STUDY ON THE IMPORTANCE OF PHYSICAL TRAINING FOR JUNIOR FEMALE HANDBALL TEAMS FROM ROMANIA

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Abstract: The aim of this study is to bring to the fore the importance of physical training in the youth segment. Starting from the idea that physical training has an essential role in the training process of athletes, we conducted a sociological survey based on a questionnaire. The questionnaire was distributed written and online to a number of 56 coaches and theorists from the Physical Education faculties specialized in handball. The research methods used during this study were: the method of analyzing specialized and interdisciplinary literature, the pedagogical observation method, the survey method, the statistical-mathematical method, the graphic method and the tabular method. The results highlighted the fact that the didactic strategies designed to plan the physical training represent a defining element in the training process of the athletes during their sports training.

Key words: handball, juniors, motor qualities, physical training.

1. Introduction

In general, the game of handball is characterized as a dynamic game, based on a series of natural movements learned from childhood and consolidated throughout life, and it can be practiced by any individual regardless of age, gender and level of training. Being a team game, one can specify the fact that the handball game fits into the category of sports games that are based on the playful side

of physical exercise, having an indisputable educational value [16].

When we refer to the game of modern handball, the characteristics have changed compared to the period of the 80s and 90s. In addition to the aspects mentioned above, one can add the following remarks that can influence a better sports performance: frequent changes intensity; high technical-tactical and requirements; cognitive athletes' development at the level of 6 or 9 m's line and not on a single position, favouring the

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rapid accommodation during critical game situations; an increasing level of physical contact with the opponent as well as long and intense periods of training can increase the risk of injury [2], [8], [14], [18].

Regarding the training process, it is necessary that coaches should focus on improving the physical and mental qualities of athletes in order to create the necessary conditions for technical and tactical mastery [6] specific to the game of handball, especially on the coordinators of the visual analyzer with upper limbs [1] through efficient drive systems.

Basic motor skills and those specific to handball play an important role in training lessons and competitions [3]. Currently, sports performance is an area of interest for most sports' researchers; in this regard are a number of different approaches to this topic [7]. Achieving performance in this sport depends on a of basic number motor qualities, especially strength, speed and endurance [3], [4], [15]. According to Skoufas Dimitrie, as far as women's handball is concerned, performance is the parameter with the greatest significance that has experienced rapid development both nationally and especially globally [5]. The same author states that this parameter refers to two components that are to be consolidated and improved in full accordance, namely, technical training and tactical training [5].

In Romania, children get in touch with the game of handball from an early age because their interest and desire for movement is very high during the primary cycle [12]. The proof of this is the existence of baby handball and mini handball groups in our country. This is a benefit for coaches, because often repetitive and rapid unilateral movements

can lead to postural deficiencies, so they can identify and apply the most effective methods and means to optimize performance capacity, ensuring at the same time a continuity of the instructive-educational process [8].

During puberty, athletes need special attention in terms of their morphofunctional development, due to the transformations that take place during this period [9]. From motor qualities point of view, the pubertal period is favourable for the acquisition of motor structures, being considered one of the most auspicious stages of their development. The physical training is that part of sports training meant to ensure the energy background of performance, by determining the increase of functional and morphological indices of the body, to improve biometric qualities, to master technical procedures, to strengthen and to improve the system of motor skills [11], [13], [17]. We can strongly state that this component is the starting point in training athletes, especially those at the beginning of their career, given that "the process of training handball players involves optimal solving of the relationship: physical training, technical-tactical training, psychological training" [10].

2. Objectives

The objectives of this study were focused on identifying the role and importance of physical training at the level of junior handball teams III, as well as the predominant motor qualities in the motor structure of the game at this level of performance. Thus, we conducted a sociological survey based on a questionnaire, to help us achieve the proposed scientific approach.

3. Material and Methods

In order to carry out the study, the following research methods were used: the method of analyzing the specialized and interdisciplinary literature; method of pedagogical observation; questionnaire-based survey method; statistical-mathematical method; tabular and graphical method.

The questionnaire was distributed in letter and online format to a number of 56 coaches and teachers with handball specialization who work in different echelons of performance handball, as well as theorists with handball specialization from the profile faculties.

4. Results and Discussions

Centralization of questions

Table 1

	Questions	No. of responses
1.	What sources of information do you consult before planning the content of the physical training?	56
2.	Regarding the determination of the content of physical training, do you take into account the following aspects?	56
3.	Lately, there have been various opinions of specialists regarding the hierarchical order of the dominant motor qualities of the handball game: strength, speed, endurance, coordination skills, mobility. What is your opinion on this order, depending on the evolution of the handball game?	56
4.	Do you agree with the major role that strength has in the current game of handball?	56
5.	What is the age that you consider optimal for the development of strength?	56
6.	Do you think that by developing strength can decrease the number of injuries among athletes?	56
7.	In an annual training cycle at the level of junior groups III the largest share allocated to the development of strength is allocated during the period:	56
8.	In your opinion, what do you consider that the Romanian system lacks handball training?	56

To the question no. 1 "What sources of information do you consult before planning the content of the physical training?" the answers received show us that (fig. 1):

- 50% of those surveyed use a lot of specialized sites when it comes to planning the content of physical training, 32.14% of them use this source a lot, 10.71% of them use little and 7.14% of them very little;
- 67.86% of specialists choose to consult a lot of specialty books in order to plan

the content of physical training, 14.29% of them use this source of information a lot, 14.29% of them little and 3.57% of them very little;

- 44.64% of those surveyed use the HRF requirements very much as a source of information, 21.43% of them use this source a lot, 19.64% of them little, 10.71% of them very little and 3.57% of these never;
- 26.79% of the surveyed specialists never use the curriculum developed by MEN for handball, 21.43% of them use

very little this source of information, 17.86 of them use little, 17.86% of them use very little much and 16.07% of them make extensive use of this source of information;

- 35.71% of those surveyed use other sources of information very much in

planning, 23.21% of them use little, 17.86% of them use a lot, 12.50% of them never and 10.71% of they use very little other sources of information such as specialized scientific articles, international conference sites, etc.

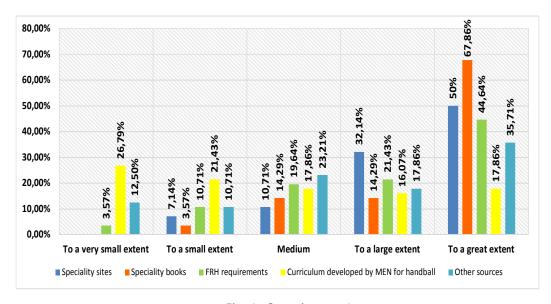


Fig. 1- Question no. 1

To the question no. 2 "Regarding the determination of the content of physical training, do you take into account the following aspects?" (fig. 2):

- 71.83% of those surveyed take into account the specifics of the game very much when determining the content of physical training, 14.29% of them little, 10.71% of them a lot and 3.57% very little;
- 55.36% of the specialists take into account the concept of the game very much in order to establish the content of the physical training, 19.64% of them take into account little, 16.07% of them take into account a lot and 8.93% of them take into account very little;
- 69.64% of those surveyed take into account the composition of their team

when planning the content of their physical training, 17.86% of them take into account a lot, 8.93% of them take into account a little and 3.57% of them very little;

- 64.29% of those surveyed take into account the individual characteristics of athletes in determining the content of physical training, 19.64% of them take into account little, 14.29% of them take into account a lot and 1.79% of them very little bit;
- 55.36% of the specialists take into account the perspectives of the handball game when establishing the content of their physical training, 23.21% of them take into account a little, 17.86% of them take into account this aspect a lot and

- 3.57 % of them take very little into account;
- 75% of those surveyed take into account the level of development of motor skills, 23.21% of them take little account, 19.64% of them take this aspect into account and 3.57% of them take very much into account little bit;
 - 37.50% of the surveyed respondents

take very much into account the composition of their own team when determining the content of their physical training, 21.43% never take into account this aspect, 16.07% of them take very little into account, 14.29 % of them take little into account and 10.71% of them take a lot into account.

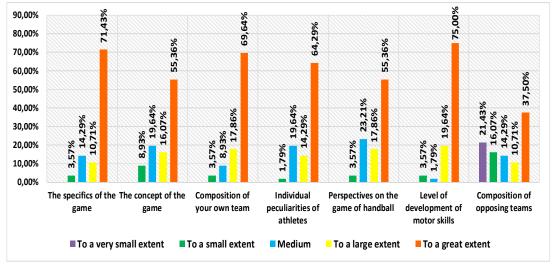


Fig. 2 - Question no. 2

Analyzing the answers to question no. 3 "Lately, there have been various opinions of specialists regarding the hierarchical order of the dominant motor qualities of the handball game: strength, speed, endurance, coordination skills, mobility. What is your opinion on this order, depending on the evolution of the handball game?", 22 specialists agreed with the hierarchical order proposed as a priority of the motor qualities in the handball game. A number of 20 specialists had a different vision and ranked motor quality as a priority followed by strength, endurance, coordination skills mobility. Another 3 specialists ranked as priority the motor quality the endurance followed by speed, strength, mobility and

coordination abilities. A number of 4 specialists indicated as a priority the coordination capacities followed strength, speed, endurance and mobility. In the options of 3 specialists, motor quality was classified as a priority, followed by speed, strength, endurance and coordination skills. There were also 4 specialists who specified that these motor qualities appear combined important that at this age range to focus on all these, the share allocated to each motor quality being different depending on the training period.

After the statistical processing of the answers received to question no. 4 "Do you agree with the major role that strength has in the current game of

handball?" (figure 3), we found that 82.14% of the surveyed specialists agree that strength has an important role in the game of handball and 10.71% of them do not agree with this statement. In the end, there are 4 specialists, representing 7.14%, who have a different opinion, arguing that all motor skills are important, insisting that they manifest themselves combined in the game of handball.

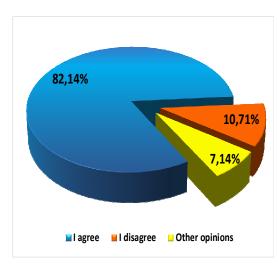


Fig. 3 - Question no. 4

To the question no. 5 "What is the age that you consider optimal for the development of motor quality strength?" (fig. 4), the analysis of the received answers shows that 23.21% of the surveyed specialists opt for the age between 14-15 years, 21.43% of them opt for the age between 16-17 years, 17.86% of they opt for the age between 13-14 years, 16.07% of them opt for the age between 15-16 years, 16.07% of them opt for the age between 12-13 years and 5.36% of them opt for the age between 11-12 years.

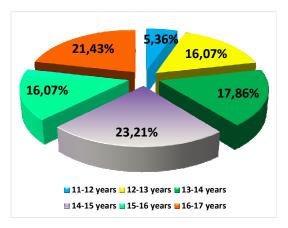


Fig. 4 - Question no. 5

Regarding the question no. 6 "Do you think that by developing strength can decrease the number of injuries among athletes?" (fig. 5), we notice that 48.21% of those surveyed believe that by developing motor quality strength can decrease the number of injuries among athletes to a very large extent, 21.43% of them believe that the number of injuries can decrease in to a large extent, 16.07% of them opt for a medium level and 14.29% of them believe that injuries can decrease to a small extent.

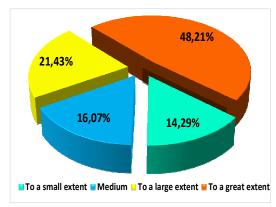


Fig. 5 - Question no. 6

Regarding the question no. 7 "In an annual training cycle at the level of junior groups III the largest share allocated to

the development of strength is allocated during the period:" (fig. 7), there were 49 specialists (87.50%) who specified that in the preparatory period allocates the largest share for the development of motor quality force and 7 specialists specified this is achieved during the competitive period.



Fig. 6 - Question no. 7

The answers received to question no. 8 "In your opinion, what do you consider that the Romanian system lacks handball training?" it mainly refers to the lack of material bases for training and recovery, financial problems, lack of teaching materials developed by the Romanian Handball Federation, training courses, the creativity of coaches both in the training process and during official competitions. There were also many answers aimed at the youth segment, namely: lack of patience in approaching the training of juniors, objective selection criteria, and a unitary game design customized for each category of juniors, a well-developed methodical training line, a adequate competition system, the use of new methods for the development of motor skills.

5. Conclusions

The answers of the interviewed specialists confirmed that at the level of

junior groups it is necessary to improve physical training, as well as to implement a unitary training concept specific to each category of juniors, by applying training strategies in close accordance with the current requirements of performance handball and age of each performance echelon. Also, following the application of this questionnaire, we can emphasize that currently the dominant qualities in the game of handball are strength-speed, followed by endurance, coordination skills and mobility.

In order to ensure a high level of training and a continuity of the instructive-educational process, we consider it necessary to start a solid physical training from an early age and lay the foundation for the accumulation of strength from the age of 14 years.

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