

STUDY ON THE EFFICIENCY OF THE WING-SPIKERS IN THE NATIONAL VOLLEYBALL CHAMPIONSHIP

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Abstract: Contemporary volleyball raises a very important problem by developing new training methods in order to achieve the development of the game, through new strategies and systems for modeling the trainings, competitions as well as the emergence of new motor actions within the game actions.

The purpose of the study is to present the efficiency of the actions for the wing-spiker player performed during the official games of the National Volleyball Championship, at senior level, Division A1.

The research hypothesis is that, by analyzing the in-game efficiency of the extreme players, we can determine the game model of this player, at the senior level.

The objectives of the research include tasks, establishing the purpose and hypotheses of the paper, choosing the methods of conducting the study, establishing the study sample, recording the results, analyzing and interpreting the results, formulating conclusions and proposals and drafting the paper.

The research methods were the bibliographic study, the statistical-mathematical method, the graphical representation method.

The possibility of a dynamic approach to the content of the game of volleyball is determined by the correct knowledge and understanding of the key aspects of the competitive game worldwide, so that they are transferred and present permanently in the daily concerns of the coaches and players.

In conclusion, the objective of the efficiency in the actions and structures of the game, as it is revealed in the records of the official games, leads to some conclusions with implications in anticipating the efficiency in the future competitions.

The determination of the efficiency of the actions and structures of the game aims to form an idea as accurate as possible about the value of the game of the teams in the championship and the championship itself.

Keywords: *volleyball, efficiency, wing-spiikers, game, national championship*

Background

The game of volleyball aims primarily at the efficiency of the technical-tactical actions, efficiency that is achieved with players who have an impressive stature, a special physical training, with specific motor qualities, an improved execution technique that allows them to apply precise game tactics on the background of a remarkable psychic training [1].

Manifestations attractive shows relying heavily on the idea that volleyball continues to grow due to its flexibility and the involvement of players their coaches them and crowd them [2].

The overall performance of a volleyball team depends on many factors, of which the execution of skills immediately leading to winning or losing the game is considered decisive [3].

Wing-spiker, the IV is a player with a very important team gear volleyball, both defense and attack [4]. Wing-spiikers are players who are very good at taking over and attacking, so you can already see changes in the defense system and receiving the adverse service. There are many teams that take the service of opponents in two players, maximum three [5]. Already, the number of players participating in receiving the service is considerably reduced, so that as many players as

possible can be put in very good attacking situations.

Regarding the attack, the second is usually the security player who can solve any crisis situation. Of course, this situation is ideal and it takes many hours of preparation to get here.

The combination game is very common nowadays, where the wing-spiker is very important, participating during time 2 (when he is in line I) or 3 (when he is in line II) in the attack, and for this he must be a a player with great psychic power and a great desire to overcome himself [6].

The different types of model presentation are determined by the fact that a new type of shooter is currently appearing. Today, it amazes us with how much skill and sportsmanship, through acrobatic jumps, they take the balls in defense, with how much attack they attack from different fast passes, how accurately and safely they take difficult services [7].

Some coaches give priority to players' motor qualities, athletic stature and multilateral physical training. Other coaches insist on developing tactical training and appreciate this aspect more. Others place the focus on team

homogeneity, cooperation, team cooperation and couples (lift-puller) [8]. There is also the tendency to give priority to factors such as: detention, technicality, height, coordination and cooperation.

Material and methods

The study was conducted based on the data obtained from the records made during the National Volleyball Championship, Division A1, 2018/2019.

The subjects of the study were wing-spikers of zone 4, of the first 6 teams participating in this competition.

The purpose of the study is to present the efficiency of the actions for the wing-spiker player performed in the official games of the National Volleyball Championship, at senior level, Division A1.

The research hypothesis is that, by *analyzing the in-game efficiency of the extreme players, we can determine the game model of this player.*

Objective of the efficiency in the actions and structures of the game, as it is revealed in the recordings of the official games that will allow to draw conclusions with implications in anticipating the efficiency in the future competitions.

The determination of the efficiency of the actions and structures of the game aims to form an idea as accurate as possible about the value of the game of the teams in the championship and the championship itself.

The tasks of the paper were the following:

- establishing the purpose and hypotheses of the work;
- choosing the methods of conducting the study;
- establishing the study sample;
- record of results;
- analysis and interpretation of results;
- formulation of conclusions and proposals;
- editing the paper;

The research methods were

- the bibliographic study,
- the statistical-mathematical method,
- the method of graphical representations

Ranking Calculation

Wing-spiker , the ranking takes into account:

- **Serve Index (Sv ind.):** Positive serves divided the total points of both teams (ranking is available only if the player has made at least one serve per set)
- **Reception Index (Rc ind.):** Positive receptions minus negative receptions divided the total receptions (ranking is available only if the player has made at least three receptions per set)
- **Attack Index (Sp ind.):** Positive attacks minus negative attacks divided the total attacks (ranking is available only if the player has made at least three attacks per set)
- **Block Index:** Positive blocks divided the total points of both teams

The final ranking is based on the final "index" which determines the impact of the role on the game, in other words the importance of the role towards the win probability. This final Index is calculated considering the indexes for each single skill ("ind." Columns) and a coefficient which indicates the "importance" of the role to determine the probability of success for the team. Each single skill index is calculated by considering the positive and negative skills based on the number of points played by the teams and multiplied by a coefficient which indicates the importance of the skill for that role in determining the probability of success for the team. The icons next to each skill column give an idea about the "weight" of the skill determining the probability of success for the team in this role.

The final Index is calculated also considering the following criteria:

- Minimum number of Serves per set: 1
- Minimum number of Receptions per set: 3
- Minimum number of Spikes per set: 3

Serve	Reception	Attack	Block
<ul style="list-style-type: none"> • # serve needles • / half point • = serve error 	<ul style="list-style-type: none"> • # perfect • / half point • = error 	<ul style="list-style-type: none"> • # point • / blocked • = error 	<ul style="list-style-type: none"> • # point • / invasion • = hand out

Results and discussions

We present the efficiency of the first 5 players, on each specific action of the wing-spiker position, at the end of the National Championship.

Players (Team)	Block				
	#	=	/	All	Bl. ind
FS (SCMU CRAIOVA)	41	43	3	105	0.0093
BMI (CSM BUC)	28	33	1	80	0.0063
SP (ARCADA GALATI)	29	21	11	83	0.0007
DBL (ZALAU)	16	22	21	87	0.0035
BRI (ZALAU)	16	21	12	64	0.0035

Table 1 Blocking efficiency of the first 5 players

Players (Team)	Service				
	#	=	/	All	Sv. ind
FS (SCMU CRAIOVA)	36	81	14	351	0.0113
BMI (CSM BUC)	40	80	16	375	0.0126
SP (ARCADA GALATI)	43	69	9	244	0.0125
DBL (ZALAU)	2. 3	14	7	311	0.0066
BRI (ZALAU)	21	54	18	313	0.0085

Table 2 Service efficiency of the first 5 players

Players (Team)	Atack				
	#	=	/	All	Sp. ind
FS (SCMU CRAIOVA)	318	53	70	611	31.5957
BMI (CSM BUC)	258	53	56	565	25.5805
SP (ARCADA GALATI)	179	31	50	395	19.6
DBL (ZALAU)	216	35	36	455	32.1868
BRI (ZALAU)	233	54	40	440	28.4318

Table 3 Attack efficiency of the first 5 players

Players (Team)	Reception				
	#	=	/	All	Rc. ind
FS (SCMU CRAIOVA)	175	39	11	551	0.54
BMI (CSM BUC)	260	69	32	762	0.39
SP (ARCADA GALATI)	166	35	24	510	0.45
DBL (ZALAU)	221	35	19	606	0.49
BRI (ZALAU)	86	34	27	314	0.25

Table 4. Efficiency of taking over the first 5 players

Players (Team)	Played		Index efficiency
	M	S	
FS (SCMU CRAIOVA)	28	99	0.40
BMI (CSM BUC)	28	97	0.36
SP (ARCADA GALATI)	25	79	0.37
DBL (ZALAU)	20	101	0.34
BRI (ZALAU)	28	90	0.34

Table 5. Efficiency index at the end position at the end of the CN

At work, just about all the players used the jump service - almost 80% in this competition, and the second variant was the planned, floating jump service. That's because teams feel the importance of maintaining momentum, do not give your opponent easy points and trust their defense and block hits to earn points for them easier.

The service seemed to be strong and aimed at tactical targets or positions on the ground and this seemed to offer the beneficiaries some difficulties. Difficulties, in the sense that the passage was perfect sometimes, then, suddenly, a seemingly average service would make the best receiver to have difficulty. Many coaches find that the ball has difficulty in receiving because it can "fall" very quickly. In this competition, it seems that serving here has caused difficulties in receptive, during a long match.

The reception of the service was quite good, two players had the most excellent takeovers (#), from CSM Bucharest (260 reception) and Zalau team (221 reception), but also with many erroneous receptions (69 reception CSM Bucharest), which gave points direct to the opponent.

Attack at wing-spikers is modest, because it did not exceed an index of efficiency of 0.35, while the reception service was well above 0.35! This means that in the attack, the construction of the attack suffered from the point of view of the steps, which resulted in a low efficiency in the attack. There are game situations in which, due to weaker takeovers, the high game coordinator is forcing you to give the wing-spiker a weaker step, which needs to be resolved. This, in case of a grouped blockade made by 2 or 3 players, must demonstrate a great technical ability and a special logical thinking in order to solve the attack.

Conclusions

The wing-spiker's technical-tactical baggage must be very rich, encompass all game-specific actions, perfected to the highest possible level. From the tactical point of view, it must have discipline tactic to engage in their team tactics. All his resources must be as efficient as possible, along with the tactical thinking and creativity required in the game.

The action of receiving the service is an essential element of this category of players, regardless of the device for receiving the service - reception with two or three players.

The blockage is weaker compared to service actions and recovery. All this shows that in addition to the fact that he has to be a very good shooter and with a good blocking in line I, he must be a good performer at the service and taking over from the service and attacking the defensive system. In all these actions it must show consistency, precision and difficulty in their execution.

The specialized training of the wing-spiker must be multilateral, according to the functional model of the player in this position. He must make a special contribution to the economy of points earned both in the attack in line I, as well as to show safety and precision in line II.

The study confirms the hypothesis that, by analyzing the in-game efficiency of the extreme players, we can determine the game model of this player.

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