



RESEARCH ARTICLE

## Does the First Goal Scorer Win in Football? U 19 League Example

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### Abstract

This study was conducted to examine the effect of the first goals scored by the 18 football teams in the U-19 Elite Academy Football League. In this context, the distribution of the goals scored and conceded by the teams in home and away matches according to the time periods of 15 minutes each were analysed. The official web page of TFF (Turkish Football Federation) at <https://tff.org> was used to collect data. 34.21% of the first goals scored between 0-15th minutes, 39.29% of the first goals scored by the champion team were scored between 16-30th minutes. All teams in the league won 70.76% of the matches in which they scored the first goal, while only 14.91% of the matches in which they conceded the first goal were lost and 14.33% ended in a draw. It was concluded that the rate of leaving with a win the competitions in which the champion team scored the first goal was 82.14%, which is quite high. In the matches in which all teams in the league scored the first goal, the average points per match was 2.27, champion team was 2.57. As a result, it can be said that the first goal scored is mostly concentrated in the first half of the competitions and in the first 15 minutes, the first goal scored in football is important both in winning the matches and in achieving the desired point average per match, and coaches should develop tactical strategies on scoring the first goal.

### Keywords

Football, Competition, Analysis, First Goal

## INTRODUCTION

Football is one of the most popular sports compared to other sports. In modern football, it is possible to measure the performance of both the team and the players in a competition and to determine the positive and negative aspects. The positive and negative aspects identified can be done by interpreting the competition images and data. The interpretation of the analysed data and its use as part of the tactical plan is important for tactical preparation for the competition. It is important to make the most accurate use of the opportunities to score a goal in a football match, to increase the attacking options that affect the goal

formation and to develop the necessary strategies to win the match (Akgül, 2017).

One of the most important parts necessary to contribute to the success of the teams in football is the competition analyses. There are many studies in the literature on match analysis, goal analyses and performance parameters. While some of these studies were based on the number of passes before the goal was scored, some of them focused on the time of the goal, and some of them looked at the effect of the first goal on the result (Armatas and Yiannakos, 2010; Arslanoğlu et al. 2018; Arslanoğlu et al. 2013; Çobanoğlu O., 2019; Sever and Arslanoğlu, 2016). Competition analysis is a very important tool that can provide feedback to coaches and athletes in terms of technical and

tactical performance in matches. One of the important variables proposed in competition analysis is goals scored (Göral and Öz, 2021).

The first goal is considered to have had an impact on the outcome of the match. Therefore, analysing which team scored the first goals and in which minutes, and developing strategies based on the results, can be remarkable for winning a football match. It is seen that the first goals affect both high and limited budget teams. Considering the effect of the first goal scored on the result of the match, it is very important to determine the tactics to be developed for scoring and not conceding goals (Yolgörmez and Kayatekin, 2023).

There are advantages and disadvantages whether a football team plays home or away matches. Indeed, at this point, factors such as the spectator effect, the fact that the spectators do not go away and recognise the field better than the rival team because it is at home are some of the advantages of home matches. Some of the disadvantages are the pressure of rival spectators, fatigue from travelling away and unfamiliar pitches (Göral and Öz, 2021). Although there are advantages and disadvantages in home and away matches, it is seen in the literature that the team that scores the first goal is more advantageous. In addition, as a result of many studies in the literature on football, it has been stated that the advantage of being a host is also clearly revealed (Legaz et al. 2013).

The aim of this study is to examine the effect of the first goals scored on the match results of the teams in the U-19 Elite Academy Football League in all matches played at home and away, to determine the distribution of goals according to 15-minute time periods and the average points in the matches in which the first goal was scored. In addition, it is aimed that the results obtained will contribute to the development of match strategies of coaches and athletes.

## MATERIALS AND METHODS

### *Study Model*

Before the data collection phase of the study, ethics committee approval was obtained from Sinop University Human Research Ethics Committee on 10.04.2023 with decision number 2023/60.

In the study, the performances of the teams competing in the U-19 Elite Academy Football League in the 2021-2022 season were evaluated in terms of some parameters. The data of the matches played during the season were obtained and recorded by accessing the official "https://tff.org" website of the TFF (Turkish Football Federation). The data collection group of the study consists of a total of 380 matches played by 20 teams competing in the U-19 Elite Academy Football League for 38 weeks in the 2021-2022 season.

The effects of the first goals scored in a total of 380 matches of 20 teams in the league in 38 weeks during the 2021-2022 season on the match result, average points per match and goal minutes were analysed. Matches that ended in a goalless draw were not taken into consideration as they did not make any difference in the score. Competitions in which a match did not end in a goalless draw within 90 minutes and there was a winner as a result were included in the study. In the study, the following parameters were taken into consideration.

-The effect of the first goals scored by all teams overall, home and away on the result of the match (Win, draw, defeat)

-The distribution of the first goals scored by all teams overall, home and away in 15 minute time periods (1-15 min. / 16-30 min. / 31-45 min. / 46-60 min. / 61-75 min. / 76-90 min.) is as shown.

-The average points per match of the first goals scored by all teams overall, home and away were analysed.

-The effect of the first goals scored by the champion team in all matches and the first goals scored by the Teams finishing in the top four places in the league (Galatasaray, Fenerbahçe, Beşiktaş, Trabzon) in general, home and away matches on the result of the match.

-The distribution of the first goals scored by the champion team in general, home and away in time periods of 15 minutes each (1-15 min. / 16-30 min. / 31-45 min. / 46-60 min. / 61-75 min. / 76-90 min.) is as shown.

-The average points per match for the first goal scored by the champions overall, at home and away were analysed.

### *Data Analysis*

The data obtained in the research were analysed with SPSS 22.0 V. programme. Descriptive statistics data with frequency

percentage were included in the study. The results obtained were interpreted by the researchers.

**RESULTS**

In this section, the effect of the first goals scored by all teams in the league, the champion

team and also teams finishing in the top four places in the league on the match result, their distribution according to time periods and the average points per match are presented.

**Table 1.** The effect of the first goals scored on the result of the match and the average points per match

| General | F   | %     | Points per match average |
|---------|-----|-------|--------------------------|
| Win     | 242 | 70.76 | 2.27                     |
| Draw    | 51  | 14.91 |                          |
| Defeat  | 49  | 14.33 |                          |
| Total   | 342 |       |                          |
| Home    | F   | %     | Points per match average |
| Win     | 133 | 76.88 | 2.45                     |
| Draw    | 25  | 14.45 |                          |
| Defeat  | 15  | 8.67  |                          |
| Total   | 173 |       |                          |
| Away    | F   | %     | Points per match average |
| Win     | 109 | 64.5  | 2.08                     |
| Draw    | 26  | 15.38 |                          |
| Defeat  | 34  | 20.12 |                          |
| Total   | 169 |       |                          |

F: Frequency %: Percentage

All teams in the league won 70.76%, lost 14.33% and drew 14.91% of the matches in which they scored the first goal. They won 76.88%, lost 8.67% and drew 14.45% of the home matches in which they scored the first goal. In the away matches, the team won 64.5 per cent, lost 20.12

per cent and drew 15.38 per cent. While the average points per match of all teams in the league in the matches in which they scored the first goal was 2.27, it was found to be 2.45 in the home field and 2.08 in the away field (Table 1).

**Table 2.** Distribution of the first goals scored by teams according to time periods

| General      | F   | %     | Home         | F   | %     | Away         | F   | %     |
|--------------|-----|-------|--------------|-----|-------|--------------|-----|-------|
| 0-15 min.    | 117 | 34.21 | 0-15 min.    | 66  | 38.15 | 0-15 min.    | 51  | 30.18 |
| 16-30 min.   | 91  | 26.61 | 16-30 min.   | 48  | 27.75 | 16-30 min.   | 43  | 25.44 |
| 31-45 min.   | 54  | 15.79 | 31-45 min.   | 21  | 12.14 | 31-45 min.   | 33  | 19.53 |
| 46-60 min.   | 34  | 9.94  | 46-60 min.   | 16  | 9.25  | 46-60 min.   | 18  | 10.65 |
| 61-75 min.   | 25  | 7.31  | 61-75 min.   | 13  | 7.51  | 61-75 min.   | 12  | 7.1   |
| 76-90 min.   | 21  | 6.14  | 76-90 min.   | 9   | 5.20  | 76-90 min.   | 12  | 7.1   |
| <b>Total</b> | 342 |       | <b>Total</b> | 173 |       | <b>Total</b> | 169 |       |

F: Frequency %: Percentage

When the distribution of the goals scored by all teams in the league according to time periods is

analysed; 117 goals (34.21%) were scored between 0-15th minutes, 91 goals (26.61%) were

scored between 16-30th minutes and 34 goals (15.79%) were scored between 31-45th minutes; 66 goals (38.15%) were scored between 0-15th

minutes in home matches and 51 goals (30.18%) were scored between 0-15th minutes in away matches (Table 2).

**Table 3.** The effect of the first goals scored by the champion team on the result of the match and the average points per match

| General | F  | %     | Points per match average |
|---------|----|-------|--------------------------|
| Win     | 23 | 82.14 | 2.57                     |
| Draw    | 3  | 10.71 |                          |
| Defeat  | 2  | 7.14  |                          |
| Total   | 28 |       |                          |
| Home    | F  | %     | Points per match average |
| Win     | 11 | 78.57 | 2.50                     |
| Draw    | 2  | 14.29 |                          |
| Defeat  | 1  | 7.14  |                          |
| Total   | 14 |       |                          |
| Away    | F  | %     | Points per match average |
| Win     | 12 | 85.71 | 2.64                     |
| Draw    | 1  | 7.14  |                          |
| Defeat  | 1  | 7.14  |                          |
| Total   | 14 |       |                          |

F: Frequency %: Percentage

The Champion team won 82.14% of the matches in which they scored the first goal, lost 7.14% and drew 10.71%. They won 78.57%, lost 7.14% and drew 14.29% of the home matches in which they scored the first goal. They won 85.71 per cent of their away matches and lost 7.14 per

cent of the matches in which they scored their first goal. In the matches in which the champion team scored the first goal, the average points per match was 2.57, while it was found to be 2.50 at home and 2.64 at away matches (Table 3).

**Table 4.** Distribution of the first goals scored by the champion team according to time periods

| General      | F  | %     | Home         | F  | %     | Away         | F  | %     |
|--------------|----|-------|--------------|----|-------|--------------|----|-------|
| 0-15 min.    | 4  | 14.29 | 0-15 min.    | 2  | 14.29 | 0-15 min.    | 2  | 14.9  |
| 16-30 min.   | 11 | 39.29 | 16-30 min.   | 6  | 42.86 | 16-30 min.   | 5  | 35.71 |
| 31-45 min.   | 6  | 21.43 | 31-45 min.   | 3  | 21.43 | 31-45 min.   | 3  | 21.43 |
| 46-60 min.   | 5  | 17.85 | 46-60 min.   | 2  | 14.29 | 46-60 min.   | 3  | 21.43 |
| 61-75 min.   | 2  | 7.14  | 61-75 min.   | 1  | 7.13  | 61-75 min.   | 1  | 7.14  |
| 76-90 min.   |    |       | 76-90 min.   |    |       | 76-90 min.   |    |       |
| <b>Total</b> | 28 |       | <b>Total</b> | 14 |       | <b>Total</b> | 14 |       |

F: Frequency %: Percentage

In the study, when the distribution of the goals scored by the champion team in the league was analysed according to the time periods, it was found that the first goal was scored between 16-

30th minutes with 11 goals (39.29%), and the first goal was scored between 46-60th minutes with 5 goals (17.85%) (Table 4).

**Table 5.** The effect of the first goals conceded by the champion team on the result of the match and the average points per match

| <b>General</b> | <b>F</b> | <b>%</b> | <b>Points per match average</b> |
|----------------|----------|----------|---------------------------------|
| Win            | 4        | 44.44    | 1.44                            |
| Draw           | 1        | 11.12    |                                 |
| Defeat         | 4        | 44.44    |                                 |
| <b>Total</b>   | <b>9</b> |          |                                 |
| <b>Home</b>    | <b>F</b> | <b>%</b> | <b>Points per match average</b> |
| Win            | 3        | 100      | 3                               |
| Draw           |          |          |                                 |
| Defeat         |          |          |                                 |
| <b>Total</b>   | <b>3</b> |          |                                 |
| <b>Away</b>    | <b>F</b> | <b>%</b> | <b>Points per match average</b> |
| Win            | 1        | 16.67    | 0.66                            |
| Draw           | 1        | 16.67    |                                 |
| Defeat         | 4        | 66.66    |                                 |
| <b>Total</b>   | <b>6</b> |          |                                 |

F: Frequency %: Percentage

The Champions of the league won 44.44% of the matches in which they conceded the first goal and drew 11.12% of the matches in which they conceded the first goal. The champion team conceded the first goal in all home matches, while

this rate remained at 16.67% in away matches. In the matches in which the champion team conceded the first goal, the average points per match was 1.44 (Table 5).

**Table 6.** Distribution of the first goals conceded by the champions according to time periods

| <b>General</b> | <b>F</b> | <b>%</b> | <b>Home</b>  | <b>F</b> | <b>%</b> | <b>Away</b>  | <b>F</b> | <b>%</b> |
|----------------|----------|----------|--------------|----------|----------|--------------|----------|----------|
| 0-15 min.      | 4        | 44.44    | 0-15 min.    | 3        | 100      | 0-15 min.    | 1        | 16.67    |
| 16-30 min.     | 2        | 22.22    | 16-30 min.   |          |          | 16-30 min.   | 2        | 33.33    |
| 31-45 min.     | 1        | 11.12    | 31-45 min.   |          |          | 31-45 min.   | 1        | 16.67    |
| 46-60 min.     | 2        | 22.22    | 46-60 min.   |          |          | 46-60 min.   | 2        | 33.33    |
| 61-75 min.     |          |          | 61-75 min.   |          |          | 61-75 min.   |          |          |
| 76-90 min.     |          |          | 76-90 min.   |          |          | 76-90 min.   |          |          |
| <b>Total</b>   | <b>9</b> |          | <b>Total</b> | <b>3</b> |          | <b>Total</b> | <b>6</b> |          |

F: Frequency %: Percentage

In the study, it was observed that the champion team in the league conceded the first goal between 0-15th minutes with 4 goals (44.44%), followed by the time period between 16-30th and 46-60th minutes with 2 goals each (22.22%) (Table 6).

The Teams finishing in the top four places in the league won 80% of the matches in which they

scored the first goal, lost 20% of the matches in which they conceded the first goal and only 2 matches ended in a goalless draw. At home, all teams won 90 per cent of the matches in which they scored the first goal, while 10 per cent of the matches ended in defeat. On the away field, 50 per cent of the matches were won and 50 per cent of the matches ended in defeat (Table 7).

**Table 7.** The effect of the first goals scored by the Teams finishing in the top four places in the league on the result of the match

| <b>General</b> | <b>F</b> | <b>%</b> |
|----------------|----------|----------|
| Win            | 8        | 80       |
| Draw           |          |          |
| Defeat         | 2        | 20       |
| Total          | 10       |          |
| <b>Home</b>    | <b>F</b> | <b>%</b> |
| Win            | 7        | 87.5     |
| Draw           |          |          |
| Defeat         | 1        | 12.5     |
| Total          | 8        |          |
| <b>Away</b>    | <b>F</b> | <b>%</b> |
| Win            | 1        | 50       |
| Draw           |          |          |
| Defeat         | 1        | 50       |
| Total          | 2        |          |

F: Frequency %: Percentage

## DISCUSSION

In this study, it is analysed how the first goals scored by all teams, the champion team and the big four teams in the U-19 Elite Academy Football League in Turkey in the 2021-2022 season affect the match result, the distribution of goals in 15-minute time periods and the average points per match.

All teams in the league won 70.76% of the matches in which they scored the first goal, 76.88% at home and 64.5% away. The champions of the league won 82.14% of the matches in which they scored the first goal, 78.57% of the matches in which they scored the first goal at home and 85.71% of the matches in which they scored the first goal away from home. The big four in the league won 80 per cent of the matches in which they scored the first goal, 87.5 per cent of the matches in which they scored the first goal at home and 50 per cent of the matches in which they scored the first goal away from home. Within the scope of the research, when the effect of the first goals scored by all teams in the league, the champion team and the Big 4 teams on the match result was evaluated, it was found that the team that scored the first goal in the matches had a very high percentage of winning the match.

In matches at Euro 2012, the win rate was 70.97 per cent when teams scored the first goal (Leite, 2013). In the Greek Super League matches of 2006-2007, 71.43% of the matches ended with a victory in favour of the team that scored the first

goal and 12.8% with a defeat, and the study found that the first goal had a strong influence on the final result (Armatas et al. 2009). In the 2006 World Cup, in a study in which the goals scored by the teams were analysed and evaluated, it was concluded that the teams that scored the first goal had a winning rate of 73.21% and a losing rate of 7.14% (Armatas and Yiannakos, 2010). In the 2018 FIFA World Cup group stage and subsequent competitions, it was determined that the team that scored the first goal left the matches victorious with a high rate of 86% (Bilgin and Müniroğlu, 2022). In another study, 240 matches in the Portuguese Premier League were analysed and it was stated that 70% of the teams that scored the first goal in the matches won the competitions. (Pratas et al. 2016). It was concluded that in 19 matches after the 2014-2018 World Cup group stage, 17 teams that scored the first goal won their matches and only two teams lost the matches despite scoring the first goal, and it was concluded that finding the first goal had a high effect on winning the match with a rate of 89.5% (Bilgin et al. 2020). In the 2022 European Women's Football Championship, a total of 95 goals scored in 31 competitions were analysed, and it was found that 74% of the teams that scored the first goal in the competitions left the matches victorious, while 26% did not win the matches (Başkaya, 2023). An analysis of goals scored in the 2014 FIFA World Cup found that the teams that scored the first goal won 75.4% of their matches (Yiannis, 2014). In



another study, it was found that 1019 goals were scored in a total of 380 matches in the 2018-2019 Italian Serie A League, teams won 67.34% of the matches in which they scored the first goals, and the first goal had a strong effect on the match result (Charalampos et al. 2022). In the 2012 European Championship, the teams won the match with 70.97% in the matches in which they scored the first goal (Yiannis et al. 2013). In another study, the first goals scored in 64 matches played in the 21st World Cup held in Russia in 2018 were analysed, and it was found that the teams that scored the first goal won 71.4% of the matches, lost 9.5% and 19% of the matches ended in a draw (Alexandros et al. 2019; Çobanoğlu, 2019). In a total of 282 matches that ended with a goal in the Turkish Super League 2016-2017 season, 70.6% of the teams that scored the first goal won the match, while 12.4% lost the match. The champion team, on the other hand, was victorious in 23 of the 26 matches in which it scored the first goal (88.5%), while it failed to win any of the 6 matches in which it conceded the first goal. In the same study, the winning rate of the teams that finished in the first 3 places in the league was found to be 83.1% in matches where they scored the first goal (Yolgörmez, 2018; Yolgörmez and Kayatekin, 2023). On the importance of analysing the first goal parameter in the study of tournaments, many studies have highlighted the impact of the first goal (Bilgin and Müniroğlu, 2022). Göral and Öz, (2021) argued that scoring the first goal in a football match, whether at home or away, has a significant effect on winning the matches to a great extent and increasing the average points per match.

When analysed in the literature, it is seen that the results of the studies are similar to our study. These results show that the first goal in a football match is an important parameter affecting the match score and the team that scores the first goal wins the match at a high rate. Theis, (2012) states that the teams that score the first goal in football competitions have improved performance and increased self-confidence.

When analysed in the literature, it is seen that the results of the studies are similar to our study. These results show that the first goal in a football match is an important parameter affecting the match score and the team that scores the first goal wins the match at a high rate. Theis (2012) states that the teams that score the first goal in

football competitions have improved performance and increased self-confidence.

In the 2006 World Cup, in a study in which the goals scored by the teams were analysed and evaluated, it was stated that most of the goals scored occurred between 76-90th minutes (Armatas and Yiannakos, 2010). It was found that most of the goals scored in the Turkish Super League occurred in the 76th-90th minutes (Doğan et al. 2004). In the 2010 World Cup, it was determined that the highest number of goals occurred in the time period between 76-90th minutes (İmamoğlu et al. 2011). When the goals scored in 1998, 2002 and 2006 World Cups were analysed in terms of time periods, it was found that the goals scored were mostly between 76-90th minutes (Armatas et al. 2007; İmamoğlu et al. 2007). In an interesting study, it was found that most of the goals scored from set-pieces in 5 seasons in the Turkish Super League were scored between the 76th and 90th minutes (Cerrah et al. 2016). According to their 2009 Serie A Brazilian Championship analysis, they stated that the most goals were scored in the last 15 minutes of the match (Gomes et al. 2011). In another study conducted in 2007, the goals scored in 8 National Professional Football Leagues were analysed and it was found that more goals were scored in the second half of the competition and that these goals occurred between the 76th and 90th minutes (Silvia, 2007).

It has been stated in many studies above that the most goals in football competitions occur in the time period between the 76th and 90th minutes. Since there are not enough studies on the time periods when the first goal is scored in the literature, it is thought that our research will contribute to the literature in this respect. In our research, it was determined that the first goal was scored mostly in the first half of the competition between the 0-15th and 16-30th minutes. Considering that physical performance in football competitions will directly contribute to the technical, tactical and psychological performance of a team, it is predicted that the probability of scoring the first goal in the early stages of the competitions may be higher.

In the matches in which all teams in the league scored the first goal, the average points per match was 2.27, while it was found to be 2.45 at home and 2.08 away. In the matches in which the champion team scored the first goal, the average

points per match was 2.57, while it was found to be 2.50 at home and 2.64 at away matches.

In the analysis study conducted in different leagues in Turkey, it was stated that according to the average points per match index, the point range of "2.063-3.000" in the TFF 2nd League is classified as "very good", the point range of "2.243-3.000" in the 3rd League is classified as "very good", the point range of "1.558-2.062" in the TFF 2nd League is classified as "good" and the point range of "1.660-2.242" in the 3rd League is classified as "good". For the league championship, as the average points per match, "2.063±0.116" points in the 2nd League and "2.243±0.204" points in the 3rd League may be sufficient (Göral and Ayca, 2014). According to the results of their study in 2021, Göral and Öz found the average points per game collected both at home (2.39 points) and away (2.00 points) in successful seasons and at home (1.94 points) and away (1.54 points) in unsuccessful seasons. When we compare the results of the studies in the literature with the results of our study, the average score of the teams in the league in the matches in which they scored the first goal is classified as "very good". It is seen that the average points per match of the champion team in this study is well above the point range in the 2nd League and 3rd League.

The results of this study reveal the importance of the first goal in football. Considering that reaching the first goal without conceding a goal in order to leave the competitions with a victory can directly affect the outcome of the matches, it can be argued that the teams can increase their probability of winning the match by preferring an attacking football understanding instead of a game understanding based on defence and trying to find the first goal in the first parts of the matches. In order to score the first goal in competitions, it is necessary to analyse the opponent's strengths and weaknesses well and develop tactical strategies. In addition, since the first goals are more often scored in the early stages of the competition, coaches and players may need to pay more attention to these stages tactically.

#### **Conflict of interest**

No conflict of interest is declared by the authors. In addition, no financial support was received.

#### **Ethics Committee**

This study is approved by the Sinop University (SNU) and Human Research Ethics Committee of the SNU (Approval Number and Subject: E-57428665-050.01.04-172275 and 2023/60).

#### **Author Contributions**

Planned by the authors: Study Design, Data Collection, Statistical Analysis, Data Interpretation, Manuscript Preparation, Literature Search. Authors have read and agreed to the published version of the manuscript.

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