COMPARATIVE ANALYSIS OF USE OF „STANDARD SITUATION-SET PLAYS" ON XVI, XVII, XVIII AND XIX WORLD CUP IN SOCCER

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Apstract:

   The purpose of this study is to determine frequency of successful and goal-score attacks, which are started from set plays on XVI, XVII,XVIII and XIX World Cup in soccer Four best placed teams on the last four World Cups in soccer are used as a sample for this study. In this study successful attacks started from set plays were analized, apropos from throw-ins, free kicks and corners. Data obtained in this study are processed with procedures of descriptive statistics, and from the area of comparative statistics, differences in success of attacks are observed using Kruskal-Wallis test.The results of this analysis indicate some differences in number of succesful attacks which are started from set plays in last four World Cups. The highest percentage of successful attacks started from the set plays in relation to total number of successful attacks was in XVII World Cup (49%), while in the last World Cup, that percentage is consederably smaller (26%). Also, it is notable significant statistical diference in number of accurate and inaccurate attacks started from corners (p=0,042), while there is not significant statistical difference in number of efficient attacks started from set plays, and generally most effective attacks started from set plays,   starts after free kicks (p = 0.148).From the results of this study, it is obvious that set plays are extremely important part of soccer game. Also, the percentage of efficient attacks started from set plays, indicate that if team want to achieve great success on World Championships they can not only be good in set plays, but must have quality organizations of continued and quick attacks.

   Key words: *free kick, thzow-ins, corner kick, Kruskal-Wallis*

INTRODUCTION

 Analysis of competitive activity is been used as a research method in many athleete disciplines. The analyses is concidered very important process which enables coaches to make right concludions regarding his own and opposite team performance. If there wouldn't exist such an analysis football coaches would be forced to rely only on their own subjective judgments. It is known that in modern football this is not sufficient, since personal obsevation are nor pricaise nor informative enough. Because of that football game has been enreached with details desribing team performancce wider than coach's observations. (Franks, 1997).

A detailed analysis TA aims to improve both, team and individual performance by using the feedback gained from these analyses. The goals of monitoring competitive activity and collecting important information might be achieved by observing method (Armantas, Yiannakos, Ampatis, and Sileloglou, 2005).

   Monitoring and discovering most effective methods and means of playingallows systematization of training process on substantive and effective aspects of the game (anković et al., 2009).n football, scoring goals is the primary determinant of success and therefore numerous researchers are interested in finding the best ways for making this

aim achievable (Jones, James, and Mellalieu, 2004).

Results of the research dealt with the interruption of the game showed great importance of standard situations - set plays, in the achievement of results in modern football. After the standard situation – set plays, you get 1 / 3 of the total number of goals (Bangsbo and Peitersen, 2000). At the European Championships 2004 held in Portugal, 35.6% of all achieved goals are after the set plays (Armantas, Yiannakos, and Hatzimanouil, 2007), while that number and at the last World Championship was 32.6% (Armantas et al, 2007).

In previous research activities the set plays were analyzed in continental competitions, especially the European Championship (Armantas et al, (2007); Hill and Hughes, (2001); Pappas, (2002); Grant, Williams and Reilly, (1999); Jinshan , Xiaoke, Yamanaka and Matsumoto, (1993); Olsen, 1998), as well as the most important club competitions (Taylor, James and Mellalieu, (2005); Michalidis, Papaiakovou and Papaiakovou, (2004), and by comparing domestic and European competitions.

In these researches analyzed the ways of organizing attacks that lead to achieving the goals (the counter-attack, the continued attacks, set plays), the distribution of time to achieve goals in correlation to the first and second half and areas from which/where the goals are scored. Corners were as well included in these analyses.

Set plays were rearly individually analised. That is the main reason why we nowadays are not in a position to monitor the trends development in this segment of the game. For this reasons the need for comparative analysis of successive World Championships has been appeared.

The subjects of this analysis are successful attacks, carried out after a set plays at the XVI, XVII, XVIII and XIX World Cup Championships, and the important relations manifested as essential for the establishment of certain tendencies in development of football games in field of tactics. The main aim of the research is to determine the frequency of successful attacks, and the number of effective attacks, carried out after a set plays at the XVI, XVII and XVIII World Championships

METHODS

On a WCs in France 1998, Japan and South Korea 2002, Germany 2006 and South Africa 2010,

participated 32 national selections which played 64 matches. The sample taken consisted of the most successful teams on these competitions. Namely, best four placed team on WCs in France (France, Brasil, Croatia and Netherland), on WCs in Japan and South Korea (Brasil, Germany, Turkey and South Korea), on WCs in Germany (Italy, France, Germany and Portugal), and on WCs in South Africa (Spain, Netherland, Germany and Uruguay) it included 7 games played by 4 teams, which makes the number 28 on one championship and 112 in total on four World Cups.

This paper will address the issue of successfully organized attacks, which were ended by goal strike and those started after set plays. Based on this parameters for the need of analysis it's been monitored 12 different variables: total number of succesful atacks– TSA, total number of imprecise and precise attacks – TIPA (all shots which are inprecise or hit the bar or saved by the goalkeeper or defender), total number of efective attacks – TEA (goal scored attacks), total number of succesful atacks carried out after a set plays – TSS, total number of imprecise and precise attacks carried out after a set plays – TIPS, total number of efective attacks carried out after a set plays – TES, total number of imprecise and precise attacks carried out after a throw-ins – TIPT total number of imprecise and precise attacks carried out after a corners – TIPC, total number of imprecise and precise attacks carried out after a free kicks – TIPF, total number of efective atacks carried out after a throw-ins – TET, total number of efective atacks carried out after a corners – TEC, total number of efective atacks carried out after a free kicks – TEF.

The Descriptive method and within it general research techniques - techniques of observation - have been used for successful realization of this research.
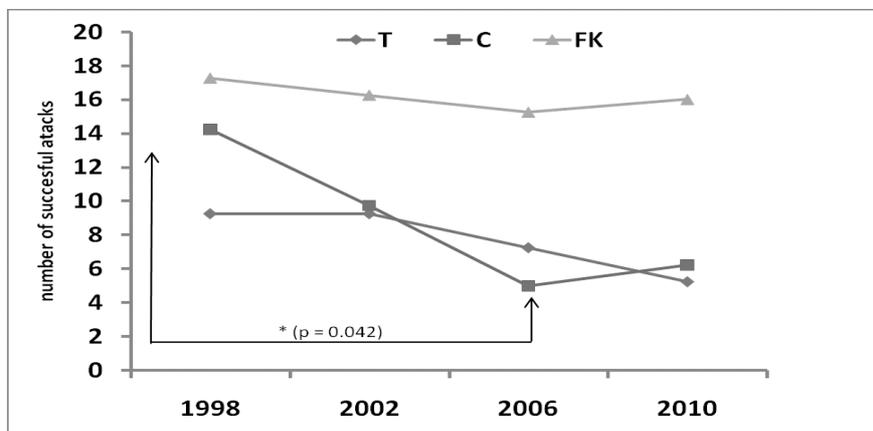
Through this technique, we analyzed successful attacks (attacks that have been completed by a strike to the opponent goal), based on the observer paper, or a protocol of observation This paper is used for each team that is monitored and treated every game individually. The system of notation, in the previously formed observer paper recorded all scouted variables.

Hughes & Churchill, (2005) in their study where they tested the reliability of such a system of/for monitoring and analyzing competitive activity in football, concluded that with this kind of sur-

Table 1. Average value, by team, imprecise, precise and efective attacks of four best placed team in XVI, XVII,XVIII and XIX World Cup (TIPT - total number of imprecise and precise attacks carried out after a throw-ins, TIPC - total number of imprecise and precise attacks carried out after a corners, TIPF - total number of imprecise and precise attacks carried out after a free kicks,

TET - total number of efective

Set plays	1998		2002		2006		2010		p value
	Average	Stdev	Average	Stdev	Average	Stdev	Average	Stdev	
TIPT	9.25	1.5	9.25	4.27	7.25	2.62	5.25	1.71	*0.138*
TIPC	14.25	5.12	9.75	4.19	5	2.16	6.25	3.77	0.042
TIPF	17.25	1.7	16.25	1.7	15.25	4.03	16	10.29	*0.439*
TET	0.5	0.57	0.5	0.57	1	0.81	0.25	0.5	*0.525*
TEC	1.5	1.73	1.25	0.5	1.25	1.89	0.75	0.5	*0.727*
TEF	0.75	0.95	2.75	1.7	2.25	1.5	1.75	1.5	*0.148*

Chart 1. Use of set plays (average value by team) of four best placed team in XVI, XVII,XVIII and XIX World Cup (T –succesful atacks carried out after a throw-ins, C – total number of succesful atacks carried out after a corners, FK – total number of succesful atacks carried
out after a free kicks)

vey error can be up to 3%. This means that that the data obtained by this observation is valid and can be used in further research and making conclusions.

Transversal study design variables, which are tracked and analyzed in this study, were collected by systematic observation of a computerized football match recordings from above mentioned championships. Materials are downloaded from the Internet. Considering that this research leads to

empirical facts, research results have been shown through quantitative values. Descriptive statistics was used as the first aspect of quantitative analysis. From descriptive a statistical method in this analysis is used the distribution of frequencies for each variable expressed in the form of suspension of statistical series, nominal statistical scale. From the segment of central tendencies, we were using the arithmetic mean and from the segments of disper-

sion the standard deviation.

From the area of comparative statistics non-parametric discriminate analysis was applied and as a superior procedure Kruskal-Wallis tests. All mathematical calculations and chart previews are realized using the application program for personal computers, Microsoft Excel.

RESULTS AND DISCUSSION

On the last four World Cups the successful attacks started after the set plays had extremely important role in the total number of all successful attacks. At the World Cup Championship held in France in 1998, first four representations started in 35%, at the WC 2002 in 49%, WC 2006 in 42% and in 2010 in 26% their successful attacks upon standard situations – set plays.

It can be said that the last World Cup has brought something new in at least two segments of the game. The total number of successful attacks of first-placed teams at the World Championship of 1998, 2002 and 2006 recorded a decreasing trend (1998 - 495; 2002 - 321; 2006 - 307 successful attacks) while the last World Cup first four teams made a total of 342 successful attacks. What is more interesting is that at the last World Cup the trend of reducing the number of successful attacks started after set plays has been continued.

While this trend was expected on the last three World Championships as a consequence of decreasing the total number of strokes, the last World Cup, besides increasing the total number of successful attacks brought reduced number of successful attacks started after a set plays compared to the previous WCs. As the number of effective attacks started after a set plays is concerned, the last World Cup has also "brought" change in the trend. The average number of goals scored after the set plays increased starting from the XVI World Championship where 21% of the total number of effective attacks began after stoppage of play, through the XVII and XVIII, where 36% or 42% of total successful attacks began after a set plays, to the last World Championship where 26% of the total number of goals, scored after an attack initiated by the set plays.

It is interesting to mention that the winners of the last three World Cup Championships (France, Brazil and Italy) were also the teams that attained most of the goals through actions started after a set plays (Italy 2006, 60% of the total number of goals achieved after the attacks started after the stoppage of play). The winner of the last World Championship, Spain, scored only one goal from the actions commenced after the set plays (semi-final goal by Pujol that qualified Spain for the finals).

In Table 1 can be seen that the largest number of successful attacks began after a free kicks and that this number is approximately equal on the last four World Championships. It is similar when it comes to the successful attacks started after the throw-ins. It is interesting that the throw-ins are becoming increasingly important means of attacking tactics, approaching to corners by the number of successful attacks started in this way.

When it comes to successful attacks started after the corner we noticed significant statistical differences comparing the previous four WCs (p = 0.042) so that on the basis of these results we can say that the tactics of defence somehow found a solution for such danger as corners. Yet the last WC (Chart 1) has brought improvement and a slight increase in the number of successful attacks started after a corner kick.

As effective attacks started after the standard situation – set plays for free kicks were followed by the dominant means of achieving goals after the set plays, after coming corners and after throw-ins. As for the number of effective attacks started after the free kick, corner kick and a throw-ins for comparing the four WCs does not notice a significant statistical difference.

When we are talking about the effectiveness of attacks started after set plays, a free kick are the dominant means of achieving goals, afterwards are corners and finally throw-ins. Comparing the data from the last four WCs we can not see significant deferens in this manner. Based on this, at least when it comes to corners, we can conclude that despite the reduction in the number of successful attacks started after a corner kick, effectiveness of attack is not significantly changed. At the last World Championship the trend of reduction the number of goals scored after a free kicks, outs and corners is continued (comparing to WC 2006).

CONCLUSION

Based on collected results might be concluded that the standard situation – set plays stand for a very important part of football game, when it comes to achieving excellent results in the World Championships. The organization of both, offen-

sive and defensive set plays is extremely important and special attention must be devoted to this segment of the game.

A quality organization of free kicks and corner strikes mainly depends on the quality of performer. Special attention should be dedicated to a player with excellent (technical) skills. Because of this in the process of training young players should be paid great attention to training the technical elements of hitting the ball in a proper manner. Based on share which effective attacks began after the stoppage of the game occupy in the total number of all effective attacks can be concluded that to achieve excellent results in the World Championships team can not only rely on the set plays but well coordinated, continued and quick attacks.

In the future remains to be seen whether the trend of reducing the total number of effective and successful attacks, initiated after the set plays with the last World Cup will continue in the forthcoming World Championships or maybe new solutions in terms of tactics would be invented to increase the number of successful and efficient attack started after stoppage of the game.

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СПОРЕДБЕНА АНАЛИЗА ЗА ПРИМЕНТА НА "СТАНДАРДНАТА СИТУАЦИЈА - ПРЕКИН НА ИГРАТА НА XVI, XVII, XVIII I XIX СВЕТСКО ПРВРНСТВО ВО ФУДБАЛ

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Апстракт:

Целта на истражувањето беше да се утврди зачестеноста на бројот на успешните напади, како и бројот на ефикасните напади , изведени по прекините на играта на XVI, XVII, XVIII и XIX Светско првенство во фудбал. Примерокот на истражувањето го претставуваа четирите првопласирани репрезентации на четирите последни светски првенства во фудбал. Анализирани се успешните напади кои започнувале по прекинот на играта, односно по изведувањето на аутот, слободните удари и корнерите. Добиените податоци од истражувањето се обработени со дескриптивни статистички постапки. Третираните разлики за успешноста во нападот се анализирани со пресметка на Крускал-Валисовиот (Kruskal-Wallis) тест. Резултатите од него укажаа дека бројот на започнатите напади по прекиниот на играта на претходните четири светски првенства се разликува. Најголем процент на тие напади во однос на вкупниот број успешни напади, имаа екипите на седмото Светско првенство (49%). Наспроти тоа, на последното Светско првенство, тој процент е збалежително помал (26%). Исто така, забележана е статистички значајна разлика во бројот на прецизните и непрецизните напади започнати по изведувањето на корнерите (p= 0,042), додека во бројот на ефикасните напади кои започнувале по прекинот на играта, не е утврдена статистички значајна разлика, со тоа што главно најголемиот број од нив ,започнувале по изведувањето на слободните удари (p=0.148). Врз основа на резултатите од анали-зата, може да се каже дека прекинните на играта се мошне значаен сегмент во фудбалската игра.Сепак процентот на ефикасните напади кои започнуваат по прекините на играта, укажуваат дека за постигнување на врвни резултати на Светските првенства, екипите не може да се потпираат само на прекините на играта, туку мора да организираат континуирани и брзи напади.

Клучни зборови: *слободен удар, аут, корнер, Крускал-Валисов тест*