

## Review Article

### Influence of tactics efficiency on results in serbian soccer super league in season 2009/2010

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#### Abstract:

**Objective.** This research aims to compare the expression of football teams tactics, with different levels of performance, defined on the basis of placement on the table, after a competitive season. More precisely, it is necessary to determine whether and to what extent there are differences in the implementation of certain tactical assets (features) in the organization of successful attacks, among teams that are placed differently on the table.

**Methods.** In the tactical analysis of expression of 12 teams divided into 3 groups based on placement on the table a total of 228 games in the 2009/2010 Super League in Serbia were covered. The first group (G1) consisted of the teams that took the top four place in the standings, the second group (G2) teams that were placed from 7th to 11th place and a third group (G3) consisted of four last placed teams. Observed parameters are related to the efficiency of pass games and the structure of successful attacks, attacks that have been completed by a shot to the goal. All observed parameters were conducted with specially made software, which is used to analyse football games.

**Results.** By analysing the frequency of successful attacks, it was found that there is a statistically significant difference in the number of successful attacks among the teams that are placed differently on the table ( $p = 0.001$ ), in favor of the better placed team. Also, the success of the attack, seen through their precision indicates the differences in their distribution ( $p = 0.025$ ) among these groups. The results further suggest that the structure of attack is not related to the placement of the teams in the standings. However, the success of passing proved to be an important factor in achieving a better placement ( $p = 0.004$ ), and the distance from which kick is directed at goal ( $p = 0.021$ ).

**Conclusion.** The results of this study may help to identify those tactic features in football, which contribute to achieving better results.

**Key words:** football, game analysis, tactics, score, successful attacks

#### Introduction

The definition of tactical games model in football is of concern to many researchers. Application of certain tactical options in the game depends on a number of factors, primarily on the technical training of players, physical abilities, psychological maturity. Researchers in this area are trying to assess whether there are patterns in the game, which teams play in, aiming to use this information to identify the virtues and flaws, both the team's and the opponent's (James, 2009). The main objective analysis of the tactical aspects of football games is bringing to link technical and tactical elements from the actual result. This is the main reason why researchers around the world study tactics, in the attack, mainly through analysis of strike actions completed by a shot to the opponent goal (Dufour, 1993). The main objective of such analysis is to identify the advantages of tactical activities of the team or individual, who can still improve, but also to find weaknesses. Thus, the opposing coaches game analysis teams will use in the preparation and exhibition games tactics plan that will most effectively exploit flaws in a game opponent (Carling et al., 2009).

Research in football is generally focused on the analysis of goals and activities that lead to kick at goal (successful attacks) on the highest quality international and European, representative competitions (Jankovic and Leontijevic, 2006; 2007; Jankovic et al., 2009; Szwarc, 2008 ; Imamoglu et al., 2007, Acar et al., 2007; Luhtanen et al., 2001), and then in the best club competitions: (Buraczewski and Cicirko, 2007; Szwarc, 2007; Buraczewski and Bergier, 2007). Some authors have tried to find whether there are differences between

successful and unsuccessful teams in various competitions and representative in the implementation of successful attacks, as well as performance analysis of passing (Hughes and Franks, 2005; Hughes and Churchill, 2005; Szwarc, 2004; Scoulding et al., 2004; Hook and Hughes, 2001; Stanhope, 2001; Grant et al., 1999; Hughes et al., 1988). The analysis of national championships is often based on a successful attack (the most efficient): (Armatas et al., 2009; Sala-Garrido et al., 2009; Moura et al., 2007), and very little concentration upon analysis of technical-tactical activities (Lago et al., 2010; Armatas et al., 2009; Rampinini et al., 2009; Jones et al., 2004). However, some results of previous studies showed relatively contradictory findings. Hughes et al., (1988) found that teams that reached the World Cup semifinals in 1986 have the tendency to organize more attacks through the middle of the field, while those who failed to pass the group stage used more lateral position in organizing the attacks. In addition, after winning the ball again, teams are more likely to perform successful kicks at goal. The results of his study published Low et al., (2002) analysing the 40 matches in the FIFA World Cup 2002, and obtained similar results as Hughes et al., (1988), although in this study, none of the statistics has been used to compare the difference among the teams.

Also, Hughes and Franks (2005) have compared the performance of tactical activities between successful and unsuccessful teams in the World Championship 1990. They found differences between these two groups of teams, where the more successful teams have better indicators in relation to the possession of the ball, and the number of shots at goal. However, Hughes and Churchill (2005) compared the game play of successful and unsuccessful teams in the America Cup tournament 2001, they found that there were no significant differences between successful and unsuccessful teams in the structure of attack (tactical activities) that led to the kick at goal.

Other studies have tried to find a model to win on the basis of statistical reports of successful teams, under the assumption that mimicking these figures gets a winning model. For example, Horn et al. (2002) identified the central zone of pitch, just above the penalty area and stated that 86% of adding to this area will be completed later in the penalty area action with shot on the goal. Similarly, Taylor and Williams (2002) have given the importance of tactical asset - seizure of the ball, the team analysed the World Cup winners in 2002 and suggested that the ball which was stolen in the opponent's defensive third results in more attempts at goal kicks.

Since very few studies related to the tactical expression of football teams, with different levels of performance, defined on the basis of placement on a table, the need for this kind of research appeared in the national championship. Specifically, it is necessary to determine whether and to what extent there are differences in the implementation of certain tactical resources between teams that are differently placed on the table. Also, few studies that deal with this issue are able to for a long period of time, track the technical and tactical aspects of the game and then establish their relationship with the result. The special value of this work is reflected in the specific sample that was analysed, because so far there are no published results, which are involved in this kind of analysis, obtained by analysing the tactical success of Serbian Super League team.

Therefore, the subject of this research is to detect and track tactical laws for achieving the best possible results in the football game. Case work included physical manifestation of tactical football teams, through analysis of the structure of strike actions completed by a shot to the opponent's goal. Tactical presentation, primarily involves technical and tactical activities that an individual, a group of players or the whole team undertakes in order make a rational and efficient action towards scoring, using the tactical means in that part of the pitch. In addition to this, the passing game was analysed, both its efficiency and its influence on the team's placement.

The aim of this study is to compare tactical expression of football teams, with different levels of performance, defined on the basis of placement on the table, after a competitive season. More precisely, it is necessary to determine whether and to what extent there are differences in the implementation of certain tactical features in the organization of successful attacks, between teams that are differently placed on the table.

## **Method**

### **Sample**

The study analysed 228 games, and expression of 12 teams that competed in the Super League of Serbia, in season 2009/10. The teams were divided into 3 groups based on their ranking on the table, at the end of the season. The first group (G1) consisted of four team winners in the second group (G2) were the team that took the 7th, 8th, 9th and 10th position, while the third group (G3) consisted of four last placed teams.

### **Procedures**

Collecting data relevant to this study was conducted electronically, using software which is specially made for this experiment (Java programming language). At the end of competitive season, systematic observation of recorded match video has been done on a PC Pentium 4. Videos are taken from the television channel RTS, Sports Arena and FOX television.

### Variables

Variables that are tracked by this observation were selected as the primary subject of analysis and that as a result of such fundamental theoretical, practical tenets and principles, which belong to the football game and its evolution. In this paper, research attention is focused on monitoring the success of organized attacks that have been completed by a shot on the goal, and the characteristics of the passing game.

The **total number of successful attacks** on one game is the first variable which explains the connection between placement on the table and technical and tactical success of the team. Another variable is **the structure of successful attacks** analysed through the **accuracy of shots** to the opponent's goal, with different precision strikes (shots on goal), imprecise attacks (shots wide) and effective attacks (goals); **duration of attacks** (attacks up to 3 sec., of 4-8 sec., from 8-15 sec., >15 sec.); **number of the participants in the attacks** (individual, 2-4 players, >5 players); **the number of passes in successful attacks** (without pass, 1 pass, 2-4 passes, >5 passes); **distance of shot from the goal** (<5 met., 5-11 met., 11-16 met., >16 met.). While the third variable is the **passing game**, and the extent and effectiveness of passing game in a game (the total number of passes, the number of accurate passes, the percentage of correct passes).

### Statistical analysis

Standard descriptive statistical analysis (mean and standard deviation) was calculated for each variable. Kruskal Wallis tests were used to, determine differences between mean values of the frequency of certain variables, and Mann-Whitney-U tests were, used as post-hoc tests where appropriate. Chi-square tests were used to detect correlation between the placement of the table team and the distribution of variables in the observed parameters. The level of statistical significance was at  $p < 0.05$ . All statistical tests were analysed using SPSS 17.0 software (SPSS INC, Chicago, IL).

### Results and discussion

The aim of this study was to identify the relationship between tactical expression and achieved results of the teams that appear in football national championship in Serbia. Taking into account the fact that the result in football is determined by many factors, one group of authors believe that this approach in the analysis, the effectiveness of the game, must be taken with a grain of salt (Lago, 2009, Taylor et al., 2008, Tucker et al., 2005). However, longitudinal research, such as this observation may point to certain laws that can be used in the analysis of the very structure of the football game, and it is very important, results from these studies have direct practical implications, both in training technology and in direct preparation for the competition.

In the 2009/2010 season competition in the Serbian Super League, 16 teams participated, the first four of which have claimed performances in competitions organized by UEFA (the first team in the standings going into qualifying for the Champions League, while the next three teams have won the qualifying standings for the Champions of Europe). The two last placed teams at the end of the season fell below the rank of the competition. This work led us to the data which show the relationship between the results, i.e. the sum of points won during the competition, and tactical expression of the teams whose characteristics of the game were analysed.

**Table 1. Comparative analysis of the average number of successful attacks of teams per game, in the Super League of Serbia in 2009/2010 season.**

| Successful attack        | G1             | G2             | G3             |
|--------------------------|----------------|----------------|----------------|
| <i>Average</i>           | 11.66          | 9.09           | 7.94           |
| <i>Stdev</i>             | 4.22           | 4.03           | 3.66           |
| <i>p (Kruskal-Volis)</i> |                | <b>0.001</b>   |                |
| <i>Mean Rang</i>         | 62.78          | 45.42          | 37.3           |
| <i>Mediana</i>           | 12.00          | 9.50           | 10.00          |
|                          | <b>G1 - G2</b> | <b>G1 - G3</b> | <b>G2 - G3</b> |
| <i>p(U test)</i>         | <b>0.006</b>   | <b>0.001</b>   | 0.158          |
| <i>r (size effect)</i>   | 0.34           | 0.43           | 0.18           |

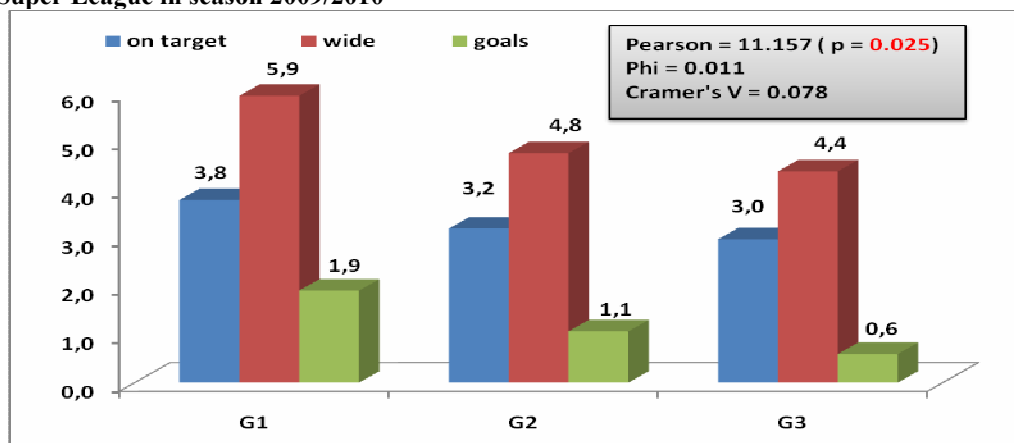
G1 - four top placed teams, G2 - the teams of 7 - 11 places, G3 - four last placed teams.

Analysing the number of successful attacks during the games (all those attacks that have been completed by a shot to the opponent goal) and comparing their frequencies, it is seen that there is a significantly greater number

of such attacks in the team which achieved a better result, and were better placed ( $p = 0.001$ ) (Table 1). This figure, though quite expected, indicate that teams achieve better results, take the initiative and win because they have a better organization of the attacks than opponents. The most noticeable difference is in the teams that took the first four positions, which have significantly more shots at opponent's goal than the other two groups of teams, while there is no difference between teams that have taken middle position on the table, and teams placed in the lowest position (Table 1). Similar data were obtained by Armatas et al. (2009) who took the sample of teams that appear in the Greek national championships and compared the performance of the first two teams in the standings and the two last placed teams, and the conclusion was that better placed teams performed also more shots at goal than worse placed. What is also important in the interpretation of the results of this analysis is certainly the average number of shots at goal, which is quite small. If you look at the overall average data about Serbian championship teams, on averagethere are less than 10 kicks at goal. Based on these data, it can be concluded, in a professional sense, that the Serbian football championship teams are more focused on the tactics of defending the goals. While Lago et al. (2010) analysing the Spanish professional league, came to results where the team who won have an average of 14.4 shots on the goal, the team that played a draw 13.6, and defeated team averaged 12.0 shots on goal. Also, Szwarc (2004) analysed World Cup 2002 and obtained similar results according to which the finalists had a lot more shots than the teams that haven't reached the finals of the competition (18.00 vs. 14.08). That the Serbian championship is quite inefficient proves the fact that at the Euro 2008 teams semifinalists organized approximately 15 successful attacks per game, while the four last place teams in the group had an average 13.2 a successful attack (Roxburg, 2008). In the 2009/10 season in the Champions League teams that qualified for the quarterfinals had average of 13.13 of successful attacks, and eight of the last placed team in group 8.76 of such attacks, while the Europe League, the second-best European club competition, the team in quarterfinals had an average of 11.99 of successful attack, and eight last teams in the group stage of the competition had on average 9.38 of attack. (www.uefa.com). Previously mentioned results clearly indicate that much more attention must be paid to the tactics of attack, i.e. to the methodology of effective organization of attacks in order to achieve better results in the future.

Looking through specific examples, it often happens that the team that has fewer shots towards the goal wins the match, but a special value of this research is reflected in a number of games analysed in the annual cycle of competition, so the obtained results provide reliable indicators of the tactical efficiency of the teams in Super League of Serbia. In addition to the frequency of successful attacks, for this research, as well as for deeper analysis of the tactics of attack of teams with different performance, accuracy of the final kicks at the goal is extremely important, which is again related to the distances from which strikes are carried out. All the shots that are pointed to the opponent goal, according to generally accepted classification, are divided into precise and imprecise, and the scored goals are defined as effective shots. In relation to this indicator, the results of this study show that there are significant differences ( $p = 0.025$ ) in the distribution of various precision shots among the teams that have achieved different results (Figure 1). Although the size of the impact of the Phi and Cramer coefficient is small, it can be concluded that the successful teams realize more efficient attacks than the less successful teams. It is interesting that the team that recorded the worst outcomes have the highest percentage of accurate shots while the percentage of inaccurate shots is approximately the same (Figure 1). Differences in the distribution of different shots precision can be explained by the quality individuals who carry out attacks in more successful teams, however, one of the main reasons is first of all, the distance from which the shot is taken, which is what the precision i.e. danger to the goal depend on.

**Figure 1. Analysis of the accuracy of successful attacks and their distribution in different placed teams, Serbia Super League in season 2009/2010**



G1 - four top placed teams, G2 - the teams of 7 - 11 places, G3 - four last placed teams.

In G1 group, the ratio between goals and kicks was 1:6 (for every six shots fall by one goal) in a G2 is 1:9, and G3 is 1:8, from this we can see that successful teams have a higher percentage of efficiency (realization) than the other teams. The ratio between kicks and goals at Euro 2008, the team semifinalist, was 1:9, while the four last placed teams in the group had a 1:28 (Roxburg, 2008), while the ratio of successful EC in 2000 the team was 1:7, and 1:17 unsuccessful (Hook and Hughes, 2001) and Szwarc (2007) analysing the finals of the Champions League, came to a 1:8 relationship of the team that won the Champions League and the defeated team 1:24. These data indicate that the successful teams have a higher percentage of realization of opportunities, which is also one of the preconditions for good results. Rampinini et al. (2009) analysing the teams of the Italian Serie A, also came to the conclusion that there are significant differences between successful teams on one hand, and unsuccessful ones on the other hand, with reference to accurate and inaccurate shots, and the percentage of efficiency.

Analysis of the very structure of organization of attacks among Serbian Super League team, depending on the duration of attacks, number of players and number of participants as well as adding to the organization's attack shows that there is no statistically significant difference ( $p=0.26$ ,  $p=0.39$ ,  $p=0.34$ ), and Chi Square test showed no significant relationship between the teams in the standings and the distribution of certain types of attacks in relation to the three criteria set.

**Table 2. Analysis of the structure of successful attacks, expressed through the average and percentage values of the duration of the attacks, the number of participants and the number of passes during an attack, in the Serbian Super League in season 2009/2010.**

| <u>DA</u>    | <i>G1</i> | <i>G2</i> | <i>G3</i> | <i>Chi Square</i>  |
|--------------|-----------|-----------|-----------|--------------------|
| < 3 sec      | 3.9 (34%) | 3.2 (37%) | 2.3 (30%) | $C^2 = 7.62$       |
| 4-8 sec      | 2.4 (21%) | 2 (22%)   | 2.1 (28%) | $p = 0.26$         |
| 8-15 sec     | 2.9 (26%) | 1.8 (20%) | 1.9 (24%) | $\hat{f}i = 0.092$ |
| >15 sec      | 2.1 (19%) | 1.8 (21%) | 1.4 (18%) |                    |
| <u>NPP</u>   |           |           |           |                    |
| 1 player     | 2.5 (21%) | 2.2 (25%) | 2.2 (28%) | $C^2 = 4.06$       |
| 2-4 players  | 6.8 (59%) | 5.3 (59%) | 4.4 (56%) | $p = 0.39$         |
| >5 players   | 2.3 (20%) | 1.5 (16%) | 1.2 (16%) | $\hat{f}i = 0.067$ |
| <u>NPSS</u>  |           |           |           |                    |
| no pass      | 2.5 (21%) | 2.3 (26%) | 2.3 (29%) | $C^2 = 6.73$       |
| 1 pass       | 2.7 (23%) | 2.2 (24%) | 1.8 (23%) | $p = 0.34$         |
| 2 - 4 passes | 4.4 (37%) | 3.3 (36%) | 2.9 (37%) | $\hat{f}i = 0.085$ |
| > 5 passes   | 2 (19%)   | 1.3 (14%) | 0.9 (11%) |                    |

DA - duration of attack; NPP - the number of player participants attack; NPSS - the number of passes in successful attacks; G1 - four top placed teams, G2 - the teams of 7 - 11 places, G3 - four last placed teams.

Based on the results (Table 2), we can say that the attacks that last up to 8 seconds are the dominant form of offensive activities Serbian Super League team. Attacks up to 8 seconds, on average, are 55-59% of all attacks. By analysing the results of the number of attacks depending on their duration, it can be seen that the Serbian Super League teams usually opt for extremely fast action, by which they attempt to exploit any mistake in the defense of the opponent, i.e. the speed of transition in the moment of change of ball possession is an extremely important aspect of effective tactics attacks. Grant et al. (1999) concluded that on WC 1998th usually the duration of possession leading goal were  $10 \pm 6$  sec. On the basis of the results obtained by Buraczewski and Bergier (2007), analysing the matches in different competitions, 76% of goals achieved by attacks that last up to 15 seconds, similar data were obtained by Buraczewski and Cicirko, (2007) analysing CL games of the season 2005-06. (60.5% goals last up to 5 sec, 6-10 sec. and 11-15 sec. same as 10.5% and over 15 sec. 18.4%). Based on analysis of Jankovic et al. (2010) it is evident that the number of short attacks is decreasing, while the number of continued attacks are more and more increasing, which indicates a quality game in defense on one hand, which prevents the development of rapid attacks, the increasing importance of continuous possession of the ball on the other hand.

Looking at the number of players who participate in actions that end in a shots to the goal, based on the results, it can be said that the group attack (2 - 4 players) is the most effective form of offensive actions in the Serbian



league. Team attack, which involved 5 or more players, is applied by the teams with the best results. From Table 2 it can be seen that teams from the G1 group use both individual and team attacks, while the weaker teams placed more reliance on individual attacks. Team attack, which involved 5 or more, is the characteristics of the teams with bigger number of technically skilled players, who are able to keep the ball in possession for a long time, and who use that in the best possible way (Jankovic et al., 2010).

The number of passes during one attack can also point to the very structure and nature of offensive actions. On the basis of results of this study, it is shown that the weaker teams use more attacks without passes i.e. individual attacks in the organization of their attacks, and successful teams in the organization of many more attacks involve five or more players (Table 2). This data is linked to the results obtained in terms of duration and number of player participants, where the better placed team on average performed more attacks lasting >15 seconds, and therefore a larger number of passing during the development of attack. Buraczewski and Bergier (2007), got the results were mostly two (16.7%), three (25%) or four players (22.9%) were included in the action of effective attacks. Based on the analysis of the previous three World Cups, it is evident that there has been an increase in the percentage of attacks with 5 or more passes, indicating again the increasing application of continuous attacks and the need for dominance in the possession of the ball in comparison with the opponent (Jankovic et al. 2010).

An important segment of competitive performance is the quality of passing game in the field. Since the receipt and transmission of ball is the basic unit of cooperation between the two main players in the field, the effectiveness of a tactical attack of a team will depend on it. In modern football, players are required to have an extremely high percentage of accurate passing, especially in the maneuver area. And if we take into account the close game in the markings on each of the fields, technical skills of players, and the ability to control the ball in the most complex game situations are mostly expressed and emphasized (Jankovic et al., 2010). Technical and tactical skills of players are manifested primarily through dominance in the possession of the ball, and through fast and simple actions that end in a kick to the goal. The domination of possession of the ball certainly is proved by the total number of passes the team made during the game and their efficiency. Looking at the total number of passes of teams in super league of Serbia, it can be seen that there is no significant difference in the average number of passing during the game, although it is still evident that the better placed teams have more passes than worse placed teams (Table 3). When the number of accurate passes is in question it is evident that the number of accurate passes decreases with worse placed teams, and finally when the percentage of accurate passes is in question it can be seen that there is a statistically significant difference between the team's placement and the effectiveness of their passing games ( $p = 0.004$ ) (Table 3). Based on these results, we come to the conclusion that teams who aspire to a high ranking, must above have quality individuals, and to devote more attention in the training process, technical - tactical training of its players, because the effectiveness of their playing influences directly the achieved result of that team.

**Table 3. Comparative analysis of passing game, the team placed differently, as expressed through the average value and standard deviation values of Serbian Super League matches of the season 2009/2010**

| Passing game               | G1     |        | G2     |        | G3     |       | p - results  |
|----------------------------|--------|--------|--------|--------|--------|-------|--------------|
|                            | mean   | stdev  | mean   | stdev  | mean   | stdev |              |
| <b>Total Passes</b>        | 414.81 | 141.92 | 324.56 | 115.07 | 356    | 78.52 | <b>0.147</b> |
| <b>Successful Passes</b>   | 316.56 | 121.07 | 243.56 | 116.89 | 226.56 | 68.28 | <b>0.073</b> |
| <b>% Successful Passes</b> | 75.75  | 7.40   | 72.44  | 11.66  | 64.56  | 6.76  | <b>0.004</b> |

G1 - four top placed teams, G2 - the teams of 7 - 11 places, G3 - four last placed teams.

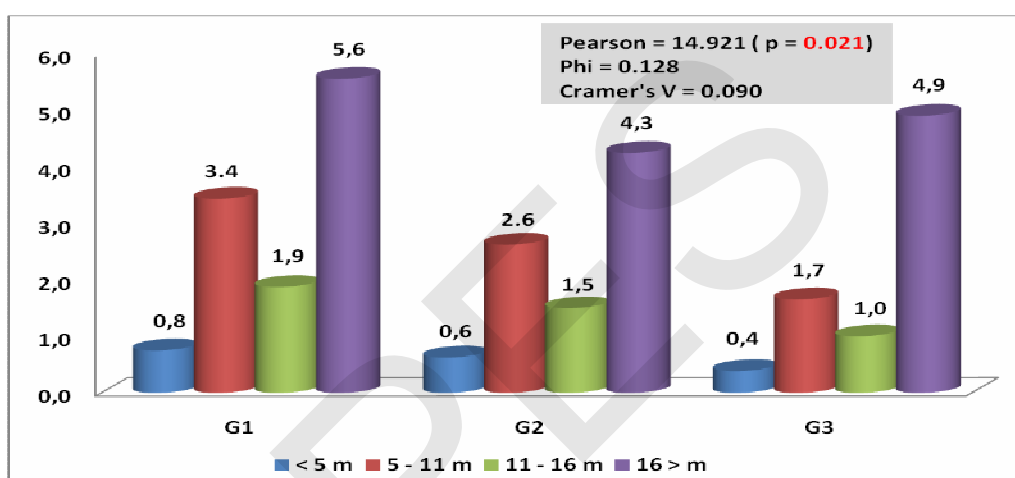
These data indicate that better-trained technical team achieved a number of passes that is from the positive property, which is the tendency in modern football, achieved dominance in the field and thus come to the opponent's goal. In the 2009/10 season in the Champions League elimination rounds average total number of passes was 459.2, 328.1 has being successful while the percentage of success was 70% (www.uefa.com). At the European Championship 2008 a successful team, that passed the second stage of the competition had average 359.9 successful passes, percentage of successful passes is 75.6%, while teams that did not pass the elimination phase of the competition had an average of 217.4 a successful passes, the percentage of 72.4%. (www.uefa.com)

Based on these indicators with the highest quality of European football competition can be seen that a pass plays in the Serbian Super Leagues slower or players keep the ball longer in his possession, thus losing the dynamics of the game, or significantly less active during the game. A smaller number of passes, thus, accurate passes,

speaks in favor of the previous statements, but in terms of percentage of success is noticed that only teams from the top of the table are close to the European standards.

In the analysis of the distance from the goal when shot at goal is taken, which is very important in the interpretation of precision shots, the division into four categories is made - from goalkeepers space - five meter, the shot from a distance of 5-11 meters, the penalty (11 meters) to the edge of the penalty area and outside the penalty area. From Chart 2 it can be seen that there are significant differences ( $p = 0.021$ ) between the three groups analysed. Better placed team in the standings finish their attacks, based on the analysis, the percentage number of shots point to a line penalties (G1-G2 and 36.1% - 36%), while the worse placed teams decide to shoot from bigger distance (outside the penalty space 61.8%). These results indicate that teams that achieved worse results fail in ending the attacks to come closer to the goal and thus increase the chances of achieving goals. While the teams that achieve better performance, come closer to opponent's goal by providing an organized attack themselves

**Chart 2. Analysis of the distance from which kicks at goal are taken and the distribution of strokes in certain zones of differently placed team in the Super League of Serbia in the season 2009/2010. Values are expressed as average number of shots per game from certain zones.**



G1 - four top placed teams, G2 - the teams of 7 - 11 places, G3 - four last placed teams.

Previous analysis is in accordance with results of this study, so the most goals in World Cup 2006 reached the zone 5-11 meters, 62%. Buraczewski and Bergier (2007), in their studies came to results which show that most goals are achieved from space between the goal line and penalty line (62.4%). World Cup 2006 goals consisted of: goals inside the penalty area 82.5% and 17.5% outside the penalty area. At the World Cup 1998 The fewest goal were scored from the distance, i.e. outside the 16-metre area, 12, 9%, while the percentage of goals from the inside of the 16-metre area was 87,1%. Based on these results we can conclude, that the achievement of positive result, in the long run, depends on the clear conception of the tactics of attack, which would increase the number of organized, successful attacks. Striking from a distance, are certainly useful, as well as surprise, however, should not be the dominant form of attacking action.

## Conclusions

When interpreting the obtained results of this analysis, one must take into account the fact that it's just part of a comprehensive analysis of competitive activity, based on mathematical probabilities (Ortega et al., 2009). Therefore, the data values in the analysis of the game, regardless of whether or not significant, can serve as coaches' feedback in planning and programming of training activities, but not as the only source of information about the competitive performance of the individual or team. In theory, through this kind of monitoring and analysing football games, one comes to information that may point to certain principles and legality of the evolution of football tactics, from which it can predict the development of football tactics.

Previous studies have concluded that the difference between winning teams and losers is mostly evident in the frequency and efficiency kicks at goal and the success of the passing game (Grant et al., 1999). Hughes and Franks (2005) showed that the differences between successful and unsuccessful teams in converting possession into shots on goal, where successful teams have a better relationship. The results of this analysis largely confirm the results of previous studies, but also show the distribution of certain variables, the observed parameters, and reveal their connection to the final placement team in the standings.

Analysing the correlation of expression and tactical team's final ranking, based on the monitoring of a competitive season in the Serbian league we can draw the following conclusions:

- Analysing number of successful attacks, it was found that there is a statistically significant difference in the average number of successful attacks between the different teams that are placed on the table, the difference is in favor of the better placed team to shoot more shots at goal from worse placed teams.
- Distribution of precise, imprecise and effective attack with the teams placed differently statistically is different and is also in favor of the better placed team who has a higher percentage of the number of effective attacks.
- The structure of organization attacked Serbian Super League team, depending on the duration of attacks, adding to the number of successful attacks, and the number of players participating in the organization of the attack, is not different with teams with different success.
- Better placed teams have more passes in a game, and when the number of accurate passes in question shows that they are worse teams placed decreases the number of correct passes. However, analysing the exact percentage of passes can be seen that there is a statistically significant difference between the teams on the table in relation to the effectiveness of their passing games ( $p=0.004$ ), with a better placed team achieved 75% accurate while adding teams in last place in the table have only 64% of the successful passes.
- In the analysis of the distance shot at goal, it is obvious that there is a significant difference ( $p=0.021$ ) between the three groups analysed in the distribution of shots from different distances. Better placed team in the standings finish their attacks close or inside the penalty area, based on the analysis, (G1-36.1% and G2-36%), while the worse placed teams decide to shoot from distance (outside the penalty area 61.8%).

These studies review the indicators of success in football, some limitations and / or methodological problems in studying these studies can be seen. Analysing the reliability of such monitoring and analysis competitions activities in football, the conclusion is that errors in this research can be: for the duration of the attack about 5.5%, adding to the number of about 3%, for the zone of rubble about 3% (Hughes and Churchill, 2005). Taking into account the fact that almost all variables have up to 5% of the errors, we can say that this method of data collection is moderately reliable.

The value of this kind of approach to the problem of football games is reflected in the application of the results directly into practice. Anyone who is directly or indirectly connected with football training, who manages the training process of a team or working with youth football categories need to know the rates of success and according to the methods of creating them. In addition to the direct, professional, indicators discovered by this analysis, the special value of this work is continued monitoring of competitive activities of a national competition in football, on a large sample of teams (12 teams). In Further analysis, for which this study will serve as a theoretical framework, we should find the relations tactics games, either in attack or defense, among Serbian most successful teams and successful teams of Europe, which would at least partially contribute to identifying the reasons for the failure of Serbian clubs in European competitions over the past 15 years.

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