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STUDY ON MODEL OF GAME FOR GREAT PERFORMANCE IN VOLLEYBALL AND ELEMENTS OF PROGRESS

COJOCARU ADIN MARIAN¹, COJOCARU MARILENA¹

Abstract

Need knowledge of the game and the current model of development trends, is an essential requirement for specialist must harmonize and design training content, depending on the essential elements of the game's top teams worldwide value and in accordance with the actual availability of potential biomotric their technical and tactical players and teams. In this context, the analysis of the current game at peak performance teams participating in qualifying tournaments and world championships, with implications for the future of game design, player and training, we draw several trends, of which we speak dedicated team of formula is 5T 1 R, are launched into a very low number of changes to the reserve players (except libero player) or tactical play aspect that is designed to the smallest detail, missing improvisations time particularly unprepared

Hypothesis. We can talk about specialization player positions and areas of maximum efficiency for attack, block and retrieval, which is done on a broad background of training in the majors, all with a special motric labor, with nervous consumption. Current level of play, the expression realization of options, which gave endorsement practice efficiency and allowed generalization beyond the strict context of the team.

Method. For comparative analyzes of various parameters of models of game and player characteristics, we proceeded to use methodological tools that experts recommend it for this purpose. At the basis of the work, stays a rich analysis of information material, studied and consulted and their views and experiences shared by many specialists and technicians, with extensive work in performance volleyball players.

Discussion. Modernization is a complex process of reconsideration, the revaluation of all that still proves valuable performance and introducing innovative elements with value and performance validated by practice .. Modernization is not a simple act, but it is a complex and continuously interacting with many implications between all elements of the structural and functional basis of democratic institutions and coach-athlete relationship, and to redefine the objectives, content modification training and game adequacy competitive system methodologies and organizational framework performance.

Conclusions. Putting in accordance with current and future requirements of performance volleyball players, volleyball Romanian require the need for continuous improvement and modernization, not by simple additions or selection of knowledge, but through a restructuring of the entire system performance, the position of systems theory, which and gives a high degree of efficiency

Key words: model, play, performance, progress.

Introduction

Study attempts to identify issues as comprehensively the entire range of components of the game and player models, the current peak performance requirements as landmarks content and methodology, for which to strive, as a whole, the entire Romanian coach, connection elements foreshadowed in the model is crucial condition in delivering Romanian unitary conception of play, training and player model.

Knowing the efficiency of each player's contribution than others to achieve the game, is of major importance for both technician and for sport (Serban, 1999)

The indices of efficiency and economy, in which objectifies sports activities game, knows a interest in growing, they constitute benchmarks to which is

conjugated efforts of coaches and players cues that tend to grow, players increase efficiency index from 0.54 to 0,65 (Ionită, 2007).

Analyzing tournament games Olympic team hopefuls in terms of quantitative and qualitative values, which the team as a whole and separate players, they realized the evolution of a game that stands between quantitative values (weight) and qualitative (efficiency) there is a report of determination in which the value of adverse opposition is of crucial importance (Ghenadi et. al., 1995). The value of the efficiency is higher, the quantitative values are lower, expressing a good indicator of economy in game (Mârza, 2006).

Further progress upward, can be designed and built without a correlated approach, integrating all the

¹ Faculty of Physical Education and Sport, *Spiru Haret* University, ROMANIA E-mail: adincojocaru@yahoo.com



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components performance volleyball players, from human resources (athletes, technicians), scientific (research, methodology, medicine, psychology, etc..) technical materials and the organization (specialized units competitive systems) to the intimate process of preparation and training technology (programming, methods and means, control, guidance, assessment, etc.).

Modernization is a complex process of reconsideration, the revaluation of all that still proves valuable performance and introducing innovative elements with value and performance validated by practice (Cojocaru, 2007). Modernization is not a simple act, but it is a complex and continuously interacting with many implications between all elements of the structural and functional basis of democratic institutions and coach-sport relationship, and to redefine the objectives, content modification training and game adequacy competitive system methodologies and organizational framework performantial (Bompa, 2003)...

Hypotheses

Somatic, biological and motive potential of players, in which the parameters - age, height, point of impact of the ball on attack and blocking - is increasing across team;

the efficiency of game actions, for the dominant specialization line and all other action games, mark growing values (especially due to the elimination of wrong actions).

Method of research

For comparative analyzes of various parameters of models of game and player characteristics, we proceeded to use methodological tools that experts recommend it for this purpose. At the basis of the work, stays a rich analysis of information material, studied and consulted and their views and experiences shared by many specialists and technicians, with extensive work in performance volleyball players.

In preparing this paper, we used these methods:

- the method of bibliographic study;
- the method of observation;
- the method of modeling and analogy;
- the experimental methods
- specific entry method effectiveness of the game;
- statistical and mathematical method for calculating the efficiency indices;
- graphical method.

Results

Knowledge and contribution of each player's performance than others to achieve the game, is of major importance for both the technician and for athlete.

The indices of efficiency and economy, in which objectifies game activity athletes, meets a growing interest from larger, they constitute benchmarks to which coaches and players combine efforts.

Analyzing tournament games Olympic team hopefuls in terms of quantitative and qualitative values, which the team as a whole and separate players, their made in the evolution of a game, it points out that between quantitative values (weight) and qualitative (efficiency) there is a determination report in which the value of the opposition side has a decisive importance. The higher the value the higher the efficiency, the quantitative values are lower, expressing a very good indicator of economy.

Whereas, in the concatenation game structures, actions have their own weight and effective weight-dependent qualitative value of the previous action, we will analyze each action game values in the context of qualifying matches to make comparative assessments, essential design game model and training, for which representative teams to guide future work.

Construction attack

Premise that bring increased efficiency of combinative organization compared to simple assault, based solely on the strength and effectiveness of shooters, is also found in the world's top teams, the tendency to maximize the share of one of the options, depending on its practical efficiency and may not generalize an option that permanently applied to find in the game.

Since the principle of maximum efficiency with minimum effort devoted combination attack based on participation to completion in 3 successive times (time) of all players, regardless of linkage and shooters in the field, it is useful to analyze practice team game for to examine whether the theoretical premises of this option combination can be improved or amended by other practical solutions.

The competition results are a criterion for validating the effectiveness of any action, we believe that there is a significant correlation between organizational option combination or slow attack and athlete outcome itself. What can be easily found in record game analysis (table no. 1) is significant weight accomplishes leading teams in combinative completed during 1 and 2, compared to what our teams actually performed under championship game internal opponent team the opposition is much diminished value and service acquisition efficiency achieved thresholds that would allow construction lifter combination of attack, a higher percentage.

Regardless of the complexity of the attack and the construction to which the aim is to capitalize by creating superiority in action, the player who completes (Drăgan, 2002).



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Zone	4	4~3	3	3~2	2	Total actions
Spiker						
T 1	10,3~15%	24,6~37%	20,5~31%	11,9~17%	0,11~2%	67,38~74%
T 2	2,42~18%	2,85~21%	2,95~25%	4,4~33%	0,67~25%	14,5~13,3%
T 3	4,66~43%	1,74~16%	2,06~24%	0,64~5,4%	1,01~9,6%	10,5~11,5%
Total	18,1~19%	29,1~32%	26,4~29%	16,4~18%	1,90~2%	91,3~100%
Middle						
blocker						
T 1	0,27~0,3%	5,44~5,8%	35,5~38%	49,4~53%	2,20~2,9%	92,8~81,1%
T 2	1,14~13%	0,16~1,4%	1,23~11%	0~0%	7,98~73%	10,81~9,44%
T 3	1,71~15%	0,11~1%	4,54~42%	1,01~10%	3,45~32%	10,82~9,4%
Total	3,44~3%	5,74~5%	41,3~36%	50,5~44%	13,7~12%	114,3~100%
Opposite						
T 1	0,32~0,4%	8,11~9,5%	17,3~20%	42,4~49%	16,4~19%	85,10~64,3%
T 2	0,90~2,5%	2,35~6,3%	22,7~61%	4,06~10,7%	7,06~19%	37,10~27,6%
T 3	1,7~14%	0,37~3%	2,99~24%	0,95~8%	6,87~56%	12,51~9,15%
Total	2,68~2%	10,7~8%	42,9~32%	48,2~36%	29,4~22%	134,5~100%
Total	24,22~7,12%	44,54~13,09%	110,6~32,51%	115,1~33,84%	45~13,23%	340,1~100%
average						

Table 1 - Share of attack distribution

That, in the conditions 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 of organizational design combination of attack as the premises theoretical maximum efficiency in organizing attacks require completion of.

Analyzing the structure and mechanism combinations in attack teams top priority orientation viability was found to completion of on time 1 (T1), in the center of the net, a high-speed lift and surprise completion time 2 (T2) players of line 1 or 2 on a lift with parameters close to those of the time 1, so that the organization can no longer lock be opportune.

On time 3 (T3) for completion (our teams use players priority area 4, or at the line 2 in zone 1 or 6) the tendency is to perform the attack in line 2, the coordinates attack in T2 and one in T3, safety player is allocated most efficiently, wherever they are found on land.

Guiding idea in choosing solutions is that of alternating combinations, the timing of completion of the players nominated for various times and trajectory lifting surfaces is completed, a principle that leads us to the conclusion establish dominant areas for completion, depending on the organization poor and lower efficiency in a specific area of blockage adverse (table nr. 2)

Table 2 - Distribution attack completion of with the setter to all land areas

ZONE		4	1		3]	L 2 / Z (6		2]	L 2/Z :	1		TOT	TAL
Country Average team	Actions	Share of	Actions +	Actions	Share of	Actions +	Actions	Share of	Actions +	Actions	Share of	Actions +	Actions	Share of	Actions +	Actions	Actions +	
Russia	124	47%	57	27	10.2%	14	16	6%	6	87	33%	38	8	3%	2	262	117	
Serbia	102	46.6%	46	27	12.3%	12	18	8.2%	7	49	22.4%	24	23	10.5%	12	219	101	
Poland	104	39.8%	50	34	13%	21	16	6.2%	8	84	32.2%	35	23	9%	9	261	123	
Croatian	46	36%	16	14	11%	3	13	10%	7	46	36%	19	9	7%	4	128	49	
Romania	19	21.3%	11	20	22.4%	10	13	14.6%	6	36	40.5%	25	1	1%		89	52	
General average																		
	395	41.1%	180	122	12.7%	60	76	7.9%	34	302	31.4%	141	64	67%	27	959	319	33.26%



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Defense becomes more aggressive and better organized, depending on each attack action that adopt devices and special tasks, priority system Z6 withdrawn.

The trend that is emerging in the world, is a defense organization based block device group, covering an area of land in line 2 and mainly defend the attack in force, the limit lanes, completion gaining strength direction and a share majority (table nr. 3).

Table 3 – Share of dominant directions for attack, players were made by participating teams qualifying tournament J.O. 2012

		FIRST		SECOND	
	FIRST LINE	PHASE		PHASE	
RUSSIA	Average 2 games	80,72%	81,79%	27,01%	22,93%
POLAND	Average 2 games	70,9%	66,06%	38,96%	33,95%
SERBIA	Average 2 games	77,54%	75,05%	47,57%	30,08%
GERMANY	Average 1 game	74,87%	85,36%	23,8%	36,18%
	GENERAL				
	AVERAGE	76%	77,06%	34,33%	30,78%
	SECOND LINE	faza 1		faza 2	
RUSSIA	Average 2 games	77,75%	42%	75%	58%
POLAND	Average 2 games	75,37%	72%	32,81%	28%
SERBIA	Average 2 games	71,45%	72,36%	37,73%	27,63%
GERMANY	Average 1 game	86%	82,85%	28%	17,14%
	GENERAL				
	AVERAGE	77,64%	67,25%	43,5%	32,75%

Discussion

Concern for action to ensure the lock and taking the attack placed pass into the background as long as the lock succeeded, organization and effective player action, to increase its share in the defense team stood at over 40% of tampering attack, attack and put significantly reducing weight and efficiency in game 3-10% (Ionita, 2007).

Multiplication completion variants of the attack, by the use of a wide range of lifting speeds and trajectories, as well as areas along the length of the net and the target area of the opponent's court, imposed solutions organization seeking effective defense devices.

Rigid and relatively limited action players in defense device required by the rules of a particular defensive system cannot be fully effective, given the great variety that has attack and construction may well exploit the deficiencies it has any defense system. This is the reason why leading teams using combinations of several systems, or different devices, depending on each case of attack (Şerban, 1999).

Defender behavior within the limits marked by a certain system, begins to be increasingly less used in favor of a more liberal behavior, anticipatory, with the choice solution drive multiple dependent variables (own block, dominating attack adverse express duties for the sequel, and so on).

Clashes defending our teams in international competitions and team representative attack leading teams in recent years, the efficiency achieved in defensive actions constitute an argument of optimizing devices and actions players need to achieve a balance

of attack and defense contribution game and increase your chances of winning the team's only competitive in terms of organizing the attack (Marza, 2000).

Increased efficiency defense is achieved by adopting devices and actions, through flexibility to cover the widest possible range of variability construction adverse attack.

Behavior of players in defense, depending on the construction of adverse attack is carried out within devices adopted by inter-cooperation relations both between those acting on the ball, as they and other players between receiving tasks, depending on their block, which acts to cover an area clearly defined by the length of the net and onto ground and, depending on which placement is made other players, especially for taking the attack in force.

Conclusions

Elements of progress resulting from analysis carried out by us and necessary to obtain high performance us: speed and variety in attack and defense game

These factors express the general dynamics of the game, running speed action and indirectly surprise that generate variety in enemy action. Its realization requires: anticipation, reaction speed, creativity, cooperative play, fast-moving, and surprise and deception opponent.

Crucial importance is the height dominance over the net, for the striker as you jam. To achieve them are shooters and cover the attack force necessary directions



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senior players, very good jump, high skill and training as these actions play.

Perfecting og skills

Accuracy, reliability and high efficiency core activities and, especially, the high level of specialization line dominant action is found in the players top teams, which are distinguished by the high percentage of successful game action and low number of mistakes, taking particular actions, work and setting.

Experience the competition

Considered as the main success factor is measured by number of international games, the number of years of activity in representative teams and the number of hours of training. Top teams, made, on average, before entering the major competition, 150 international games and basic players get to 350-400 games.

Age players, is considered a good indicator for assessing the experience. The winning teams of C.M. and Jo, have average age was around 24 years - female and 26 years old male.

Although it is difficult to make predictions about future developments that will mark volleyball, from News and trends currently can predict the future:

- increasing strategic importance and tactics for both attack actions and for the defense;
- coordinators role and outstanding players in the game will increase team and training;
- revitalization of old game actions or innovations in attack and defense;
- specialization of players will continue on a multilateral fund general education;
- greater similarity between game practiced by girls and that of boys;
- developing mental preparation of the players will increase;
- the training remains a key factor in developing dynamic performance;
- technical leadership in complex and professional management team, both in the preparation, as well as that

of competitions;

 increasing the number of major competitions and more difficult to penetrate and maintain top global hierarchies.

In preparation area volleyball players, along with modeling Conditions; methodological orientation and content of training, weight training extends directly through games, which grows increasingly specific weight (80-100 games / year), training performance components (bio-motility, technical and tactical , psychological), achieving approximately 1/3 of the volume of training in specific conditions of competitive game (Bompa, 2003)

- obtain a continuous availability performance, the fund whose superior training to achieve maximum athletic form steps;
- using a relatively small number of exercises, with selective and cumulative efficiency (based media selected and streamlined the structure, content and dynamic request);
- rapid physical and psychological recovery immediately after exercise to ensure the development of high volume and intensity of training daily (2, even 3 lessons / day);
- Use of appliances, items of cybernetics and mathematical programming and conduct training and competition dynamics;
- interdisciplinary scientific oversight body responsiveness to demands of training and competition by bringing together specialists brigades (physician, psychologist, biochemist, coach, statistician, nutritionist, etc.).

References

- Bompa, T., 2003, Performanța în jocurile sportive: teoria și metodologia antrenamentului, Editura Ex Pronto, București, pag. 108.
- Bompa, T., 2003, Totul despre pregătirea tinerilor campioni, Editura Ex Pronto, Bucureşti, pag. 215.
- Cojocaru, A., 2007, Model și modelare în voleiul de performanță, Editura Universitaria Craiova 86
- Drăgan, A. 2002, Volei, noțiuni de bază, Editura Fundației României de Mâine, București, pag 82.
- Ghenadi, V. Et Al., 1995, Volei obiectivizarea instruirii, Editura PLUMB, Bacău, pag 121
- Ioniță, M., 2007, Modelarea pregătirii jocului de volei din perspectiva modificărilor regulamentului, Editura Universitaria Craiova, pag.98
- Mârza, D., 2006, VOLEI Bazele teoretice și metodice, Editura PIM, Iași, pag. 85.
- Şerban, M., 1999, Gândirea Factor de optimizare a modelării. Volei; Editura Printech, București, pag 124.



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