CHARACTERISTIC OF THE GAME PERFORMANCE OF ATHLETES IN BEACH VOLLEYBALL IN BULGARIA

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Abstract

The present research aims to provide information about the game performance of beach volleyball players in Bulgaria. We researched the game performance of 24 players participated in four tournaments of the National championship in beach volleyball, conducted in 2013. Three elements of the technique were analyzed e - service, reception and attack. Based on the results it is calculated, and coefficient of performance (Ke) of each element. Conclusions and recommendations provide guidance for optimizing the training process and increasing the efficiency of the competitors.

Keywords: *service, reception, attack, game performance, coefficient of performance, video monitoring*

INTRODUCTION

Beach Volleyball combines all positive aspects of team sports - ability to play the ball, speed and accuracy of movement, flexibility, deemed necessary to link individual actions and thinking of the teammates, etc. To these positive aspects we can add multilateral influence of the natural factors in outdoor sports. (Kuchukov & Antonov) (Кючуков & Антонов), (2004).

Played outdoors on a sand surface with only two members per team, the goal of beach volleyball is to make the ball hit the ground on the opponent's side of the court, or prevent its return to one's own side of the court.

The sport of beach volleyball underwent serious changes after the 2000 Sydney Olympics. Previous to 2001, the sport was played using the 'side out' scoring format. Teams only scored points when they were serving, and matches consisted of one game to fifteen points where the winner had to win by two points. The sport is now played with a 'rally point' system where points are scored on every play, regardless of which team possesses the serve. The court dimensions also changed from a 9x18m court to a smaller 8x16m court. Researchers have explored the effect of different scoring systems and court dimensions on the sport (Kountouris & Laios, 2000; Kontourris, Laios, & Katsikadelli, 2001; Giatsis 2003, Giastis & Tzetis 2003; Grgantov, Katić, & Marelić, 2005; Kroger, 2006).

The popularity of beach volleyball is increasing, but it is a sport in the early stages of its development and it is necessary to introduce quality materials to support the development of players and coaches through practical advice (Jones, & Dalanhese, 2011).

The basic requirements for beach-volleyball players are the same as those exercising for classic volleyball. It is no coincidence that many of the beach volleyball players have previously been trained in traditional volleyball. (Hristova (Христова), 2012).

The features of the sport games activities in beach volleyball have increased demands on the universal game preparation of athletes who should be well informed about reception, attacking, blocking and play defense. One could say the main objective of preparing athletes in beach volleyballs versatility (Kostykov (Костюков), Chesnokov (Чесноков), & Timohin (Тимохин), 1996).

The aim of this study is to determine the game performance of athletes in beach volleyball in Bulgaria during the last season in 2013.

For achieving the goal we set ourselves the following **tasks**:

1. To correlate the indicators analyzed for the initial service, the reception and the attacking.

2. To correlate the efficiency of the analyzed elements of game technique.

3. To correlate the coefficient of efficiency of game activities of the player.

The research sample included 24 beach volleybal players from Bulgaria participating in all 4 National tournament circuits in beach volleyball.

Organization and methodology of the research took place in the following order:

1. Video monitoring and recording of game acti-

Table.1. Indicators analyzing the game performance

Indicators	Service	Reception	Attack
Points (%)	6,42	-	41,46
Positive (%)	18,63	70,04	5,42
Negative (%)	62,95	22,25	33,04
Faults (%)	12,00	7,71	20,08
Total action	987	873	1128
Ke	1,35	1,70	2,19

ons of the players.

2. Processing the data using following mathematical - statistical methods:

- to determine the gaming performance - the program Data-Volley

- to determine the coefficient of performance (Ke) – Experimentation of the sector „Volleyball" methodology by the formula:

$$Ke = \frac{A4x4 + A3x2 + A2 + A1}{A}$$

where: A4 – is a number of playing activities with maximum grade; A3 – is a number of playing activities with good grade; A2 – is a number of playing activities with low grade; A1 – is a number of group activities where there is a mistake; A – is a common number of game activities.

RESULTS AND DISCUSSION

The first element of the game technique characteristics which we will go through is the service (Table 1).

We identified four indicators which analyze the effectiveness of its players service in beach volleyball - points scored directly from a kick-in, positive out (difficult meeting) initial shocks, negative (inadequate) met initial shock and errors of the initial shock.

We identified four indicators which analyze the effectiveness of the services in beach volleyball - points scored directly from a service, positive out (difficult reception), negative (inadequate reception and errors of reception.

The results show lack of security of the players in the implementation of service with few direct points and a high percentage of errors and inadequate service.

Errors are 12%, inadequate services - 62.95%. Direct points 6.42% of service and difficulties in reception for opponents after which attack is organized, are 18.63%.

Reception is the second element which determines the effectiveness in three indicators - positive reception, after which the team has organized attack, negative reception when attack is organized and errors at the reception when there has been a direct point.

We have to point out the high percentage of positive reception - 70.04%. Concerning the analysis of service,

however, this percentage is quite understandable. Mistakes in reception are overall 7.71% and after not organized attack, are 22.25%.

Characteristics of the attack of beach volleyball players were also split into four indicators – scored points, positive attacks after which the ball remained in the game and contra attack not organized, negative attacks, after which the opponent organizes attack and errors during the attack.

The highest percentage is for the direct points – 41.46%. However, because of the high percentage of the negative attacks – 33.04%, especially mistakes in attack – 22.08%, one can notice the high level effectiveness of the attack of the competitors in beach volleyball.

The percentage of attack activities when the ball remained in the game for contra attack or not organized attack by the opponent is – 5.42%, which further confirms our position.

The obtained results were calculated by the formula and coefficient of the effectiveness (Ke) of competitors for each of the elements was examined by the technique of the game.

Of the three elements the highest Ke is in the attack - 2.19 points, and the lowest Ke in serving - 1.35 points. In reception Ke of the beach volleyball players in Bulgaria is in 1.70 point.

CONCLUSIONS

1. Beach volleyball players in Bulgaria implement ineffective service with small amount of direct points and a large amount of errors from the serving.

2. The high level of the players at the reception was largely due to the quality of the service.

3. The coefficient of efficiency of the attack is the highest of the three indicators, but there is a need to reduce the errors and uncompleted attacks.

4. We recommend - beach volleyball players in Bulgaria should work on improving the quality of serving and attacking.

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