

DIFFERENCE IN THE EFFECTIVENESS OF THE OFFENSIVE STRATEGIES BETWEEN GUARDS FROM VTB ANF ABA LEAGUE

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Abstract

The aim of the present research is to compare the total efficiency of possessions and successfully released possessions in offense achieved during the whole season by the players who play in the guard positions in the ABA League and the VTB League. For the needs of this research, the data of the players who play in the guard position are taken, divided into two groups, ABA (n = 54) and VTB (n = 39). Each of the regional leagues for the season 2020-2021 number of 12 teams, which have played a total of 24 matches in the regular part of the season plus the play-off matches. The data is taken from the specialized scout platform Synergy sport tech. The data for all defenders from the studied leagues are statistically processed with the statistical software SPSS 22. A Mann-Whitney U test was calculated to determine the differences between the studied leagues. Based on the results obtained, we can conclude that there are statistically significant differences between the guards who played in the ABA and VTB League for the 2020-2021 competition in the area that studies the scope and performance of the attack. The guards who play in the regional VTB league achieved better results compared to the guards who play in the regional ABA league for the analyzed competitive season.

Keywords: *basketball, compare, guards, performance, matches.*

Introduction

At the highest level of basketball competition, success can be mostly dependent on the recruitment of players with complementary skills who are capable of performing according to the demands of their playing position (Ige & Kleiner, 1998).

While these characteristics contribute to individual performance, the combination of all individual performances in a coherent manner ultimately results in team success (Gomez et al., 2009)

Basketball match success has been associated with a range of team performance indicators including successful 3-point (Ibanez et al., 2009; Jukic et al., 2000; Lorenzo et al., 2010), 2-point (Ibanez et al., 2009; Jukic et al., 2000; Lorenzo et al., 2010) and 1-point (free-throw) (Jukic et al., 2000; Sampaio et al., 2006; Trninic et al., 2002) shots, 'defensive rebounds' (Gomez et al., 2008; Ibanez et al., 2009; Trninic et al., 2002), 'fouls' (Sampaio et al., 2006), 'turnovers' (Lorenzo et al., 2010) and 'assists' (Gomez et al., 2008; Ibanez et al., 2009; Trninic et al., 2002). Gomez and colleagues (2008) reported that 'defensive rebounds' and 'assists' discriminated all wins and losses during the 2004-2005 Spanish Men's Professional League. Other studies focusing on European basketball matches have also reported the importance of 'defensive rebounds', 'assists' and 'field-goal percentage' for team match success (Jukic et al., 2000; Trninic et al., 2002). During short-term, junior tournaments, a range of performance indicators including '2-point field-goal' accuracy, 'defensive rebounds', 'turnovers' and 'assists' were acknowledged as discriminatory for wins or losses (Ibanez et al., 2009; Lorenzo et al., 2010).

Generally, coaches and researchers use this information to identify the most valuable players and the importance of certain specific roles (Sampaio et al., 2006a), to assess the impact of rule changes (Gómez et al., 2006), to investigate the home advantage (Carron et al., 2005; Pollard, 2008) or to evaluate the participation in the game by starting and reserve players, with the goal of determining how each player contributes to team performance (Sampaio et al., 2006b).

The aim of this research is 1) to compare the total number of possessions achieved during the whole season by the players who play in the back positions in the ABA League and the VTB League, 2) is to

compare the total number of successfully realized possessions achieved during full season players who play in the guard positions in the ABA League, and VTB League, 3) is a comparison of the total number of holdings achieved in the transition throughout the season players who play in the guard positions in the ABA League and VTB League, 4) is a comparison of the total number of successful possessions in transition that were achieved during the whole season by the players who play in the guard positions in the ABA League and VTB League, 5) is a comparison of the total number of possessions in positional attack that they achieved during full season players who play in the guard positions in the ABA League and VTB League, 6) is a comparison of the total number of successful possessions in positional attack achieved during the whole season by the players who play in the guard positions in the ABA League and VTB League.

Methods

Participants

The research was conducted on a total of 93 respondents, who play in the regional ABA and the regional VTB league. The sample of respondents is drawn from the population of players who played in the above teams, in the competition season 2020-2021. For the needs of this research, the data of the players who play in the guard position are taken, divided into two groups, ABA $n = 54$ and VTB = 39. Each of the regional leagues for the season 2020-2021 number of 12 teams, which have played a total of 24 matches in the regular part of the season plus the play-off matches. The following criteria are taken as a basic criterion for the player to be subject to analysis: 1) to have played half of the total number of matches for the team that played in the analyzed league, 2) playmakers, back-shooters and combo backs.

Data collection

The data is taken from the specialized scout platform Synergy sport tech. In the specialized scout platform Synergy sport tech, the data for each player are entered, i.e. the total number of possessions, realizations, the total number of possessions in transition, realization in transition and the cumulative efficiency in the positional attack are calculated, divided by the structure for the competitive season 2020-2021 for the two studied regional leagues separately.

Statistical analysis

Because the assumption of normal data distribution was distorted, The Mann-Whitney U test was further applied to determine the differences in the arithmetic mean rankings, and the significance level was set to ($p < .05$). The determination of the magnitude of the difference effect was analysed according to Cohen's criterion, 0.1 small effect, 0.3 medium effect, 0.5 and more large effect (Coolican, 2009; Lenhard & Lenhard, 2016). The statistical program SPSS 22 was used for data processing.

Results

From the above analysis of Table 1. we can see that there are statistically significant differences in 5 of the 6 variables studied in this study. Statistically significant differences were found in the variables: TOTALP (number of holdings realized during the whole season) with level of significance ($p = .003$), in the variable TOTALR (total number of successfully realized holdings achieved during the whole season) with a level of significance of ($p = .003$), the variable TOTALTRP (total number of holdings realized in transition during the whole season) with a level of significance ($p = .018$), with the variable TOTALHCP (total number of positions in positional attack that they achieved during the whole season) with level of significance ($p = .003$) and in the variable TOTALHCR (total number of successful holdings in positional attack that they achieved during the whole season) with level of significance ($p = .002$). There is no statistically significant difference with the TOTALTRP variable (the total number of holdings realized in transition during the whole season).

Although there is a statistically significant difference in the ranks of the arithmetic means, the results of the magnitude of the effect show that the magnitude of these differences ranges from small ($\eta^2 = .181$) to medium ($\eta^2 = .323$) Table 2.

The current study identified the following indicators for the performance of the players who play in the back positions in the two analyzed leagues for the competitive 2020-2021, as follows:

- The guards of the VTB League achieve a larger number of possessions throughout the season;

- The guards from the VTB League have greater success on the total number of realized possessions during the whole season
- The guards of the VTB League achieve a larger number of possessions in transition throughout the season;
- The guards from the VTB League achieve a larger number of possessions in a positional attack throughout the season;
- The guards from the VTB League have greater success on the total number of realized possessions in the position attack during the whole season.

Table 1. Means ranks and Sum of ranks

	LEAGUE	N	Mean Rank	Sum of Ranks
TOTALP	ABA	54	39.93	2156.00
	VTB	39	56.79	2215.00
	Total	93		
TOTALR	ABA	54	39.93	2156.00
	VTB	39	56.79	2215.00
	Total	93		
TOTALTRP	ABA	54	41.39	2235.00
	VTB	39	54.77	2136.00
	Total	93		
TOTALTRR	ABA	54	42.84	2313.50
	VTB	39	52.76	2057.50
	Total	93		
TOTALHCP	ABA	54	39.98	2159.00
	VTB	39	56.72	2212.00
	Total	93		
TOTALHCR	ABA	54	39.60	2138.50
	VTB	39	57.24	2232.50
	Total	93		

Table 2. The differences in the mean ranks

	TOTALP	TOTALR	TOTALTRP	TOTALTRR	TOTALHCP	TOTALHCR
Mann-Whitney U	671.000	671.000	750.000	828.500	674.000	653.500
Wilcoxon W	2156.000	2156.000	2235.000	2313.500	2159.000	2138.500
Z	-2.974	-2.974	-2.360	-1.748	-2.951	-3.111
Asymp. Sig. (2-tailed)	.003	.003	.018	.080	.003	.002
η^2	0.308	0.308	0.245	0.181	0.306	0.323

Discussion

Determining the differences between guards is essential for obtaining reliable information about the main features in the structure of the basketball game. The number of holdings made by the guards quote. Previous investigations widely studied the game-related statistics mostly assessing team performance in order to determine the most valuable players and the importance of certain positions such as guards, forward and centers (e.g., Sampaio et al., 2006a),

The guards who play in the clubs that are part of the regional VTB-league realize a larger number of possessions compared to the guards that play in the regional ABA-1 league, hence it can be seen that most of the attacks that were organized and realized by the players perform on the guards positions. The successful realization of the attacks is also on the side of the defenders who play in the VTB League (the reason for such results can be located in the dynamics of the game, as well as in the quality of the players). The game in transition divided in this research is analyzed in two segments, first in the total possession achieved by the guards where there are no statistically significant differences between the players in the studied leagues and the total number of successfully completed transitions where better results were achieved by VTB players.

The largest percentage of the possessions realized by the guards belongs to the positional game, i.e. to the actions that take place in the middle of the field, and here again the players from the VTB-league achieve better results. The success in the realization of the positional attacks during the analysis we can conclude that it is on the side of the players from the VTB – league.

Conclusion

Based on the results obtained, we can conclude that there are statistically significant differences between the guards who played in the ABA and VTB League for the 2020-2021 competition in the area that studies the scope and performance of the attack. The guards who play in the regional VTB league achieved better results compared to the guards who play in the regional ABA league for the analyzed competitive season. For a more detailed and complete picture in the attack segment, it should be noted that the long spaces that determine the attack in basketball should be studied, in order to get a complete picture of the differences in quality of players playing in different leagues.

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