STRUCTURE OF TECHNICAL-COMPETITIVE ACTIVITY IN MODERN FOOTBALL

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Abstract
The structure of competitive activities (even on the level of technique) represents the foundation while planning and operationalization of the method of training and teaching on each professional football team. The results of the performed research are obtained on a group sample of subjects from four national team, participants of the World Championship, held in Germany in 2006: Italy, France, Germany and Portugal. The elaboration and discussion of the obtained results included the overall duration of each analyzed match when the ball was in game. The observing protocol (prepared for this research) was used separately for each match and for each player. Based on qualification of technique of football game, an overall of 42 variables were observed, classified in a total of 5 groups of technical elements: ball kicks (15 variables – elements), ball receiving (12 variables – elements), disguising movements and dribblings (11 variables – elements), taking away of the ball (3 variables – elements) and carrying the ball. The results of the research indicated that ball hitting is the dominant technical element of football game (425), as well as that dribblings and disguised movements are rarely implemented (16.5). The kicks with the inside of the foot are far most represented, and the kicks with inside part of the foot ridge and headers are also distinguished. Among headers, it is important to underline the header with the bounce on one leg, since it is applied most. Ball receiving is the second frequent represented technique element and it was used on average 292 times in a match. The most often used is receiving with the inside of the foot of the rolling balls, while the second represented was the receiving of high balls based on amortization with inside part of the foot, as well as chest receiving of the ball. Technical element of taking away of the ball appears most in the form of taking away of the ball with inside part of the foot. The value of the approach to the problems of football game in this way reflects in application of the obtained results immediately in practice.

Key words: STRUCTURE / COMPETITIVE ACTIVITY / FOOTBALL / TECHNIQUE

INTRODUCTION

It is evident that the research activities in sport have increased, especially in football, where the importance of sports scientific research and of applied work is significantly more widely accepted. The importance of science in sport is appraised by all these who are involved in work of professional clubs and national managing bodies, but the major part of work is undertaken by the physiologist of exercising while other traditional sports scientific fields as sports technique and motor learning, are not represented enough in the filed of neither application or research. It seems that the world of football accepted biological sciences with greater enthusiasm than behavioral and sociological sciences (Reilly & Gilbourne, 2003).
The increased interest in analysis of football games, observed through a few aspects, resulted in improvement of training technology. A great number of research was done in the field of physiological adaptions and energy needs of the body in the course of a football match (Stolen et al, 2005), as well as of the structure and character of players’ movements (volume, intensity) in the course of the game (Bangsbo & Michalsik, 2002, Di Salvo, et al, 2007; Ricardo et al, 2007). The analysis of tactical manifestation of an individual, group of players or of an entire team becomes an indispensable method of application for preparation for football competitions of the highest quality, and therefore the object of the research is mostly the analysis of successful and efficient actions, forechecking, breaks. (Jankovic, 2004; Jankovic & Leontijevic, 2006, 2007; Japheth, & Hughes, 2001; Luhtanen et al. 2001; Sewarc, 2004; Scoulding, et al. 2004; Yamanaka, et al. 1999).

By the analysis of football matches it is possible to determine occurrence of certain technical elements, as well as their importance for achievement of final result. A relatively small number of papers elaborates these problems. Certain papers, dealt with monitoring of the following technical elements: ball receiving, passing, shots, scores, dribblings, interceptions, situations of dead ball, headings and goalkeepers defenses (Luhtanen 1988, Luhtanen, 1990). The authors of the mentioned papers, conclude that more successful teams, resultwise, have greater and more versatile application of technical elements of football game. However, there is a lack of scientific researches related to technical manifestations independently from football tactics, as well as regarding efficient adoption of specific football skills. Current coach practice (especially Serbian professional practice) is based on tradition, intuition and imitation, more than on empirical evidence.

The object of this research, which has empiric character, was firstly, football technique, i.e. structure of football game on the level of technique, with all its specificities. The structure of football technique involves technical manifestation of footballers during the game at each part of the ground, and technical manifestation means again any activity of a player with a ball individually, as well as an overall activities of a complete team.

As a consequence of the need to generalize data, as well as to give profile of football players on the level of application of certain group technical elements, as well as of each technical element separately, and obtaining of overall and mean values on the level of one team, there appeared a need to quantify and identify the most efficient elements of technique applied in modern football which is the aim of this paper.

By monitoring and analysis of standard situations in football performance it is possible to notice various factors of football game and features of top footballers. Such a process is far more complex in team sports than in individual ones where there are discrete, objective indices of features (Reilly et al, 2000).

Football technique, as an integral part of overall preparation of football players for top results in football, encompasses a variety of movements with or without the ball, which in game, due to nature and richness of performance, manifest in various ways (Aleksic & Jankovic, 2006).

METHODS OF WORK

For successful realization of this research, an empiric-non experimental method was used, and from general research techniques we used the technique of observation.

Group sample of subjects includes four national teams, participants of the last World Championship in Germany in 2006 - Italia, France, Germany and Portugal. Each national team played 7 matches on the competition, so the analysis comprised an overall of 28 matches. The procedure of analysis of technical manifestations and all activities on the level of technique of one team and of each footballer individually, included all footballers who appeared in competition as starters, and there were 64 of them in total. The analysis and elaboration of the obtained data involved the overall duration of one match, when the ball was in game. Therefore, the players’ activities after the referees’ breaks were not analyzed. Due to nature of football game, as well as specificities of certain systems of competitions, the extended time caused by draws in the phase of elimination, also were not observed in this research.

The observing protocol (made for this research) was used for each match separately, and individually for each player. By the system of notation, each activity with the ball of each player was recorded in the
Taking away of the ball (3 variables – elements): ODH – foot taking away of the ball; ODG – taking away of the ball by pushing the body; ODK – taking away of the ball by sliding tackle and

Carrying the ball: UV – overall carrying, ball controlling in movement with any part of the body accompanied by three contact with a ball in a row.

Notions interesting for this research are described by descriptive statistics. Statistic descriptive fields described are the following: frequency distribution for each variable expressed in the form of a discontinuous statistic series, i.e. normal statistic scale. An arithmetic mean is used from the segment of measures of central tendencies. Standard deviation, standard variance and coefficient of variance were used from the segment of dispersion measures.

RESULTS AND DISCUSSION

Taking into account the fact that effective match duration ranks between 60 and 65 minutes, by analogy, we can conclude that each player spends in contact with the ball, less than 3 minutes or 3.7% of overall time (Mohr et al., 2003). According to Di Salvo (2007) a player runs with the ball in possession between 119 and 286 meters during a match, which is 1.2 - 2.4% of the overall covered distance. There is an imposed need to increase players’ efficiency in contact with the ball, and that is possible by increasing training activity and application of technical elements which were confirmed resultewise.

By analyzing technical manifestations of the national teams at the World Championship in Germany, in 2006 (Graph 1), we reached the data that show that ball kicks are the dominant technical element in football game. One team, performs on average 425 ball kicks, which is 52% of overall number of activities with the ball. The next group of technical elements, according to occurrence in the course of one match, are ball receiving, whose overall volume on the level of the entire team is 292, i.e. 35%. Thus, 87 % of all movements with the ball are ball kicks and receiving. These data confirm that the so called “transfer” in football practice is the basic form of re-

previously created observation sheet (Carling et al., 2005). Pursuant to the classification of techniques of football performance (Aleksic & Jankovic, 2006), an overall of 42 variables were observed, classified in 5 groups in total of technical elements:

1. Ball kicks (15 variables – elements): UU – overall kicks; UH – kick with the inside part of the foot ridge, UU – kick with the inside of the foot; US – kick with the outside of the foot; UUH – the kick with inside part of the foot ridge; USH – the kicks with outside part of the foot ridge; UG – header; UGM – standing headers; UGK – header form movement; UG1 - header with the bounce on one leg; UG2 - header with the bounce on both legs; UGP – diving header; UP – overall special kicks; UP – heel kick; US – point kick; UV – volley; UD- drop kick; UM – scissors kick.

2. Ball receiving (12 variables – elements): PU1 – receiving with inside part of foot based on amortization of rolling balls; PU2 – receiving with inside part of foot based on trap; PU3 – receiving with inside part of foot based on amortization of high balls; PS1 – receiving with inside part of foot based on amortization of rolling balls; PS2 – receiving with inside part of foot based on trap; PS3 – receiving with inside part of foot based on amortization of high balls; PD1 – sole receiving based on amortization of rolling balls; PD2 – sole receiving based on trap; PH – receiving by mid-ridge of the foot based on amortization; PN – upper leg receiving; PGR – chest receiving; PG – head receiving.

3. Disguising movements and dribblings (11 variables – elements): DU – dribbling with inside part of the foot; DS – dribbling with inside part of the foot; D90° – dribbling with sole pulling of the ball and carrying at 90 degree angle; D180° – dribbling with sole pulling of the ball and carrying at 180 degree angle; DR – dribbling by ball rolling; DB – lateral dribbling; DZ – dribbling false stopping; DPU – dribbling jump over the ball inside; DPS1 – dribbling jump over the ball in the field; DPS2 – dribbling jump over the ball in the field with both legs; DP – dribbling by pulling of the ball with inside of the foot.
alization of players’ collaboration during the match. Greater number of ball kicks compared to receivings, in tactic sense, means that the application of play-
ing “at first”, therefore without receiving of the ball, is general tendency of play acceleration with as low number as possible of contacts with the ball.

**Graph 1.** Average and percentage occurrence of certain elements of technique during the game

Carrying of the ball as technical element encompasses 8% of overall activities with the ball of one team on a football match. The footballers of the observed national teams, used 55 times carrying of the ball as technical element, which, observed through average values according to each player is around 5.5 carrying in one match. It has been considered for a long time in the football-related professions, that carrying of the ball shall loose its’ significance in time, but this research, as well as many previous ones, indicate that this technical element is an extremely important segment of moving activity of footballers with the ball. Jankovic (2004) in his research obtained the data showing that one footballer during one football game performs 8 carrying of the ball of which 7 are successful and one is unsuccessful. According to certain authors (Luhtanen et al., 2001) who analyzed European Championships, one team carries the ball totally 38 times, which is 3.8 per player. In the analysis of competitive activity of the national team of Japan at the World Championship in 1998, Yamanaka, et al. (1999) obtained the results in which, among other, number of carrying at one match ranges from 49 to 95 (from 4.9 to 9.5 per player). Additionally, number of carrying of the ball depends also on the opponent as well as of many factors on which, after all, depends the result.

**Ball kicks**

Ball kicks, as technical element of football game, are dominant aspect of manifestation of foot-
ball skill. Application of ball kick is multiple, kicks appear even when passing the ball, i.e. collaboration of two players, when shooting at the opponent’s goal, as well as during defensive striking of the ball. Ball kick, whether observed from the point of technique, tactics or football condition, represents the most authentic and prioritized means of football performance (Aleksic & Jankovic, 2006). As it can be seen from Table 1, ball kicks make almost more than half of the overall footballers’ activities with the ball (52%), and therefore it is necessary to dedicate greater attention to this technical element in training, coaching and advanced training. Additionally, it is very important to have information about which kicks are the most frequent in football game and their volume.

At the World Championship in Germany in 2006 teams performed on average 425 kicks per ball, which is 42.5 kick per player (Table 1), approximately the same number of kicks as the winner of the World Championship in 1998, France, whose players on average performed 39 kicks in a match (Japheth and Hughes, 2001), however significantly greater number of kicks were performed by the French at the European Championship, 2000. (66 on average). The national team of Germany in the introductory match against Costarica performed even an overall of 590 ball kicks, while the Portuguese performed only 220 kicks. Compared to sub classification of the shots as technical elements, we can see that the greatest number of kicks by far, was performed by the inside of the foot (256). That fact is expected if we know that kick with inside of the foot is carried with the largest
kicking surface and thus the players most often opt for that type of kick. The next kick, by occurrence, at that competition was the kick with inside foot ridge, 59.4 or approximately 6 kicks per player. Jankovic (2004) reached the similar results of 6.4. From the Table 1 it can be noticed the great number of headers 43, thus each player on average performed on average four headers, which indicates to an exceptional importance of this element of football technique and requires impeccable training in order to increase efficiency.

Table 1. Average number of certain performed kicks (± Stdev) per ball of each National team at the competition and an overall average

<table>
<thead>
<tr>
<th>TEAM</th>
<th>UU (± Stdev)</th>
<th>UH</th>
<th>UUH</th>
<th>USH</th>
<th>US</th>
<th>UG</th>
<th>PU</th>
<th>Overall average</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITA</td>
<td>238 (43)</td>
<td>17 (7)</td>
<td>60 (10)</td>
<td>23 (8)</td>
<td>4 (2)</td>
<td>40 (8)</td>
<td>11 (5)</td>
<td>396</td>
</tr>
<tr>
<td>GER</td>
<td>269 (63)</td>
<td>19 (6)</td>
<td>66 (13)</td>
<td>23 (10)</td>
<td>3 (2)</td>
<td>50 (10)</td>
<td>25 (9)</td>
<td>453</td>
</tr>
<tr>
<td>FRA</td>
<td>258 (60)</td>
<td>13 (5)</td>
<td>50 (10)</td>
<td>32 (9)</td>
<td>2 (2)</td>
<td>36 (6)</td>
<td>18 (3)</td>
<td>409</td>
</tr>
<tr>
<td>POR</td>
<td>260 (77)</td>
<td>20 (2)</td>
<td>61 (13)</td>
<td>36 (9)</td>
<td>2(2)</td>
<td>45 (10)</td>
<td>20 (7)</td>
<td>445</td>
</tr>
<tr>
<td>Average</td>
<td>256.36</td>
<td>17.11</td>
<td>59.43</td>
<td>28.61</td>
<td>2.68</td>
<td>43.04</td>
<td>18.54</td>
<td>425.82</td>
</tr>
<tr>
<td>Max</td>
<td>379</td>
<td>31</td>
<td>91</td>
<td>52</td>
<td>7</td>
<td>68</td>
<td>41</td>
<td>590</td>
</tr>
<tr>
<td>Min</td>
<td>89</td>
<td>4</td>
<td>33</td>
<td>15</td>
<td>0</td>
<td>27</td>
<td>5</td>
<td>220</td>
</tr>
<tr>
<td>Stdev</td>
<td>59.47</td>
<td>5.66</td>
<td>12.93</td>
<td>10.00</td>
<td>1.89</td>
<td>9.95</td>
<td>8.59</td>
<td>81.97</td>
</tr>
</tbody>
</table>

There is a certain number of studies dealing with similar issues, analyzing participants of the world championships (17th World championship), winning and loosing teams were compared and the general conclusion is that the loosing teams realize on average 388 kicks while the winning teams manage to realize 355 kicks (Sclware, 2004). Whereas, a similar research on the sample of national teams participation in the XVI World championship in France, shows that the winning teams realized greater number of kicks on average, at one match (Grant, Williams, & Reilly, 1999), i.e.362 kicks (winning teams) compared 308 kicks (defeated teams).

Also, the statistical data of the final match of the Champions League 2005 between Barselona and Arsenal, when Barselona performed an overall of 716 kicks at that match, which is 71 kick per player on average, while the defeated team of the match, Arsenal realized 304 kicks. (Zubillaga & Gorospe, 2007).

Great number of analyses of competitive activity in football game is related to technical –tactical manifestation of an individual, group of players or the whole team. Within those analyses, not rarely, one can identify even the number of kicks based on the number of passes, because each performed pass, regardless of its efficiency, was preceded by the kick of the ball. Based on such studies, one can reach the data indicating that one team performs 369 kicks on one match (Luhtanen et al., 2001). Comparison in manifestation and implementation of technical – tactical combination in the play of European and South American selections points that European teams perform 307 ball kicks compared to 230 kicks of the South American teams (Lee, Shelton, Reilly & Rienzi,1999).

Even the fact that the national team of Japan, at the World Championship in 1998, at three matches played, realized different number of ball kicks, against Argentina 347, against Croatia 335 and 426 against Jamaica (Yamanaka et al,1999) shows that the number of performed ball kicks is determined to the great extent by great number of different factors which condition and determine the course of events on one game.
Structure of Technical-Competitive Activity in Modern Football

Graph 2. Structure of headers and analysis of special kicks during a game

On the Graph 2 one can notice the structure of headers and the way of performing of special kicks. Header with the bounce on one leg is the most frequently performed kick (17.25), while the header with the bounce on both legs is applied more rarely (13.71). These data speak about the dynamics of football game and the necessity to reach the ball as soon as possible, and one of the ways to do it, is certainly bouncing in game. Slightly greater application of the bounce on one leg is due to greater height that can be reached with such a bounce, so the players are prepared, i.e. trained to reach the ball before the opponent in that way. Standing and moving headers are applied in very small number, while diving header is extremely rare in football game, with at least 0.64 kicks on the level of the entire team per one match/ Special kicks also have their application, on the sample of the observed teams (Graph 2) it can be seen that drop kick is the most frequent (9.61), point kick is also applied more significantly (5.71) while heal kicks, scissors and volley are insignificantly applied.

Ball receiving

As shown by the results of this research, after the ball kick, the most frequently applied technical element in football game is ball receiving. Value of technical abilities of footballers’ is measured most often by the ability of “soft”, easy and rational ball receiving. In football, balls are most often received on principles of compression ("trap") and amortization (Aleksic & Jankovic, 2006). There is a great number of variants in the way to perform certain receivings of the ball, which depend, primarily on certain situations in the course of the game itself. It is necessary to receive suitably the ball and in the shortest possible time frame put it in function of further continuing of the action. Therefore, all balls, the rolling and high ones, fast and slow balls, coming from different angles towards the player, balls with rising and falling ways, balls with lower and higher grade of rotation are accepted. This research points out that one team on one match performs on average 292 ball receivings, observed through individual values (Table 2). Almost the same results were reached by other authors, who besides the number of the performed ball receivings, considered also their efficiency (Luhtanen et al., 2001), and out of 267 activities of ball receiving at one game, even 93% were successful ones, and only 7 % were receivings followed by the transfer of the ball into opponent’s possession.

According to the classification of the technical element, and especially according to subclassifications of ball receiving from the Table 2 it can be noticed that the greatest number by far of received balls with inside of the foot, rolling balls, even 180. This information points out to tendency of a player to realize collaboration in the safest way, with low pass. Also, as with the kick, the surface with which the ball is received (inside of the foot) is the greatest, increasing thus the efficiency of performance. The second element, according to occurrence of ball receiving is the receiving with inside of the foot of high balls, based on the principle of amortization 21.5;
from this one can see that the basic request of players is to “receive” the ball and to control it because they are forced to do this by strict marking and shallow formation of the opponent. Chest receiving has, also significant role in preparation of the ball for passing or shooting at goal. The Table 2 displays a very small number of balls received by upper leg and outside of the foot, of high balls whereas surprisingly the balls are often received by the sole.

**Table 2.** Way of performing the technical element of ball receiving represented by average values of each national team (± Stdev) and overall average

<table>
<thead>
<tr>
<th>TEAM</th>
<th>PU1</th>
<th>PU2</th>
<th>PU3</th>
<th>PS1</th>
<th>PS2</th>
<th>PS3</th>
<th>PD1</th>
<th>PD2</th>
<th>PH</th>
<th>PN</th>
<th>PGR</th>
<th>PG</th>
<th>UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITA</td>
<td>160(39)</td>
<td>14 (3)</td>
<td>16 (4)</td>
<td>16 (3)</td>
<td>3 (1)</td>
<td>2 (2)</td>
<td>6 (3)</td>
<td>4 (2)</td>
<td>6 (3)</td>
<td>5 (2)</td>
<td>19 (4)</td>
<td>1 (1)</td>
<td>252 (47)</td>
</tr>
<tr>
<td>GER</td>
<td>170 (48)</td>
<td>14 (5)</td>
<td>30 (6)</td>
<td>25 (7)</td>
<td>7 (3)</td>
<td>2 (1)</td>
<td>13 (4)</td>
<td>8 (3)</td>
<td>7 (2)</td>
<td>4 (2)</td>
<td>20 (7)</td>
<td>1 (1)</td>
<td>300 (76)</td>
</tr>
<tr>
<td>FRA</td>
<td>203 (46)</td>
<td>12 (3)</td>
<td>19 (4)</td>
<td>20 (6)</td>
<td>5 (2)</td>
<td>2 (1)</td>
<td>11 (3)</td>
<td>5 (3)</td>
<td>9 (3)</td>
<td>5 (2)</td>
<td>15 (2)</td>
<td>1 (1)</td>
<td>306 (58)</td>
</tr>
<tr>
<td>POR</td>
<td>188 (58)</td>
<td>18 (6)</td>
<td>21 (4)</td>
<td>23 (9)</td>
<td>4 (2)</td>
<td>2 (2)</td>
<td>17 (7)</td>
<td>6 (2)</td>
<td>9 (2)</td>
<td>8 (2)</td>
<td>15 (5)</td>
<td>1 (0)</td>
<td>313 (82)</td>
</tr>
<tr>
<td>Average</td>
<td>180.36</td>
<td>14.86</td>
<td>21.50</td>
<td>21.18</td>
<td>4.32</td>
<td>2.07</td>
<td>11.46</td>
<td>5.57</td>
<td>7.71</td>
<td>5.43</td>
<td>17.00</td>
<td>1.14</td>
<td>292.54</td>
</tr>
<tr>
<td>Max</td>
<td>291.00</td>
<td>27.00</td>
<td>42.00</td>
<td>35.00</td>
<td>12.00</td>
<td>5.00</td>
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<td>11.00</td>
<td>32.00</td>
<td>3.00</td>
<td>419.00</td>
</tr>
<tr>
<td>Min</td>
<td>66.00</td>
<td>6.00</td>
<td>11.00</td>
<td>8.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.00</td>
<td>1.00</td>
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<td>0.00</td>
<td>8.00</td>
<td>0.00</td>
<td>134.00</td>
</tr>
<tr>
<td>Stdev</td>
<td>48.26</td>
<td>5.03</td>
<td>7.03</td>
<td>7.10</td>
<td>2.70</td>
<td>1.59</td>
<td>5.83</td>
<td>2.87</td>
<td>2.88</td>
<td>2.49</td>
<td>5.24</td>
<td>0.80</td>
<td>67.96</td>
</tr>
</tbody>
</table>

**Disguising movements and dribblings**

Disguising movements, which at the same time are integral, preparatory part of each dribbling, represent the most attractive and the most sophisticated moving abilities for footballers with the ball. Dribblings and disguising movements are those deceiving body movements and actions with the ball, aimed at forced reaction of the opponent in the direction opposite to the one in which the ball will really be carried i.e. to confuse the opponent and to delay his action (Aleksic & Jankovic, 2006). On the example of the national teams, participants in the finals of the World Championship in 2006 it can be seen that dribbling as technical element and as attacking means of tactics is very rarely implemented.

Of overall number of performed dribblings (on average 16.46), almost 70% were dribblings with inside and outside of the foot. If we observe by the individual achievement, we can see that each player can perform only 1.6 dribbling per one football match. In tactic sense, it can be concluded that the game at this competition is based on collective play with as less as possible touches of players with the ball, without individual actions. The Italian national team, winner of the World Championship on average performed only 10 dribblings per one match, while the Portugal were slightly more liberal in their play with and average of 20 dribblings per match. This information speaks also on differences in tactical choice and conception of the game as well as on differences in features of players of certain selections.

From dribblings, besides the dribblings with inside and outside of the foot, for which it could be said that they were slightly more represented of the others, is the dribbling by skipping the ball in the field (2.14). Small number of performed dribblings, as well as performance of those dribbling which are the simplest, points out to great responsibility of the players in the game, without space and possibilities for individual manifestation and unnecessary risks in the game. Football game became in that sense disciplinary and strictly subordinated to achievement of final success, so that application of the basic and simplest technical elements lost in creative manifestation, on the individual plan. It is definitive that competing in skills of two teams transformed into a competition of two coaches, of two clear game conceptions, two in advance prepared plans of the game, with extremely limited space for improvisation.
Taking away of the ball

Taking away of the ball is a technical element which is used to try to come in possession of the ball in direct one-on-one situation. Taking away exists as a technical element of the game of football and the theory and practice so far confirmed three ways of taking away of the ball: taking away with inside of the foot, by pushing the body and with sliding tackle, although the ball can be taken in various ways, with different body parts, and in practice, although rarely, even with head (Aleksic & Jankovic, 2006). The choice of defensive activities in the course of the game, is also influenced by defense of the whole team, as well as by individual features of the players. Taking into account the fact that tendencies of modern play in defense, zone play and covering of the space, with as few as possible number of direct one-on-one situation (Jankovic, 2004; Jankovic & Leon-tijevic, 2006, 2007), it can be ascertained that taking away of the ball is applied rarely, which is confirmed by the results of this result.

The Table 3 displays that one team makes 23 tries of taking away of the ball during one match, and these are all those actions in which defense players come into contact with the ball while attempting to take it away. German national team, at the match against Ecuador, performed even 42 taking away of the ball. As for the way of performing a taking away, it can be noticed that taking away of the ball with inside of the foot (striking of the ball to an opponent) is the most applicable element of the taking away technique (11.14), while taking away by pushing the body and with sliding tackle are equally represents.

Table 3. Application and structure of performing of taking away of the ball as element of football technique

<table>
<thead>
<tr>
<th>TEAM</th>
<th>ODU</th>
<th>ODG</th>
<th>ODK</th>
<th>UOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITA</td>
<td>13.29</td>
<td>3</td>
<td>5.29</td>
<td>21.57</td>
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<tr>
<td>GER</td>
<td>13.14</td>
<td>8.57</td>
<td>9.43</td>
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<td>FRA</td>
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<td>7.71</td>
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<tr>
<td>POR</td>
<td>8.43</td>
<td>5.43</td>
<td>6.57</td>
<td>20.43</td>
</tr>
<tr>
<td>Average</td>
<td>11.14</td>
<td>6.18</td>
<td>6.36</td>
<td>23.71</td>
</tr>
<tr>
<td>Max</td>
<td>22</td>
<td>15</td>
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<td>Min</td>
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<tr>
<td>Stdev</td>
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</table>
CONCLUSION

Technical elements, as an integral part of players’ movements with the ball in football game, are exceptionally important segment of the structure of the football game on the level of technique. Since it is known that in modern, top football, the only criterion of value is the result, than quantifying of all activities of an individual, group of players or of the whole team which contributed to achievement of top sports result is an essential issue in programming and administration of the training process of one team.

The principal value of this paper reflects in the need to reach relevant information which would complement theoretic knowledge and offer theoretic supports to the practice in training process in the field of technique.

The results of the research showed that ball kicks are dominant technical element of football game, on average 425 ball kicks, which is 52% of the overall number of all ball activities.

The next group of technical elements, according to occurrence in the course of one match, are ball receiving, with an overall number of 292 on the level of the entire team, which is 35%.

Thus, 87% of all movements with the ball, are kicks and receiving of the ball. These data confirm that the so called “transfer” in football practice is the basic form of realization of collaboration of players during the game. Greater number of ball kicks compared to receiving performed, in tactical sense, can be interpreted as application of “one-touch” pass, therefore without receiving, which is general tendency in order to accelerate play in football. The kicks with inside of the foot are by far the most useful, accompanied with kicks with inside of the foot ridge and headers. Among headers, it is important to stress kick with bouncing on one leg because it is applied most. Within ball receiving the most used is the receiving of the rolling balls with inside of the foot, followed by the next frequent technical element of receiving of high balls on base of amortization with inside of the foot, as well as chest receiving. Technical element of taking away of the ball appears most in the form of taking away with inside of the foot.

Dribblings and disguising movements are rarely used during a match (average of 16.5 per team).

In order to provide more significant research results, it would be necessary to complete the sample of subjects, i.e. the observed teams with the teams which are not the most quality teams of one competition. Generalization of the results is not valid, since the observed teams mostly played dominant role against their opponents and therefore had greater control and possession of the ball. For future analysis, it is necessary to take, by the method of random sampling, the teams with different level of successfulness in order to obtain more objective results.

Additionally, manifestation of one team in application of the elements of technique can be influenced by great number of factors, such as quality of opponents, play conception, current result, importance of the game, numerical superiority or inferiority, venue of the match, competition system, weather conditions, players’ features...

The value of the approach to the problems of the football game in this way, is reflected in application of the obtained results directly in practice. Everyone who is directly or indirectly associated with the training process, i.e. who manages planning and operationalization of work of a football team, needs to know which technical elements are applied most in modern football in interpretation of the most successful teams, on most quality World competitions.

REFERENCES


