Features of goal kicks by football players in games of high-level teams

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Purpose: to establish the peculiarities of goal kicks by highly qualified football players in the conditions of competitive activity.

Material & Methods: the registration of technical and tactical actions was carried out using the games of teams participating in the group stage of the UEFA Champions League 2019/2020 season as an example. The games of Group C teams of FC Manchester City (Manchester City, England), FC Atalanta (Bergamo, Italy), FC Shakhtar (Donetsk, Ukraine), FC Dynamo (Zagreb, Croatia) were analyzed. In total, 290 shots were recorded and analyzed in 12 games of four teams. To solve the tasks in the work, the following research methods were used: analysis of scientific and methodological literature, registration of team technical and tactical actions, methods of mathematical statistics.

Results: the paper presents data that characterize the features of kicks by players in the games of high-level teams. In total, 290 kicks were recorded and analyzed in 12 games of four teams participating in the UEFA Champions League 2019/2020 season. Kicks on goal were classified according to the result (goals, on target, past the goal, into the goal frame, blocked shots), at the place of execution (from the goal area, from the penalty area, from outside the penalty area), along the trajectory (upwards kicks, low kicks).

Conclusions: the results of the study indicate differences in the quantitative indicators of kicks on goal of teams participating in the UEFA Champions League season 2019/2020 in group "C". It was established that highly qualified football players most often performed kicks on the right foot, which is explained by the lateral advantage. In addition, football players carried out more kicks from the bottom and from the zone between the goal area line and the penalty area line, which should be reflected in the construction of exercises aimed at improving the technique and tactics of kicks.

Keywords: kicks, goals, penalty area, goal area, shots on target, goal frame.

Introduction

The structure of the competitive activity of football players of different ages and qualifications in our time is quite well studied. Studies were conducted with young soccer players [3; 9], professional soccer players of teams of different levels [1; 7; 8; 11], footballer-veterans [10], female footballers [2], footballers with disabilities.

The study undergoes a fairly wide range of technical and tactical actions (TTA): individual [7; 12] and team [4; 5; 18] TTA, defensive [8] and attacking [4; 6; 17; 19] TTA, passing the ball [6; 14; 16], strokes of the opponent, TTA of goalkeepers [13; 20] and others.

Of particular interest among the experts is studying the TTA, which, in their opinion, make the largest contribution to the outcome of the game. Specialists attribute shots to the goal to such a TTA [11; 15; 17; 19].

So, in a previous study [19], the authors found that high-level teams on average perform 13.2 shots on target per game. Of them:

– from the game – 11.9 shots, after the drawing of standard provisions - 1.3 shots;

– foot – 11.4 shots, head - 1.8 shots;

– after the ball bounces from the goal frame, goalkeeper or defender – 2.1 shots, after passing the ball from a partner – 9,8 shots;

– one touch – 5,0 shots, second touch – 3,4 s shots, after the ball – 3,4 shots;

– from the ground – 10,0 shots, on a ball flying – 3,2 shots.

– from the limits of the goal area – 0,6 shots, from the zone between the goal area and the penalty mark – 2,7 shots, from the zone between the penalty mark and the penalty area line – 2,4 shots, from the outside of the penalty area – 7,5 shots.

Purpose of the study: to establish the peculiarities of goal shots by highly qualified football players in the conditions of competitive activity.

Material and Methods of the research

Registration and analysis of the TTD was carried out in the games of the group stage of the UEFA Champions League 2019/2020 season in accordance with well-known recommendations. We analyzed 12 games of four teams of group C of FC Manchester City (Manchester City, England), FC Atalanta (Bergamo, Italy), FC Shakhtar (Donetsk, Ukraine), FC Dynamo (Zagreb, Croatia))

Results of the research

Table 1 shows the quantitative indicators of shots on goal with different performance of the teams participating in the UEFA Champions League season 2019/2020 group "C".

The table shows that of the four teams in this group for 6 games, the players of the Manchester City team delivered the most hits - 92 shots (group winner), and the Dynamo players performed the least shots – 50 shots (last place in the group).

It should be noted that the number of shots on goal in the games of the teams of this group ranged in a wide range – from 2 (Dynamo, Croatia) to 23 (Atalanta, Italy).

Table 1

Efficiency indicators of goal shots against the teams participating in the UEFA Champions League season 2019/2020 of Group "C" (indicators for 6 games)

Indicators	Manchester City	Atalanta	Shakhtar	Dynamo	Group total
Total number of shots	92 (100,0%)	87 (100,0%)	61 (100,0%)	50 (100,0%)	290 (100,0%)
Goals	16 (17,4%)	8 (9,2%)	8 (13,1%)	10 (20,0%)	42 (14,5%)
On target (except goals)	23 (25,0%)	24 (27,6%)	16 (26,2%)	9 (18,0%)	72 (24,8%)
Past the gate	37 (40,2%)	37 (42,5%)	20 (32,8%)	14 (28,0%)	108 (37,2%)
To the gate frame	3 (3,3%)	3 (3,4%)	2 (3,3%)	3 (6,0%)	11 (3,8%)
Blocked shots	14 (15,2%)	15 (17,2%)	15 (24,6%)	14 (28,0%)	58 (20,0%)

Remark. the first value is the number of shots, in parentheses is the percentage of the total number of shots.

Table 2

Indicators of goal shots from different areas of the football field of teams participating in the UEFA Champions League season 2019/2020 group "C" (indicators for 6 games)

Indicators	Manchester City	Atalanta	Shakhtar	Dynamo	Group total
Total number of shots	92 (100,0%)	87 (100,0%)	61 (100,0%)	50 (100,0%)	290 (100,0%)
From the goal area	8 (8,7%)	12 (13,8%)	5 (8,2%)	8 (16,0%)	33 (11,4%)
From the penalty area (except for the goal area)	54 (58,7%)	52 (59,8%)	31 (50,8%)	23 (46,0%)	160 (55,2%)
From outside the penalty area	30 (32,6%)	23 (26,4%)	25 (41,0%)	19 (38,0%)	97 (33,4%)

Remark. the first value is the number of shots, in parentheses is the percentage of the total number of shots.

An analysis of the effectiveness of shots on goal shows that only 14.5% of shots ended in a goal. At the same time, Dynamo players (20.0%) had the highest performance in strikes, while the Atalanta team showed the lowest efficiency (9.2%). Despite the fact that the players of the Manchester City team scored 2.7±0.7 goals per game, the percentage of productive shots is only 17,4%.

In addition, as a result of the study, it was found that in addition to goals, 24,8% of all shots were on target, 37,2% – on target, 3,8% – on target and 20,0% of shots were blocked.

Table 2 shows the quantitative indicators of shots on goal made by football players of teams participating in the UEFA Champions League season 2019/2020 group C from different zones of the football field.

The results of the table indicate that the players of the teams participating in the Champions League more often shots from outside the penalty area (except the goal area) - 55.2% of all shots. Teams made 97 shots (33.4%) from outside the penalty area, 33 shots (11.4%) from the outside of the goal area.

Table 3 shows the quantitative indicators of kicks and goals by the teams participating in the UEFA Champions League season 2019/2020 group "C".

The table shows that almost half (49.7%) of shots on goal by the players in the games of the Champions League hit with the right foot. 34.5% of the shots were made with the left foot and 15.9% of all shots on target by the head. This situation can be explained by the lateral advantage. It is well known that the majority of the population are right-handed. Worldwide, there are approximately 10% left-handed people. Left-handers are much less observed than right-handers in football.

From table 4 it can be seen that highly qualified footballers are more likely to score shots on goal by low shot. So, 80.7% of all shots on target by the players were low.

The leader in this regard was the Manchester City team, whose players hit 87.2% of shots on target. More often than

Table 3

Indicators of goal shots and head shots for teams participating in the UEFA Champions League season 2019/2020 Group C (indicators for 6 games)

Indicators	Manchester City	Atalanta	Shakhtar	Dynamo	Group total
Total number of strokes	92 (100,0%)	87 (100,0%)	61м (100,0%)	50 (100,0%)	290 (100,0%)
Right leg	45 (48,9%)	40 (46,0%)	27 (44,3%)	32 (64,0%)	144 (49,7%)
Left leg	35 (38,0%)	28 (32,2%)	25 (41,0%)	12 (24,0%)	100 (34,5%)
Head	12 (13,0%)	19 (21,8%)	9 (14,8%)	6 (12,0%)	46 (15,9%)

Remark. the first value is the number of shots, in parentheses is the percentage of the total number of shots.

Table 4

Indicators of accurate low shot and high shot of teams participating in the UEFA Champions League season 2019/2020 group "C" (indicators for 6 games)

Indicators	Manchester City	Atalanta	Shakhtar	Dynamo	Group total
Total number of shots on goal	39 (100,0%)	32 (100,0%)	24 (100,0%)	19 (100,0%)	114 (100,0%)
High shots	5 (12,8%)	6 (18,8%)	5 (20,8%)	6 (31,6%)	22 (19,3%)
Low shots	34 (87,2%)	26 (81,2%)	19 (79,2%)	13 (68,4%)	92 (80,7%)

Remark. the first value is the number of shots, in parentheses is the percentage of the total number of shots.

Table 5

Indicators of performance low shot and high shot of teams participating in the UEFA Champions League season 2019/2020 group "C" (indicators for 6 games)

Indicators	Manchester City	Atalanta	Shakhtar	Dynamo	Group total
Total number of shots on goal	16 (100,0%)	8 (100,0%)	8 (100,0%)	10 (100,0%)	42 (100,0%)
Hihg shots	3 (18,8%)	1 (12,5%)	1 (12,5%)	4 (40,0%)	9 (21,4%)
Low shots	13 (81,2%)	7 (87,5%)	7 (87,5%)	6 (60,0%)	33 (78,6%)

Remark. the first value is the number of shots, in parentheses is the percentage of the total number of shots.

other teams, high shots was performed by Dynamo team players (31.6%).

We obtained similar data when analyzing effective shots on goal, was performed by the low shots and high shots players of the teams participating in the UEFA Champions League season 2019/2020 group "C" (Table 5).

Thus, an analysis of productive shots shows that out of 42 goals 33 (78.6%) were scored low and only 9 (21.4%) high.

The players of the Manchester City team scored 16 goals with 13 (81.2%) low and 3 (18.8%) high. In turn, the players of the Atalanta and Shakhtar teams with 8 goals scored 7 (87.5%) low and 1 (12.5%) high. Significantly different performance indicators of the Dynamo team, whose players scored 4 (40.0%) goals on high and 6 (60.0%) low goals.

Conclusions / Discussion

1. As a result of the study, it was found that the teams participating in the UEFA Champions League season 2019/2020 in the games performed a different number of shots on goal with different efficiency and effectiveness.

2. Group "C" teams averaged 12,1±1.0 shots on target per game. Most often, kicks against the opposing teams were carried out by the players of the Manchester City team (group winner) – 15,3±1,5 shots. Less often, the opponents 'goal was threatened by Dynamo players (last place in the group), who, on average, performed 8,3 ± 1,6 shots on target.

3. The results of the study indicate that the teams of this group on average 1.4 ± 0.3 shots per game from outside the goal area, 6.7±0.7 from the penalty area and 4.0 ± 0.4 from outside penalty area.

4. Football players of these teams on average 6.0±0.6 shots per game with the right foot, 4.2±0.5 shots with the left foot and 1.9±0.3 with the head.

5. It was found that high-level teams perform more shots from the low. So, the teams participating in the UEFA Champions League, on average, for a game 0.9 ± 0.1 shots, performed on high and 3.8±0.5 shots on the low. The number of effective strikes on high was 0.4 ± 0.1, below – 1,4±0,3.

Prospects for further research in this direction. Further research may be devoted to the study of the features of goal kicks by young football players in the games of CYFL of Ukraine of different age groups.

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