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RELATIONSHIP BETWEEN THE SPORTS PREPAREDNESS AND THE GAME REALIZATION OF THE NATIONAL TEAM – WOMEN"20

(Preliminary communication)

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Abstract

Contingent of the study is 15 women basketball players born in 1993-1996, listed in the national team for the respective age. The following methods of research have been applied for the realization of the objective and tasks set up: review study of the specific literature, anthropometry, expert evaluation, sport-pedagogical tests, observation and recording of the competitive effectiveness. All competitors of the team have undergone tests in 10 indicators bearing information about the basic signs of the specific basketball workability. Under the procession, the test battery has been divided into two groups: tests bearing information about the physical preparedness (6 tests) and tests characterizing the technique-tactic skills (4 tests). The analysis of the results from the study as well as the summaries made allow formulating the following conclusions: As a whole, the basketball players entered into the group under study have got approximately equal level of physical development and sports preparedness which is at an average level; The average team mark (3,91) proves that as a whole the national team under study is under the average level for the same age (the best 20 year old women basketball players) in Bulgaria; The dependence between the sports preparedness (physical and technique-tactic) and the game effectiveness coefficient of the women'20 basketball players is weak.

Keywords*: basketball, game effectiveness, expert evaluation, school-training process, rank correlation, coefficient of the effectiveness,*

INTRODUCTION

Modern basketball more and more imposes the point of view that the achievement of high and stable sports results can be attained under scientifically reasoned sports preparation of many years only. A basic part of that preparation is the participation of the growing up women basketball players in the European championships for the respective age group. It is known that the observation and the registration of the game indicators allow gathering rich information about the game activity of the separate players and the teams as a whole. The procession of that information by the help of the variation analysis allows finding the average level of each of the signs under study of the team competitive effectiveness. Uncovering the dependence between the signs of the game effectiveness and the specific preparedness will provide us with the basic directions for the optimization of the school-training process.

The stochastic nature of the basketball motive activity and the lack of quantitative measures of the sports achievement make considerably difficult the control and the management of the training process. The striving towards more and more exact information leads to the use of various means for registering the separate parameters of the motive activity (Gyosheva, Tsarov, Tsarova (Гьошева, Църов, & Църова), 1990, Tsarov (Църов), 2012).

According to the standing point of many experts, basketball is probably the most collective sports game. The weak technique-tactic preparedness of a single member of the team only immediately hinders the activity of the rest of the players and kills the efforts of the whole team (Simeonova, 2012). The low level of the specific physical qualities development reflects on the sports preparedness of the basketball players and hinders their game realization.

The application of the Krüger-Spirman rank correlation in the field of basketball allows establishing for instance the dependence between each of the competitive effectiveness signs under study and the classification of the teams in a given competition. Particular attention has to be paid to the correlation relationship of the so-called

"analogue of the sports achievement" (Y) with the signs which characterize the phenomenon under study (the competitive effectiveness, the specific workability, the physical preparedness, etc.). The creation of "analogue of the sports achievement" which is quantitatively measured, possible thanks to the means of the sports statistics, is imposing because of the fact that the sports result in basketball is not a quantitatively measured magnitude and that is why the study of its relationship with the separate factors of the sports achievement is exceptionally difficult.

Objective of the present study is the optimization of the training process of the growing up basketball players from the national team women'20 through evaluation of the sports preparedness and the comparative analysis of the specific workability and the game effectiveness.

METHODS

The present study has been made during the period of May till August 2013. Subject of the study is the specific workability and the competitive effectiveness in basketball. Object of the study is the basic signs of the physical and technique-tactic preparedness of growing up women basketball players. Sample of the study is 15 women basketball players born in 1993-1996, listed in the national team for the respective age.

The following methods of research have been applied for the realization of the objective and tasks set up: review study of the specific literature, anthropometry, expert evaluation, sport-pedagogical tests, observation and recording of the competitive effectiveness.

All competitors of the team have undergone tests in 10 indicators bearing information about the basic signs of the specific basketball workability. Under the procession, the battery test has been divided into two groups: tests bearing information about the physical preparedness (6 tests) and tests characterizing the technique-tactic skills (4 tests).

For evaluating the competitive effectiveness of each of the basketball players (10 in number) having participated in the matches during the European championships held in Albena (Bulgaria) in 2013, the so-called coefficient of the effectiveness has been used, taken to the front on the bases of the statistic record of the game activity according to 15 game indicators bearing information about all sides of the sports preparation of the athletes. That coefficient provides the possibility to establish the degree of the realization of the abilities of the women players within the extreme conditions of the competition.

The results of the study are subjected to mathematic-statistic treatment by: alternative analysis, Krüger-Spirman rank correlation and sigma method for evaluation.

The new normative system for control and evaluation of the specific workability of the results from the "Sport preparation" subject of the pupils from 5th up to 12th grade at the sports schools in Bulgaria has been used for the evaluation.

Table 1. presents the individual marks of the physical preparedness. Borislava Hristova (5,04) and Iva Georgieva (4,96) have got the highest marks; close to them are Kalina Aksentieva (4,25) and Tanya Eneva (4,13). The rest eleven girls have marks under the average level: "good 4" while four of them have a mark under "satisfactory 3". The average mark of the team is 3,61.

In relation to the technique-tactic preparedness (Table 2.), Borislava Hristova (5,31) and Dayana Shtarkelova (5,06) have marks above "very good 5" only; the marks of the rest of the girls vary between

Table 1. Individual average marks for the physical preparedness indicators

Name of player	Marks
Radostina Dimitrova	3,63
Maria Svetoslavova	2,96
Iva Kostova	3,38
Kristina Peychinova	2,88
Teodora Dineva	2,71
Zlatina Dimitrova	3,46
Martina Nikolova	3,83
Uva Georgieva	4,96
Kalina Aksentieva	4,25
Borislava Hristova	5,04
Dayana Shtarkelova	3,04
Tanya Eneva	4,13
Yana Kojuharova	3,33
Hristina Tyutyundzhiev	3,75
Gabriela Kostova	2,75
Average	*3,61*

Table 2. Individual average marks on the technique-tactic preparedness indicators

Name of player	Marks
Radostina Dimitrova	3,88
Maria Svetoslavova	4,56
Iva Kostova	3,94
Kristina Peychinova	4,25
Teodora Dineva	4,94
Zlatina Dimitrova	4,06
Martina Nikolova	4,63
Uva Georgieva	4,06
Kalina Aksentieva	3,44
Borislava Hristova	5,31
Dayana Shtarkelova	5,06
Tanya Eneva	3,94
Yana Kojuharova	3,44
Hristina Tyutyundzhieva	3,81
Gabriela Kostova	3,88
Average	*4,21*

"satisfactory 3" and "good 4". The average mark for the team is 4,21.

Table 3. presents the individual average summary marks for the sports preparedness. It is again Borislava Hristova who has the highest mark – 5,18; she outstands the other players whose marks vary around "satisfactory 3" and "good 4". The average mark for the team is 3,91.

Table 4. presents both the individual marks for the general preparedness of the players and the coefficient of their game realization during the European championships under study. Here the competitors are 10 as three of the girls are ill (Teodora Dineva, Tanya Eneva and Dayana Shtarkelova) while other two have played for a very short time (Zlatina Dimitrova and Martina Nikolova) and it will not be correct to use their data.

During the analysis it strikes that Borislava Hristova who has the highest marks for the sports indicators (5,04) and the technique-tactic preparedness (5,31) is also first by the coefficient of effectiveness (realization) – 15,3. Gabriela Kostova is next by the best coefficient (14,3) but her average mark for the sports preparedness is "satisfactory 3,31". She is the tallest girl in the team of 192 cm height. Three players have got close values from 9,1, 9,6 and 9,8. The values of the game effectiveness coefficient for the other girls is between 1,4 and 6.9.

Table 3 Individual marks for the general preparedness indicators

Name of player	Marks
Radostina Dimitrova	3,75
Maria Svetoslavova	3,76
Iva Kostova	3,66
Kristina Peychinova	3,56
Teodora Dineva	3,82
Zlatina Dimitrova	3,76
Martina Nikolova	4,23
Uva Georgieva	4,51
Kalina Aksentieva	3,84
Borislava Hristova	5,18
Dayana Shtarkelova	4,05
Tanya Eneva	4,03
Yana Kojuharova	3,39
Hristina Tyutyundzhieva	3,78
Gabriela Kostova	3,31
Average	*3,91*

Table 4. *Mark of the general preparedness and the game effectiveness coefficient of the players having participated in the European Championships*

№	Name of player	Marks	Game effectiveness coefficient
1	Borislava Hristova	5,18	15,3
2	Gabriela Kostova	3,31	14,3
3	Iva Kostova	3,66	9,8
4	Radostina Dimitrova	3,75	9,6
5	Hristina Tyutyundzhieva	3,78	9,1
6	Kristina Peychinova	3,56	6,9
7	Iva Georgieva	4,51	4,3
8	Kalina Aksentieva	3,84	3,4
9	Yana Kojuharova	3,39	3,0
10	Maria Svetoslavova	3,76	1,4

With the purpose to establish the dependence between the level of the sports preparedness and the game realization of the players under study, the Spirman (R_s) rank correlation coefficient is applied. The analysis shows that hardly there exist any dependence between the physical preparedness and the game realization. As and evidence can be used the value of R_s= 0,06. That shows that the level of the physical preparedness of these players does not impact their game realization. The dependence between the game realization and the technique-tactic mastership of the players from that age groups is also weak R_s=0,249. The dependence between the game realization and the general preparedness is also low - R_s=0,139..

The analysis of the results from the study as well as the summaries made, allows bringing the following conclusions:

1. As a whole, the basketball players entered into the group under study have got approximately equal level of physical development and sports preparedness which is at an average level.
2. The average team mark (3,91) proves that as a whole the national team under study is under the average level for the same age (the best 20 year old women basketball players) in Bulgaria.
3. The dependence between the sports preparedness (physical and technique-tactic) and the game effectiveness coefficient of the women'20 basketball players is weak.

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