

ANALYSIS AND COMPARISON OF THE GAME PERFORMANCE OF GUARDS OF THE WOMEN BASKETBALL TEAM SC UMB BANSKA BYSTRICA IN THE SEASONS 2014/2015 AND 2015/2016

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The paper presents the results of the analysis and comparison of game performance of two women-guards of the women basketball team SC UMB Banská Bystrica in the seasons 2014/2015 and 2015/2016. The main method we used to evaluate the game performance of the two women-players within both seasons, was observation, more specifically, it was the method of a direct structured long-term group observation. The observed indicators were recorded in the game statistics records after each match, which enabled us to obtain data related to total game productivity (TP) of the players. Game productivity is one of the main indicators of the game performance and in the records, it is calculated by means of a formula used in quantitative Manley's method. For qualitative evaluation of the data obtained from the game statistics records in both seasons, we have analyzed the game performance of each guard, and further compared the data. The shooting indicators have proved that it is not only the points made that matter, but the activity of a player in a number of points attempted is also extremely important. Similarly, the situation related to indicators of positive and negative critical cases appears to be relevant. We have found out that for the post of a guard, stable performance in individual indicators of the game statistics is essential, and there should not be significant differences in game performance within one season.

INTRODUCTION

There is no doubt that basketball is a constantly developing sport. The requirements for coordination of the player's moves, and the types of factors which affect the game itself, are extremely important. More specifically, it is the limiting, conditioning, and complementary factors, mainly from the biological, motoric, and psychological-social point of view (Vojčík et al., 1997).

Tománek (2010) sees the specifics of basketball in a relation between the dynamics of the moves and a gradually more frequent physical contact between players, which is typical mainly in professional basketball. The rules, however, do not allow many forms of contact. Basketball is

developing to be more of a physical game which allows physical contact to a certain extent.

Basketball is a dynamic sport in which there is a constant change in the pace of the game, as well as the game itself, its tactics, actions and reactions to the match development, and finally, the unpredictable situations. The course of the game can be divided into a defense and the offense phases. These phases are in a close relationship, because as one team is performing the offense, the other team is in the defense phase. Each phase is divided into smaller stages of the game, where various game situations occur (Táborský et al., 2007).

According to Horička (2014), a game situation is when in a given moment of the game there are

no changes in the structure of the game situation. On the basis of a specific game situation, an individual or the whole team enters a game role

- standard, which are limited by rules, and occur when the match is interrupted. It is for example throwing the ball in the game after a free throw, etc.
- typical, which result from the course of the game. It is the frequently repeated situations within the match, depending on the acts of the opponent, e.g. defense of a player with the ball, or handling the screen. There are different alternatives how to solve these situations.
- unique, or special game situations. There are other game situations which require variable, more complex solutions, and result from the acts of teammates and opponents.

The acts that are performed in the course of the game require high level of motoric skills and special skills, high level of coordination of the moves, precise differentiation, muscle coordination, cooperation in combinations, and many other factors. During the course of the game, a player must be aware of several factors: the immediate status of the game situation, ability to anticipate action, and the right choice of tools for playing, the extent of influencing the acts of the opponent, or the movement of the subject of the game (the ball). Besides, basketball develops determination, psychological resistance, and social cohesion (Horička, 2014).

The prerequisites for the high level of all chosen factors carried out during the game (sports activity), are created through the influence of natural abilities, external environment, and purposeful practice. The final result of a sports activity is sports performance. It is a complex presentation of the individuals' abilities, internal or external factors, which lead to a higher or a lower level of the achieved result (Peráček, 2004).

Basketball, such as the other team sports, uses the term game performance. Přidal, (2011), understands game performance as a specific case of the sports performance in specific parts of the sports games. The author therefore considers this term as a synonym to 'sports performance', where instead of the term 'sportsman' we use the term 'player'.

Game performance is often mistaken for the term game efficiency (Měkota, Cuberek, 2007). Feč and Feč (2013) understand sport efficiency as the

which needs to be solved. The game situations may be as follows:

ability of a team or an individual to perform in a stable way in a certain period of time. It is a long-term process which is divided from the development point of view into: macrocycles, mesocycles, microcycles, and training units. Via these cycles, we can achieve growth in the efficiency, and thus also successfulness. The efficiency is affected by the age as well as the load of the players. Therefore it constantly changes and has a dynamic character. There are three phases of sport efficiency:

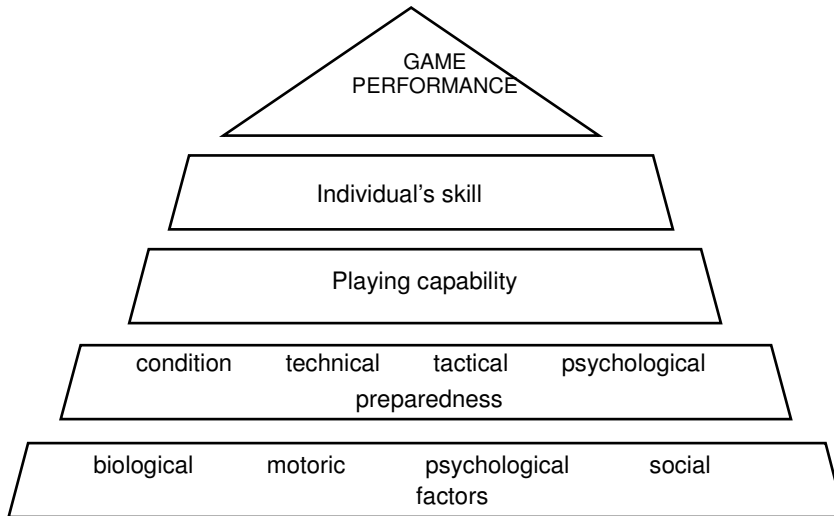
- the phase of increasing the sport efficiency,
- the phase of stabilizing the sport efficiency,
- the phase of decreasing the sport efficiency.

In basketball, game performance is understood as implementing the individual and group acts of players in a match, which are affected by the frequency of game task (Hůlka, Bělka, 2013). On the basis of this understanding of game performance, we distinguish between the individual and the team game performance.

All a player does in a match and all that is connected with fulfilling his/her roles in the match, can be classified as the individual game performance, or the game performance of an individual. The game performance of an individual is a very complex phenomenon, as many phenomena are happening inside the player's body, and therefore the performance is difficult to observe. It is psychological processes, e.g. perception, thinking, making decisions, attention, etc. On the outside, players manifest quality and a number of individual skills. On basis of this, players are judged and evaluated. Therefore the requirements for understanding players and having an individual approach towards them have become more and more frequent (Velenský, 1999).

The individual game performance in basketball is affected by many determinants and factors. In literature, we can find different classification of these factors. If we take into consideration the work of Choutka (1981), Dobrý and Semiginovský (1988), Hohmann and Brack (1983), or Přidal (2011), we distinguish the following factors:

- biological factors,
- motoric factors,
- psychological factors,
- social factors (Picture 1).



Picture 1 Model of a structure of an individual game performance

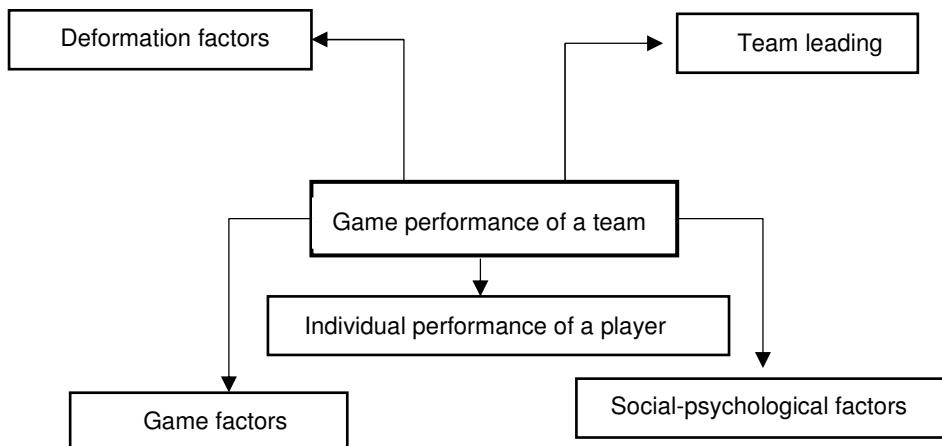
Source: Own elaboration according to Příklad (2011).

Picture 1 shows the hierarchy of the players' level, and their capability to play, i.e. game predisposition or skill, which includes the integration of condition, technical, tactical, and psychological preparedness. Game performance mainly depends on realizing the individual skills by the player.

Game performance of a team is based on the individual performances of players, which are subject to mutual regulation effect. The individuals

influence the game of the team, and the team affects the individuals. Team performance is not a sum of performances of individuals; it is a qualitatively higher phenomenon which is influenced by social, psychological, and special game rules and regulations (Příklad, 2012).

Besides these rules and regulations, the game performance of a team is limited by the following factors (Picture 2):



Picture 2 Model of a structure of team game performance

Source: own elaboration.

The main expression of the team game performance is the result of a match; in basketball it is the final score, but also the ranking of the team in the given season. These are qualitative characteristics which we focus on when evaluating the team game performance, but we also consider

the quantitative characteristics, which relate to the length of the match, standard situations, skill executions of an individual, etc. (Nemec, Adamčák, Izáková et al., 2014).

Besides evaluating the team game performance, we can also evaluate the game

performance of the individual players. All values can be obtained by direct observation of the match, watching a video, from the score sheet, or from the game statistics (Rose, 2013).

In our paper, we base our arguments on the results of evaluation of game performance obtained from the game statistics records. These are technical scores which are recorded by all teams during the matches.

According to Tománek (2010), since 2004, game statistics have been recording the number of minutes a match lasted, successful and unsuccessful attempts to score two or three points, and FT for one point, defensive rebound, offensive rebound, assistance, turnovers, personal fouls, blocked shots, and the final score. In our case, these statistics also include positive fouls, and the two-point shots are divided into under the basket shots and field shots.

To evaluate the whole team game performance, or the game performance of the individual players, we can use a number of methods. All methods, however, are based on observing the critical incidents: positive, or negative individual skill.

These methods are used for preparing players' characteristics in the match, in the training process, as well as for the skills and analysis of the individual game performances (Süss – Buchtel, 2009).

There are various methods of evaluating the game performance in basketball:

- Hluchý's method – evaluates each event with either a positive or a negative value (+1, -1),
- Iļaško's method – focuses on defense acts,
- Stéblo's method – evaluates by a coefficient of general activity of a player in the match,
- Váľková's method – evaluates the difference between the positive and the negative values/data.
- GPAI method - The Game Performance Assessment Instrument, informs of tactical and technical abilities of a player in solving critical cases (Memmert, Harvey, 2008). The GPAI method was elaborated in the studies of Mitchell et al. (2006) with the focus on: football, basketball, rugby, and ice-hockey.

Evaluation according to the GPAI method consists of the following points (Table 1):

Table 1 Evaluation of the game performance according to the GPAI method

Components	Definition
Basics	Correct return to defense
Deciding	Early decision of what to do with a ball: driving in, shooting, passing
Coordination	Managing the transition phase of the game
Support	Freeing the player without the ball
Player's abilities	Effective manifestation of playing skills
Covering	Covering the player with the ball
Defending	Defending the player without the ball

Source: adapted from Mitchell, Oslin, Griffin (2006).

Table 2 Calculation of the final score according to the GPAI method

Index	How to calculate it
Support index (SI)	Number of appropriate and inappropriate supporting movements without the ball
Decision making index (DMI)	Number of appropriate/inappropriate decisions made
Skill execution index (SEI)	Number of efficient/inefficient skill executions

Source: adapted from Mitchell, Oslin, Griffin (2006).

Where the formula for calculating the game performance according to the GPAI method is:

$$\frac{(DMI + SEI + SI)}{3}$$

The result is then judged by the following criteria (Mitchell, Oslin, Griffin, 2006):

5 – Very efficient performance: the player is constantly active, available for team players, helps in critical situations,

4 – Efficient performance: the player attempts to cooperate with team players, communicates often, requests the ball,

3 – Average efficiency: the player sometimes communicates with team players, is less available for them, is slower than others,

2 – Weak efficiency: the player rarely communicates with team players, seldom receives the ball, quits if ball is not received,

1 – Very weak efficiency: the player does not make him/herself available, does not obtain the ball, does not communicate with team players.

The last method we used to evaluate the game performance of our respondents for the purposes of this paper is Manley's method, which is considered to be the most frequently used method of game performance evaluation in basketball. Its main indicator is game efficiency, and it is evaluated by a formula used in NBA to determine the MVP (most valuable player of the season). This formula is further mentioned in the methodology part of this paper.

OBJECTIVE

The objective of this paper is to analyze and compare the game performance of guards of the women basketball team SC UMB Banská Bystrica in the seasons 2014/2015 and 2015/2016.

GOALS

Table 1 Somatic characteristics of two guards of the women basketball team SC UMB Banská Bystrica

Player	Age	Height (cm)	Weight (kg)	BMI	Number of years the player has played basketball
M. M.	21	166	67	24.3	8
K. M.	21	171	62	21.2	11

Note: cm – centimeter, kg – kilogram, BMI – body mass index

The players participated in the training process in the 2014/2015 season four times a week (Tuesday to Friday) in the afternoon, while Monday

1. Defining the problem and the objective of the survey.
2. Choice of a representative sample.
3. Data collection.
4. Data evaluation and analysis – analysis of the game performance of women guards with the use of game statistics records in the seasons 2014/2015 and 2015/2016.
5. Comparison of the game performance of female guards in the seasons 2014/2015 and 2015/2016.
6. Interpretation of the results and making conclusions.

METHODOLOGY

The analysis of the game performance was performed on a sample of the women basketball team SC UMB Banská Bystrica, at the Faculty of Arts, Matej Bel University in Banská Bystrica, in the seasons 2014/2015 and 2015/2016. The team meets in the gym at the Faculty of Arts, Matej Bel University, where it played its home championship matches of the First SBA Women's League, in both seasons. The game performance of two guards – K.M. and M.M. was observed, while these two women played in all matches of the first and the second parts² in both seasons (Table 1). In the 2014/2015 season, 15 matches were analyzed, and in the 2015/2016 season it was 14 matches.

² In Slovakia the season is divided into the first (basic) part, played in the fall, and the second (extension) part, played in spring.

was free. All practices took place in the gym, Wednesdays being focused primarily on shooting. It must be pointed out that in the 2014/2015

season, the basketball team SC UMB was established, and therefore it was the first season for the team to play in the championship matches. In the 2015/2016 season, the players participated in the training process five times a week (Monday to Friday), in the afternoon, where Mondays and Wednesdays were focused on working out in the fitness and cross-fit studio, and on the other days the training process was based in the university gym. Besides this, during the first part of the season, both players took part in morning shooting practices twice a week (Tuesday, Thursday). The women basketball team SC UMB Banská Bystrica played 15 championship matches in the 2014/2015 season in the period between October 4, 2014 – April 18, 2015 and 14 championship matches in the 2015/2016 season, between October 17, 2015 – April 3, 2016.

The main method used to record and evaluate the game performance of the players in the individual matches in both seasons, was observation. The results of this observation were recorded in the observation sheets during the championship (technical scoring sheet of the championship matches, <http://www.slovakbasket.sk/page.php?id=30>). We used the direct structured long-term group observation method. The direct observer was the assistant coach, while she was assisted by substituting players. The recorded data from the technical score sheets were written in the game statistics records after every match (<http://www.slovakbasket.sk/page.php?id=30>), which enabled us to access the data concerning the total game productivity (TP) of the players. Game productivity is one of the most significant indicators of game performance, and in the game statistics records it is calculated by means of the formula, via the above mentioned quantitative Manley's method:

$$TP = (RO + RD + ST - TO - (UBSA - UBSM + 2PA - 2PM + 3PA - 3PM)) * 0.791 + A * 1.209 - (FTA - FTM) * 0.7088 + BS + PTS$$

where RO – offensive rebound, DO – defensive rebound, ZL – steals, TO – turnovers, UBS – under the basket shot, A – total number of shooting attempts, M – point made, UBS+2P+3P – field goal shooting, 2P – two-point shooting, 3P – three-point shooting, FT – free throws, A – assists, BS – blocked shots, PTS – points. (<http://www.slovakbasket.sk/page.php?id=30>).

To perform qualitative evaluation of the game statistics records in the 2014/2015 and 2015/2016 seasons, we have analyzed the game performance of each guard, and following this we compared the figures. Finally, the outcomes of the research were interpreted and the conclusions were made.

RESULTS

The game statistics is one of the indicators used in evaluation of the player's or the team's performance. The numerical indicators of the game statistics belong among the main means for analyzing and evaluating the game performance, for the individual matches, first (basic) part, second (extension) part, or the whole season. In our paper, we have analyzed and evaluated the results of the game statistics of two women-guards in the seasons 2014/2015 and 2015/2016. The observed matches were analyzed and evaluated in total for each season and each guard, while firstly the data were analyzed individually for each player, and following this, the indicators of their game efficiency were compared.

By analyzing the indicators of the game statistics of the guard K.M. positive and negative critical cases, which form the basis for the observation of each method of game performance evaluation, as stated by Süss – Buchtel (2009), we have found out that this player improved in the 2015/2016 season when compared to the previous season of 2014/2015 in all positive indicators of the game statistics, and also in one indicator of negative critical cases: turnovers – TO (highlighted in blue color in Picture 1). At approximately the same period of play time for both seasons, the player K.M. was more productive in the 2015/2016 season, which can be seen in Picture 1, mainly in the following indicators: offensive rebound (RO) and assists (A), in which this player's improvement tripled, as well as positive fouls (F+), where her activity improved by 33%. Besides positive critical cases, for this player (K.M.) we have also noted significant activity in the total number of three-point attempts (3PA), where the number of 3PAs increased by 66% in the 2015/2016 season. In the 2015/2016 season, this activity was the main indicator to have affected the improvement in the total number of points (PTS). Even though the player's total percentage in three-point shooting (3P%) and in other indicators related to shooting (UBS, 2P, FT) did not change in comparison with the 2014/2015 season, a significant activity of K.M.

in the number of three-point attempts and other positive indicators of the game statistics, along with a lower number of turnovers (TO), was essential for

her significant 250% total improvement in the 2015/2016 season (Picture 1, the indicator TP – total game productivity).

GP K.M.	MIN	EVALUATION SHOOTING															+							-		
		UBS			2P			3P			FGS			FT			PTS	F+	RO	RD	ST	A	BS	TO	F-	TP
		UBSM	UBSA	%	2PM	2PA	%	3PM	3PA	%	FGM	FGA	%	FTM	FTA	%										
15 GP (2014/2015)	295	11	32	34	8	41	20	7	23	30	26	96	27	11	16	69	70	18	4	27	25	6	1	63	37	13.8
14 GP (2015/2016)	266	10	30	33	8	39	21	11	38	29	29	107	27	12	19	63	81	24	10	32	27	16	2	52	40	49.1
TOGETHER	561	21	62	34	16	80	20	18	61	30	55	203	27	23	35	66	151	42	14	59	52	22	3	115	77	62.9

Picture 1 Game statistics of the player K.M. in the 2014/2015 and 2015/2016 seasons

Note: GP – Played games, MIN – Minutes played, UBS – Under the basket shot, UBSA - Under the basket shot made, UBSA – Under the basket shot attempt, % - Shooting percentage, 2P – 2 points, 2PM - 2 points made, 2PA – 2 points attempt, 3P – 3 points, 3PM - 3 points made, 3PA – 3 points attempt, FGS - Field goal shooting, FGM - Field goal shooting made, FGA - Field goal shooting attempt, FT – Free throws, FTM – Free throws made, FTA – Free throws attempt, PTS – Points, F – Fouls, RO – Offensive rebounds, RD - Defensive rebounds, ST – Steals, A – Assists, BS – Block shots, TO – Turnovers, TP – Total game productivity, + = positive critical cases, - = negative critical cases

By analyzing the indicators of the game statistics of the second guard (M.M.), the positive and the negative critical cases, we have found out that this player improved in the 2015/2016 season, compared to the previous season (2014/2015) in only one of the positive indicators of the game statistics: the assists – A, and one of the negative critical cases: turnovers – TO (highlighted in blue color in Picture 2). More significant activity of the player M.M. has been observed in all indicators of shooting besides three-point shooting (3P). M.M. improved greatly in the effectivity of points made, which showed in her percentage of efficiency, where the percentage increased in the 2015/2016 season by almost 150% in under the basket shots (UBS%), by 86% in 2 point shooting (2P%) and by 130% in free throws (FT%). In picture 2 we can see

that even with a lower pay time in the 2015/2016 season (by nearly 45%), the player M.M. was more productive in total in this season, which clearly shows her improvement in total game productivity (TP) by 70%. Compared to the previous season of 2014/2015, this player also improved in the number of points made, if we take into consideration the actual play time and the number of played matches in the 2015/2016 season. The weakest indicators in the 2015/2016 season, which greatly affected the possibility of a more significant improvement in total game productivity of M.M. in comparison with the 2014/2015 season, appeared to be the percentage of three-points made (3PM%), and the number of turnovers, while in positive critical indicators, it was mainly the number of offensive rebounds (RO) and assists (A).

GP M.M.	MIN	EVALUATION SHOOTING															+							-		
		UBS			2P			3P			FGS			FT			PTS	F+	RO	RD	ST	A	BS	TO	F-	TP
		UBSM	UBSA	%	2PM	2PA	%	3PM	3PA	%	FGM	FGA	%	FTM	FTA	%										
15 GP (2014/2015)	310	3	14	21	9	42	21	2	11	18	14	67	21	6	16	38	36	15	7	29	18	8	0	40	31	7.7
14 GP (2015/2016)	188	4	8	50	7	18	39	0	15	0	11	41	27	7	8	88	29	9	3	12	7	12	0	29	17	13.5
TOGETHER	498	7	22	32	16	60	27	2	26	8	25	108	23	13	24	54	65	24	10	41	25	20	0	69	48	21.3

Picture 2 Game statistics of the player M.M. in the 2014/2015 and 2015/2016 seasons

Note: GP – Played games, MIN – Minutes played, UBS – Under the basket shot, UBSA - Under the basket shot made, UBSA – Under the basket shot attempt, % - Shooting percentage, 2P – 2 points, 2PM - 2 points made, 2PA – 2 points attempt, 3P – 3 points, 3PM - 3 points made, 3PA – 3 points attempt, FGS - Field goal shooting, FGM - Field goal shooting made, FGA - Field goal shooting attempt, FT – Free throws, FTM – Free throws made, FTA – Free throws attempt

attempt, PTS – Points, F – Fouls, RO – Offensive rebounds, RD - Defensive rebounds, ST – Steals, A – Assists, BS – Block shots, TO – Turnovers, TP – Total game productivity, + = positive critical cases, - = negative critical cases

When comparing the indicators of the game performance of two women-guards in the 2014/2015 season, we have found out that K.M. is a more productive guard, and a more successful player in shooting. Her total game productivity (TP) is mainly a result of her activity in shot indicators. At approximately the same amount of time played, the player K.M. achieved 18 more under the basket attempts in comparison with M.M., she was more active and successful in three-point shots (3P) as well as in free throws (FT). Activity and success in these indicators of shooting for K.M. (highlighted in red color in Picture 3) resulted in the difference of total points made, as well as in higher total productivity of this player. In two-point shooting and in the total number of free throws made (FTM), as

well as in two positive critical cases (RO, A), both players were equally active and successful (highlighted in blue color in Picture 3). The only indicator in which M.M. was better than K.M. in the 2014/2015 season, was a lower number of turnovers (TO, as Manley's method does not take into consideration any fouls, F+, F-, in calculating the TP). This negative indicator, however, appears to be essential for the total result in game (total) productivity of both players, because this number is more than a 100% higher than the number of steals (ST), so the ratio of the positive (ST) and the negative (TO) critical cases is 1:2 in favor of turnovers, which is definitely a negative indicator of the game performance at the post of a guard.

2014/2015 15 GP	MIN	EVALUATION SHOOTING															+					-				
		UBS			2P			3P			FGS			FT			PTS	F+	RO	RD	ST	A	BS	TO	F-	TP
		UBSM	UBSA	%	2PM	2PA	%	3PM	3PA	%	FGM	FGA	%	FTM	FTA	%										
K.M.	295	11	32	34	8	41	20	7	23	30	26	96	27	11	16	69	70	18	4	27	25	6	1	63	37	13,8
M.M.	310	3	14	21	9	42	21	2	11	18	14	67	21	6	16	38	36	15	7	29	18	8	0	40	31	7,7

Picture 3 Comparison of the indicators of game performance of guards in the 2014/2015 season

Note: GP – Played games, MIN – Minutes played, UBS – Under the basket shot, UBSA - Under the basket shot made, UBSM – Under the basket shot attempt, % - Shooting percentage, 2P – 2 points, 2PM - 2 points made, 2PA – 2 points attempt, 3P – 3 points, 3PM - 3 points made, 3PA – 3 points attempt, FGS - Field goal shooting, FGM - Field goal shooting made, FGA - Field goal shooting attempt, FT – Free throws, FTM – Free throws made, FTA – Free throws attempt, PTS – Points, F – Fouls, RO – Offensive rebounds, RD - Defensive rebounds, ST – Steals, A – Assists, BS – Block shots, TO – Turnovers, TP – Total game productivity, + = positive critical cases, - = negative critical cases

We have also compared the performance of both guards in the 2015/2016 season, to verify the increase or the decrease in the indicators of their game performance in relation to the previous season. Picture 4 clearly shows that out of all indicators, there was only one in which they achieved a 100% identical value, and that was in the percentage of all shots made, as well as almost the same result in two-points made parameter (highlighted in blue color in Picture 4). The most significant difference as compared to the 2014/2015 season can be seen in the fact that while in 2014/2015, the player K.M. was more active and dominant, in all shooting attempts besides the two-point attempts where both players

were equally active and successful, in the 2015/2016 season, this player (K.M.) was more active in the total number of all points attempted and made (UBS, 2P, 3P, FT, PTS), highlighted in red color in Picture 4). However, the player M.M. was more successful in the percentage of under the basket shots (UBS%), two-point shots (2P%) and free throws (FT%). (highlighted in yellow color in Picture 4). Despite her improvement, the low number of shots and no 3 point shots made resulted in the number of points made as low as 29 (2P/match), along with the low values of all indicators of positive critical cases, also due to a three times lower value of her game productivity (TP) compared to K.M. As in the 2014/2015

season, M.M. was more successful compared to K.M. in the 2015/2016 season in the indicator of turnovers (TO). What appears to be positive for M.M. is her improvement of this indicator in

comparison with the previous season (40% improvement) – twice compared to K.M. (20 % improvement).

2015/2016 14 GP	MIN	EVALUATION SHOOTING															+					-				
		UBS			2P			3P			FGS			FT			PTS	F+	RO	RD	ST	A	BS	TO	F-	TP
		UBSM	UBSA	%	2PM	2PA	%	3PM	3PA	%	FGM	FGA	%	FTM	FTA	%										
K.M.	266	10	30	33	8	39	21	11	38	29	29	107	27	12	19	63	81	24	10	32	27	16	2	52	40	49.1
M.M.	188	4	8	50	7	18	39	0	15	0	11	41	27	7	8	88	29	9	3	12	7	12	0	29	17	13.5

Picture 4 Comparison of the indicators of game performance of guards in the 2015/2016 season

Note: GP – Played games, MIN – Minutes played, UBS – Under the basket shot, UBSA - Under the basket shot made, UBSA – Under the basket shot attempt, % - Shooting percentage, 2P – 2 points, 2PM - 2 points made, 2PA – 2 points attempt, 3P – 3 points, 3PM - 3 points made, 3PA – 3 points attempt, FGS - Field goal shooting, FGM - Field goal shooting made, FGA - Field goal shooting attempt, FT – Free throws, FTM – Free throws made, FTA – Free throws attempt, PTS – Points, F – Fouls, RO – Offensive rebounds, RD - Defensive rebounds, ST – Steals, A – Assists, BS – Block shots, TO – Turnovers, TP – Total game productivity, + = positive critical cases, - = negative critical cases

DISCUSSION AND CONCLUSIONS

During the many years of basketball development, there has been a need to quantify the game performance of the individual players as well as the whole team. Numerous methods were being created and developed, which enable us to objectively record the aspects of the game. These methods were improved from simple statistics recorded manually on paper (usually by assistant coaches or players) to currently used fully automated procedures which record significant variables (individual skill) of the match, and create necessary records of the game performance (Lorenzo, Gómez, Ortega et al., 2010; Oliver, 2004).

The analysis of game performance represents a feedback of the players' performance immediately after the individual matches, or later, and enables us to evaluate their performance for the whole season. It provides valid, precise, and reliable information about the game performance for the coach as well as for the player, it suggests what steps need to be taken, what changes should be done before and during the following season. This analysis should help players understand why things should or should not be done in order to improve their game performance.

The comparison of the indicators of the guards' game performance in the seasons of

2014/2015 and 2015/2016 suggests that for the post of a guard, more stable performance in the individual indicators of the game statistics are essential. The indicator of shots has proved that it is not only scoring that is important, but also the activity of the player related to the number of shots. This indicator noted a critical difference between our two observed players, because M.M., who improved significantly when compared to K.M. in the 2015/2016 season in the percentage of under the basket shots (UBS%), two-point shooting (2P%) as well as in free throws (FT%), reached no more than 30% of the shooting success (points made) of K.M. Therefore M.M.'s shooting indicator shows that it is essential to increase the activity in the number of shoots. Similar situation appears to be with the indicators of the positive and the negative critical cases, where the player M.M. showed a substantially lower activity compared to the player K.M. in the 2015/2016 season. While in the 2014/2015 season the players were approximately equal in numbers (besides two indicators – ST and TO), in the 2015/2016 season, their values were similar only in two indicators (A, BS). Lower values of M.M. in all positive critical indicators in the 2015/2016 season (besides the mentioned A and BS) resulted in significant differences between both players, in favor of K.M.

The only stable positive critical indicator for M.M., as compared to K.M., was turnovers (TO).

By analyzing and comparing the indicators of the game performance of our guards, we have come to a conclusion that to achieve a more productive game performance, for our guards, activity in all indicators of the game statistics is essential. As suggested by Benčíková (2013), activity is based on internal motivation which leads to motivating others, and thus to higher productivity. In total evaluation of the game productivity, as one of the important factors of individual game performance, it is not substantial to perform in positive indicators of chosen parameters, e.g. only being successful in points made, or in positive or negative critical indicators, but it is crucial for players who play at a guard post to achieve more stable results in the game statistics indicators without excessive fluctuation of the game performance values during the whole season.

The main reason for the insufficient and fluctuating level of game performance of our guards appears to be the following: of the negative critical cases it is the number of turnovers (TO), low frequency and effectivity of three-points made (3P%), and of the positive critical cases it is the offensive rebounds (RO). In case of turnovers, since the most common reason of losing the ball is the insufficient handling the ball by the player and the technique of the player while dribbling under pressure, or inaccuracies when passing the ball, we propose more attention be placed on the improvement of the given individual skills in the period after the end of a season. The effectivity of points made for every shooting, in our case the three-point shooting, can be increased only by increasing the shooting attempts, not only in the training process, but also, and mainly, on an individual basis and practice. In our case, the morning shooting practices in the 2015/2016 season appeared to be very efficient, while being conducted twice a week; for M.M. the practice was primarily focused on two-point shooting (UBS, 2P) and free throws (FT) and for K.M. it was three-point shooting (3P). With the last indicator – offensive rebounds (RO), it is to be

decided how efficient the extra practice may be for the post of a guard, i.e. how much the coach will consider this indicator as essential for the improvement of the player's total game productivity. We need to realize that it is the post of a guard whose the role is to prevent fast offensive transition in offense, turnovers, or steals, and should most frequently be the one to return into defense. Therefore, a guard must consider his/her spacing, or the possibilities of a fast return, which often prevents the guard from actively participating in offensive rebounds of the team, and thus gaining these positive indicators of the game statistics for him/her as an individual, in relations to the other posts.

Analyzing and comparing the individual game performance in basketball is a very relevant issue and one of the main goals for coaches, players, sports scholars, and managers, the main significance of which is to make available detailed information about the players' individual game performance during a match or during the whole season, and thus create stimuli for increasing the effectivity of the training process. The evaluation of the individual game performance belongs among the basic theoretical and practical tasks. Even though there exists scientific knowledge related to this field, many coaches still tend to evaluate the game performance by observing the players, as well as using their coaching experience, without implementing any elaborate method of evaluation. The reason for this appears to be the complexity of the problem, which results from a large number of determinants of the individual game performance (Argaj, 2009). In our paper we have analyzed and compared two players – guards. We realize that this factor may have affected our general conclusions and recommendations, and therefore consider our findings to be a good starting point for further researches. By enlarging the sample of the research, or focusing on other age and performance categories, we may achieve more detailed analysis, recommendations, and generally valid and effective conclusions within the chosen problem of evaluating the game performance.



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