

THE CONTENT AND GAME ACTION WEIGHT OF SENIOR FOOTBALL PLAYERS AS GOALKEEPER

A. DÎNCĂ¹ C. CIORBĂ²

Abstract: Football was and remains the number one sport, being very popular among the youth, both at the amateur and professional level. In recent years, specialists in several sports events, including sports games, call for the differentiated training of athletes depending on their playing position. The players in the football teams are strictly specialized in playing positions, which are four in number: goalkeeper, defenders, midfielders and forwards. The given article represents an extensive analysis of all the footballers' actions in the position of Goalkeeper, here being analyzed in detail the content of the actions of the footballers in the position of Goalkeeper, as well as their weight in an official match. The recorded results will allow the design of a differentiated training program for footballers for the Goalkeeper position, which will allow its implementation in the sports training of senior goalkeepers.

Key words: football, seniors, goalkeeper, game actions.

1. Introduction

As in most sports games, in football all players are assigned to certain playing positions, and in most cases these are the players in the position of goalkeeper, forwards, midfielders and defenders [4], [6], [8, 9, 10, 11].

Analyzing the specialized literature [1, 2, 3], [5], [13], [17], regarding research in the football game, we notice that most of them are usually dedicated to the factors of sports training, functional training, where the whole team is presented. Very few works are dedicated to the

differentiated training for this sports event, for example depending on the playing position of the footballers. Even if there is some research in this regard [7], [12], [14, 15, 16], they are mostly dedicated to differentiated training according to the playing positions of football players on the field, such as defenders, midfielders, or forwards. In the local and foreign literature, there are very few researches with reference to the differentiated training of goalkeepers in the game of football, and this topic, being one of great topicality, became the subject of our researches.

¹ State University of Physical Education and Sport, 22, A.Doga Street, Chisinau, Republic of Moldova.

² "Ion Creangă" State Pedagogical University, 1, Ion Creangă Street, Chisinau, Republic of Moldova; „Dunarea de Jos” University of Galati, Cross-Border Faculty, 111, Domneasca Street, Romania.

2. Content and Research Methods

The purpose of our research was to highlight the main game actions of football athletes in the position of Goalkeeper and to assess their weight during an official match.

To achieve the given goal, traditional research methods in physical education and sports were applied and mostly intuitive methods, practical methods, pedagogical observation, statistical methods of processing recorded experimental data, etc.

In order to analyze both the quantitative and the qualitative part of the game actions of the goalkeepers, they were compared with certain standards, i.e. with the results of the goalkeepers from the biggest football teams on the European continent, compared to those of the goalkeepers within the National Championship of football from Romania and of the footballers from the Iranian Championship.

Thus, according to what was mentioned above, the goalkeeper's actions were analyzed in ten games from the final part of the Europe League 2023, the goalkeeper's actions in ten matches in the Romanian Championship, as well as the goalkeeper's actions in ten matches within the Iran Championship, the athletes of this country actually constituting the groups participating in the basic pedagogical experiment, i.e. the formative experiment, which is still taking place.

3. Results

Following the analysis of several games, especially of the players in the goalkeeper position, a symbolic classification of the game actions of the football players in the goalkeeper position was made (Figure 1).

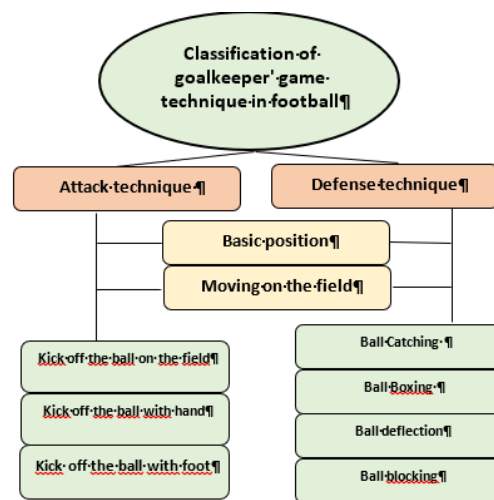


Fig. 1. *Classification of footballers' actions in the position of goalkeeper*

If we analyze the classification of footballers' actions in the position of goalkeeper, it is clearly observed that they are classified in turn into game elements and their execution procedures. They can be both in attack, where goalkeepers often start a team attack from their own goal, and in defence, which belongs to goalkeepers.

According to the above classification, the basic element among all the actions of football players in the goalkeeper's position is catching the ball, this is actually also the basic function of a goalkeeper in the football game (Table 1).

Table 1

The number of executions of the "catching the ball" element by the players in the goalkeeper position

Techniques	Techniques variants	Competitive forums		
		Europe League	Romanian Championship	Iran Championship
From a static position	Up	1,68	1,24	1,03
	Down	1,57	1,44	1,26
	Waist	1,18	1,08	1,03
In dynamics	Plunge	2,32	2,01	1,75
	Running	1,09	1,03	0,72
	Jump	2,31	2,16	1,95
Total		10,15	8,96	7,74

If we are to analyze the total number of executions of this procedure such as "catching the ball", it largely depends on the dynamics and aggressiveness of the games in different competitions. Thus, according to the table above, the total number of executions of this element is

proportionally decreasing at different levels, ranging from 10.15 catches in the European League, to 8.96 in the Romanian Championship and 7.64 in the Iranian Championship. This is very well shown in Figure 2.

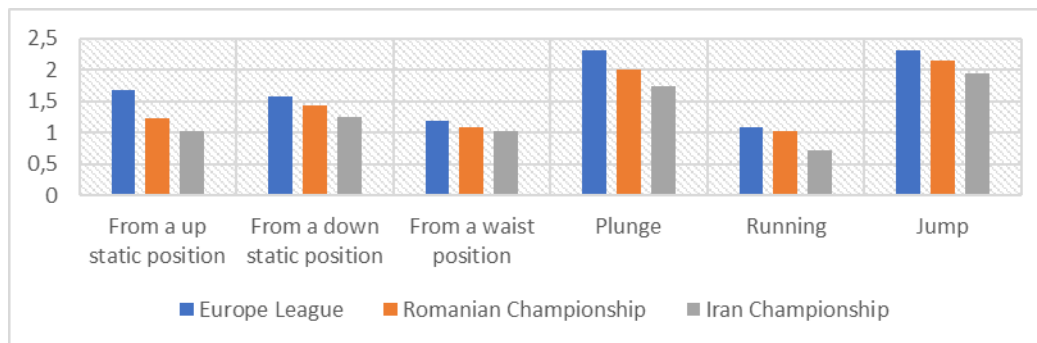


Fig. 2. *Graphic representation of the element "catching the ball" by the players in the goalkeeper position*

In the given case, based on the classification presented previously, the technical procedures for catching the ball were divided into catching the "ball from a static position" and "catching the ball from a dynamic position", i.e. in motion. According to the recorded data, the process of "catching the ball in dynamics" prevails over the one from a static position, a fact that is easy to clarify

where the game of football is a dynamic one, and the intention of those who take shots at the goal is to hit as awkwardly as possible for the goalkeeper, so without gaining possession of the ball. Thus, in all competitions, the European League, the Romanian Championship and the Iranian Championship, the average catch of the ball from a static position in the ten official games played was 4-4.4 catches,

the “dynamic catching of the ball” technique averages between five and six such executions. The most common methods used to catch the ball in dynamics was the side plunge catch, on average 2.32 in the European League, 2.01 - the Romanian Championship and 1.75 in the Iranian Championship. The use of the “catch the ball from the jump” procedure had approximately the same evolution, where the goalkeepers from the Europe League performed an average of 2.31 catches of the ball in the ten representative games, in the Romanian Championship - 2.16 catches and in the Championship Iran – 1.95 catches.

Thus, analyzing the number of executions of the goalkeepers of the game

techniques at different levels, it is clearly observed that they do not differ much in number from one technique to another, mostly their number depends on the intensity and the stake of each individual game.

Another fairly widespread element performed by footballers in the goalkeeper position is "blocking the ball" (Table 2). This procedure mostly takes place in the conditions of space and time crisis, when the goalkeeper has very little space between him and the forward taking the shot on goal and obviously, in this case the goalkeeper has very little time to make a decision about the defence goals, then he resorts to blocking the ball with any part of his body.

Table 2

The number of executions of the element "blocking the ball" by the players in the goalkeeper position

Techniques	Techniques options	Competitive forums		
		Europe League	Romanian Championship	Iran Championship
With the body	By falling	0,75	1,25	1,38
	From a static position	2,13	2,06	2,37
With the arms	By falling	1,28	1,22	1,36
	From a static position	3,14	3,46	4,12
With the legs	By falling	1,86	2,03	2,14
	From a static position	2,38	3,01	3,27
Total		11,59	13,03	14,64

Even if the goalkeeper has the right to block the ball with any part of the body, in the classification of the actions of the footballers in the position of the goalkeeper, the blocking procedures were divided into three techniques most frequently found in football goalkeepers,

these being: blocking the ball with the body, blocking the ball with the arms and blocking the ball with the feet (Figure 2). All these were further divided into two groups, such as from a static position and by falling, or plunge.

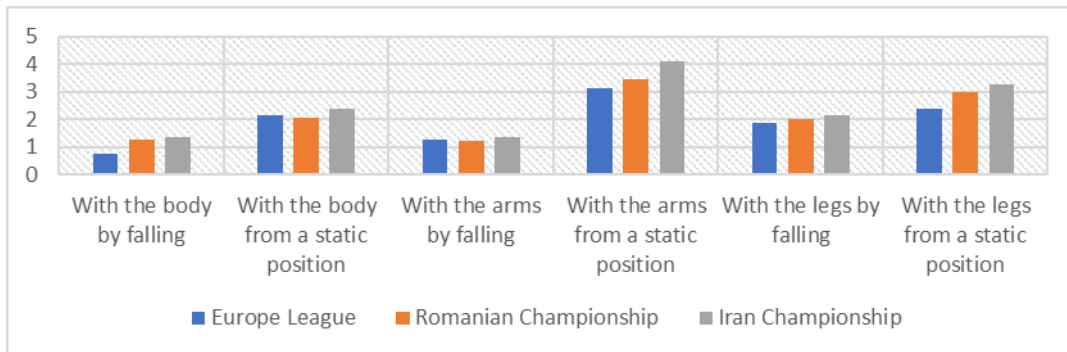


Fig. 3. *Graphic representation of the element "blocking the ball" by the players in the goalkeeper position*

In the given case, an inverse dynamic is observed, compared to the "catching the ball" element, where the number of ball blockages is increasing, i.e. the higher the level of competition, the lower the number of executions of this element. Thus, within the Europe League, tackling the ball with the body from a static position was undertaken on average up to 2.13 actions of this kind and only 0.75 actions of the kind given by falling. Approximately the same trend is observed in the Romanian and Iranian Championships, where the average debate with the body in a static position does not exceed the average of 2.06 actions in the Romanian Championship and 2.37 such actions in the Iranian Championship. Debates of the ball with the body by falling, in the two championships is relatively higher compared to the Europe League games, the average of these actions being 1.25 in the Romanian Championship and 1.28 in the Iranian Championship.

According to Figure 2 the most frequently applied methods of debating the ball are those with the arms at all levels, which is actually natural for players in the goalkeeper position, where the

game with the arms is the safest from the point of safety view of the technical procedures. Thus, releasing with the arms in a static position are most often applied regardless of the level of the competitions, and their average is from 3.14 to 4.12 interventions during a match. Almost twice as few interventions by goalkeepers are those by debating the ball with the arms by falling, the average in this case being approximately equal at all competitive levels, varying between 1.28 in the European League and 1.22 in the Romanian Championship and 1.28 in the Championship of Iran.

There are situations where goalkeepers are forced, depending on the game situation, to interfere for releasing the ball with their feet. If we analyze the results from Table 2 it is clearly observed that in the competitions of a higher level (Europe League), the number of debates with the foot from a static position, but also by falling, is lower compared to the competitive results of footballers in championships with a lower level, such as be the Championship of Romania and Iran. In the first case, the average of debates with the feet from the static position is on average 2.38 actions within the European

League and 3.01 and 3.27 actions respectively in the Romanian and Iranian Championship. Regarding the debates with the feet by falling, goalkeepers from the Europe League performed 1.86 such actions on average and those from the Romanian Championship – 2.03 and respectively – 2.14 those from the Iranian Championship.

Therefore, the element of the ball release is quite frequently used by the players on the goalkeeper position and mostly their number does not depend on the level of the competition but on the stake of each individual game.

Another procedure quite frequently used by the players in the position of Goalkeeper is “deflection of the ball”, this being applied in cases when the goalkeeper does not have enough time to gain possession of the ball, or the playing situation is difficult for the goalkeeper,

and he is forced to deflect the ball from its trajectory (Table 3, Figure 3).

According to the classifications of the technical procedures of the elements and the technical procedures of the goalkeepers, the most frequent deflections are accomplished by two procedures, these being the deflection with the hand/hands and the deflection with the foot/feet, both being in turn divided into deflections from a static position and deflections from jump/plunge. If we are to analyze the deflection with the hand through the jump, the goalkeepers in the Europe League competitions perform this procedure most frequently, on average 5.26 times per match. Their number decreases depending on the level of the competitions, where in the Romanian Championship the average of fulfilling this procedure is 4.12 times, and in the Iranian Championship 3.78 times.

Table 3

The number of executions of the "ball deflection" element by the players in the goalkeeper position

Techniques	Techniques options	Competitive forums		
		Europe League	Romanian Championship	Iran Championship
By hand	From a static position	2,15	3,22	3,57
	By jumping	5,26	4,12	3,78
By foot	From a static position	2,26	3,14	3,98
	By jumping	3,45	2,67	3,58
Total		13,12	13,15	14,91

The one related to deflecting the ball with the foot, this procedure is applied in cases when the ball is kicked towards the goal with a fairly high speed, and the

goalkeeper fails to react with his hands and is forced to deflect the direction of the ball with one or both feet, depending on the game situation.

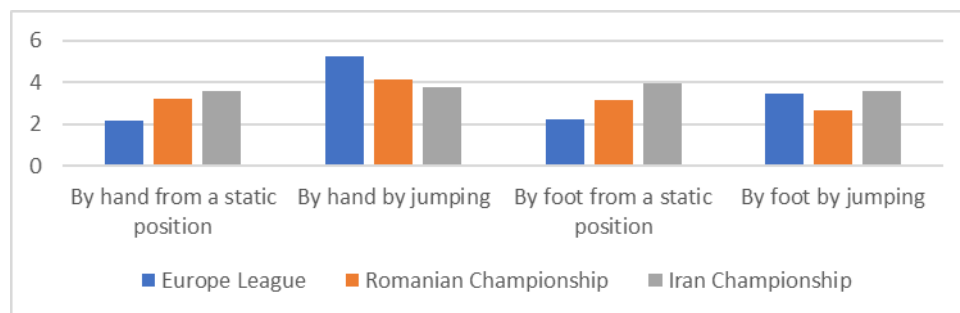


Fig. 4. *The number of executions of the element "deflection of the ball" by the players in the goalkeeper position*

The goalkeeper has the possibility to deflect the ball with his foot/feet both from a static position and by falling, when the ball is not in the intervention area of the goalkeeper. In the first case goalkeepers from higher competitions, such as the Europe League, this average procedure was applied 2.15 times within a game. This indicator is somewhat higher in the case of goalkeepers from championships with a lower level, such as be the Championship of Romania – 3.22 times and the Championship of Iran – 3.57 times.

Therefore, even in the given case there is no legality related to the application of

this technical procedure of the goalkeepers, however, a slight tendency is observed towards increasing the number of deviations with the foot from the static position, this underlining the lower intensity of the matches in the championships with a lower level of football, such as Romania and Iran, compared to the Europe League.

A procedure quite frequently used by goalkeepers in the game of football is the so-called "boxing the ball", this being executed with the fist(s) of the hand or hands, again depending on the game situation (Table 4, Figure 5).

Table 4

The number of executions of the "boxing the ball" element by the players in the goalkeeper position

Techniques	Techniques options	Competitive forums		
		Europe League	Romanian Championship	Iran Championship
With one hand from a static position	Up	1,06	1,23	1,36
	Front	0,53	0,22	0,14
With a moving hand	Side plunge	1,47	1,05	0,78
	Up jump	2,04	2,58	1,86
With both hands from a static position	Up	0,16	1,03	1,07
	Front	0,76	1,45	1,32
With both moving hands	Side plunge	0,78	1,07	1,54
	Up jump	1,12	1,47	1,23
Total		7,92	10,1	9,3

This way of defending the goal is applied in the case when the shots were strong at the goal, or in the direction of the goal, and the goalkeeper cannot risk catching the ball, being sure that he will be able to gain possession of it, and in this case the goalkeeper executes the so-called 'boxing' the ball either by changing direction out of

bounds or by turning the ball in the field. As mentioned above "ball boxing" can be performed with one or both hands, usually with the hands clenched into fists, all of which can be performed from a static position or in motion, either directly from the front or up, either by side plunge, etc.

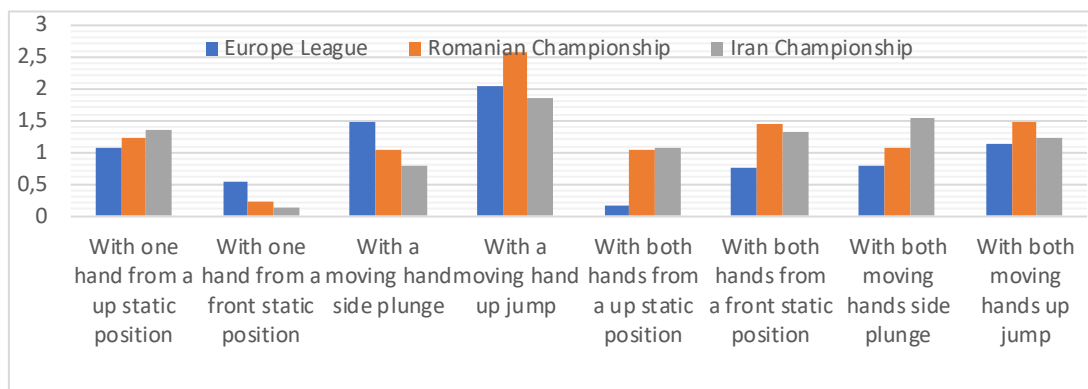


Fig. 5. The number of executions of the "boxing the ball" element by the players in the goalkeeper position

If we are to analyze "ball boxing" with one hand from a static position, this happens quite rarely, regardless of the level of competition, so "boxing the ball with one hand from a static position" in the average of the ten games examined this procedure it was only applied around 1.06, in the European League competitions, 1.23 in the Romanian Championship and 1.36 in the Iranian Championship. Even more rarely was the 'one-handed ball-boxing' technique used from the static front position, where the average across the three competitions was around 0.14 in the Iranian Championship and 0.53 in the Europe League, meaning there were matches where this technique was never performed.

The second method of "boxing" with a moving hand was somewhat more frequently applied, again depending on the game situations created in the goalkeeper's area of action. Thus, "boxing

with both hands" from the side plunge in the middle was performed 1.47 times in the case of the European League, 1.05 times in the case of the Romanian Championship and 0.78 times in the case of the Iranian Championship. Here a slight tendency to increase the number of such executions is observed depending on the level of the competitions, so the higher the competitive level, the more frequently this procedure is used and vice versa.

The next two methods of boxing the ball are those with both hands from a static position and in motion, both of which in turn are aimed from up, from the front, plunge and through the jump. Analyzing the results of performing "boxing the ball" with both hands from a static position from above, regardless of the competition level, this procedure was performed 0.16 times in the European League competitions, 1.03 times in the Romanian

Championship and 1, 07 times in the Iran Championship. Although, there is a small tendency towards increasing the number of executions as the competitive level is lower, their number is quite small, if we remember that in this observational experiment ten official matches were analyzed.

Approximately the same tendency is also observed in the case of the execution of the procedure "boxing the ball" with both hands from a static position and from the front, where the average execution of this procedure was 0.76 times in the European League competitions, 1.45 times in the case of the Romanian Championship and 1.32 times in the Iran Championship.

The results of "boxing the ball" with both hands from the movement, in our case, from the side plunge, where the goalkeepers from the European League on average performed the given technique 0.78 times, those from the Romanian Championship - 1.07 times and those of the Iran Championship 1.54 times do not differ much. There is a tendency to increase the number of such executions with the decrease of the competitive level, although the differences are quite insignificant.

Somewhat more pronounced are the results of "boxing the ball" with both hands from the movement by performing the upward jump, this being possible when the kicks were executed on the space of the goal at the top of it. In most cases, this procedure allows the ball to be sent over the goal, after which the corner kick follows. As the number of executions

of "boxing" with both hands by jumping up in the case of the Europe League, the goalkeepers performed on average 1.12 "boxings" in the Romanian Championship - 1.47 and in the Iranian Championship - 1.23 "boxings" of this type.

Slightly less is the number of "boxings" of the ball with both hands by side jumping, i.e. by plunge, where on average the goalkeepers in the Europe League performed 0.78 "boxings", in the Romanian Championship - 1.07 and in the Iran Championship - 1.54 such procedures.

If we analyze the executions of both technical procedures, as in the most frequent cases, no clear trend is observed in the number of executions of different technical procedures depending on the competitive level, although there are also cases of this kind, but they are not enough frequent.

The last element of the goalkeeper's game analyzed was "kick-off the ball back into play", this element being possible to execute both with the foot and with the hands (Table 5, Figure 5).

Analyzing games from different competitions has shown that at all levels there is a clear tendency for goalkeepers to be involved in the game as a defensive player, especially when pressure is put on the team's defence, which often has to use the pass back to the goalkeeper, and he is going to introduce it into the game. In this case the goalkeeper must be able to pass to the teammate accurately, debate the ball in the field accurately, that is to fully fulfil the functions of a defender.

Table 5

The number of executions of the element "putting the ball back into play" by the players in the position of goalkeeper

Techniques	Techniques options	Competitive forums		
		European League	Romanian Championship	Iran Championship
By hand	At short distances	2,35	3,17	3,26
	At long distances	3,28	2,57	3,06
With the foot	From the 6m square	4,78	5,73	4,89
	From the game	7,15	5,23	4,52
Total		17,56	16,70	15,73

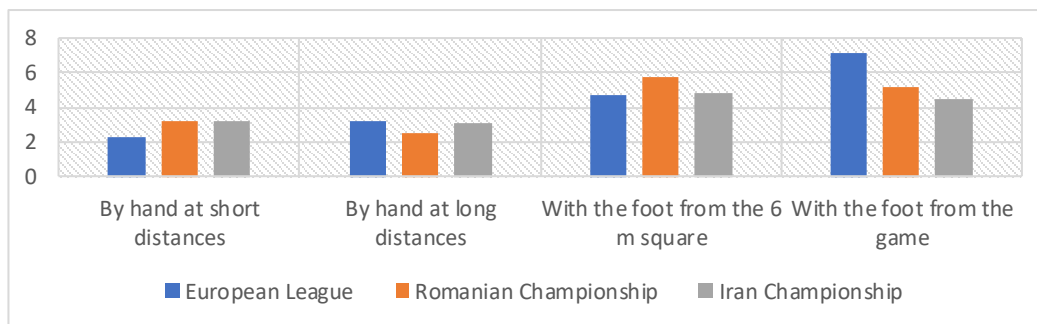


Fig. 6. *The number of executions of the element "putting the ball back into play" by the players in the goalkeeper's position*

According to the data in Table 5 the goalkeeper can put the ball into play, for the most part, by applying two basic procedures, these being putting the ball into play with the hand or with the foot. In the first case the goalkeepers use the procedure given when they take possession of the ball, i.e. the ball is caught and in the second case, when the ball is thrown in after it has left the court surface through the front line, in this case the ball is thrown from the position standard from the 6 meter square. Another case of kicking the ball is when the ball has been back the goalkeeper by a field player and in that case the goalkeeper can only gain possession of the ball by kicking it, acting as a defender.

If we analyze the introduction of the ball into play with the hand, we notice that

here the goalkeeper has several options, and the most frequent of them being the introduction of the ball to the player who is at a short distance, i.e. in the region of 10-15 meters, by throwing the ball to his player at a distance of 30-40 meters and more, this being considered at long distances. In the first case, the number of this type of interventions in the environment within the European league was used 2.35 times, with a slight increase in the case of the Romanian Championship – 3.17 times and the Iranian Championship -326 times.

Often the goalkeeper is forced to put the ball into play in cases when it leaves the field through the end line, and it is to put it into play from a standard position from the 6-meter box. The average number for such actions is around 4.78 in the Europe

League and correspondingly 3.17 in the Romanian Championship and 4.89 in the Iranian Championship. In the given case, there is no legality of the goalkeeper's game, or of the teams, regardless of the level of the sports competition.

As we mentioned above, lately in the game of football, especially in the seniors, the goalkeeper is more often used as the last defender, and he participates in the game as a field player as a defender. Most often this happens in teams with an increased level of sports training. For example, in the European League competitions, on average the goalkeeper plays the ball or kicks it into play 7.15 times, in the Romanian Championship - 5.23 times, and in the Iranian Championship - 4.52 times. Therefore, the higher the level of competition, the more often this method of goalkeeper play is applied. In fact, there are other factors involved here that require the teams to play defensively, here we refer to the conditions when one or another team has limited playing time and the score is not favourable for them, when one or the other wants to "freeze" score and the opposing team is constantly attacking them, then the defensive players are put in a situation where they have to turn the ball to the goalkeeper to create priority of defensive players. This happens less often in teams with a lower level of sportsmanship, who immediately pass into attacking actions without returning the ball to the goalkeeper, or do so less often.

4. Conclusions

Following the conduct of the given research, the following conclusions are proposed:

1. The content and weight of the playing actions of the footballers in the position of goalkeeper differ quite a lot depending on the level of the competitions.

2. Even if there are some legalities related to the way goalkeepers intervene in the football game, for the most part, their actions depend on the game situations, the game score, its stake and other factors.

3. The researches carried out have highlighted the fact that although the most frequent actions of the goalkeeper are those performed with the hands (debates, deflections, catches), recently goalkeepers are increasingly assigned the role of "last defender", where they play in the area on the position of defenders.

The results of the given research can be successfully used in planning and carrying out the training of football players for the position of goalkeeper.

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