating multiple technical indicators within a single analytical framework, this research offers a more comprehensive assessment than evaluations relying solely on individual performance variables. Furthermore, the study aimed to generate objective evidence that can support coaches and team management in evaluating technical strengths and weaknesses. The findings are expected to facilitate evidence-based decision-making for tactical planning, training programme development, and performance monitoring. In addition, this study contributes to the growing body of knowledge on technical performance analysis in professional futsal, particularly within the context of newly promoted teams competing at the elite level. Ultimately, the study seeks to provide practical and scientific insights that can support continuous performance improvement and enhance competitive sustainability in professional futsal.

LITERATURE REVIEW

Technical performance analysis has become one of the fundamental approaches for evaluating team performance in modern sports because it enables coaches and researchers to objectively measure the effectiveness of players' actions during competition. Unlike subjective observation, technical performance analysis utilizes quantitative indicators to describe how teams create scoring opportunities, maintain possession, execute tactical strategies, and respond to different match situations (Davis et al., 2024; Lord et al., 2020; Plakias et al., 2024). The increasing accessibility of match statistics and video analysis technologies has significantly enhanced the quality of performance evaluation across elite sports. Objective performance analysis also provides valuable information for identifying strengths and weaknesses that may not be evident through conventional coaching observations. In team sports, technical performance indicators are frequently integrated with tactical analysis to provide a more comprehensive understanding of competitive performance (Ju et al., 2021; Lutz et al., 2019; Plakias et al., 2024; Vella et al., 2022). Coaches increasingly rely on these analytical approaches to evaluate player contributions and improve collective team organization. The systematic interpretation of technical indicators also supports long-term athlete development by facilitating continuous performance monitoring. Furthermore, technical performance analysis contributes to evidence-based decision-making by reducing reliance on intuition during performance evaluation. These analytical approaches have consequently become an essential component of professional sports management and coaching practice. Therefore, understanding the theoretical foundations of technical performance analysis is essential for interpreting competitive outcomes in professional futsal.

Performance indicators represent measurable variables that objectively describe the technical efficiency and competitive effectiveness of a team during a match. Common technical indicators include goals scored, goals conceded, shooting accuracy, passing success, ball possession, defensive actions, and match outcomes (Gonzalez Rodenas et al., 2020; Howell et al., 2026; Otero-Saborido et al., 2021). These indicators enable researchers to quantify different dimensions of team performance using standardized analytical procedures. Among these variables, scoring efficiency is frequently considered one of the most influential indicators because it directly determines competitive success. However, successful performance cannot be explained solely by offensive productivity because defensive organization and consistency throughout the match also contribute

substantially to overall results. The combination of offensive and defensive indicators therefore provides a more balanced representation of team performance. Several studies have emphasized that analysing multiple technical indicators simultaneously produces more comprehensive conclusions than relying on individual variables alone (Azam et al., 2023; Fainshmidt et al., 2020; Hendren et al., 2023; Moradi & Zihagh, 2022). This multidimensional perspective enables researchers to identify interactions between different aspects of match performance. Consequently, integrated performance indicators have become increasingly important for evaluating competitive effectiveness across professional team sports. Such an approach is particularly relevant in futsal because the dynamic nature of the game requires players to perform multiple technical actions continuously under high-pressure situations.

Professional futsal possesses distinctive competitive characteristics that differentiate it from other invasion sports and require specialized approaches to performance evaluation. The smaller playing area, reduced number of players, and continuous transitions between attack and defence increase the frequency of technical actions throughout the match (Armatas, 2026; Clemente et al., 2020; Ferraz et al., 2025; Wing et al., 2022). These characteristics require players to make rapid tactical decisions while maintaining high technical accuracy under time constraints. As a result, technical performance indicators in futsal often fluctuate considerably according to match context, opponent quality, and tactical strategy. Previous investigations have demonstrated that scoring patterns, finishing effectiveness, and defensive organization vary across different phases of competition. Match outcomes are therefore influenced by multiple interacting factors rather than a single technical variable. Comprehensive evaluation of these indicators enables coaches to identify recurring performance patterns that may influence competitive success. Such analyses also facilitate more effective training design by identifying specific technical components requiring improvement. Consequently, professional futsal provides an appropriate context for implementing comprehensive technical performance analysis using objective match statistics. This perspective supports the development of more systematic evaluation models for elite futsal competition.

Newly promoted professional teams frequently experience greater competitive challenges than established clubs because they must rapidly adapt to higher standards of competition. Differences in player experience, tactical maturity, squad depth, and competitive intensity often influence performance consistency during the first professional season (Bolckmans et al., 2023; Mannix et al., 2026; Swainston et al., 2020). These adaptation processes may affect both offensive productivity and defensive stability throughout league competition. Consequently, newly promoted teams require systematic performance evaluation to identify factors contributing to successful or unsuccessful match outcomes. Objective performance analysis enables coaching staff to distinguish temporary performance fluctuations from recurring technical weaknesses. Such information is particularly valuable for developing evidence-based strategies to improve competitive performance during subsequent matches. Performance monitoring conducted throughout an entire season also provides a broader understanding of team development than analyses limited to individual matches. Longitudinal technical evaluation therefore represents an important analytical approach for understanding adaptation within professional leagues (Errekagorri et al., 2021; García-Aliaga et al., 2023; Lago-Peñas, Lorenzo-Martinez, et al., 2023; Zhou et al., 2020). Despite its importance, season-long investigations involving newly promoted professional futsal teams remain relatively limited. This limitation highlights the need for further studies that comprehensively evaluate technical performance throughout an entire competitive season.

The integration of objective match statistics into coaching practice has transformed performance evaluation from descriptive observation into evidence-based decision-making. Coaches can utilize technical performance indicators to evaluate tactical effectiveness, monitor player

development, and design more targeted training programmes. Objective analytical findings also improve communication between coaches, analysts, and athletes because performance discussions are supported by measurable evidence (Ashdown et al., 2026; Barbosa et al., 2023; Barker-Ruchti et al., 2021; Callinan et al., 2023; Jowett, 2024). Furthermore, comprehensive performance analysis contributes to strategic planning by identifying technical trends that influence competitive outcomes. The use of integrated technical indicators allows coaching staff to evaluate team performance from multiple perspectives rather than focusing exclusively on match results. Such an approach supports continuous performance improvement through systematic identification of strengths and weaknesses. The growing application of performance analytics demonstrates its practical value for enhancing competitive effectiveness in professional sport. In professional futsal, objective technical evaluation is increasingly recognized as an essential component of sustainable team development. Therefore, comprehensive analysis of technical performance indicators provides an important scientific foundation for improving coaching practices and competitive performance. This theoretical perspective underpins the present study, which examines the technical performance of Rafhely FC throughout the 2024–2025 Indonesian Pro Futsal League season using multiple objective match indicators.

METHOD

Research Design

This study employed a quantitative descriptive research design to examine the technical performance of Rafhely FC throughout the 2024–2025 Indonesian Pro Futsal League season. Quantitative descriptive research is appropriate for studies aiming to objectively describe the characteristics of a phenomenon using numerical data without manipulating variables or examining causal relationships. This design enables researchers to systematically collect, organize, and interpret numerical information representing actual events that occurred during official futsal matches. In the present study, the observed events consisted of measurable technical performance indicators recorded during competitive matches. Rather than testing hypotheses regarding cause-and-effect relationships, the study focused on providing an objective description of Rafhely FC's technical performance across an entire league season. The descriptive quantitative approach allows performance characteristics to be presented through statistical summaries that accurately reflect the team's competitive achievements. Match statistics served as objective evidence for evaluating both offensive and defensive performance throughout the competition. The findings generated from this approach provide factual information regarding the team's strengths, weaknesses, and performance consistency during its inaugural season in the professional league. Consequently, the selected research design is considered appropriate for producing comprehensive evidence concerning the competitive performance of a newly promoted professional futsal team. The overall analytical framework emphasizes objective performance evaluation based on observable match events rather than subjective coaching assessments.

Participants

The unit of analysis in this study was Rafhely FC, a professional futsal club representing West Sumatra that competed in the 2024–2025 Indonesian Pro Futsal League. Administratively, the research was conducted at the Rafhely FC management office in Padang to obtain secondary information regarding the club and to facilitate access to official competition data. The observation period covered the team's complete participation throughout one competitive league season, beginning with the opening fixture and ending with the final league match in June 2025. This observation period enabled the researcher to document the team's technical performance

continuously throughout the competition. The population consisted of all official league matches played by Rafhely FC during the 2024–2025 Pro Futsal League season. Because the study aimed to evaluate season-long technical performance, every official match was considered an observation unit. A total sampling technique was adopted, whereby all matches meeting the research criteria were included in the analysis. Consequently, the research sample consisted of all 22 official league matches played by Rafhely FC during the competition season. Employing total sampling ensured that no competitive performance information was omitted from the analysis. This sampling strategy provided a complete representation of the team's technical performance throughout its first season in Indonesia's highest professional futsal competition.

Instruments and Data Collection

The primary research instrument was a structured statistical observation sheet, commonly referred to as a coding sheet, specifically developed to record technical performance indicators during official matches. The coding sheet transformed observable match events into standardized quantitative data suitable for statistical analysis. Six technical performance indicators were included in the observation instrument, namely goals scored, goals conceded, scoring time, shots on target, dominant foot used for scoring, and match outcomes. Each indicator was operationally defined before data collection to ensure consistency throughout the observation process. The primary data source consisted of official match video recordings and official competition statistics published during the 2024–2025 Indonesian Pro Futsal League season. Every match was repeatedly reviewed to verify the accuracy of each recorded technical event and to minimize recording errors. All observed events were systematically coded into the observation sheet immediately after the verification process had been completed. The completed coding sheets were subsequently entered into Microsoft Excel to establish a structured research database. The use of video-based observation enabled objective identification of technical actions performed during actual competition without interfering with the natural match environment. Consequently, the collected dataset provided comprehensive quantitative information describing Rafhely FC's technical performance across the entire league season.

Data Analysis

The collected data were analysed using descriptive statistical techniques to summarize the technical performance characteristics of Rafhely FC throughout the competition season. Descriptive statistics were selected because the study sought to describe performance patterns rather than test inferential hypotheses. Initially, all observed technical indicators were tabulated using Microsoft Excel before statistical summaries were calculated. The average number of goals scored and goals conceded per match was calculated using the arithmetic mean to evaluate the team's offensive productivity and defensive performance throughout the season. The arithmetic mean was calculated using the following equation:

$$\bar{x} = \frac{\sum x}{n}$$

Note:

$\bar{x}$ = Average (mean) performance (e.g., average goals per game)

$\sum x$ = Total number of observed indicators

n = Total number of matches played

where $\bar{x}$ represents the average value of each performance indicator, $\sum x$ denotes the total number of observed events, and n represents the total number of official matches analysed. In addition to calculating averages, frequency distributions and percentages were computed to summarize scoring time, dominant foot usage, shots on target, and match outcomes. Winning percentage was calculated

to evaluate the team's overall competitive success throughout the season using the following equation:

$$P = \frac{f}{n} \times 100\%$$

Note:

P = Percentage being calculated

f = Frequency of occurrence (e.g., number of goals or wins)

n = Total number of opportunities or total number of matches

where P represents the percentage value, f denotes the frequency of a particular event, and n represents the total number of observed matches. The descriptive statistical findings were presented in the form of tables, graphs, and percentages to facilitate interpretation of the team's technical performance. Finally, the observed performance patterns were interpreted by comparing offensive and defensive indicators and relating them to the competitive outcomes achieved during the 2024–2025 Pro Futsal League season.

Research Procedure

The research procedure consisted of five sequential stages to ensure systematic implementation throughout the study. The first stage involved conducting a literature review on technical performance analysis, professional futsal, and objective match statistics while simultaneously developing the coding sheet used as the primary observation instrument. The second stage focused on collecting official match videos and competition statistics covering all 22 league matches played by Rafhely FC during the 2024–2025 season. The third stage involved repeatedly observing every recorded match to identify and code all predefined technical performance indicators into the statistical observation sheet. Following completion of the observation process, the collected data were verified, tabulated, and organized into a structured database using Microsoft Excel. During the fourth stage, descriptive statistical analyses were conducted to calculate averages, frequencies, percentages, and graphical summaries describing the team's technical performance. The analytical results were then interpreted to identify recurring offensive and defensive performance patterns throughout the competition season. The fifth and final stage involved discussing the findings by comparing them with existing theoretical perspectives and previous studies on technical performance analysis in professional futsal. Based on the overall findings, conclusions were formulated regarding Rafhely FC's technical performance during its inaugural season in the Indonesian Pro Futsal League. Finally, practical recommendations were proposed to support evidence-based coaching, performance evaluation, and future competitive improvement for professional futsal teams.



Figure 1. Research Method Flow

RESULTS AND DISCUSSION

Results

This section presents the technical performance analysis of Rafhely FC during the 2024–2025 Indonesian Pro Futsal League season based on objective match statistics collected from all official league matches. The analysis focuses on six technical performance indicators, namely goals scored by match, goal-scoring time distribution, dominant foot used for scoring, goals conceded, shots on target, and overall match outcomes. These indicators were selected to provide a comprehensive description of the team's offensive productivity, defensive performance, shooting effectiveness, and competitive results throughout the season. The findings are presented using graphical visualizations to facilitate the identification of performance patterns across different technical indicators.

Goals Scored by Match

Figure 2 illustrates the number of goals scored by Rafhely FC in each of the 22 matches played during the 2024–2025 Indonesian Pro Futsal League season. The results demonstrate noticeable variation in offensive productivity from one match to another. Rafhely FC scored between zero and five goals per match, indicating fluctuations in attacking performance throughout the competition. The highest goal production was recorded in Match 21, in which the team scored five goals. Several matches also showed relatively high offensive productivity, with four goals scored in Matches 3, 7, and 19. In contrast, Rafhely FC failed to score in Matches 5, 10, 15, and 22. The remaining matches were characterized by one to three goals, reflecting moderate attacking productivity. Overall, the distribution indicates that goal-scoring performance was inconsistent throughout the season, with periods of high offensive output alternating with matches of limited scoring success.

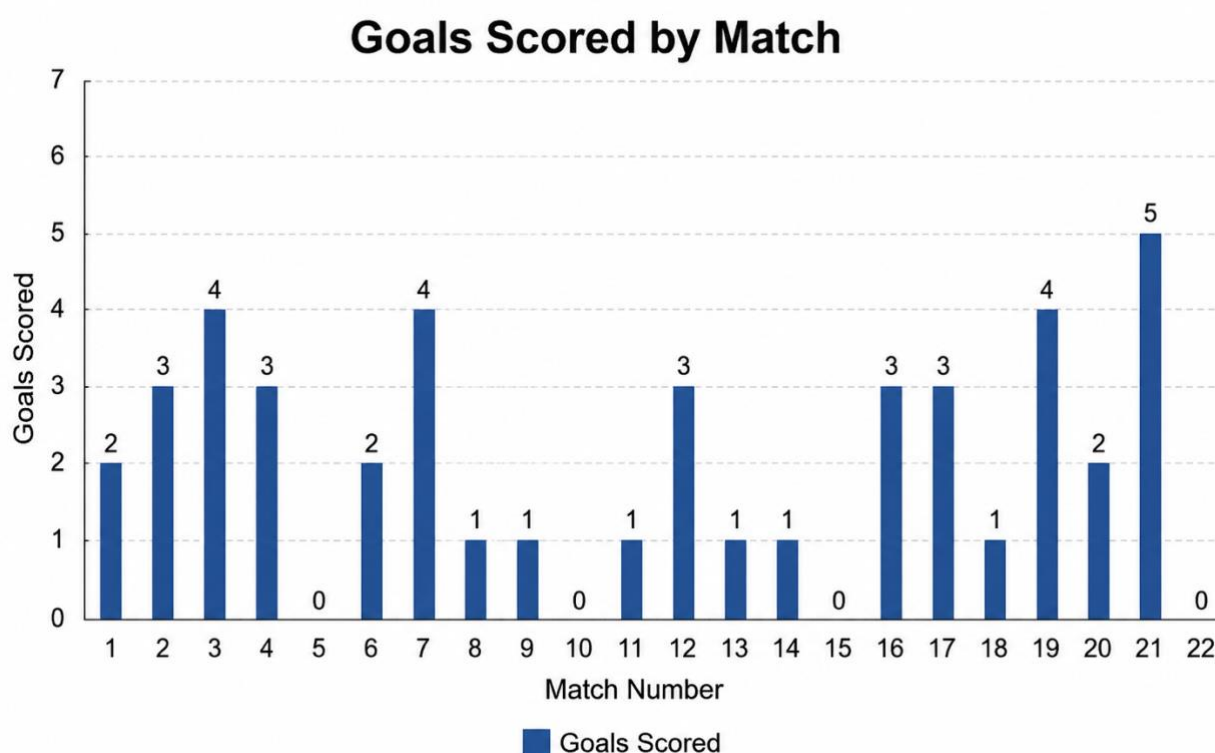


Figure 2. Goals Scored by Rafhely FC in Each Match during the 2024–2025 Indonesian Pro Futsal League Season.

Goal-Scoring Time Distribution

The distribution of goals according to match time is presented in Figure 3. Goals were grouped into four ten-minute intervals to identify scoring patterns throughout the duration of the

match. The highest number of goals was recorded during the final ten-minute period (31–40 minutes), indicating that this phase represented the team's most productive scoring period. The first (1–10 minutes) and second (11–20 minutes) intervals produced similar numbers of goals, while the third interval (21–30 minutes) recorded the lowest goal frequency. Despite slight differences among the four periods, goals were distributed across all stages of the match, suggesting that Rafhely FC maintained attacking activity throughout regulation time. The relatively higher scoring frequency during the final phase indicates that the team continued to generate offensive opportunities until the end of the match. Overall, the temporal distribution demonstrates that offensive productivity was relatively balanced, with a slight increase during the closing minutes of play.

Goal-Scoring Time Distribution

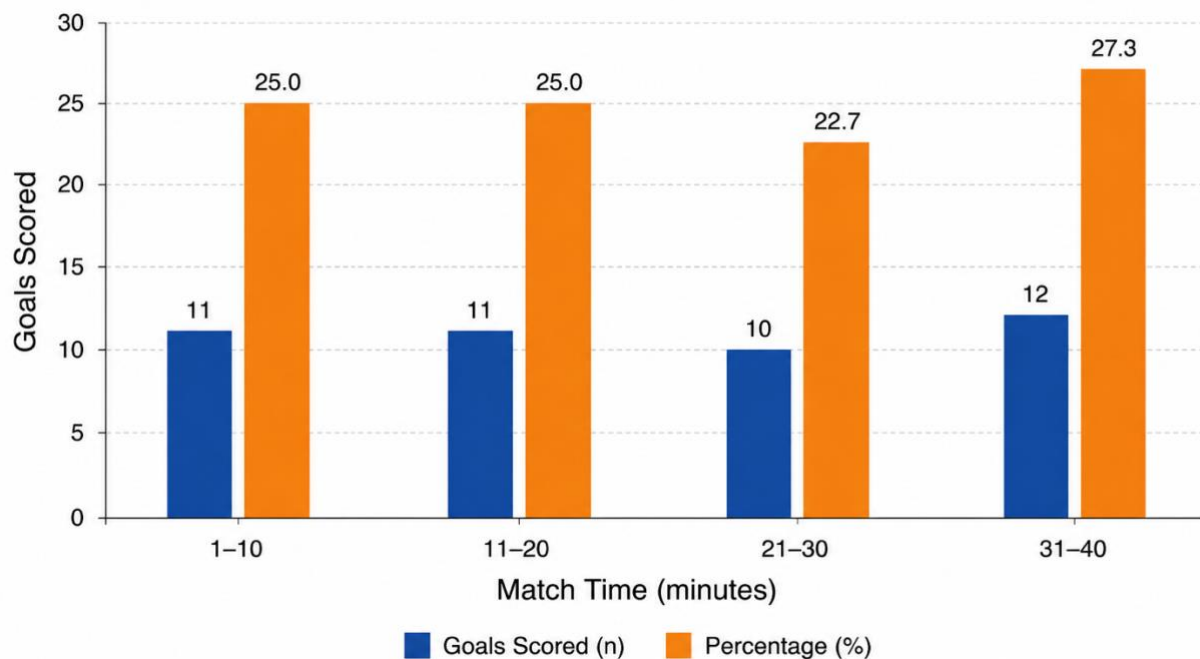


Figure 3. Distribution of Goals Scored by Match Time during the 2024–2025 Indonesian Pro Futsal League Season.

Goals Scored by Dominant Foot

Figure 4 presents the distribution of goals based on the dominant foot used for finishing. The results indicate that the majority of goals were scored using the right foot, while a smaller proportion resulted from left-foot finishes. This distribution demonstrates a clear dominance of right-foot finishing throughout the competition season. The difference between the two categories suggests that most attacking situations were completed using players' preferred kicking foot. Nevertheless, goals scored with the left foot also contributed to the team's overall offensive output, indicating the presence of bilateral finishing ability within the squad. The distribution provides an overview of the technical characteristics of Rafhely FC's finishing performance during competitive matches. Overall, right-foot finishing represented the primary goal-scoring technique employed by the team during the season.

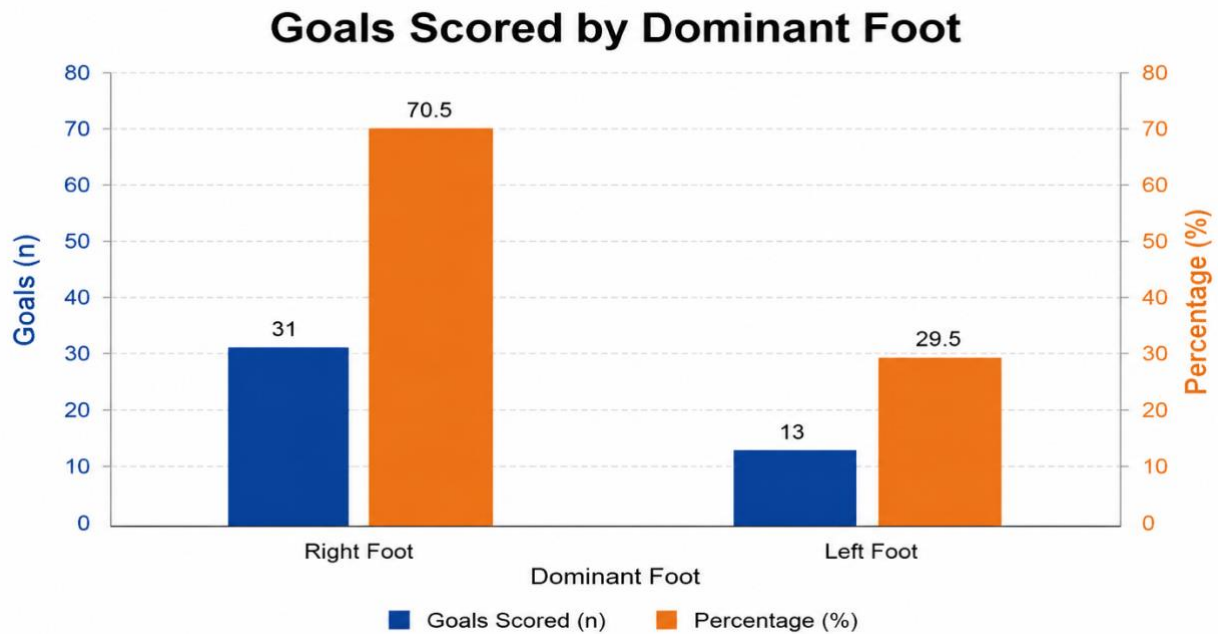


Figure 4. Distribution of Goals Scored by Dominant Foot during the 2024–2025 Indonesian Pro Futsal League Season.

Goals Conceded by Match

Figure 5 summarizes the number of goals conceded by Rafhely FC across all league matches. The results show that the team conceded goals in every match throughout the competition season. The number of goals conceded varied considerably between matches, indicating fluctuations in defensive performance. Several matches recorded relatively high concession totals, while others showed fewer goals conceded. Despite these variations, the overall pattern suggests that the defensive line experienced continuous pressure from opposing teams throughout the league campaign. The repeated occurrence of conceded goals across multiple matches indicates that defensive consistency remained difficult to maintain during the season. These findings provide a quantitative overview of Rafhely FC's defensive performance across all official league fixtures.

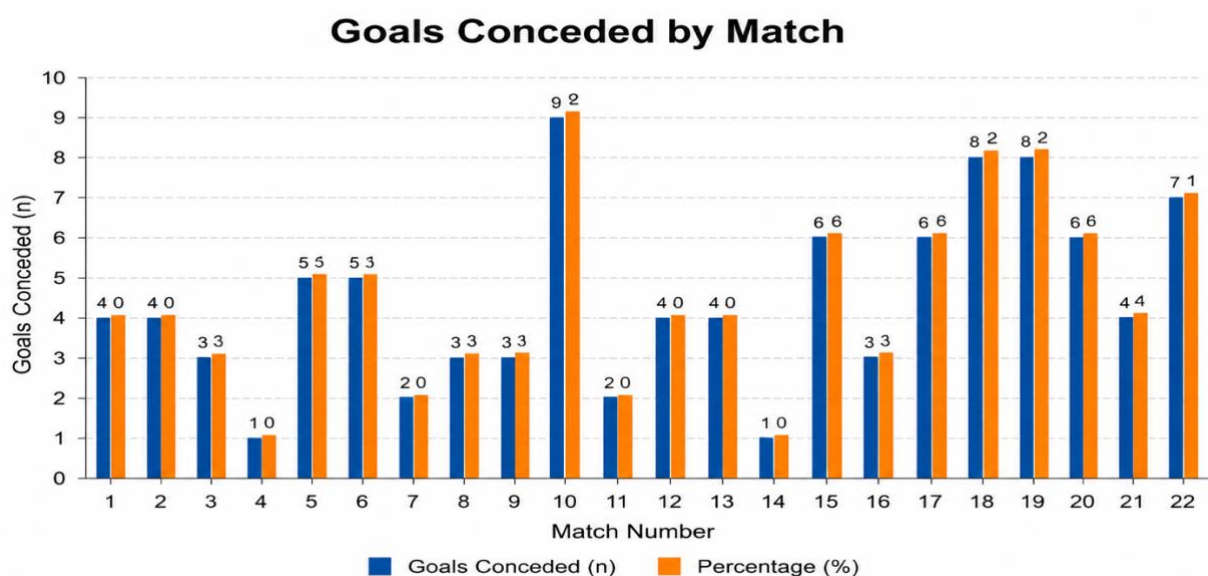


Figure 5. Goals Conceded by Rafhely FC in Each Match during the 2024–2025 Indonesian Pro Futsal League Season.

Shots on Target

Figure 6 presents the distribution of shots on target recorded by Raffhelly FC during the 22 league matches. The number of shots on target varied substantially across the season, reflecting differences in attacking opportunities created during each match. Some matches produced a relatively high number of accurate attempts, whereas others generated only a limited number of shots on target. The variation observed across matches indicates that offensive effectiveness fluctuated throughout the competition. Although the team consistently created scoring opportunities, the frequency of accurate shots differed according to match conditions. The distribution of shots on target provides an objective description of Raffhelly FC's attacking activity throughout the league season. Overall, the findings indicate that offensive production was not uniform across all matches.

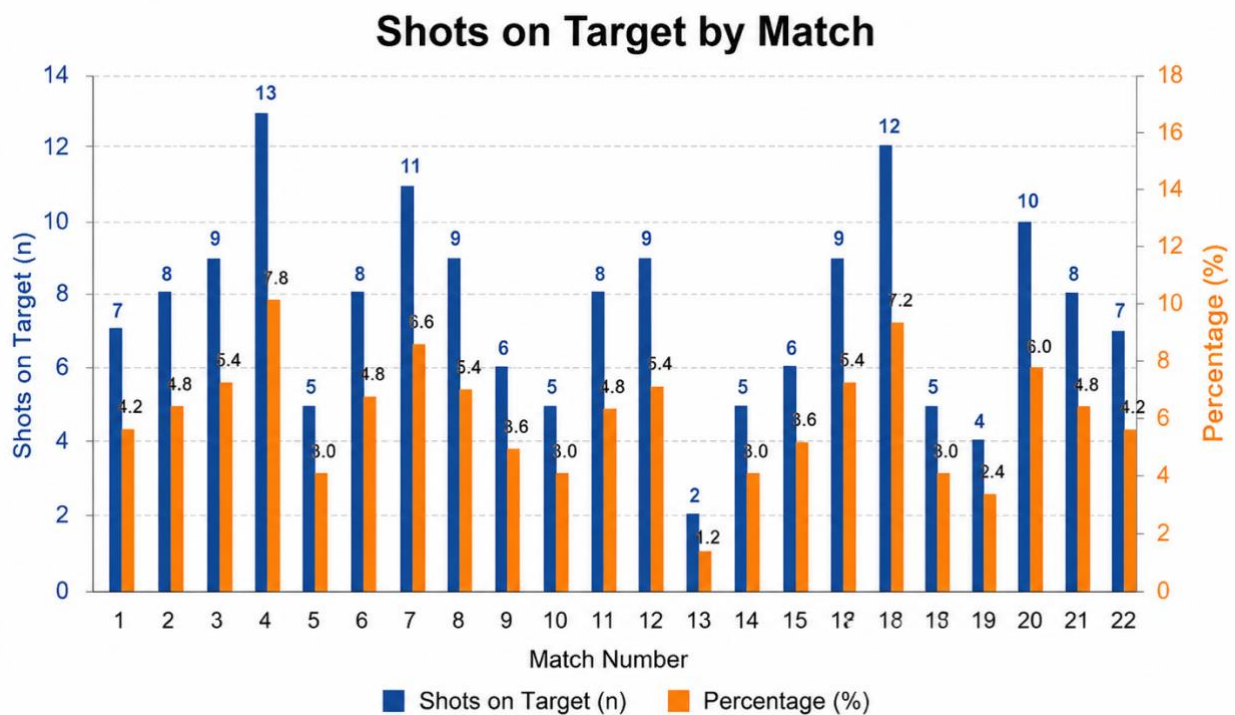


Figure 6. Shots on Target Recorded by Raffhelly FC in Each Match during the 2024–2025 Indonesian Pro Futsal League Season.

Match Outcomes

The overall competitive performance of Raffhelly FC is summarized in Figure 7 through the distribution of wins, draws, and losses recorded during the 2024–2025 Indonesian Pro Futsal League season. The results show that the team achieved four victories, two draws, and sixteen defeats across the 22 league matches. Consequently, losses accounted for the largest proportion of the team's competitive outcomes during the season. The number of victories was considerably lower than the number of defeats, while drawn matches occurred relatively infrequently. This distribution indicates that Raffhelly FC encountered substantial competitive challenges during its inaugural season in the professional league. The overall match outcome profile provides a concise summary of the team's season-long competitive performance. These findings serve as a descriptive overview of Raffhelly FC's results and complement the technical performance indicators presented in the preceding analyses.

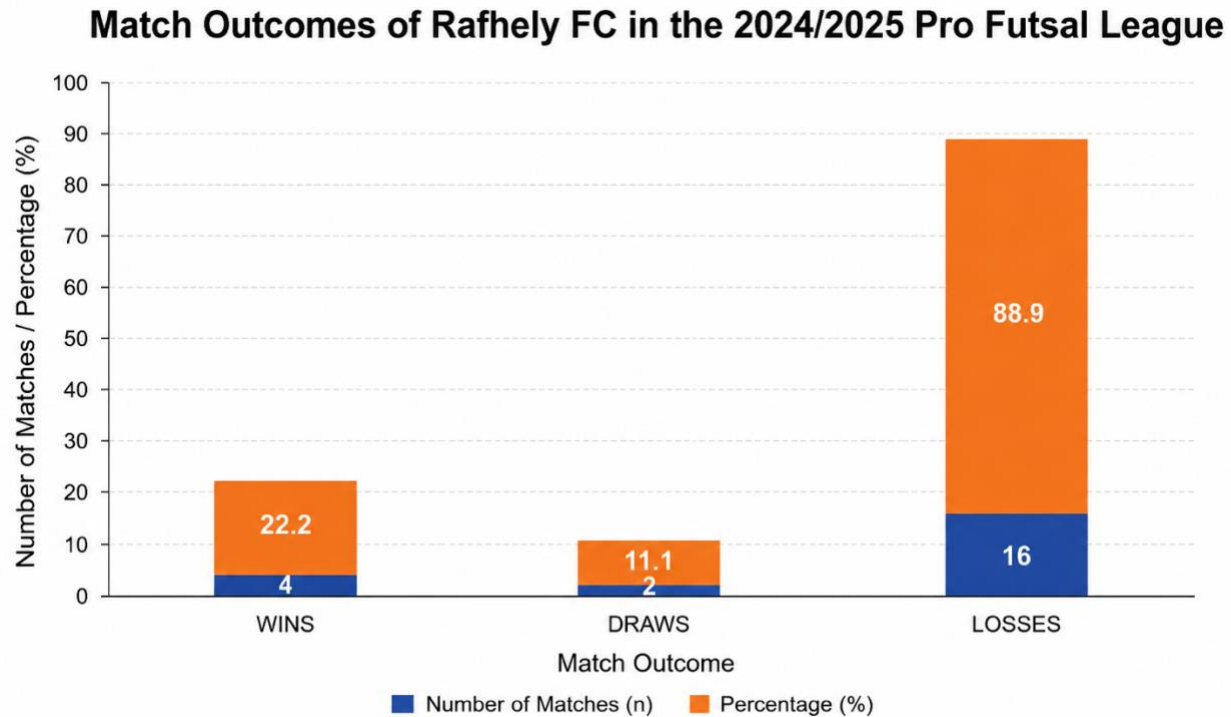


Figure 7. Distribution of Match Outcomes Achieved by Rafhely FC during the 2024–2025 Indonesian Pro Futsal League Season.

Discussion

The analysis of goals scored in each match demonstrates that Rafhely FC experienced considerable fluctuations in offensive performance throughout the 2024–2025 Pro Futsal League season. The variation in the number of goals scored indicates that the team's attacking effectiveness was not maintained consistently from one match to another. Several matches showed relatively high offensive productivity, suggesting that the team was capable of creating and converting scoring opportunities under favourable competitive conditions. Conversely, several matches ended without goals, indicating that offensive opportunities were either limited or not converted efficiently into successful finishes. These findings suggest that the team's offensive performance was influenced by its ability to maintain consistency in attacking execution rather than by isolated moments of successful finishing (Lord et al., 2020; Stafylidis et al., 2025). The variation in goal production also reflects differences in match dynamics encountered throughout the season, where the level of offensive effectiveness changed according to competitive circumstances. Such fluctuations indicate that Rafhely FC possessed the potential to perform effectively in attack but struggled to sustain that level of performance over consecutive matches. Maintaining offensive consistency throughout an entire league season is an important characteristic of successful professional teams because it reduces dependence on isolated high-scoring performances. Therefore, the inconsistency observed in goal production may have contributed to the team's unstable competitive performance during the season. Overall, the findings emphasize that improving the consistency of attacking efficiency should become one of the primary priorities for future performance development.

The distribution of goals across different match intervals demonstrates that Rafhely FC remained capable of producing offensive opportunities throughout the entire duration of the match. Although goals were scored during every time interval, the final ten minutes represented the most productive scoring period. This pattern suggests that the team's attacking performance remained active until the closing stages of competition rather than declining toward the end of matches. The relatively balanced distribution of goals also indicates that Rafhely FC did not rely exclusively on

early or late offensive pressure but attempted to maintain attacking activity throughout regulation time. The increased productivity during the final period may reflect greater attacking intensity as the match approached its conclusion. It may also indicate that players became more willing to take offensive risks when pursuing favourable match outcomes. At the same time, the relatively small differences between time intervals suggest that the team's scoring opportunities were distributed fairly evenly across the match (Dick et al., 2021; Wunderlich et al., 2021). This balanced temporal distribution demonstrates that offensive production was not concentrated within a single phase of play. Nevertheless, increasing attacking effectiveness during the middle stages of matches may provide additional opportunities to improve overall scoring productivity. Consequently, optimizing offensive performance across every phase of competition may contribute to greater consistency in future matches.

The analysis of goal distribution according to the dominant foot reveals that right-foot finishing was the primary source of Rafhely FC's offensive productivity throughout the season. Most goals were scored using the right foot, indicating that players predominantly relied on their dominant side when completing attacking actions. This finding reflects the technical characteristics of the team's finishing performance during official competition. Although right-foot finishing accounted for the majority of goals, the contribution of left-foot finishes demonstrates that several players also possessed the ability to score using their non-dominant foot (Palucci Vieira et al., 2021; Wilson, Sandes de Souza, et al., 2020; Wilson, Smith, et al., 2020). Such bilateral contribution increases offensive variation and reduces predictability during attacking situations. However, the considerable difference between right-foot and left-foot goals suggests that attacking patterns remained largely dependent on one dominant finishing technique. A greater balance between right-foot and left-foot finishing could potentially increase offensive flexibility and improve the team's ability to exploit different scoring situations. Developing technical proficiency with both feet may also reduce defensive predictability by allowing players to finish effectively from a wider range of positions and angles. Expanding bilateral finishing ability therefore represents an important aspect of technical development for future competitions. Overall, the distribution of goals according to the dominant foot demonstrates that Rafhely FC's attacking performance was characterized by a strong reliance on right-foot finishing.

The findings related to goals conceded and shots on target provide complementary information regarding Rafhely FC's overall technical performance throughout the competition season. The consistently high number of goals conceded indicates that maintaining defensive stability remained one of the team's principal challenges. Defensive vulnerability was evident across multiple matches, suggesting that the team experienced difficulty limiting opponents' scoring opportunities. At the same time, the number of shots on target demonstrates that Rafhely FC was capable of creating offensive chances during many matches. However, variation in the number of accurate shots indicates that offensive production also fluctuated considerably throughout the season. The coexistence of relatively high attacking activity and substantial defensive vulnerability suggests that improvements are required at both ends of the court. Creating numerous scoring opportunities alone is insufficient if defensive performance allows opponents to maintain comparable or greater offensive effectiveness. Similarly, reducing goals conceded without improving offensive productivity may also limit competitive success (Brecht & Flepp, 2020; He et al., 2023; Prieto-González et al., 2025; Zaytseva & Shaposhnikov, 2023). Therefore, offensive efficiency and defensive organization should be viewed as complementary components of overall team performance rather than as independent technical aspects. The combined findings indicate that achieving a better balance between attacking effectiveness and defensive stability will be essential for improving Rafhely FC's future competitive performance.

The distribution of match outcomes provides a comprehensive summary of Rafhely FC's competitive performance during the 2024–2025 Pro Futsal League season. Winning only four of twenty-two matches demonstrates that the team encountered substantial challenges in maintaining competitive consistency throughout the league campaign. The relatively small number of drawn matches further indicates that most fixtures ended with a decisive result rather than balanced competition. The predominance of defeats suggests that the team's technical performance was not consistently sufficient to achieve favourable outcomes against professional opponents. These results correspond with the fluctuations observed in offensive productivity, defensive performance, and shooting effectiveness throughout the season (González-Rodenas et al., 2023; Mišák, 2026; Turner & Franks, 2021). The combination of inconsistent goal scoring and frequent goals conceded appears to have contributed directly to the team's overall competitive record. Although Rafhely FC demonstrated periods of effective performance during several matches, these positive performances were not sustained consistently across the entire season. The findings therefore indicate that future performance improvement should focus on maintaining technical consistency rather than relying on isolated successful matches. Strengthening offensive efficiency while simultaneously improving defensive organization may increase the team's ability to convert competitive performances into positive match outcomes. Overall, the match outcome analysis confirms that Rafhely FC requires comprehensive technical and tactical development to achieve greater competitive stability in future professional league seasons.

Implications

The findings of this study provide important theoretical and practical implications for the development of performance analysis in professional futsal. From a theoretical perspective, the study enriches the existing body of knowledge by demonstrating that comprehensive technical performance evaluation should integrate multiple objective indicators rather than relying on a single performance variable to assess team effectiveness. The combination of goals scored, goal-scoring time, dominant foot usage, goals conceded, shots on target, and match outcomes provides a more holistic understanding of competitive performance throughout an entire league season. This multidimensional approach contributes to a broader conceptual framework for evaluating the performance characteristics of newly promoted professional futsal teams under real competitive conditions. From a practical perspective, the findings provide evidence-based information that can support coaches in designing more targeted training programmes based on the team's identified technical strengths and weaknesses. The observed inconsistency in offensive productivity suggests the need to improve finishing efficiency and maintain attacking effectiveness across consecutive matches. Likewise, the relatively high number of goals conceded indicates that strengthening defensive organization, communication, and collective defensive coordination should become a major priority in future training programmes. The dominance of right-foot finishing further highlights the importance of developing bilateral technical proficiency to increase offensive flexibility and reduce tactical predictability during competitive matches. In addition, the temporal distribution of goals suggests that maintaining offensive intensity throughout all phases of the game may further enhance scoring opportunities and overall match performance. The integration of objective match statistics into routine performance evaluation can also assist coaching staff in monitoring player development, identifying recurring performance patterns, and making more informed tactical decisions throughout the competition season. Furthermore, these findings may serve as a practical reference for club management when planning player recruitment, technical development, and long-term performance improvement strategies based on empirical evidence rather than subjective assessment. Overall, this study demonstrates that systematic technical

performance analysis provides a valuable foundation for evidence-based coaching, strategic decision-making, and sustainable competitive development in professional futsal.

Limitations and Suggestions for Future Research

This study has several limitations that should be considered when interpreting its findings and designing future investigations. First, the study focused exclusively on a single professional futsal team, Rafhely FC, during one competitive season, thereby limiting the generalizability of the findings to other clubs, leagues, or competitive contexts. Second, the analysis was restricted to descriptive technical performance indicators derived from official match statistics and did not incorporate physical, physiological, tactical, or psychological variables that may also influence competitive performance. Third, although objective match statistics provide valuable quantitative information, they cannot fully explain the contextual factors underlying fluctuations in team performance, such as tactical adjustments, opponent quality, player availability, or coaching decisions. Fourth, the study evaluated technical performance at the team level without examining individual player contributions, positional differences, or interaction patterns among players during matches. In addition, the descriptive research design does not permit causal inferences regarding the relationships between technical indicators and match outcomes. Future studies are therefore encouraged to include multiple professional clubs across different league seasons to enable broader comparative analyses and improve the external validity of the findings. Researchers should also integrate advanced performance variables, including tactical behaviour, physical workload, spatial analysis, and contextual match factors, to provide a more comprehensive understanding of team performance. The application of notational analysis, tracking systems, wearable technologies, and artificial intelligence-based performance analytics may further enhance the precision and depth of future investigations. Moreover, longitudinal studies examining performance development across several competitive seasons would provide valuable insights into the adaptation process of newly promoted professional futsal teams. Future research may also employ inferential statistical techniques or predictive modelling to identify the technical indicators that most strongly influence competitive success in professional futsal. Collectively, these improvements would contribute to a more comprehensive evidence base for performance evaluation and support the development of more effective, data-driven coaching strategies in elite futsal.

CONCLUSION

This study demonstrates that Rafhely FC's performance during the 2024–2025 Pro Futsal League season was characterized by inconsistency in both offensive and defensive aspects. Although the team showed its highest goal-scoring productivity during the final ten minutes of matches (minutes 31–40) and relied predominantly on right-foot finishing, the conversion of shots on target into goals remained relatively inefficient. Defensively, the high number of goals conceded throughout the season reflected weaknesses in defensive organization and overall team stability. These performance characteristics contributed to an overall record of four wins, two draws, and sixteen losses, resulting in a loss percentage of 72.73%. Therefore, Rafhely FC requires comprehensive technical and tactical improvements, particularly in finishing efficiency, defensive coordination, and performance consistency across matches. Overall, the findings highlight the importance of systematic technical performance analysis as an evidence-based foundation for coaching decisions and long-term performance improvement in professional futsal.

AUTHOR CONTRIBUTIONS STATEMENT

Muhammad Alief contributed to the conceptualization of the study, research design, data collection, match observation, data curation, formal analysis, interpretation of the findings, visualization, and preparation of the original manuscript draft. Masrun contributed to the research methodology, supervision of the study, validation of the analytical framework, interpretation of the results, and critical revision of the manuscript. Ardo Okilanda contributed to the development of the research framework, supervision of the research process, data interpretation, and manuscript review and editing. Vega Soniawan contributed to the validation of the technical performance analysis, interpretation of the findings from a sports coaching perspective, and critical revision of the manuscript. Bram Sujadesman contributed to data verification, methodological evaluation, supervision of the research implementation, and final review of the manuscript. All authors reviewed, approved, and agreed to the final version of the manuscript before submission.

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