

## **Analysis of goal scoring period in major European football league winners 2019/2020**

### **ABSTRACT**

One of the most watched football tournaments in the world is the European football league (e.g., La Liga, Bundesliga, Serie A, etc.). Football matches are divided into two halves. At the end of the game, the number of goals scored can be used to determine the winner. Therefore, the objective of this study was to analyze and compare the goals scored between the first half and second half period among the winners of each top European League 2019/2020 competition. The Mann-Whitney U test was used to evaluate a total of 406 goals from 175 games from the official website and YouTube highlights. Only Liverpool, England's Premier League, showed more goals in the first half, whereas the majority of the winners—Real Madrid, Spain's La Liga, Juventus, Italy's Serie A TIM, Bayern Munich, Germany's Bundesliga, and Paris Saint-Germain, France's Ligue 1 Uber Eats—scored more goals in the second half. The results indicated that there were significant differences in goals scored between the first and second half periods in La Liga and Serie A TIM,  $p < .05$ . In conclusion, Real Madrid and Juventus fully utilized the disadvantages of their opponents to score a goal to win a match and competition. As the time moves towards the end of the matches, the player's fitness components, mental aspect, and team tactical become the crucial factors of team differentiation. This study recommends comparing goal scoring across several continents in the future.