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ANALYSIS OF THE GAME ACTIONS OF THE JUNIOR FOOTBALLERS AT NATIONAL LEVEL ACCORDING TO THE GAME POSITION

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Abstract. The problem of improving the substitute players preparation system in the game of football was and remains quite current at the contemporary stage. One of the acute problems in this regard is the selection of young footballers on certain criteria. According to the analysis of the literature, it was highlighted that most specialists focus on the traditional selection criteria of young footballers and very few of them take into account the structure and content of the activity on each game. It was this criterion that was the basis of the research undertaken, where all the game actions performed by footballers on the main game positions were analyzed, in order to be able to select both the right people for these positions and their specific training, of each game position. This will ultimately lead to an increase in the quality of training of footballers, both on the playing field and for the team as a whole.

Keywords: creativity, rugby players, synectic method, Torrance test.

At the present stage, several researches been undertaken related to optimization of the training process of footballers, including at the junior level. Junior is the age where, in fact, the primary selection is completed and the footballers already specialize in concrete playing positions [1, 2, 3, 6, 7].

To date, very little research has been conducted, highlighting the basic criteria that coaches focus when selecting football athletes according to the structure and content of each playing field [5, 6].

It is considered that a thorough analysis of the main actions on each playing position will allow the coach to select the right footballers on the main playing positions.

In this sense, a fact-finding experiment was carried out, which aimed to highlight the basic characteristics of the structure of the game actions of the junior football players according to their playing position. In fact, we were particularly interested in the structure of the game actions on each station, as well as the number of their executions in an official match.

The games of ten Romanian junior teams were analyzed, and the analysis was performed on four playing positions such as: goalkeepers, defenders, midfielders and strikers. It is worth mentioning that here the actions of the players were registered regardless of the extremes of the game, i.e. for central defenders, right or left defenders, all actions were registered only as defenders.

Next we will analyze each game position separately, both in terms of quantity and quality. Therefore, we will present both the structure of each game position and the number of their executions in a football match. A total of ten football matches were recorded between the junior teams and the average execution of the game elements procedures for each position was calculated.

Speaking about the content of the elements and procedures of the game, the first was subjected to the analysis of the goalkeeper position (Figure 1). It is very clear that the

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goalkeeper position is based on two basic elements, such as *catching and rejecting / deflecting the ball*. In fact, these are two basic actions characteristic of goalkeepers, where there are several procedures for executing these elements of the game.

In the same context, we can classify the actions of the goalkeeper as actions in attack, when the team starts the attack right from the goalkeeper and the actions in defense, when the team defends itself and the opponents are in attack.

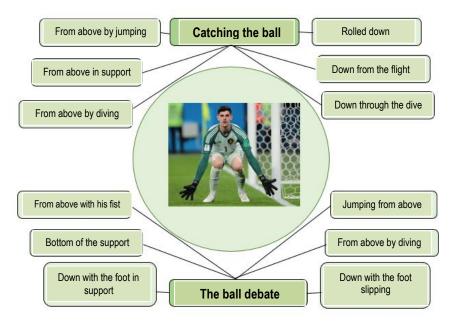


Fig. 1. The content of the technical elements and procedures of the game of the players on the goalkeeper position

Referring to catching the ball, these, in turn, fall into two broad categories, namely catching the ball above and catching the ball below, either rolled on the field or being in bouncing jumps from the field.

Depending on the location of the goalkeeper, the top ball can be caught by diving, from the support, or the ball bounced off the ground. Like catching the top ball, catching the bottom ball is classified as catching the ball rolling from the ground support, catching the bottom ball in flight and catching the bottom ball by diving.

All of the above are just the motor actions that footballers should perform while moving during the game. Next we will refer to the qualitative indices of play on the goal position, i.e. the number of executions of the elements and technical procedures of the game performed by them (Table 1).

According to Table 1, the player's actions as a goalkeeper are divided into two groups of actions, when the team is in attack and the goalkeeper is included in these actions and when the team is in defense and the goalkeeper's intervention persists.

Analyzing the goalkeeper's game actions when the team is in attack (Figure 2) it is very clear that the three most frequently used actions by him. First of all, most of the attacks start from the goalkeeper, when the opponent's attack ended with his recovery of the ball. In this case, the goalkeeper most often introduces the ball into the game by throwing it to the players on the field with his hand, who are better placed, ie to the players who are not marked by the opponents. The average number of such actions in a game was 11.42.

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No.	GAME ACTIONS IN ATTACK	Total	%
		no.	
1	Throwing the ball in the field by hand	11,42	45,63
2	Kicks	08,53	34,13
3	Head passes	05.07	20,24
Total actions in attack		24,97	100
DEFENSE GAME ACTIONS			
1	Catching the ball	12,46	37,68
2	Rejecting / deflecting the ball with the hand / hands	07,38	22,32
3	Rejection / deviation with the foot	13,23	40,00
Total defense actions		33,07	100
Total game actions		58,04	_

Table 1. The actions performed by the player as a goalkeeper

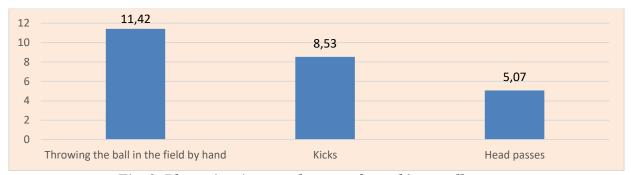


Fig. 2. Players' actions on the post of attacking goalkeeper

Another element quite often fulfilled by the goalkeeper is the foot pass, this being quite often used in junior football and not only. Usually, players, especially defenders, use the pass to the goalkeeper quite often, especially when the opposing team scores the players, who start the attack right near the goal or the 16-meter square. In this case, the goalkeeper is obliged to release or pass direct to the partner players on the field. The number of such clearances or passes on the ground in an average game is 8.53 executions.

In some situations of play, these being quite rare, the goalkeeper coming out of the 16 meter square not having the possibility to clear the ball with his foot is forced to clear it, or to pass it with the head to the team partners. Such

clearances on average, in a game, is recorded on average about 5.07 shares.

Next we will analyze the goalkeeper's playing actions when the team is in defense. In this case, three types of actions are also recorded, such as catching the ball, rejecting / deflecting the ball with one hand / both hands and rejecting / deflecting the ball with the foot (Figure 3).

Analyzing the official matches between the junior teams, it was shown that the average goalkeeper takes of the ball by catching it 12.46 times. There are situations when the goalkeepers, being in different situations, are forced to debate the ball with one hand or both, either on or off the field, depending on the situation and the convenience of the location. Such actions in a match can average 7.38.

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Fig. 3. The actions of the players in the position of goalkeeper in defense

In different situations, the goalkeeper has to reject / deflect the ball with his foot, especially in cases when the defenders return the ball to the goalkeeper, and he is unable to catch it with his hands. Such actions characteristic of the goalkeeper, according to the calculations, were on average 13.23 rejections / deviations. These can be done accurately to his teammates, or in cases of lack of time, due to pressure from the opposing team's attackers, they are met only on the field with little chance that the ball will reach his partners.

Therefore, the total number of game actions performed by players on the goalkeeper position is on average 58.04 actions. Based on the specifics of the goalkeeper, it is obvious that a larger number of actions return during the team's defense, where the goalkeeper is the last line of defense of the team, here the average number of actions is 33.07 actions, compared to 24.97 actions in attack. Here the number of actions of the goalkeeper also depends on the potential of the opponent, who will carry out more or less attacks, ie he will play more aggressively or less aggressively in attack.

Another very important playing position in a football team is that of defenders, in the literature it can be found under the term defender. Analyzing the actions of the players as defenders (Figure 4) were highlighted four elements of the game that they perform most frequently, of course depending on the game situations. These are: picks, clearances, interceptions, passes and dribbles. All these

elements are fulfilled by the defenders, in the most frequent cases, being in the attacking position or in the defensive position. According to the figure below, each element is executed by several processes.

Thus, referring to the takeover element, it can be performed by several procedures, and the most common of them are: takeover on the chest, takeover with the head, takeover with the leg and takeover with the foot itself.

Another characteristic element of the game for defenders is the clearance of the ball, and the procedures for performing this element are the two main ones - the clearance with the foot and the clearance with the head.

Another absolutely necessary element for each defender is the interception of the ball, this being accomplished either intuitively or by speed actions. These, as in the case of clearances, are divided into interceptions with the foot, or interceptions with the head. Both procedures are performed depending on the playing situations on the field.

One of the basic elements that every player, including the defender, is required to possess is the passing of the ball. Usually, this element is fulfilled with both the foot and the head, depending on the game situations.

One of the lesser-used elements in the game of football, including at the junior level, is dribbling. Defensive players rarely use this element because it is quite risky, and the attacker of the opposing team may take possession of the ball after a failure to perform the given procedure.

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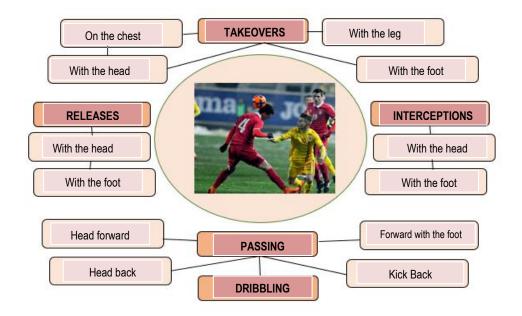


Fig. 4. The content of the elements and technical procedures of the game of the players on the position of defender

Thus, we reiterate that the procedures most frequently used by the players as defenders are the takeovers, clearances,

interceptions, passes and dribbles, and the weight of each one during a match will be further informed (Table 2).

Table 2. Playing actions performed by the player as a defender

No.		Total	%
	GAME ACTIONS IN ATTACK	no.	
1	Kicks	52,75	73,56
2	Head passes	8,22	11,46
3	Dribbling	8,23	11,48
4	Kicks at the goal	1,45	2,02
5	Headshots on goal	1,06	1,48
Total game actions in attack		71,71	100
DEFENSE GAME ACTIONS			
1	Football ball picks	13,48	31,80
2	Rejection / deflection with the foot	15,36	36,24
3	Rejection / deviation with the head	8,43	19,89
4	Interceptions	5,12	12,07
	Total defense actions		100
Total game actions		114,10	-

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For a start, we will analyze the share of technical-tactical actions performed in the attack by the players as defenders. In this case, the following technical-tactical actions are characteristic for the players on that position: kicks, head passes, dribbles, kicks at the goal, headshots on goal (Figure 5).



Fig. 5. The actions of the players as defenders in attack

According to Table 2 and Figure 5 it is clear that the most numerous elements in attack executed by the players as defenders are the foot passes, which make up an average of 52.75 passes, which represents 73.56% of the total number of elements executed in the attack. Approximately in the same number of executions are the head passes (11.46%) and the number of dribbles executed by these players (11.46%).

It is also clear why the number of shots on goal is quite small for the players as defenders, they actually have the function only of defense, and in the attack they are occasionally framed, depending on the game situations, the motivation for the game, match score and others. Thus, the number of kicks executed by the players on the respective post is 2.02%, ie only 1.45 kicks on average and - 1.48%, kicks with the head, which is 1.06 blows in the middle.

Therefore, the total number of playing actions performed by the attacking players as defenders is on average 71.71 elements and technical procedures, which is a characteristic average for the junior age.

The results of performing the elements and procedures of the players' game on the position of defenders being in a defensive position are quite different (Figure 6).

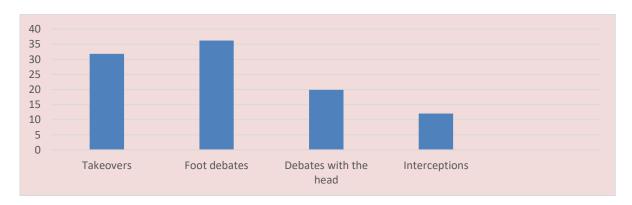


Fig. 6. The actions of the players as defenders in defense

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If we analyze the evolution of the players' defensive actions as defenders, it is clear that their number compared to the number of attacking actions is almost 30% lower than the attacking ones (42.39 actions), which demonstrates the tendency of the teams, to focus on offensive play.

Among the most common elements executed in defense are takeovers, rejections / deflections and interceptions.

In our case we did not specify the types of picks, but they can be very different, with different parts of the body. However, at the age of junior age, about 80% of the picks are executed with the foot, which is safer to execute and at the same time easier to perform, compared to the picks on the chest, with the head and others. Thus, we see that the average of the takeovers made in defense by the defenders is 13.48 takeovers, which constitutes 31.80% of the total number of actions in defense executed by the defenders.

Quite often the defensive players are put in the situation when they have to reject the ball without controlling it too much, resulting from the game situations. Thus, the average number of debates with the foot is 15.35, which constitutes 36.24% of the total number of actions executed in defense and 8.43 debates with the head, which constitutes 19.89% of the total number of elements and procedures performed in defense.

One of the characteristic elements of the defensive game is the interceptions, which aim to intercept the passes made by the attackers, they can be made by the defenders both intuitively and at maximum speed, when the passes are at medium and large distances. The number of this type of elements is quite small compared to other elements and technical procedures performed in defense, their average in a match being 5.12 interceptions, which is 12.07% of the total number of actions in defense.

Next we will analyze the actions of the junior players as a midfielder (Figure 7).

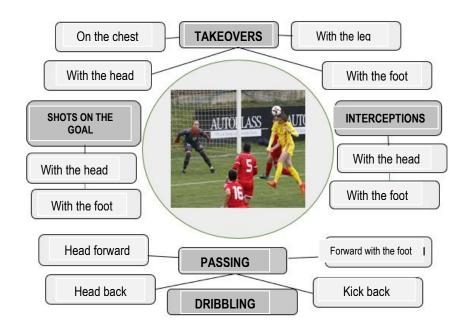


Fig. 7. The content of the elements and technical procedures of the game of the players in the position of midfielder

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Usually, the players in the midfield position have the highest volume of work in a match, given the fact that they are involved both in the activity of the defensive players, where the vast majority of attacks begin, and the direct involvement in the game in attack,

being an active support for the attacking players. This has in fact led to a rather large number of technical elements and procedures performed by the players in that position (Table 3).

Table 3. The game actions performed by the player as a midfielder

No.	GAME ACTIONS IN ATTACK	Nr. total	%
1.	Football ball picks	26,46	20,23
2.	Kicks	63,25	48,37
3.	Head passes	14,27	10,91
4.	Dribbles	18,33	14,02
5.	Kicks at the goal	6,32	4,83
6.	Headshots on goal	2,14	1,64
	Total game actions in attack	130,77	100
	DEFENSE GAME ACTIONS	Nr. total	%
1.	Rejection / deflection with the foot	13,87	43,93
2.	Rejection / deviation with the head	10,48	31,20
3.	Interceptions	7,22	22,87
	Total defense actions	31,57	100
	Total game actions	162,34	-

If we analyze Table 3, as in the case of the actions performed by the players from the position of defenders, the actions of the midfielders are also divided into actions characteristic of the game in attack and actions characteristic of the game in defense. Obviously, the actions of the attacking game are more numerous and varied, and among

them the following can be mentioned: takeovers, kicks, head passes, dribbling. According to the table above, the total number of shares of the attacking midfielders is 130.77. Correspondingly, in the respective table, in order to have a better clarity, we will also present the number of shares expressed as a percentage (Figure 8).

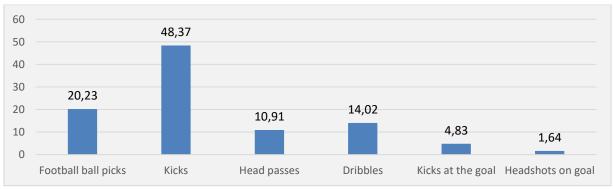


Fig. 8. Players' actions as attacking midfielder

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Based on the results shown in Figure 8, we notice that most of the actions performed by the attacking midfielders are hitting the ball / kicks, this being obvious, where the players on the given position are quite in possession of the ball and the most often apply foot passes to maintain possession. The total number of passes in a match is on average 63.25, which is almost half of the total number of shares (48.37%). For the junior age it is a sufficient number of actions, with reference to the number of passes and does not practically exceed the number of passes registered for the respective teams in other countries than Romania.

For that age, the number of kicks is quite high (26.46), this being characteristic for the given age, where the players from the vast majority of passes received, at first take the ball, or stop it in general and only then perform the next action. Presented as a percentage, the number of takeovers represents about one fifth of the total number of actions performed in the attack (20.23%).

Often, junior footballers, depending on the game situation, are forced to perform one pass or another with their head, support or jump. Their number is not too big, in total they represent 14.27 passes, which represents only 10.91% of the total number of shares under attack.

Not so considerable, but a few more actions were performed in the form of dribbling, their number being 18.33, which represents 14.02% of the total number of

actions under attack. The number of dribbling procedures is relatively high for the simple reason that at the age of junior footballers quite often try to dribble the ball, to dribble the opponent in several game situations, in order to be confirmed in the team. As we get older, footballers are less and less likely to use this procedure, using quick passes to move on the attack.

Ultimately, the meaning and purpose of each game is to score as much as possible in the opponent's goal. From game to game, the number of shots on goal differs, this being dictated by several game conditions, the level of preparation of opponents and others. At the same time, this process is characteristic, for the most part, for the players in the position of strikers, who in fact often come to make a difference in one match or another. In our case, the players as midfielders on average completed 6.32 shots on goal, which is 4.83% of the total number of actions. Only 2.14 headers were fired by the players from the given position, representing only 1.64% of the total attacking actions performed by the players from the defenders' position.

Next, we will analyze the number of actions performed in defense by the players on the defensive (Figure 9).

In fact, the number of actions that players play as defenders in defense is quite small, in our case we limited ourselves to only three such as: bounces / deflections with the foot, rejections / deflections with the head, interceptions.

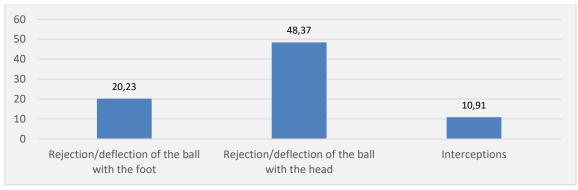


Fig. 9. Players' actions as defenders

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If we look at Figure 9, we notice that most often the midfielders proceed to reject / deflect the ball, depending on the game situations, and here are characteristic two types of debates, these being the rejection / deflection of the ball with the foot and rejection / deflection of the ball with his head. In the first case, the total number of rejections / deflections was on average 13.87, which constitutes 43.93% of the total number of actions performed in defense and 10.48 in the second case, ie the rejection / deflection of the ball with the head, which represents 31.20% of the total number of actions executed in defense.

The next type of defensive action performed by the players as midfielders was the interceptions. When we talk about interceptions, we refer to the anticipation of the passes between the opponents and the intervention of the players in order to take

possession of the ball. This does not happen very often, but on average, in our case, it was 7.22 interceptions, which represents 22.87% of the total number of actions performed in defense.

Finally, if we analyze the total number of actions in attack and defense performed by players as midfielders, we notice that this is one that fully corresponds to the age of junior players, with small differences in some or other procedures performed in attack or defense. Here we are only talking about the number of actions and not the quality of their performance by the players in one position or another.

The fourth game we are going to analyze is the striker, and the direct mission of these players is to create conditions and to score as many points as possible in the opponent's goal (Figure 10).

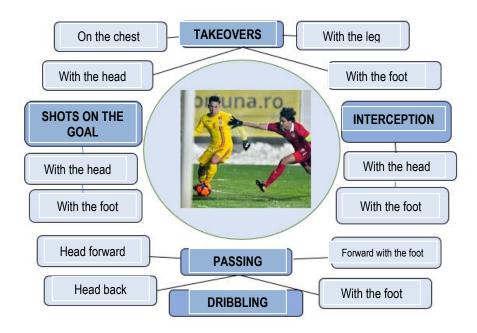


Fig. 10. The content of the technical elements and procedures of the game of the players in the position of attacker

Players in the attacking position must have in their technical arsenal several technical procedures that they are to apply during the game with one opponent or another. According to Figure 10, for the most part they are: shots on goal, picks, passes, dribbles and interceptions. To put it more bluntly, the attacking players must be able to perform

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practically all the types of actions necessary for a footballer of any level, including at junior level.

Next we will analyze the share of each technical-tactical action in attack and defense,

both quantitatively and expressed as a percentage, for a better understanding of the actions performed by juniors in a football match (Table 4).

Table 4. The game actions performed by the player as strikers

No.	GAME ACTIONS IN ATTACK	Total no.	%
1.	Football ball picks	22,36	16,52
2.	Kicks	58,47	43,20
3.	Head passes	16,31	12,05
4.	Dribbles	23,85	17,62
5.	Kicks at the goal	8,67	6,41
6.	Headshots on goal	5,68	4,20
	Total game actions in attack	135,34	100
	DEFENSE GAME ACTIONS	Nr. total	%
1.	Rejection / deflection with the foot	10,34	40,93
2.	Rejection / deviation with the head	8,39	33,22
3.	Interceptions	6,53	25,85
	Total defense actions	25,26	100
	Total game actions	160,60	-

As noted above, all actions performed by juniors in a match were symbolically divided into two groups, such as game actions performed in attack and game actions performed in defense. If we analyze the game actions performed in the attack, we notice that their number is approximately equal to that of

the players as midfielders. This demonstrates their involvement in the attacks as well. For example, the number of takeovers made by attacking players on average in a football match is 22.36, and in percentage they represent about 16.52% of the total number of actions performed in the attack (Figure 11).

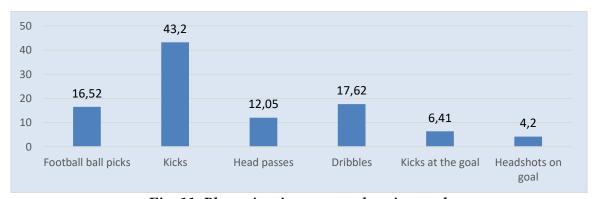


Fig. 11. Players' actions as attackers in attack

The most numerous actions in the game were the foot passes, this being a natural one,

because the vast majority of the football game, including the attack, is performed by passing

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the ball from one partner to another. The number of passes in attack on average in juniors was approximately 58.47, which represents 43.20% of the total number of actions in attack.

Otherwise, most of them were registered with head passes, their number being on average 16.31, which represents 12.05% of the total number of shares under attack. Here the largest number goes to the head passes, in cases when the corner kicks are performed, or during crossings from the flanks to the opponent's goal.

For the attacking players one of the basic actions is dribbling, this is quite often used in situations when the players go out one by one with the opponent, or in case the distance to the opponent's goal is greater and the players try to take ground for would create situations of attacking the opponent's goal. On average, the attackers perform 23.85 dribbles in the attack, which represents 17.62% of the total number of actions in the attack, this being a relatively large number compared to the players of the youth or senior teams.

In fact, the basic function of the players as strikers is to create situations and achieve them by scoring goals in the opponent's goal. This can be done through several methods, but the most common are foot kicks and kicks to the head. According to the analysis of the junior games, the average number of kicks in the game in a match is equal to 8.67, representing 6.41% of the total number of actions in attack. The average number of head-to-head shots is 5.68, which is 4.20% of the total number of attacks.

Thus, in general, the players as strikers in a football match perform on average about 135.34 technical-tactical actions in attack, this being a fairly large number, but it is part of the average of junior teams nationwide.

The defensive actions of the players as strikers are lower, due to the fact that these functions are largely the responsibility of the players as defenders and midfielders. However, there are plenty of situations when the players in the attacking position have to perform some defensive actions, either when the team is in the lead and wants to keep it, or when the opposing team is stronger according to the composition of the team and is always positioned on attacking actions (Figure 12).

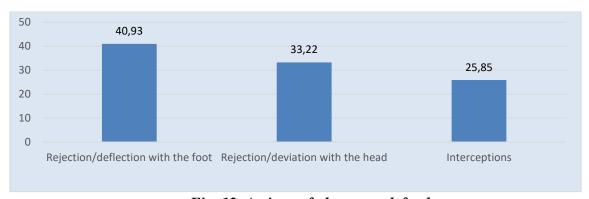


Fig. 12. Actions of players as defenders

Therefore, the most common actions in defense are the rejections / deviations of different types, as well as the interceptions during the passes made by the opponent. In the first case, the rejections / deviations of the ball are most often performed with the foot, and in the second case, depending on the game situation, they are performed with the head. The number of kick-offs / deflections by the players on the attack post was on average 10.34, representing 40.93% of the total number of actions in defense and the number

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of head-offs / deflections was 8.39, which which represents 33.22% of the total number of actions in defense.

An element used less often, but being very effective is the interceptions of passes made by the opponent. In this case, the players as a striker in a football match have completed this procedure 6.53 times, which represents 25.85%.

In total, the players as strikers, even if they are less involved in the defense actions, performed a total of 25.26 actions, this being a number that is part of the statistics of football games for the age of junior nationwide.

If we analyze all the actions of the players on the four playing positions in attack and defense, it is clear that their share is approximately equal to the averages of the playing actions of the junior teams at national level.

In this case, we were interested not only in the amount of game actions in attack and defense, but also in the structure in terms of movements coordination. That is, to which coordinative capacity is attributed a technicaltactical action or another, either in attack or defense. It has been clearly shown that all actions in attack, ie where players interact with the ball are characterized by a complex of coordination skills, these being the ability of kinesthetic sense, spatio-temporal abilities, the ability to sense balance and more. That is, in the case of performing the technical-tactical actions with the ball, it is practically necessary to highlight all the coordinative capacities characteristic of an object game, in this case, the ball game.

Equally important in terms of coordination skills are the technical-tactical actions in defense. In fact, according to the analysis, it was shown that the actions performed by footballers in defense as well as in the case of attackers are represented by the vast majority of coordination skills existing in sports activities.

This calls for more in-depth research into the effects of coordination skills development on junior footballers, especially on playgrounds, which would enhance the quality of play at this age.

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