

OBJECTIFIED PARAMETERS OF WOMEN'S HANDBALL TEAM *CSM BUCHAREST* GAMES IN THE EUROPEAN CHAMPIONS LEAGUE GROUP A EDITION 2017-2018

Elena BALINT¹

Abstract: *The article aims to present some objectified indicators of the CSM Bucharest team game in the A group of the European Champions League 2017-2018 edition. Parameters subjected to the recording action constitute essential elements of the "statistical model of the game", being oriented both for the attack phase (10 parameters) and for the defence (8 parameters). On their basis, different values of the effectiveness of certain handball game sequences - in its phases - and of the global game were calculated. The data highlighted can be used to compile the optimal gaming model when preparing the teams in the National League and / or as a basis for conducting the training process at the level of the female national team, until J.O in 2020*

Key words: *handball women, Champions League, game parameters, statistics.*

1. Introduction

High performance sports activity can be characterized as a limiting activity of the human being, physical and mental limits that the science of training seeks to raise to the highest levels. A contemporary performance sport, through the results it has achieved, has come to overcome the "barriers" considered not long ago, unbelievable, achieving a continuous dynamic of performance.

As a sporting discipline, handball has

been a major development, with competitions for all the performance handball echelons currently being organized [4].

Parallel to its quantitative development, handball has evolved greatly in qualitative terms, with the level at which it is practiced being particularly high. The specialists in the field, through their experience and studies in the field, are concerned with the continuous improvement of the game [2].

In this sense, the concept of training and

¹ Department of Motric Performance", *Transilvania* University of Braşov.

game is periodically updated, taking into account the technological advances of the evolutionary trends of the game on the international level, and the improvements resulting from the studies and applied researches carried out by the specialists of the field.

The level of performance achieved at the current stage at the international level is very high, and can only be achieved by players whose performance capacity is particularly high and steadily increasing. Modelling the training process to the level of effort required by the specific competition requires active and creative participation of domain specialists in training and rebuilding performance players [5].

In the modern handball game, some structural elements have emerged, either from the research of the field specialists, or through the interpretation of the arbitration rules, in particular the passive play that altered the defense concepts and especially the way the defensive tasks are fulfilled.

The ability of the attackers to easily overcome the more static traditional defensive systems has prompted defense players to try to be more aggressive, actions that have become more profitable by taking on more active game tasks. Current attack play determines players to be faster and to introduce greater intent in each of their actions; it can be said that at least the basic tasks are fulfilled by individual actions very well executed and integrated together with the collective ones in a more versatile game concept. [3]

The way in which the defender directly conveys to the opponent the feeling of insecurity determines a variable action-specific action for each player (not the default one by the traditional defense

system - 6: 0 in the area); sometimes even the defender is urged to act in an unexpected way, having confidence in these less common actions, being able to remove the opponent from the gate area.

We can say that we are witnessing the use of typical behaviours in other game systems, in the phases that are not expected and even less anticipated by the opponents. Nowadays, the modern defender must have the ability to understand the game with anticipation, to anticipate the attack initiatives, feeling himself able to act individually and in team against the possible actions of the attackers, leading them to the desired areas of defense and not those pursued by the attackers. All these must be applied without losing physical contact, counting on their temporary removal from the gate [6].

Advanced defense, gives players more opportunities to decide to anticipate actions or to react through initiatives to other actions. Both are complementary and must be dominated by defenders. In many situations, defense must decide between anticipating actions or reacting through other initiatives.

2. The Research Issues

In this paper we will analyze the games in group A disputed by CSM Bucharest team in the 2017-2018 Edition of the League of European Championships. A European Champion of Clubs Competitions, winning the European Champions Cup 2015 - 2016, CSM Bucharest team has a bold goal in the current season, that of winning the big trophy. With a lot of enrichment over the previous edition, with many world-renowned Olympic and European players (Ayglon C., Frafjord H., Grubisic J., Gulden I., Hagman N., Jacobsen S., Jorgensen S.,

Kurtovic A , Mehmedovic M., Niombla G.) and the native ones (Bazaliu B., Curea I., Manea O., Neagu C., Ungureanu P., Iordache A., Udriștoiu A.) CSM Bucharest is part of group A, together with Lyubliana F., Gdynia F., and NFH. Nykobing. By the time we analyze the game on its parameters, CSM Bucharest is on the first place in the group with 6 points and a 125-92 goal difference.

3. Materials and Methods of Research

For qualitative and quantitative analysis of the game, I have resorted to viewing, recording and analyzing the data provided by the teams in the qualifying race in the higher stages of the competition. Leaving behind the opinions, recommendations and analyzes - often passionate - of specialists and non-specialists alike and usually accompanying any team involved in a major sporting competition, we propose to present, on the following occasions, some objectified indicators of our team games club. Parameters that we have subjected to the registration action constitute essential elements of the "statistical model of the game". They can be used in the composition of the optimal gaming model for the preparation of the National League teams and / or as the basis for further conducting the training process at the level of the female national team to the future J.O. (2020)

Parameters with the values corresponding to them, highlighted the two games that are the subject of our study, which CSM Bucharest supported in the company of the other teams in the main groups (partly and within the limits of the possibilities offered by the observation through the media), are presented in table no.1.

Based on the data, we calculated the following items that give the value of the game:

- for attack - the effectiveness of the counterattack (according to the formula: $E.C. = \text{number of goals scored counterattack} / \text{total counterattack situations} \times 100$); the percentage value of missed attack situations (by A.R.ar = $\text{No. of attack situations missed by throws} / \text{No. total attack situations} \times 100$); percentage of unplanned attack situations due to technical-tactical mistakes (A.R.g.t.t. = $\text{no missed attack situations due to technical / tactical mistakes} / \text{total attack situations} \times 100$); percentage of unplanned attack situations due to regulatory errors (A.R.reg. = $\text{No. of attack situations missed due to regulatory errors} / \text{No. total attack situations} \times 100$); Counterattack weight in the general attack phase diagram (CP = $\text{No Goals scored on counterattack} / \text{Total Goal Score} \times 100$) Effectiveness of attack (E.A. = $\text{total number of scored goals} / \text{No. total attack situations} \times 100$). (1)

- For defense - the percentage of attack situations not completed by the opponent due to technical-tactical mistakes "caused" by the defense methods used by the CSM Bucharest team (off-shore throws, throws, throws in the goalkeeper, passive, interceptions - according to the formula $ARAp.gtt = \text{No. of attack situations missed by committing technical / tactical mistakes} / \text{No. total attack situations} \times 100$), idem for committed mistakes (steps, foul in attack, - $ARAp.gr = \text{No. of attack cases missed by committing a misdemeanour} / \text{total number of attack situations} \times 100$); defense effectiveness (E.Ap. = $\text{No. of goals received} / \text{No. of defense situations} \times 100$); overall efficiency of play (E.G.J. = $\text{attack effectiveness} + \text{defense effectiveness} / 2 \times 100$.) [1]

The percentages resulting from the team efficiency of the team, in figure calculations are shown in table no. 2, and number 1. the graphical expression of the overall

Table 1

Parameters and values of some games that CSM Bucharest Champions League 2017-2018 disputed - RECORD FIELD

CSM Bucureşti VS		NFH Nykobing			Krim Ljubliana			Vistol Gdynia			Totals actions	
GAME PARAMETERS		1	2	Final	1	2	Final	1	2	Final	192/ 144	
		22-25	39-26	61-51	30-18	33-30	63-48	34-23	34-22	68-45		
D E F E N C E	Defense in inferiority	3	6	9	3	3	6	3	3	6	21	
	Defense in superiority	1	2	3	2	2	4	2	3	5	12	
	Interception	5	3	8	2	5	7	4	3	7	22	
	Recoveries	6	4	10	4	3	7	6	3	9	26	
	Blocking the throwing arm	5	12	17	7	10	17	3	1	4	38	
	Blocking the throw	3	3	6	6	6	12	6	6	12	30	
	Balls defended by the goalkeeper	6	8	14	8	6	14	10	13	23	51	
	Opponents technical and tactical mistakes.	9	5	14	14	10	24	8	2	10	48	
	CSM regulation fault	13	13	26	6	12	18	17	12	29	73	
	Opponents regulation fault	7	7	14	6	9	15	8	6	14	43	
	Goals received	25	26	51	18	30	48	23	22	45	144	
A T T A C K	Possession of the ball (no.)	53	59	112	49	53	102	52	54	106	320	
	Counterattack: Goal: - action	4	10	14	5	8	13	9	6	15	42	
	Positional attack - 6 m:	9	16	25	13	14	27	19	15	34	86	
	- Center	0	3	3	2	5	7	3	1	4	14	
	- Extreme	3	6	9	2	2	4	6	6	12	25	
	- Inter	1	2	3	1	1	2	1	1	2	7	
	- Pivot	5	5	10	8	6	14	6	7	13	37	
	Offensive Positional - 9m:	10	18	28	14	17	31	12	17	29	88	
	- Center	1	6	7	4	4	8	1	1	2	17	
	- Inter	9	12	21	10	13	23	11	16	27	71	
	Lost balls	Throws: On the but	5	5	10	3	2	5	2	1	3	18
		In goalkeeper	3	4	7	2	4	6	6	4	10	23
		Outside	4	7	11	7	7	14	7	4	11	36
		Technical and tactical mistakes	5	9	14	3	6	9	6	4	10	33
		Mistakes to play	5	9	14	2	3	5	5	2	7	26
Free throws from 9 m	22	18	40	8	10	16	8	9	17	73		
Throwing from 7 m	3/3	5/6	8/9	3/4	3/4	5/6	3/4	2/2	5/6	18/21		
Attack in superiority	1	0	1	2	4	6	0	3	3	10		
Attack in inferiority	5	5	10	3	5	8	5	2	7	25		
Marked Goals	22	39	61	30	33	63	34	34	68	192		

Table 2

The percentage values of the essential elements of the game - on the stages of attack and defense - of CSM Bucharest Team

Games parameters	CSM Buc - NFH Nykobing %	CSM Buc – Krim Ljubliana %	CSM Buc – Vistol Gdynia %
E.C	93,3	92,8	100
A.R.ar.	25	13,7	21,6
A.R.g.t.t.	12,5	8,8	9,4
A.R.g.reg.	12,5	4,9	6,7
P.C.A	22,9	20,6	22
E.A	54,5	61,7	64,1
A.R.Ap.g.t.t	54,5	39,2	39,6
A.R.Ap.g.r	12,5	14,7	13,2
E.Ap	45,5	47	42,4
E.G.J.	50	54,37	53,25

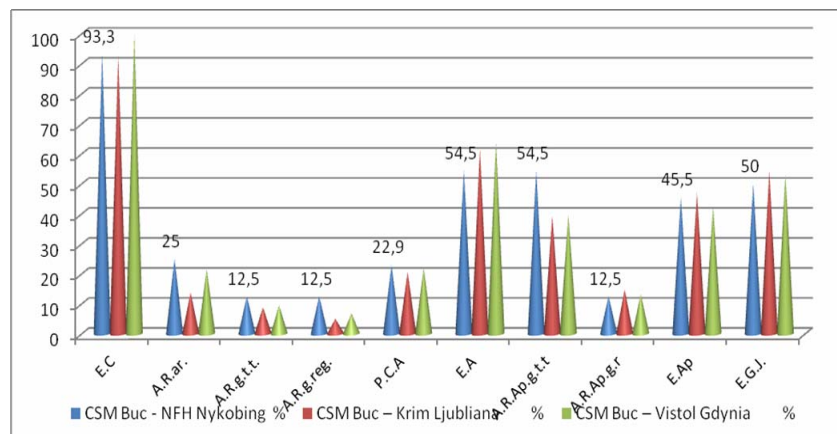


Fig.1. The percentage values of CSM Bucharest games

4. Discussions and Conclusions

From the percentages presented, the following ideas are broken:

- The CSM Bucharest team has effective defense systems (6: 0 and 5 + 1 combined). The ratio between the effectiveness of the attack phase (E.A. = 60.1%) and defense (E.Ap = 38.9%) is (except for a defeat - NFH Nykobing) in favour of the attack.- The defense is

carried out in force, aggressively highlighted by the number of unlawful interventions, sanctioned by the referees with free throws (and not only) 13,46%. Semi-circle movements for doubling, closing penetration, placement, aggressive marks are well understood;

- Regarding the behaviour of CSM Bucharest team in the previous edition, there is now an improvement of technical-tactical behaviour in all the players, in the

phases of the attack. However, the ineffective efficacy of the gate throws is signalled (by the values shown) and more surprisingly, making some technical and tactical mistakes and regulations in significant proportions. Thus, we can talk about missed throws of 20.1%, 16.9% tech-tactics and 8.03% of regulation.

- Counterattack was effective, fact highlighted by the values given by the share of counterattack in the global chart of the offensive game. We can point out that the effectiveness of the attack action was high at 95.36%. At the same time, we can analyze the overall efficiency of the game that was 52.54%.

- It is recommended to “uniformize” the values of the substitute players with the title players (see moments of injury and / or disqualifications in the competition.)

References

1. Alexe, N.: *Antrenamentul sportiv modern (Modern sports training)*. Bucureşti. Edit. Editis, 1993, p. 191-192.
2. Balint, E.: *Considerații privind comportarea echipei României de handbal feminin la turneul final al C.E – Ediția a III-a – 1998 (Considerations regarding the behavior of the Romanian women's handball team at the final tournament of the C.E - 3rd Edition – 1998)*. In: Probleme actuale privind perfecționarea sistemului de învățământ în domeniul culturii fizice. Chişinău. Edit. M.E.Ş, INEFS, AORM, DETS, 1999, p. 117-120.
3. Balint, E.: *An analysis of the performantial of the top three male handball teams in comparison to the Romanian team in the World Championships, Sweden, 2011*. Cluj-Napoca. Palestrica of the Third Millennium Civilization & Sport. Oct-Dec., 2012, Vol. 13 Issue 4, p. 333-338.
4. Curițianu, I., Neamțu, M., Balint, E.: *Analysis in attack of 6m. Line players from male handball team Steaua Bucharest in Romanian National League*. Iași. Revista Sport & Society, 2015.
5. Curițianu, I., Neamțu, M.: *An analysis of throws/goals scored by the male handball team HCM Constanța during the “Champions League” competition 2011-2012*. Cluj-Napoca. Palestrica of the third millennium – Civilization and Sport Vol. 13, no. 4, 2012.
6. Mihăilă, I.: *Handbal, Teoria jocului (Handball, Game Theory)*. Piteşti. Editura Universităţii din Piteşti, 2013, 200 p.