

## STUDY ON INCREASING THE EFFICIENCY IN VOLLEYBALL

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**ABSTRACT.** Starting from the analysis of the current global performance context in volleyball and our internal realities, we consider it appropriate to conceptually address the optimization strategy of the Romanian volleyball performance, by comparing the results of the second attack line, between two Romanian teams and one from the Italian championship and reporting them to the efficient result of an official volleyball match. The theme follows the progress of the volleyball game by aligning internal performance strategies to modern game trends that are based on surprising the opponent. Regarding the preparation and training area of volleyball, along with methodological orientation in modelling the content of preparation, it is necessary to implement in the collective and tactical structure of the second line of attack the element of surprise in the approach of an official game. The initiative represents a starting point for current and prospective coaches who want to improve the quality of the game, using the attack in the second line.

**Keywords:** volleyball, second line attack, quality

**REZUMAT. Studiu asupra creșterii eficienței în jocul de volei.** Pornind de la analiza tendinței globale în jocul de volei, în contextual relațiilor internațional considerăm oportună optimizarea concepțiilor de pregătire în voleiul de performanță, comparând rezultatele atacului din linia a II-a dintre două echipe din țară și folosind statistica unei echipe din Italia. Tema noastră urmărește strategii de pregătiri moderne în joc, pentru a surprinde adversarul cu soluții de joc tendențioase. Observând antrenamentele de volei și pregătirea meciurilor oficiale, este necesară implementarea în colectivul de jucători structura tactică de atac din linia a II-a ca element de surpriză pentru adversari. Inițiativa aceasta reprezintă un punct de vedere a antrenorului modern care vrea să ridice calitatea jocului utilizând atacul din linia a II-a.

**Cuvinte-cheie:** volei, atac din linia a II-a, calitate

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## **Introduction**

The evolution of worldwide volleyball knows a great dynamic, in terms of both content and the spectacular development of the game and in the area of distribution and popularity, a natural consequence of the policy that FIVB has been practicing consistently in this direction (Cojocaru, 2007).

Progress, still upward in volleyball, cannot be conceived and built without a coordinated and integrated approach of all the components of performance, starting from human resources (athletes, technicians), science (research, methodology, medicine), technicality, tactics and organizational framework (specialized units, competitive systems, management) to the intimacies of the training process, the contents of training and programming, methods and tools, control, guidance, assessment, technical and tactical actions, patterns of play (Ioniță, 2007).

In this context of perspective in the performance of volleyball, we consider necessary the continuous improvement and modernization, not by simple selection of knowledge, but by restructuring of the entire performance system in relation with the appearance of the surprise element in the first phase of the game [*6-adaptation*]. The surprise element can only be, in our view, the attack in the second line (Cojocaru., Cojocaru, Țurcanu, Țurcanu, 2011).

## **Materials and methods**

Starting from the analysis of the current global performance context in volleyball and our internal realities (National Women's Championship, A1 Division), we considered it appropriate to address the optimization strategy of the Romanian volleyball performance, by comparing the results of using the attack in the second line, between two Romanian teams and one from the Italian championship and reporting them to the actual result of an official volleyball match.

In this way, we try to find an answer to the question: does the attack in the second line represent a key element in the volleyball game?

## **Results and discussions**

The proportion of the second line of attack from the total attack moments and the efficiency of them in the competitive season of 2012-2013 (table no. 1).

**Table 1.** The proportion of 2<sup>nd</sup> line of attack

Team name	2 <sup>nd</sup> Line Attack	Efficiency
CSU Medicina Tg.Mureş	27%	21%
CSM Bucureşti	24%	32%
Foppapedretti Bergamo	33%	38%

The comparative results, in relation to the efficiency of the second line of attack at the game from 2012-2013 competitive season (result 3-0), between CSU Medicina Tg. Mureş, host team (Table no. 2) and CSM Bucureşti, guest team (Table no. 3).

**Table 2.** Efficiency of 2<sup>nd</sup> line of attack, CSU Medicina Tg. Mureş

Total attacks (%)	Total 2 <sup>nd</sup> line attacks (%)	Effective attack moments in the 2 <sup>nd</sup> line (%)	Effective attack moments in the 2 <sup>nd</sup> line (score)
103 (100%)	13 (12.63%)	5 (38.47%)	13-11(set 1) 16-12(set 1) 11-11(set 2) 7-4(set 3) 11-7(set 3)

**Table 3.** Efficiency of II line of attack, CSM Bucureşti

Total attacks (%)	Total 2 <sup>nd</sup> line attacks (%)	Effective attack moments in the 2 <sup>nd</sup> line (%)	Effective attack moments in the 2 <sup>nd</sup> line (score)
78 (100%)	6 (7.70%)	2 (33.34%)	2-5 (set 1) 4-5 (set 2)

The efficiency of the second line of attack at the game from 2012-2013 competition season (2-3 score), between the teams Foppapedretti Bergamo (host team) and Rebecchi Piacenza (guest) in Table no. 4.

**Table 4.** Efficiency of II line of attack, Foppapedretti Bergamo

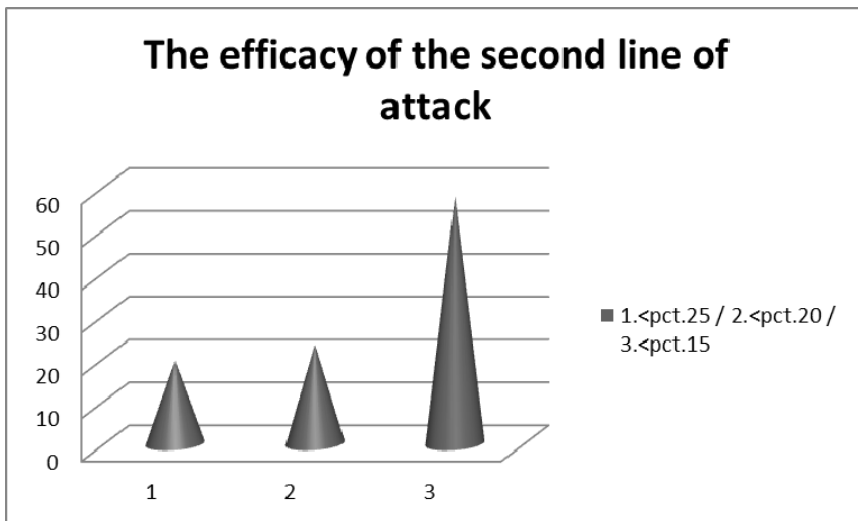
Total attacks (%)	Total 2 <sup>nd</sup> line attacks (%)	Effective attack moments in the 2 <sup>nd</sup> line (%)	Effective attack moments in the 2 <sup>nd</sup> line (score)
115 (100%)	25 (21.74%)	9 (36.00%)	9-9 (set 1) 17-16(set 1) 8-13(set 2) 10-17(set 2) 15-23(set 2) 2-5(set 3) 3-2(set 4) 5-8(set 4) 4-5(set 5)

Second line of attack statistics at CSU Medicina Tg. Mureș at National Championship A<sub>1</sub> Division, 2012-2013 (22 official matches), using Data Volley program (Table no. 5).

**Table 5.** Second line attack, CSU Medicina Tg. Mureș

Total attacks from 2 <sup>nd</sup> line	Decisive attack until point 15	Decisive attack until point 20	Decisive attack until point 25
158	30	12	10
100%	57.70%	23.08%	19.22%

The percentage of efficiency of the second line attack from 2012-2013 competition season of CSU Medicina Tîrgu Mureș volleyball team is illustrated, with a graphical representation, in figure no. 1. (Bocoș, Ciomoș, 2001).



**Figure 1.** Schematic comparison between different moments of the game

### Conclusions

Looking at Table 1 in relation to the percentage of the attack from the second line and its efficiency, we conclude that the attack from the second line in the Italian championship represents an element that is included in the collective tactical actions.

The game content, technical and tactical actions know a downward trend in the use of the attack from the second line and especially its effectiveness throughout the games played between the studied Romanian teams (Table no. 2 and no. 3), comparing with the Italian team (table no. 4).

In addition, after analysing the data provided in Table no.5, it appears that the percentage of using the second line of attack decreases as we move from point 15 of the game. This entitles us to say that the effectiveness of using this technical element decreases when approaching the 25<sup>th</sup> point of the set, which shows distrust in using the attack from the second line as a final element. This is also reinforced by the data provided in figure no. 1.

Extending sports performance through permanent innovation must be consistent with genuine own resources and current trends manifested in current volleyball performance. Our initiative represents a starting point for current and prospective coaches who want to improve the quality of the game, using the attack in the second line and increase game efficiency by framing this element in the greater picture of competitive volleyball.

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