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Analysis of goals scored in the 2024-25 UEFA Champions League

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Abstract:

This study analyzed goal-scoring patterns in the 2024/25 UEFA Champions League using key performance indicators such as scoring methods, timing, locations, and body parts used. A descriptive survey method was applied, including all participating teams. Data were collected through systematic observation, analyzing 618 goals across 189 matches using video analysis.

Results showed a high scoring rate of 3.27 goals per match, exceeding previous seasons, possibly due to the new competition format. Most goals (75%) came from open play, highlighting the importance of dynamic attacking. Additionally, 22% of goals were scored in the final 15 minutes, indicating the influence of fitness and tactical adjustments.

Technically, 52% of goals were scored with the right foot, and 62% occurred inside the penalty area. These findings provide valuable insights for coaches and analysts to better understand goal-scoring behavior in modern elite football.

Keywords: UEFA Champions League; goal-scoring patterns; match analysis; technical performance; video analysis.

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1. INTRODUCTION

The UEFA Champions League, commonly referred to as the Champions League, is an annual European football tournament organized by the European Football Confederation since 1955 for the best football clubs in Europe. This tournament is the most important football tournament at the club level in the world, as the final match of the tournament is the most watched annual sporting event around the world.

Before 1992, the tournament was officially called the European Championship Club Cup, usually referred to as the European Cup or the European Champions Cup. The tournament was initially a knockout system in which only the champions of each country played, in addition to the title holder who participates in the next edition to defend his title. The tournament began to expanding 1990as the group stage was merged and the number of teams increased.

In 1993 it switched to its new and current name (UEFA Champions League) and the number of teams was increased until the tournament is currently composed of 32 clubs to start the new version of the UEFA Champions League in the 1992/1993 season.

In 2021, UEFA announced an official change to the Champions League system and an increase in the number of teams to 36 teams starting from 2024. Each team will play 8 different matches in the first-round stage, as the round-trip system has been cancelled. Each team will play 4 games in his field and the same number outside of his field. Each team plays against two teams from each of the four rankings and qualifies for the final eighth of the top eight in the first round, while teams from ninth place to 24th place play against each other exclusionary rounds to determine the other eight teams that complete the final eighth contract. Teams from 25 to 36 places are eliminated from the tournament directly.

The game is watched by millions of people around the world and reaches its climax during continental and global tournaments, and most fans' attention is focused on certain teams, players, or even the recreational value of interviews, while coaches, researchers, and sports scientists are interested in learning and extracting lessons, as they want to know the reasons behind the excellent performance of players in order to focus on it and develop it and the reasons behind the poor performance of players in order to reduce it and avoid it. (Njororai, 2004, p. 326).

Hassanein and Abdel Moneim (1986) pointing that the analysis of the performance of players must be by tracking the performance of each player individually during the game, whether by performing the basic skills of the game or by carrying out special tasks such as plans and methods of play assigned to them as a member of the team or by tracking the player's implementation of all these tasks together. This, of course, depends on the method and method followed in the evaluation process. As for the analysis of team performance, it means tracking the performance of the whole team during the game, and here the follow-up is not limited to a specific player, but to all team members at once, through the change and transition of the events of the game, which are usually fast and flash events. The method of analysing the game is a system that is usable in evaluating performance for all times.

After a brief review of previous studies related to the subject of the study and after following up the UEFA Champions League 2024/25 and watching the series of various goals of all the teams participating in the tournament and the reasons behind their scoring, the researchers analysed all the goals scored in order to assess the performance of the teams, and tried to reach different playing strategies that determine the tactical methods of each team. The researchers identified the scoring variable that is the main factor to achieve victory. This variable was analysed from several aspects (goal scoring time, goal scoring areas, methods of scoring goals and the part of the body scoring goals). All these things make us stand in front of the inevitability of employing a performance analyst in all teams and teams in order to assist the coach in the training process.

1. When were goals scored? And what period of time did he score the most goals in the tournament?
2. Where were the goals scored from? And which region scored the most goals in the tournament?
3. How were the goals scored? And how did he score the most goals in the tournament?
4. Who scored the goals? Which part of the body scores the most goals in the tournament?

2.Material & methods

1. *Exploratory study*

An exploratory study was conducted on an interview from the qualifying round of the same tournament between the Dutch (Twente) and Austrian (Salzburg) teams, which took place on 13 August 2024 and ended with a tie score of three for each team. The researchers used the observation method to analyse the scored goals after uploading them and displaying them on a computer to extract the time of their scoring and the way they were scored, as well as the areas from which the goals were finally scored, the body parts from which the goals were scored. The survey concluded the following:

- Ensure the process of analyzing targets within the VCR.
- Calculate the scientific conditions of the instrument.
- The degree of convergence between researchers in the analysis process converges.
- Know the problems and technical errors that hinder the analysis process.

2. *Approach to study*

In this study, researchers used the descriptive analytical approach, following the survey method to suit the nature of the study, which is the same method used in all previous studies that dealt with the same subject of the current study.

3. *Sample of the Study*

The study population is all 189 Champions League 2024/25 matches, and since we used the survey method, the study sample is also 189 matches with 100% representation.

4. *Data and information collection tools*

For this study, researchers used many tools and means to collect data and information, initially they derived the data from the UEFA database from the official website of the European Union.

In the analysis process, the researchers relied primarily on recorded target videos uploaded to a Dell laptop with a win 10 operating system. The videos were played on KMPlayer 64X with video acceleration and slowdown features, as well as taking a screenshot and extracting the image of any screenshot, in addition to the ability to cut, edit and write the video clip.

The pedagogical observation card designed in Excel 2016 was also used with all the tables for the analysis process, and this method was followed by (Lames, 1994).

5. *Scientific Conditions of Tools*

The researchers proved the reliability of the UEFA 2025 database by comparing its results with the results reached after analysing the goals of 189 matches for the tournament using the Cohen's Kappa (K)coefficient, whose results were between 0.90 and 0.94, which shows the high reliability index of the UEFA 2025 electronic database.

The validity of the video analysis tool was also confirmed by analysing the aforementioned filter interview in the survey study twice a week apart. The Pearson correlation coefficient was calculated between the values obtained each time. The analysis was related to how the goals were scored, the time of scoring the goals, the areas from which the goals were scored and finally the parts of the body that scored the goals. The calculated Pearson correlation coefficient represents the stability coefficient and its value was 0.930 (±0.018), which indicates that the analysis tool in the study is fixed. The validity coefficient was also calculated by calculating the square root of the stability coefficient and its value was 0.964 (±0.007), which also indicates that the tool is honest.

6. *Field Application Procedures*

The researchers designed the pedagogical observation card and set the tables for the method of scoring goals, the tables for the times of scoring goals, the tables for the areas of scoring goals, and finally the tables for the parts of the body in which the goals were scored. The researchers themselves took over the process of observation and direct registration while watching the tournament matches, whether by live broadcasting or by recording and repeating on the FULLREPLAYS database, and then confirming by watching the videos of all 618 goals in the tournament

After the process of recording and unpacking within the tables of the objectives, verifying them and comparing them with the UEFA 2025 database, the percentages corresponding to the number of objectives were calculated and then represented in their graphs that facilitate the process of reading and interpreting them later during the discussion of the results.

The registration, unloading and analysis processes began on the first day of the tournament, corresponding to September 17, 2024, and lasted about nine months, ending on June 12, 2025, with the preparation of all tables and their graphs, as well as the interpretation of their results.

7. Statistical methods used in the study

The researchers used simple methods in line with the nature of the topic. In the section of the scientific conditions of the study tools, they used the Cohen's Kappa (K) coefficient, which measures the agreement between two evaluators, in addition to the Pearson correlation coefficient to calculate the stability of the tests. They were calculated by the Statistical Packages for Social Sciences (SPSS version 26), and the level of significance was set at 0.05.

As for the analysis process, they relied on calculating or collecting the frequencies of the goals and the corresponding percentages. Finally, some figures and graphs were used, represented by the histogram (Figure 01), the graphic columns (Figure 02) and (Figure 04), the sectoral circle of sunlight (Figure 03).

3.Results

Table 01. Goals-scoring times in 2024/25 UEFA Champions League

Time frame	goals	percentage
1’ to 15’	83	13.43 %
16’ to 30’	83	13.43 %
31’ to 45’	103	16.67 %
46’ to 60’	102	16.50 %
61’ to 75’	108	17.48 %
76’ to 90’	137	22.17 %
91’ to 120’	2	00.32 %
Total	**618**	**100 %**

Table 01 shows that the peak of scoring was in the last quarter hour of the actual time of the game, that is, the period from 76’ to 90’, by scoring 137 goals (22%), followed by the quarter hour before that, that is the period from 61’ to 75’, by scoring 108 goals (17%), we can also say that 347 goals (56%) were scored in the second half of the game.

We also note that the process of scoring goals is increasing and in an increasing pace for each half, as shown in Figure 01 below, and that the German

club (Borussia Dortmund) is the most scoring in the last quarter of the game by five goals, while the Spanish club (Barcelona) is the most scoring in the second half by 26 goals.

In terms of players, the most scored goals in the last quarter of an houris the Guinean player for Borussia Dortmund "Serhou Guirassy" with four goals, and the same aforementioned player with the English player for Bayern Munich "Harry Kane" are more than scored in the second half with eight goals for each player.

Figure 01. Goals-scoring times in 2024/25 UEFA Champions League

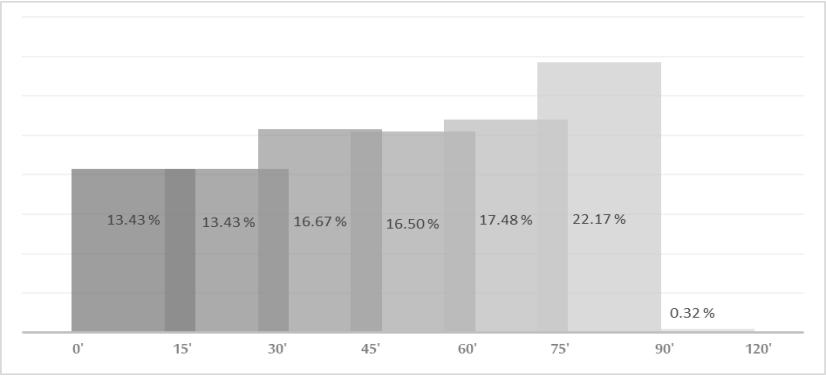


Table 02. Goals-scoring zones in 2024/25 UEFA Champions League

Zone	goals	percentage
Six yard box	158	25.57 %
Penalty Area	382	61.81 %
Out of box	78	12.62 %
Total	**618**	**100 %**

Table 02 shows that the most scored area in the stadium is penalty area by 382 goals (62%), also called the area of operations or the area of 18 yard, followed within a six-yard box by 158 goals (26%) and finally out of box area by 78 goals (13%).

The Spanish club (Barcelona) is the most scoring club within the first zone (six-yard box) with 14 goals, the French club (Paris Saint-Germain) is the most scoring club from the second zone (penalty area) with 26 goals, and the third zone (out of box) The two most scoring clubs are the English clubs (Aston Villa) and (Arsenal) and the Dutch club (PSV Eindhoven) with six goals for each club.

In terms of players, the Polish player for (Barcelona) "Robert Lewandowsk" is the most scoring goals from the first area by five goals, while the second area is the most scoring goals are the Brazilian player for (Barcelona)"Raphinha" and the Guinean player for (Borussia Dortmund) "Serhou Guirassy" with nine goals for each player, in the third area the most scoring is the Brazilian player for (Barcelona) "Raphinha" with three goals.

Figure 02. Goals-scoring zones in 2024/25 UEFA Champions League

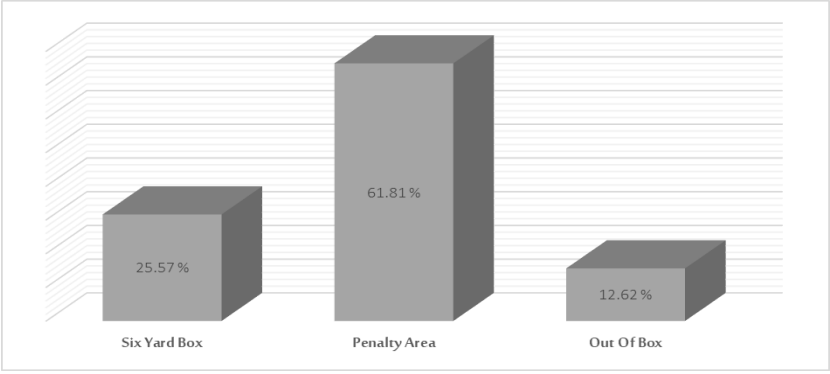


Table 03. Goals-scoring situations in 2024/25 UEFA Champions League

Ssituations		**goals**	**percentage**
From playing (76%)	Open play	378	61.17 %
	Counter	69	11.17 %
	Own goal	22	03.56 %
Set piece (24%)	Corner	62	10.03 %
	Penalty	52	08.41 %
	Free kick (13 Direct)	35	05.66 %
Total		**618**	**100 %**

Table 03 shows that 469 goals (76%) were scored from different play positions and that most of them 378 goals (61%) were from open play, 69 goals (11%) were from counter-attacks, and the rest 22 goals (4%) were from defensive errors or so-called own goals. As for the remaining 149 goals (24%), they were from fixed positions, which were corner kicks of 62 goals (10%), penalties of 52 goals (8%), and the rest were free kicks of 35 goals (6%), which is a good number compared to the total goals recorded in the tournament.

The club that scored the most goals from open play is the French club (Paris Saint-Germain) with 32 goals, the Spanish club (Barcelona) is the most scoring goals from set piece with 12 goals (including three penalties), while the German club (Borussia Dortmund) is the most scoring goals from penalty kicks with seven goals.

On the players' side, the English player for (Bayern Munich) "Harry Kane" and the Guinean player for (Borussia Dortmund) "Serhou Guirassy" are considered the most scoring goals from set play by six goals for each player. In terms of penalties, the Guinean player for (Borussia Dortmund) "Serhou Guirassy" is the most scoring with five goals.

Figure 03. Goals-scoring situations in 2024/25 UEFA Champions League

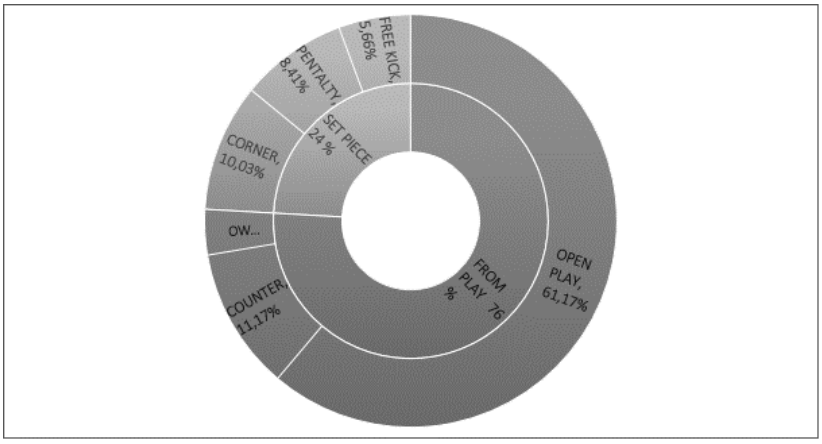


Table 04. Goals-scoring body parts in 2024/25 UEFA Champions League

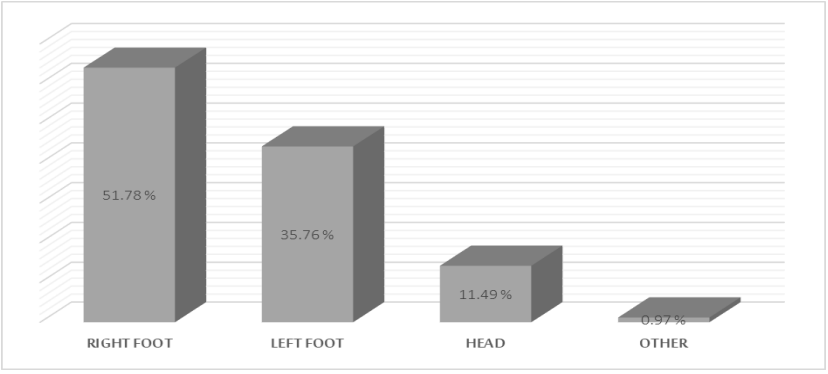
Body parts	goals	percentage
Right foot	320	51.78%
Left foot	221	35.76%
Head	71	11.49%
Other	6	0.97%
Total	**618**	**100%**

Table 04 shows that more than half of the goals of the tournament were scored with the right foot 320 goals (52%) and that 221 goals (36%) were scored with the left foot, while the rest were in the head with 71 goals (11%) with six goals (1%) scored with other parts of the body.

The club with the most goals scored in the right foot is the French club (Paris Saint-Germain) with 22 goals, the club with the most goals scored in the left foot is the Spanish club (Barcelona) with 17 goals, and the most scored in the head are the Spanish club (Barcelona) and the German club (Bayern Munich) with eight goals for each club.

On the individual side, the Guinean player for Borussia Dortmund "Serhou Guirassy" is the most scored with the right foot by nine goals, while the Brazilian player for Barcelona "Raphinha" is the most scored with the left foot by nine goals, while in the head, eight players from different clubs scored two goals for each player.

Figure 04. Goals-scoring body parts in 2024/25 UEFA Champions League



4.Discussion

The increase in goals scored at the end of the second half of the tournament matches was attributed to the physiological deterioration of the defenders compared to the attackers (Reilly, 1994; Njororai, 1996a, c, 2004, 2007a,b) as Nepfer (1992, 1995, 1998) attributed to the decline in physical condition and the lack of concentration of the defenders due to mental and physical exhaustion and the lack of any effort to influence decisively the outcome of the match.

Studies conducted by Armata et al., (2007a, b) identified a number of factors that can explain the increase in scoring in the second half, especially at the end of the game, namely fatigue and deterioration of physical condition, the increasing pace of football matches, the tactical roles of players, dehydration and overheating, lack of cognitive function that leads to lack of decision-making and loss of concentration and thus an increase in defensive errors.

It is clear that the coaches have to use the changes very carefully to deal with the physical deterioration of the players at the end of the game by inserting substitutes who add to their teammates and maintain the peak performance of their teams, and of course the substitution is a gamble and no one knows how successful it is or not, but nevertheless the substitutes contributed 96 goals and 47 crucial passes to this tournament.

Most of the goals of the tournament 382 (62%) were scored from the second area called the penalty area, which is the preferred and easy area to score goals in all tournaments. From this point of view, since this area is the most scoring goals, trainers must focus on it during training on tactics and techniques to penetrate the area and then try to score goals from within it with the necessary accuracy and strength.

While a few goals were scored from outside of the box, which are long-range goals, most of their shots were outside the frame, so they must be used only sparingly or by players who have the ability to direct the ball strongly and from a distance (Cohen, 1975;Njororai, 1996a, c; 2004).

Open play led to the scoring of most of the goals, 469 goals (76%). The remaining 24% of the goals (149 goals) came from fixed balls, which are also high compared to previous tournaments. This rise can be attributed to the remarkable development in European football and the difference in the culture and ideas of coaches, which reflects the great diversity of goals scored from fixed play.

As for the large number of penalties scored 52 goals, this is due to the improved ability of the referees to observe the defender's transgressions against the attackers in the crowded penalty area.

From this point of view, the coaches in the training process should focus on performing free fixed kicks and corner kicks, and the referees should also show more commitment in ensuring that there is no violation such as holding, pushing and referring to (var) technology. This will contribute to improving the delivery and receipt process during the implementation of fixed and corner kicks and thus increase the number of goals scored from fixed play.

Football is based on kicking the ball with the foot, so scoring goals with the foot is more than scoring with the head and using the right foot is more than using the left foot, which we also observed in our study. Comparing the current tournament with the last two tournmante, we find that they are in the same proportions, that is, the right foot is ahead of the left and the head.

Since the head scoring ratio is always lower than the foot, it is necessary to improve the quality of crosses, corners and free kicks, in addition to focusing on the tactics of tall attackers who score by head, especially if it is against small defenders.

5.Conclusions

This tournament scored 618 goals in 189 games at a rate of 3.27 goals per game, which is higher than the average of the goals of the previous tournament season 3.00 goals per game, which was also preceded by the season (2022/23) 372 goals with rate of 2.98 goals per game.

This increase can be attributed to the new system of the tournament by adding four clubs that are not strong to the total number of clubs qualifying for the tournament, in addition to abandoning the group system and relying on a system of playing eight interviews against eight different clubs four inside the field and the same outside, which enhances the element of surprise and the inability of analysts to analyze the strengths and weaknesses as it was previously when playing a home and away match against the same club. Therefore, the tournament will witness many goals being scored in many matches, including, for example, the match between (Lille 6 – 1 Feyenoord), the match between (Sparta Prague 0 – 6 Atletico Madrid), the match between (BSC Young Boys 1 – 6 Atalanta), and the match between (Bayern Munich 9 – 2 Dinamo Zagreb).

6.References:

- Mohamed Sobhi Hassanein and Hamdi Abdel Moneim: Methods of Match Analysis in Volleyball (1st Edition), Cairo, Egypt: Dar Al-Fikr Al-Arabi, 1986.
- Armatas, V., Yiannakos, A., & Sileloglou, P. (2007a). Relationship between time and goal scoring in soccer games: Analysis of three world cups. International Journal of Performance Analysis in Sport, 7 (2), 48 – 58.
- Armatas, V., Yiannakos, A., Galazoulas, C. & Hatzimanouil, D. (2007b). RGoal scoring patterns over the course of a match: Analysis of Woman's high standard soccer matches. Physical Training, January, p.1, 1p.
- Cohen, J. (1975). Psychological aspects of sport with particular reference to variation in Performance. In: Whiting H.T.A. (Ed). Readings in Sports Psychology, (85-121) London: Lepus books.
- Lames M, 1994. Systematische Spielbeobachtung. Münster: Philippka.

- Nepfer, J. (1991). Italy '91: Technical Report- U-17 World Championship for the FIFA/JVC Cup. Zurich: FIFA.
- Nepfer, J. (1992). Barcelona '92: Technical Report. Zurich: FIFA.
- Nepfer, J. (1998). Technical Report: FIFA World Cup France'98 10 June – 12 July. Zurich : FIFA.
- Njororai, W. W. S. (2004). Analysis of the goals scored at the 17th World Cup Soccer Tournament in South Korea- Japan 2002. *AJPHERD*, 10(4), 326-332.
- Reilly, T. (1994). Physiological Aspects of Soccer. Biology of Sports 11, 3-20.
- Roxburgh, A. (1996). *Euro' 96 Technical Report*. Nyon : UEFA