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**THE MODEL OF ACTIONS IN ATTACK FOR JUNIORS  
IN VOLLEYBALL**

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**Abstract**

The modern game of volleyball is characterized by speed and a variety of play activities through continuous improvement actions in terms of hitting the ball increasingly high creativity in building attack combinations and flexibility in the choice of defense.

The literature and summarizing current information we consider it necessary to develop specific training programs to increase sports performance and improve the game in attack.

To have a real dimension of the practice of juvenile volleyball game, you need to make a real x-ray at this level, especially in the final tournament, where participating teams the best of the moment.

Processing and interpretation of data collected from official site over 5 days of competition allows us to have a personal view on the level of technical and tactical training teams and individual players in the tournament for juniors.

Research methods used were computerized recording method, method and interpretation of statistical and mathematical the graphic method.

In conclusion, it is necessary to put an emphasis on proper assimilation of techniques in terms of tactics, basic requirement of obtaining high performance in our paper and confirmed by the first hypothesis stated. The development of all these components and the gradual implementation of collective offensive actions (combinations in attack) develop percentage of success - two stated hypothesis is confirmed by a low efficiency index reported internationally.

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**Keywords:** Efficiency, skills, volleyball, juniors.

## 1. Introduction

Based on what he said Bompa T. (2003, pp. 33-35), namely that "sport is the process of training exercises or repetitive work and progressively determine potential improvements to achieve optimum performance and have a size the practice of real volleyball game juvenile was needed to make a real x-ray



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at this level, especially in the final tournament, where participating teams the best of time at ages 15 – 16 years.

This was based on the need for Central College Coaches of the Romanian Federation of Volleyball to have a starting point for the revival of the volleyball game, which has never failed any valuable results, except the year 2006, 2007 and 2013 the Romanian team he won two gold medals and one bronze at the Balkan Games, but are insulated results.

We believe that the analysis and publication of these data could be of a benefit for specialists in volleyball, which after consideration could assess the extent to which juvenile male volleyball is the possibility of building long-term strategy, which ultimately bring coveted position of participants in the European tournament

## **2. Premises Study**

Processing and interpretation of data collected from official site over 5 days of competition allows us to have a personal view on the level of technical and tactical training teams and individual players in the tournament for youth.

### **2.1. Hypotheses of Research**

- The efficiency of the attack of specific values fluctuating from one team to the other.
- We believe that the effectiveness of specific attack will have a low index reported internationally

### **2.2. Subjects and Methods of Work**

The recordings were made with "Data volley 2007 Profesional" license CVM Tomis Constanța. Analyzes requested have been:

- Total analysis by skill for each team
- Total direction chart analysis for each team

Our approach followed the route registration, systematization, processing and interpretation of data on the efficiency of specific technical and tactical attack on tournament youth:

- The efficiencies of actions technical, tactical individual serve, setting, attack;
- comparing them to "the value of efficiency national team youth on the European Championship Ankara 2015"<sup>1</sup>.
- Distribution of passes on the phase I, reported the setter position.
- Efficiency players from national team and center of excellence with other players;

The subjects of this study are the 72 players of the six teams participating in the tournament for youth Dej city 2016 and their choice is justified by the fact that at least in theory they are the most representative teams of youth in 2016.

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<sup>1</sup> Technical and tactical actions Efficiency lot cadets participating in Ankara 2015 qualifier.

### 2.3. Research Methods

- The method of recording computerized;
- Interpretation of statistical and mathematical method;
- The graphic method;

Efficiency values was done after the calculation of the "vote" only the values assigned "weights for evaluations" are in percent. I used this account because do not know the values attributed to the one who made scouting. Assigned values can be different to the tournament to the European Championships in Ankara and thus could lead to some wrong conclusions.

Given these problems considers that used a single share of individual technical and tactical actions

We used the following evaluation grid

Granting ratings using the scale of evaluation was prepared by F.I.V.B. and presented in „Book for F.I.V.B. Statistical Match Record (SMR), 1992”

The result of each action is evaluated using a scale of 5 degrees based on the effect on the score or control the ball by the team after playing the ball or the opponent. Thus, in order of degree, evaluation and award criteria, we have:

AS – 4 – point won;

EXCELENT – 3 – won the control, maintained;

Good – 4 – won the limited control, maintained;

Low – 1 – control lost, without control;

Wrong – 0 – point lost;

The formula used to calculate removal efficiency for setter was as follows:

$$E = \{ [3 \times (A) + 2 \times (B) + 1 \times (C) - 1 \times (D)] \times 100 \} / 3 \times N$$

Where:

⇒ E = the efficiency

⇒ A = number of executions evaluated 3

⇒ B = number of executions evaluated 2

⇒ C = number of executions evaluated 1

⇒ D = number of executions evaluated 0

⇒ N = total number of executions.

The used sentence for the computation of the efficiency of service, attack:

$$E = \{ [4 \times (A) + 3 \times (B) + 2 \times (C) + 1 \times (D) - 1 \times (F)] \times 100 \} / 4 \times N$$

Where:

⇒ E = the efficiency

⇒ A = the number of executions evaluated 4

⇒ B = the number of executions evaluated 3

⇒ C = the number of executions evaluated 2

⇒ D = the number of executions evaluated 1

⇒ F = the number of executions evaluated 0

⇒ N = the total number of executions

### 3. Results and Discussions

**Table 1.** Efficiency values of play - tournament youth boy in 2016

Nr.	Team	Rank	Efficiency in game	Position after efficiency
1	CMV Tomis Constanța	I	0,557	I
2	CSS Bega Timișoara	II	0,523	II
3	LAPIDej	III	0,478	IV
4	CSS Zalău	IV	0,471	V
5	Steaua București	V	0,466	VI
6	CSS 1 Constanța	VI	0,490	III

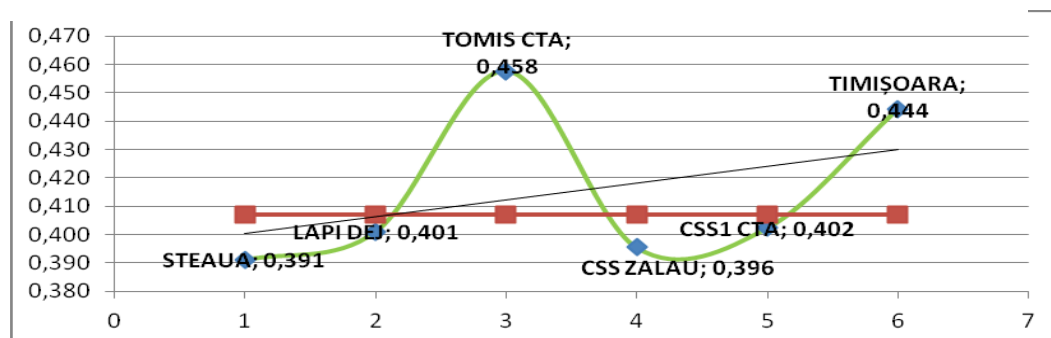
Place occupied ranking is consistent with the efficiency of each team in the game.

Assigned values of efficiency in game one Constanta CSS team even if it is the statistical error was recorded just for only four games (the last game did not scouting).

**Table 2.** Efficiency values of services - final tournament of youth boy 2016

TEAM	0%	75%	25%	50%	50%	100%	Total	Efficiency	Average National team	Average international
Steaua	46	10	116	68	131	15	386	0.391	0.415	0.407
LAPIDej	41	20	160	57	126	26	430	0.401	0.415	0.407
Tomis Cta	41	9	75	65	171	40	401	0.458	0.415	0.407
CSS Zalan	37	8	110	54	108	18	335	0.396	0.415	0.407
CSS1 Cta	27	9	92	51	80	15	274	0.402	0.415	0.407
Timișoara	58	15	83	41	149	48	394	0.444	0.415	0.407
<b>TOTAL</b>	<b>250</b>	<b>71</b>	<b>636</b>	<b>336</b>	<b>765</b>	<b>162</b>	<b>2220</b>	<b>0.417</b>	<b>0.415</b>	<b>0.407</b>
<b>Average</b>	<b>42</b>	<b>12</b>	<b>106</b>	<b>56</b>	<b>128</b>	<b>27</b>	<b>370</b>	<b>0.415</b>		
<b>max</b>	<b>58</b>	<b>20</b>	<b>160</b>	<b>68</b>	<b>171</b>	<b>48</b>	<b>430</b>	<b>0.458</b>		
<b>min</b>	<b>27</b>	<b>8</b>	<b>75</b>	<b>41</b>	<b>80</b>	<b>15</b>	<b>274</b>	<b>0.391</b>		

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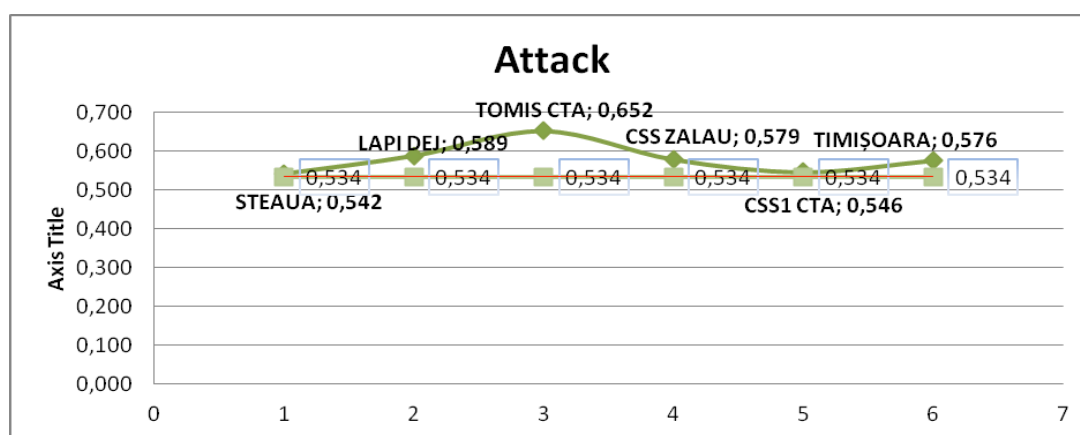


**Figure 1.** Dynamic efficiency of services - final tournament of youth boy 2016

- Tomis Constanța has most efficient service;
- Timisoara instead has the most direct hits, but most services wrong;
- The inefficient service Steaua Bucharest,
- Just two team (Tomis, Timișoara) are over the average of national team in Ankara;

**Table 3.** Dynamic efficiency of attack - final tournament of youth boy 2016

TEAM	0%	0%	25%	50%	75%	100%	Total	Efficiency	Average National team	Average international
Steaua	64	38	163	14	34	211	524	0.542	0.581	0.534
LAPI Dej	43	42	147	19	25	237	513	0.589	0.581	0.534
Tomis Cta	28	20	107	9	38	207	409	0.652	0.581	0.534
CSS Zalan	39	33	111	9	18	180	390	0.579	0.581	0.534
CSS1 Cta	39	37	129	18	30	164	417	0.546	0.581	0.534
Timișoara	50	40	127	15	34	209	475	0.576	0.581	0.534
<b>TOTAL</b>	<b>263</b>	<b>210</b>	<b>784</b>	<b>84</b>	<b>179</b>	<b>1208</b>	<b>2728</b>	<b>0.579</b>	<b>0.581</b>	<b>0.534</b>
<i>Average</i>	<i>44</i>	<i>35</i>	<i>131</i>	<i>14</i>	<i>30</i>	<i>201</i>	<i>454.67</i>	<i>0.581</i>		
<i>max</i>	<i>64</i>	<i>42</i>	<i>163</i>	<i>19</i>	<i>38</i>	<i>237</i>	<i>524</i>	<i>0.652</i>		
<i>min</i>	<i>28</i>	<i>20</i>	<i>107</i>	<i>9</i>	<i>18</i>	<i>164</i>	<i>390</i>	<i>0.542</i>		



**Figure 2.** Dynamic efficiency of attack - final tournament of youth boy 2016

#### 4. Discussion

It can be seen that the efficiency of the service is below average national team (0.415) with two exceptions, CVM Tomis Constanta (0.458) and CSS Timisoara (0.444). From this analysis, it appears that the low efficiency indirect means increased growth efficiency index taking over the work of the opposing team, which leads to efficient construction and aggregation attack points more easily. An effective means to reduce the opponent's attacking options, which means an equity foreseeable defense team and building a more efficient attack.

The fact that, in terms of taking over at higher efficiency, completion is done mostly in extreme areas of the net length, is evidence of the attack simplest organization, requiring specialists, amplifying

concerns for adequate training organization design combination of attack as the premises theoretical maximum efficiency in organizing attacks require finalization (Mârza, D., Grapă Fl. 2006).

Analyzing the structure and mechanism combinations in attack teams top priority orientation viability was found during the finalization of one (T1), in the center of the net, a high-speed lift and complete surprise during two (T2) of the players in the line 1 or 2 on a lifting come closer to those of one time so that the organization cannot lock to be opportune (Cojocaru A. Cojocaru M, 2009).

Completion of time 1 shall ask players to act only on special passes to have a slight jump, to move quickly to lock and possess very good attack on one leg in zone 2, the change of direction.

"In this attack initiates and participates in a variety of high-speed tactical schemes to confuse opponents and lock to enable others to more easily complete the attack. The main task of execution remains in the game jam along the length of the net, so you have to be the best player on the team blocking. In the attack to be able to play the ball coming from several directions, with increasing effectiveness" (Bril M.S., Kleshev U.N. 1988)

Regarding time 3 (T3) of finalization (our teams players in the four priority uses, or at the line 2 in zone 1 or 6) the tendency is to conduct attacks in the 2nd line, the coordinates of the attack in Q2 and one in Q3, safety player is allocated most efficiently, regardless of where that is found on the ground.

## 5. Conclusions

Volleyball game begins by making the service. Today, increasingly more focus on the technical element, which for some players has become a veritable weapon of attack.

The basic technique is relatively simple, and the fact that the player has available sufficient time to throw-in (8 seconds), creates the premise of a highly accurate and efficient execution.

It is necessary to put an emphasis on proper assimilation of techniques in terms of tactics, basic requirement of obtaining high performance in our paper and confirmed by the first hypothesis stated.

For better efficiency volleyball game should provide sufficient time for learning, adaptation, enhancement and improvement of technical actions - tactical.

The striker will have to develop their technical skills, the ability to perceive mental solutions based on the game situation, the precision in action and tactical qualities, dependent on experience.

The development of all these components and the gradual implementation of collective offensive actions (combinations in attack) develops percentage of success - two stated hypothesis is confirmed by a low efficiency index reported internationally.

Is important that attackers to master multiple-choice attack, being able to choose the best solution, depending on the game situation.

For an improvement in training players and a significant increase gaming and sports performance coach is essential, is to find the most effective both in specialized training and its evaluation.

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