

INSPIREE: INDONESIA SPORT INNOVATION REVIEW



ISSN 2746-6965 (Online), 2774-2520 (Print)

Journal Homepage: <https://inspiree.review/index.php/inspiree>

Original Research Articles

OPEN ACCESS

Goal-Scoring Patterns in Elite Asian Youth Football: Evidence from the AFC U-17 and U-20 Asian Cups 2025

 <https://doi.org/10.53905/inspiree.v7i02.175>

Wisnu Arda Gutawa^{*1abcde}, Gigih Siantoro^{1abcde}, Achmad Widodo^{1abc}, Imantara Subagio^{1ade}, Himawan Wismanadi^{1abe}, Heri Wahyudi^{1abe}

¹State University of Surabaya, Indonesia.

ABSTRACT

The purpose of the study. This study aimed to analyze the contribution of set plays and open play to goal-scoring outcomes in elite Asian youth football by examining goal-scoring patterns in the AFC U-17 Asian Cup 2025 and AFC U-20 Asian Cup 2025, with particular attention to differences across age categories within the AFC youth competition context.

Materials and methods. A descriptive observational research design was employed using systematic notational analysis. All goals scored in the AFC U-17 Asian Cup 2025 (n = 101) and the AFC U-20 Asian Cup 2025 (n = 93), resulting in a total of 194 goals, were included in the analysis. Each goal was classified based on the phase of play preceding the scoring action (open play or set play) and further categorized according to the final attacking action leading to the goal. Data were analyzed using descriptive statistics, including frequencies and percentages, to identify dominant goal-scoring patterns across tournaments and age groups.

Results. The findings indicated that open play was the primary source of goals, accounting for 73.71% of total goals scored across both tournaments, while set plays contributed 26.29%. In the AFC U-17 Asian Cup 2025, penalties constituted the highest proportion of set-play goals, whereas in the AFC U-20 Asian Cup, corner kicks were the most frequent set-play source. Analysis of open-play goals revealed that crosses and forward passes were the most common attacking actions leading to goals in both tournaments. A more balanced distribution of attacking actions was observed at the U-20 level, suggesting greater tactical variability compared to the U-17 competition.

Conclusions. Open play represents the dominant mechanism of goal production in elite Asian youth football. Nevertheless, set plays remain a significant contributor to goal scoring, particularly at the U-17 level. The observed differences between age categories highlight age-related variations in tactical execution and goal-scoring patterns within AFC youth competitions, underscoring the importance of age-specific training and tactical preparation.

Keywords: goal-scoring patterns; open play; set plays; youth football; AFC competitions.

ARTICLE INFO

EDITED BY

Assoc. Prof. Dr. Zulkifli, M.Pd
Universitas Islam Riau, Indonesia.

Dr. Joel Paul

University of Trinidad and Tobago,
Trinidad and Tobago.

ARTICLE HISTORY

Received : January 17, 2026

Accepted : March 14, 2026.

Published: May 27, 2026.

CITATION

Gutawa, W. A., Siantoro, G., Widodo, A., Subagio, I., Wismanadi, H., & Wahyudi, H. (2025). Goal-Scoring Patterns in Elite Asian Youth Football: Evidence from the AFC U-17 and U-20 Asian Cups 2025. *INSPIREE: Indonesian Sport Innovation Review*, 7(02), 136-143. <https://doi.org/10.53905/inspiree.v7i02.175>

INTRODUCTION

Goal scoring represents the ultimate indicator of success in football performance analysis, as it directly determines match outcomes and competitive superiority (Santos & Lago-Peñas, 2019). Regardless of the playing level, teams that consistently create and convert scoring opportunities are more likely to achieve positive results (Souza et al., 2019). In elite youth football, this understanding is particularly crucial, as players at this stage are undergoing intensive technical, tactical, and cognitive development that shapes their future performance at senior levels (Battaglia & Kerr, 2024). Elite AFC Asian youth tournaments provide a valuable context for examining goal-scoring behavior, as they feature highly trained young players competing under intense physical and psychological pressure. Matches in these tournaments often involve balanced opposition, making goal-scoring efficiency and tactical effectiveness critical determinants of success (Gómez et al., 2015). This gap in the literature is particularly notable given the rapid development of youth football systems under the governance of the Asian Football Confederation. In recent years, AFC youth competitions have become increasingly competitive, reflecting improvements in coaching education, talent identification, and player

^{abcde}Authors'Contribution: a-Study design; b-Data collection; c-Statistical analysis; d-Manuscript preparation; e-Funds collection.

Corresponding Author: Wisnu Arda Gutawa, e-mail: Wisnu.22005@mhs.unesa.ac.id



© 2026 The Author. This article is licensed CC BY SA 4.0.

visit [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

development pathways across the continent.

Critical examination of existing literature

The analysis of goal-scoring patterns provides valuable information for coaches, analysts, and talent developers by revealing the underlying mechanisms that lead to successful attacking outcomes (Sarmiento et al., 2014). Identifying the most effective attacking actions allows practitioners to design evidence-based training programs and tactical strategies aligned with the demands of competition (Craven et al., 2025). Moreover, goal-scoring analysis at the youth level can contribute to long-term athlete development by highlighting tactical behaviors and decision-making processes that should be emphasized during formative stages of player education (González-Ródenas et al., 2022). In contemporary football research, goals are commonly classified according to the phase of play preceding the scoring action, most notably set plays and open play (Kim et al., 2019). Set plays consist of structured and pre-planned situations such as corner kicks, free kicks, penalties, and throw-ins, during which teams have the opportunity to organize attacking movements in a controlled environment. These situations often involve rehearsed tactical patterns aimed at exploiting spatial advantages or mismatches in defensive organization (Almeida et al., 2019). In contrast, open play refers to goals scored during the continuous flow of the game, characterized by dynamic interactions between players, rapid decision-making, positional rotations, and spontaneous technical actions such as passing, dribbling, and shooting (Coutinho et al., 2023). Each phase of play reflects distinct tactical and technical demands and places different constraints on players' perceptual and cognitive processes. Set plays emphasize organization, timing, and execution under relatively predictable conditions, whereas open play requires adaptability, creativity, and the ability to exploit emerging spaces under defensive pressure (Boylan & Turner, 2017). As a result, the relative contribution of set plays and open play to goal outcomes may vary depending on competition level, tactical culture, and developmental stage of the players involved (Tousios et al., 2018). Previous research conducted in senior elite football has consistently shown that the majority of goals are scored from open play, while set plays contribute a smaller proportion but often play a decisive role in closely contested matches (Kubayi, 2020; Wright et al., 2014). Studies have highlighted the strategic importance of set plays, particularly in tournaments where match outcomes are frequently determined by marginal differences (Almeida et al., 2019).

Identification of research gaps

Despite this growing body of literature primarily focused on senior elite football, empirical evidence examining elite youth football competitions remains comparatively limited, especially within the Asian football context (Andersen et al., 2024; Goto & Saward, 2019). While numerous studies have analyzed goal-scoring patterns in high-profile events such as FIFA World Cups, UEFA Champions League, and European national leagues—highlighting differences between open play and set plays across various competitions (Li & Zhao, 2021)—far fewer investigations target youth-level tournaments, particularly those governed by the Asian Football Confederation. This oversight is notable given the rapid evolution of youth football systems in Asia, including advancements in coaching, talent identification, and player pathways, which have elevated the competitiveness of AFC U-17 and U-20 Asian Cups. Moreover, existing youth-focused research often emphasizes European or global FIFA events, neglecting region-specific tactical nuances, cultural influences on play styles, and age-related developmental differences prevalent in Asian competitions (Ribeiro et al., 2022; Sarmiento et al., 2015). Bridging this gap is crucial, as it would enable coaches and analysts to develop targeted strategies that account for the unique physical, tactical, and psychological demands of elite Asian youth football, ultimately enhancing long-term player development.

Rationale for the research

Analyzing how goals are generated in this context can offer important insights into the attacking tendencies and developmental characteristics of elite youth football in Asia. By providing a detailed analysis of goal-scoring patterns, this research seeks to contribute to the existing literature on football performance analysis and to offer practical implications for coaches, analysts, and youth development programs operating within the AFC context.

Objectives

The purpose of this study is to examine the contribution of set plays and open play to goal outcomes in elite AFC Asian youth football. Specifically, this study aims to identify the most frequent goal-scoring actions within each phase of play and to compare the relative proportion of goals scored from set plays and open play.

MATERIALS AND METHODS

Participants

The unit of analysis was goal-scoring events rather than individual players. The sample included all goals scored in two elite Asian Football Confederation (AFC) youth tournaments: the AFC U-20 and the AFC U-17 Asian Cup 2025. A total of 194 goals were analyzed (U-20: $n = 93$; U-17: $n = 101$). No exclusion criteria were applied, and all goals recorded in the official competitions were included, representing a complete census of goal-scoring events. A total population sampling approach was used, whereby all goals from the selected tournaments were analyzed to ensure comprehensive representation and minimize sampling bias. Data were obtained from officially released AFC match reports and competition statistics available through public AFC platforms. As the study relied exclusively on secondary data, no participant recruitment, consent, or compensation procedures were required.

Study Organization

A descriptive observational design using systematic notational analysis was employed. Descriptive statistics (frequencies and percentages) were calculated for each goal-scoring category and presented in tabular form to compare contributions from set plays and open play across the U-17 and U-20 tournaments. No inferential statistical analyses were conducted. The study utilized official AFC match reports, match summaries, and competition statistics as primary data sources.



Test Procedures and Measurement Protocol

Each goal was classified according to the phase of play immediately preceding the scoring action as either set play or open play. Set plays included goals from corner kicks, free kicks, penalties (including rebounds), and throw-ins. Open play goals were further categorized based on the final intentional attacking action, such as combination play, crosses, cut-back passes, dribbling actions, long-range shots, penetrating or aerial passes, defensive errors, and own goals. Only the final attacking action prior to the goal was coded to avoid overlap.

Table 1. Presents the operational definitions used to classify open-play attacking actions preceding goal-scoring events.

Action	Guidelines
Combinations	Combination moves involving 2/3/4 players
Crosses	Crosses from the wing
Cut-backs	Backward passes from the goal-line
Diagonals	Diagonal passes into the penalty box
Dribbling	Dribbling and finishing or providing an assist
Long-range shooting	Shots from outside the penalty box including rebounds
Forward passes	Penetrating or aerial passes
Defensive errors	Exploiting mistakes by goalkeeper or defenders
Own goals	Players scoring against their own team

In contrast, and Table 2 outlines the operational definitions applied to set-play attacking actions, providing a clear distinction between goals originating from continuous play and those resulting from structured restart situations.

Table 2. Operational definitions set play attacking actions

Action	Guidelines
Corners	Directly / indirectly from a corner
Free kicks (direct)	Direct from a free kick
Free kicks (indirect)	Indirectly from a free kick
Penalties	Spot kicks, including rebounds
Throw-ins	Following a throw-in

Ambiguous cases were resolved by cross-referencing official AFC match descriptions. As the study involved no direct human participation, ethical approval and informed consent were not required.

Statistical Analysis.

The study utilized official AFC match reports, match summaries, and competition statistics as primary data sources. A standardized notational analysis framework, developed based on previous goal-scoring research, was used to classify goals according to phase of play and final attacking actions. Data coding and tabulation were conducted using spreadsheet software.

Ethical Considerations

This study was conducted using exclusively secondary data sourced from publicly available official AFC match reports, match summaries, and competition statistics. No primary data collection involving human participants took place, and the unit of analysis was aggregate goal-scoring events rather than individual players. Therefore, no ethical approval from an institutional review board, informed consent, or participant recruitment procedures were required. All data handling adhered to standards of academic integrity, ensuring transparency and accuracy in classification and reporting.

RESULTS

A total of 194 goals were recorded and analyzed across two elite Asian Football Confederation (AFC) youth tournaments, consisting of 93 goals from the AFC U-20 Asian Cup and 101 goals from the AFC U-17 Asian Cup. Goals were classified according to their phase of play, namely set plays and open play, and further categorized based on the final attacking action leading directly to the goal. Across both competitions, goals originating from open play constituted the majority of goal outcomes, accounting for 143 goals (73.71%), while 51 goals (26.29%) resulted from set-play situations. This distribution indicates a consistent dominance of open play as the primary source of goals in elite Asian youth football.

Table 3. Overall distribution of goals by phase of play (AFC U-17 Asian Cup and AFC U-20 Asian Cup combined)

Phase of Play	Goals	Percentage (%)
Set Play	51	26.29
Open Play	143	73.71
Total	194	100

Table 3 shows that, across the AFC U-17 Asian Cup and AFC U-20 Asian Cup, the majority of goals were scored from open play, accounting for 143 goals (73.71%), while 51 goals (26.29%) originated from set-play situations. This distribution indicates that open play accounted for a higher proportion of goals than set plays when both tournaments are combined.



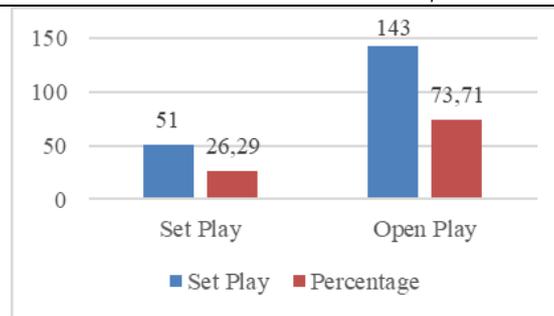


Figure 1. Graphic distribution of goals by phase of play

Table 4. Distribution of goals by set play (AFC U-17 Asian Cup)

Phase of Play	Goals	Percentage (%)
Corner kicks	8	26.7
Free kicks (direct)	4	13.3
Free kicks (indirect)	1	3.3
Penalties	16	53.3
Throw-ins	1	3.3
Total	30	100

Table 4 indicates that, in the AFC U-17 Asian Cup, penalties represented the largest share of set-play goals, with 16 goals (53.3%). Corner kicks accounted for 8 goals (26.7%), while direct free kicks (4 goals; 13.3%), indirect free kicks (1 goal; 3.3%), and throw-ins (1 goal; 3.3%) contributed smaller proportions of set-play goals.

Table 5. Distribution of open-play goals in the AFC U-17 Asian Cup

Open Play Action	Goals	Percentage (%)
Crosses	25	35.21
Forward passes	14	19.72
Cut-backs	8	11.27
Dribbling	8	11.27
Long-range shots	6	8.45
Diagonal passes	5	7.04
Defensive errors	4	5.63
Combination play	1	1.41
Own goals	0	0
Total	71	100

As shown in Table 5, crosses were the most frequent open-play action leading to goals in the AFC U-17 Asian Cup, accounting for 25 goals (35.21%). Forward passes contributed 14 goals (19.72%), followed by cut-back passes and dribbling actions, each with 8 goals (11.27%). Long-range shots (6 goals; 8.45%), diagonal passes (5 goals; 7.04%), defensive errors (4 goals; 5.63%), and combination play (1 goal; 1.41%) accounted for smaller proportions, while no own goals were recorded.

Table 6. Distribution of goals by set play (AFC U-20 Asian Cup)

Phase of Play	Goals	Percentage (%)
Corner kicks	10	47.62
Free kicks (direct)	2	9.52
Free kicks (indirect)	3	14.29
Penalties	5	23.81
Throw-ins	1	4.76
Total	21	100

Table 6 shows that, in the AFC U-20 Asian Cup, corner kicks were the most frequent source of set-play goals, accounting for 10 goals (47.62%). Penalties contributed 5 goals (23.81%), followed by indirect free kicks with 3 goals (14.29%) and direct free kicks with 2 goals (9.52%). Throw-ins accounted for 1 goal (4.76%).

Table 7. Distribution of open play goals in the AFC U-20 Asian Cup

Open Play Action	Goals	Percentage (%)
Crosses	21	29.17
Forward passes	20	27.78
Cut-backs	12	16.67
Dribbling	8	11.11
Long-range shots	5	6.94
Diagonal passes	2	2.78
Defensive errors	2	2.78
Combination play	1	1.39
Own goals	1	1.39
Total	72	100



Table 7 indicates that open-play goals in the AFC U-20 Asian Cup were distributed across several attacking actions. Crosses accounted for 21 goals (29.17%), while forward passes contributed 20 goals (27.78%). Cut-back passes resulted in 12 goals (16.67%), followed by dribbling actions with 8 goals (11.11%) and long-range shots with 5 goals (6.94%). Diagonal passes and defensive errors each accounted for 2 goals (2.78%), while combination play and own goals each contributed 1 goal (1.39%).

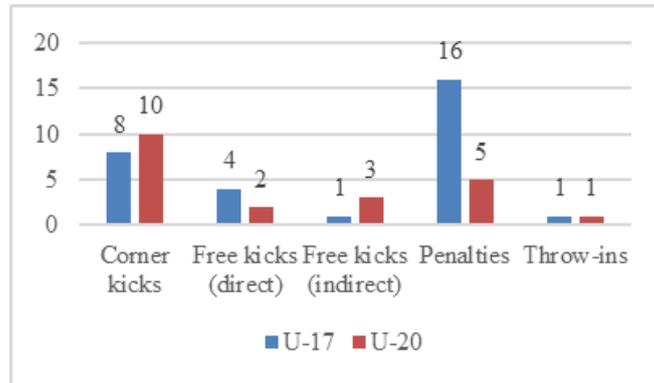


Figure 2. Graphic distribution of goals by set play

Figure 2 presents the distribution of goals scored from set-play situations in the AFC U-17 Asian Cup and AFC U-20 Asian Cup. In the U-17 competition, penalties accounted for the highest number of set-play goals (16 goals), followed by corner kicks (8 goals). Direct free kicks (4 goals), indirect free kicks (1 goal), and throw-ins (1 goal) contributed smaller numbers. In the U-20 competition, corner kicks represented the most frequent source of set-play goals (10 goals), followed by penalties (5 goals). Indirect free kicks accounted for 3 goals, direct free kicks for 2 goals, and throw-ins for 1 goal. Overall, the figure shows variation between the two age categories in the distribution of goals across different set-play types.

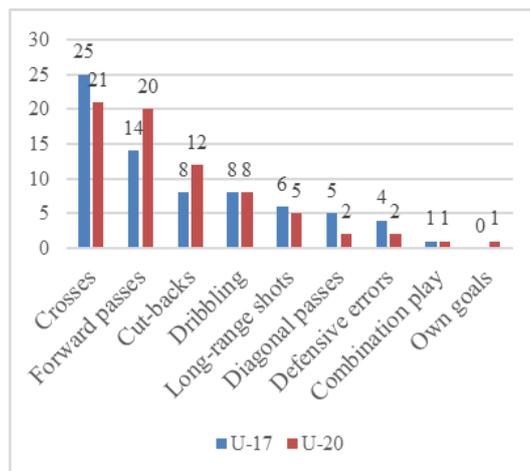


Figure 3. Graphic distribution of goals by open play

Figure 3 illustrates the distribution of goals scored from open-play actions in the AFC U-17 Asian Cup and AFC U-20 Asian Cup. In the U-17 competition, crosses accounted for the highest number of open-play goals (25 goals), followed by forward passes (14 goals). Cut-back passes and dribbling actions each resulted in 8 goals, while long-range shots contributed 6 goals. Diagonal passes accounted for 5 goals, defensive errors for 4 goals, and combination play for 1 goal. No own goals were recorded in the U-17 competition. In the U-20 competition, crosses also represented the most frequent open-play action leading to goals (21 goals), followed by forward passes (20 goals). Cut-back passes contributed 12 goals, dribbling actions and long-range shots each accounted for 8 goals, diagonal passes resulted in 2 goals, defensive errors in 2 goals, and both combination play and own goals contributed 1 goal each. The figure indicates differences in the frequency of open-play actions leading to goals between the two tournaments.

DISCUSSION

The present study examined the contribution of set plays and open play to goal outcomes in the AFC U-17 Asian Cup and AFC U-20 Asian Cup and identified clear distributional patterns across phases of play and age categories. Across both tournaments, goals originating from open play accounted for more than 70% of total goal outcomes, indicating that the majority of goals were produced during the continuous flow of play rather than from restart situations. A similar predominance of open-play goals has been reported in previous performance analysis studies conducted in senior elite football and youth tournaments, where open play consistently represents the primary source of goal scoring across competitions (Boluda et al., 2021; Gouveia et al., 2023; Wang & Qin, 2020).



Despite the dominance of open play, set plays contributed a considerable proportion of goals, particularly in the AFC U-17 Asian Cup, where nearly one third of goals originated from dead-ball situations. Comparable proportions of set-play goals have been documented in international tournaments, highlighting the quantitative relevance of restart situations even when open play remains the dominant phase (Gibson et al., 2021; Leite, 2020). The lower relative contribution of set-play goals observed in the AFC U-20 Asian Cup indicates variation in the distribution of goal-scoring phases across age categories within elite youth football (Kubayi, 2020; Valerio et al., 2025).

Differences were also evident in the types of set-play goals recorded between tournaments. In the AFC U-17 Asian Cup, penalties represented the largest proportion of set-play goals, whereas in the AFC U-20 Asian Cup, corner kicks accounted for the highest share. Previous research has shown that the distribution of set-play goal types can vary substantially depending on competition level and age group (Armatas et al., 2025), reinforcing the importance of examining restart situations separately rather than treating set plays as a homogeneous category (Leite, 2020).

In open play, goals in both tournaments were most frequently preceded by crosses and forward passes (Goh et al., 2022). Crosses have been consistently identified as a common precursor to goals in notational analyses of elite football, particularly in competitions where wide attacking play features prominently (Gouveia et al., 2023; Stafylidis et al., 2022). At the AFC U-17 level, crosses represented the most frequent open-play action leading to goals, while forward passes contributed a substantial but smaller proportion. In the AFC U-20 Asian Cup, open-play goals were more evenly distributed between crosses and forward passes, with cut-back passes also accounting for a higher proportion compared with the younger age group. Similar distributions of open-play actions have been reported in senior competitions, where goals often result from a combination of wide delivery and vertical penetration (Gouveia et al., 2023; Saward et al., 2018).

Long-range shots accounted for a moderate proportion of open-play goals in both tournaments, while goals resulting from combination play, defensive errors, and own goals occurred less frequently. Previous studies have likewise reported lower frequencies of goals originating from complex combination play compared with more direct attacking actions such as crosses and forward passes (Altarriba-Bartés et al., 2019; Stemberge, 2024). Overall, the observed distributions reflect variation in the frequency of attacking actions preceding goals across age categories, as captured through descriptive notational analysis.

These findings elucidate key ramifications for coaching and talent development in elite youth football. The dominance of open play emphasizes the need to cultivate fluid transitions, wide attacking proficiency, and decision-making under pressure. Age-specific differences suggest tailored training: U-17 programs should prioritize set-play routines, particularly penalties and corners, while U-20 development focuses on versatile open-play patterns like cut-backs and forward passes, mirroring senior-level tactical sophistication (Ju et al., 2025).

Several limitations should be acknowledged. The study employed a descriptive analytical approach and focused exclusively on the final attacking action preceding goals, consistent with previous notational analyses (Gouveia et al., 2023). Consequently, the analysis did not account for preceding possession sequences, defensive organization, or contextual match variables. In addition, the study was limited to two AFC youth tournaments, which may restrict the generalizability of the findings to other confederations or competitive environments. Future research incorporating inferential statistical approaches, contextual variables, and longitudinal designs would provide a more comprehensive understanding of goal-scoring patterns in youth football.

CONCLUSION

This study provides clear evidence that open play is the dominant source of goal production in elite Asian youth football, accounting for more than two-thirds of total goals in both AFC U-17 and U-20 competitions. These findings confirm that the tactical principles underpinning goal-scoring at senior elite level are already strongly established during the youth elite phase. While set plays contributed a smaller overall proportion, their impact was particularly pronounced at the U-17 level, where penalties emerged as a key determinant of goal outcomes. Distinct age-related differences in goal-scoring patterns indicate a progressive evolution of tactical behavior across developmental stages. U-17 teams showed greater reliance on set plays and wide attacking strategies, whereas U-20 teams demonstrated a more advanced use of forward passing actions and structured open-play attacks. This progression reflects increasing tactical sophistication, decision-making quality, and technical consistency as players approach senior-level competition. Collectively, these findings advance current understanding of goal-scoring dynamics in elite youth football and provide a robust empirical basis for age-specific coaching interventions and performance analysis frameworks within the Asian football context. The results underscore the necessity of prioritizing open-play development while systematically integrating set-play training within long-term player development models. Future research should build on this evidence by incorporating contextual and sequential analyses to further refine tactical understanding across youth football pathways.

ACKNOWLEDGMENTS

The authors express their sincere gratitude to the AFC for providing access to match footage and statistics, which were indispensable for the completion of this research.

CONFLICT OF INTEREST

The authors declare that they have no competing interests. DATA AVAILABILITY STATEMENT The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.



REFERENCES

- Almeida, J., Sarmiento, H., Kelly, S., & Travassos, B. (2019). Coach decision-making in Futsal: from preparation to competition. *International Journal of Performance Analysis in Sport*, 19(5), 711. <https://doi.org/10.1080/24748668.2019.1648717>
- Altarriba-Bartés, A., Calle, M., Susín, A., Gonçalves, B., Vives, M. T., Sampaio, J., & Peña, J. (2019). Analysis of the winning probability and the scoring actions in the American professional soccer championship. [Análisis de la probabilidad de ganar y de las acciones que conducen al gol en la liga americana de fútbol profesional]. *RICYDE Revista Internacional de Ciencias Del Deporte*, 16(59), 67. <https://doi.org/10.5232/ricyde2020.05906>
- Andersen, T. R., Malone, J. J., & Randers, M. B. (2024). Editorial: The youth elite football players. *Frontiers in Sports and Active Living*, 6. <https://doi.org/10.3389/fspor.2024.1399143>
- Armatas, V., Plakias, S., Drikos, S., & Mitrotasios, M. (2025). Tactical Indicators and Situational Variables Affecting Goal-Scoring Opportunities in the UEFA Youth League 2023–2024. *Applied Sciences*, 15(8), 4532. <https://doi.org/10.3390/app15084532>
- Battaglia, A., & Kerr, G. (2024). Youth athletes' perspectives on developmental influences of relationships in individual and team sports. *Cogent Social Sciences*, 10(1). <https://doi.org/10.1080/23311886.2024.2392023>
- Boluda, J. C., Sánchez-Sánchez, J., Viejo-Romero, D., Jiménez, L., Giménez, J., García-Unanue, J., & Felipe, J. L. (2021). Characterisation of Goal Scoring Patterns during Open Play Related to Zone Pitch Division and Number of Players Involved in the 2018 FIFA World Cup. *Sensors*, 21(16), 5601. <https://doi.org/10.3390/s21165601>
- Boylan, S. A., & Turner, K. A. (2017). Developing Organizational Adaptability for Complex Environment. *Journal of Leadership Education*, 16(2), 183. <https://doi.org/10.12806/v16/i2/t2>
- Coutinho, D., Kelly, A. L., Santos, S., Figueiredo, P., Pizarro, D., & Travassos, B. (2023). Exploring the Effects of Tasks with Different Decision-Making Levels on Ball Control, Passing Performance, and External Load in Youth Football. *Children*, 10(2), 220. <https://doi.org/10.3390/children10020220>
- Craven, L., Oxenham, P., & Ranaweera, J. (2025). Analysis of attacking styles and goal-scoring in the 2021/22 Women's Super League. *PLoS ONE*, 20(2). <https://doi.org/10.1371/journal.pone.0318929>
- Gibson, M., Emílio, P., Moreira, D., Rocha, E. M. F., Magalhães, L., De, H., MENDES, A. P. O., Torres, L. T., Carmo, D. B. P. do, Quirino, D., Conrado, E., Moreira, D., Moisés, E., & Rocha, F. (2021). *Journal of Physical Education and Sport*, 21(5). <https://doi.org/10.7752/jpes.2021.05348>
- Goh, A. M., Drinkwater, E. J., Harms, C., Scanlan, M., Newton, R. U., & Ma'ayah, F. (2022). Characteristics of goals scored in open play at the 2017 and 2018 Australian national cerebral palsy football championship. *International Journal of Sports Science & Coaching*, 18(3), 858. <https://doi.org/10.1177/17479541221095941>
- Gómez, M.-Á., Moral, J. E., & Lago-Peñas, C. (2015). Multivariate analysis of ball possessions effectiveness in elite futsal. *Journal of Sports Sciences*, 33(20), 2173. <https://doi.org/10.1080/02640414.2015.1075168>
- González-Ródenas, J., Pedrera, G., Dorado, V., Aranda-Malavés, R., Tudela-Desantes, A., & Matías-Cid, P. D. (2022). Effects of Age and Playing Tactics on the Individual Tactical Behavior in U10 and U12 Elite Spanish Soccer Players. *Sports*, 10(11), 185. <https://doi.org/10.3390/sports10110185>
- Goto, H., & Saward, C. (2019). The Running and Technical Performance of U13 to U18 Elite Japanese Soccer Players During Match Play. *The Journal of Strength and Conditioning Research*, 34(6), 1564. <https://doi.org/10.1519/jsc.0000000000003300>
- Gouveia, V., Duarte, J. P., Nóbrega, A. C. L. da, Sarmiento, H., Pimenta, E. M., Domingos, F., Antunes, R., Monteiro, D., Matos, R., Amaro, N., & Araújo, I. M. (2023). Notational Analysis on Goal Scoring and Comparison in Two of the Most Important Soccer Leagues: Spanish La Liga and English Premier League. *Applied Sciences*, 13(12), 6903. <https://doi.org/10.3390/app13126903>
- Ju, W., Morgans, R., Webb, J., Cost, R., & Oliva-Lozano, J. M. (2025). Comparative Analysis of U17, U20, and Senior Football Team Performances in the FIFA World Cup: From Youth to Senior Level. *International Journal of Sports Physiology and Performance*, 20(4), 549. <https://doi.org/10.1123/ijspp.2024-0343>
- Kim, J., James, N., Parmar, N., Ali, B., & Vučković, G. (2019). The Attacking Process in Football: A Taxonomy for Classifying How Teams Create Goal Scoring Opportunities Using a Case Study of Crystal Palace FC. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02202>
- Kubayi, A. (2020). Analysis of Goal Scoring Patterns in the 2018 FIFA World Cup. *Journal of Human Kinetics*, 71(1), 205. <https://doi.org/10.2478/hukin-2019-0084>
- Leite, W. (2020). The Importance of Set Plays in High Performance Football. *Спортске Науке и Здравље - АПЕИРОН*, 19(1). <https://doi.org/10.7251/ssh2001005w>
- Li, C., & Zhao, Y. (2021). Comparison of Goal Scoring Patterns in “The Big Five” European Football Leagues. *Frontiers in Psychology*, 11, 619304. <https://doi.org/10.3389/fpsyg.2020.619304>
- Ribeiro, J. N., Gonçalves, B., Illa, J., Couceiro, M. S., Sampaio, J., & Travassos, B. (2022). Exploring the effects of interchange rotations on high-intensity activities of elite futsal players. *International Journal of Sports Science & Coaching*, 18(6), 2044. <https://doi.org/10.1177/17479541221119659>
- Santos, P., & Lago-Peñas, C. (2019). Defensive positioning on the pitch in relation with situational variables of a professional football team during regaining possession. *Human Movement*, 20(2), 50. <https://doi.org/10.5114/hm.2019.81019>
- Sarmiento, H., Bradley, P. S., Anguera, M. T., Polido, T., Resende, R., & Campaniço, J. (2015). Quantifying the offensive sequences that result in goals in elite futsal matches. *Journal of Sports Sciences*, 34(7), 621. <https://doi.org/10.1080/02640414.2015.1066024>



- Sarmiento, H., Marcelino, R., Anguera, M. T., Campaniço, J., Matos, N., & Leitão, J. C. (2014). Match analysis in football: a systematic review. *Journal of Sports Sciences*, 32(20), 1831. <https://doi.org/10.1080/02640414.2014.898852>
- Saward, C., Morris, J. G., Nevill, M. E., & Sunderland, C. (2018). The effect of playing status, maturity status, and playing position on the development of match skills in elite youth football players aged 11–18 years: A mixed-longitudinal study. *European Journal of Sport Science*, 19(3), 315. <https://doi.org/10.1080/17461391.2018.1508502>
- Souza, D. B. de, Campo, R. L.-D., Blanco-Pita, H., Resta, R., & Coso, J. D. (2019). An Extensive Comparative Analysis of Successful and Unsuccessful Football Teams in LaLiga. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02566>
- Stafylidis, A., Michailidis, Y., Mandroukas, A., Gissis, I., & Metaxas, T. (2022). *Journal of Physical Education and Sport*, 22(1). <https://doi.org/10.7752/jpes.2022.01011>
- Stembridge, D. (2024). Physical training strategies for youngsters aged 6-7 years participating in football. *INSPIREE Indonesian Sport Innovation Review*, 5(2), 112. <https://doi.org/10.53905/inspiree.v5i02.116>
- Tousios, T., Michailidis, Y., Mandroukas, A., Mikikis, D., & Metaxas, T. (2018). Differences In Goal Scoring And Minutes Of Scoring Between Two European Championships, One Among 16 Teams (Euro 2012) And The Other Among 24 Teams (Euro 2016). *Facta Universitatis Series Physical Education and Sport*, 365. <https://doi.org/10.22190/fupes180820033t>
- Valerio, L., Yağın, F. H., & Plakias, S. (2025). Comparative Analysis of Pass Go and Traditional Drill Training Methods on Passing Accuracy Development in Youth Football Players Aged 12-15 Years: A Randomized Controlled Trial. *INSPIREE Indonesian Sport Innovation Review*, 6(2), 148. <https://doi.org/10.53905/inspiree.v6i02.152>
- Wang, S., & Qin, Y. (2020). *Journal of Physical Education and Sport*, 2020(6). <https://doi.org/10.7752/jpes.2020.s6418>
- Wright, C., Carling, C., & Collins, D. (2014). The wider context of performance analysis and its application in the football coaching process. *International Journal of Performance Analysis in Sport*, 14(3), 709. <https://doi.org/10.1080/24748668.2014.11868753>

