

Conclusion. The results of the final control of technical readiness at the end of the experiment showed that in the EG there is a statistically significant increase in indicators in the control and pedagogical tests of boys of badminton players. As a result of the pedagogical experiment, the subjects improved their performance in a short serve, a "mix" stroke, a high-distance stroke, and the speed of movement on the badminton court.

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DEVELOPMENT OF PHYSICAL QUALITIES IN STUDENTS OF 8-10 YEARS OLD ENGAGED IN TENNIS

Chen Zesen, Shkiryanov D.E.

Vitebsk State University named after P.M. Masherov

*The paper considers a fragment of a pedagogical study of age-related features of the development of physical qualities in young tennis players. An experimental substantiation of the methodology for the development of physical qualities in students of 8-10 years old is presented, based on the analysis of the results of pedagogical testing, an assessment of its effectiveness is given. **Keywords:** physical qualities, tennis, students of 8-10 years old, methodology.*

Introduction. One of the topical issues of sports training of young tennis players is the study of age characteristics of the development of basic physical qualities. At the moment of the most rapid natural development of any physical quality, to pay the main attention in the training of young tennis players to this physical quality and, thus, to stimulate its development even more, or, on the contrary, during this period, to pay the greatest attention to those physical qualities, the growth rate of which at this age is the lowest.

At present, new requirements are imposed in relation to the construction of the educational and training process, selection to sports schools, diagnostics of various aspects of the development and preparedness of young athletes. Accordingly, many coaches have questions that can only be answered as a result of special research.

The analysis of the literature on tennis indicates that the issue of the development of physical qualities in students engaged in tennis is not given due

attention, and the statement about the need to develop certain physical qualities of tennis players to a greater extent at the initial stage of the training process is debatable. This determines the relevance of the research carried out in this work.

The purpose of the study is to develop and experimentally substantiate the methodology for the development of physical qualities in students of 8-10 years old engaged in tennis.

Purpose of the study – development and experimental substantiation of the methodology for the development of physical qualities in students of 8-10 years old engaged in tennis.

Materials and methods of research. The study was conducted on the basis of the Vitebsk State Specialized School of Olympic Reserve No 8, 20 children from 8 to 10 years old took part in it. The children were divided into two groups: experimental (EG) and control (CG) groups of 10 people each. All classes, both in the experimental and in the control groups, were held under the guidance of one coach. The control group and the 45th experimental group practiced 3 times a week for 90 minutes in tennis training sessions.

The following research methods were used in the work: analysis of scientific and methodological literature, pedagogical testing, pedagogical experiment, method of mathematical statistics.

Results of the study. We have developed an experimental method for the development of physical qualities in students of 8-10 years old by means of tennis.

For the development of physical qualities in the process of training, we used the following methodological techniques:

- Use of unusual starting positions;
- change in the speed or tempo of movements, the introduction of different rhythmic combinations, different sequences of elements;
- changing the ways of performing exercises;
- throwing the ball from above, from below, from the side;
- jumping on one or two legs, with a turn;
- use of objects of various shapes and weights, etc.;
- Performance of coordinated actions.

For the development of physical qualities in this work, we used the following methods:

- standard-repeated exercise;
- variable exercise;
- play;
- Competitive.

Table – Results of the study

№	Content of pedagogical testing	Research stage	Experimental Group	Control group	The significance of the differences
			$\bar{X} \pm \sigma$	$\bar{X} \pm \sigma$	
1.	Shuttle run 3x10 m, sec	<u>before</u> <u>after</u>	<u>10,95±0,44</u> <u>10,23±0,33</u>	<u>11,00±0,42</u> <u>10,73±0,43</u>	<u>p>0,05</u> <u>p<0,05</u>

2.	Shuttle run 6x8 m, sec	<u>before</u> <u>after</u>	<u>16,05±0,38</u> <u>15,32±0,41</u>	<u>15,73±0,44</u> <u>15,38±4,65</u>	<u>p>0,05</u> <u>p<0,05</u>
3.	Throwing a ball from a standing position, m (1 kg)	<u>before</u> <u>after</u>	<u>10,53±0,81</u> <u>11,68±0,57</u>	<u>10,15±0,85</u> <u>10,42±0,81</u>	<u>p>0,05</u> <u>p<0,05</u>
4.	Throwing a ball from a sitting position, m (1 kg)	<u>before</u> <u>after</u>	<u>4,80±1,02</u> <u>5,75±0,94</u>	<u>4,22±0,91</u> <u>4,55±0,96</u>	<u>p>0,05</u> <u>p<0,05</u>
5.	Running the ball with your hand while changing direction, sec	<u>before</u> <u>after</u>	<u>12,82±0,48</u> <u>12,07±0,25</u>	<u>13,00±0,41</u> <u>12,65±0,40</u>	<u>p>0,05</u> <u>p<0,05</u>
6.	Long jump from a standing position, cm	<u>before</u> <u>after</u>	<u>141,17±4,02</u> <u>149,5±4,51</u>	<u>140,50±3,45</u> <u>143,57±3,99</u>	<u>p>0,05</u> <u>p<0,05</u>
7.	Jump up, cm	<u>before</u> <u>after</u>	<u>26,58±1,02</u> <u>28,50±1,30</u>	<u>26,38±1,07</u> <u>26,75±0,88</u>	<u>p>0,05</u> <u>p<0,05</u>
8.	Jumping rope, units/min	<u>before</u> <u>after</u>	<u>80,17±0,44</u> <u>91,33±3,27</u>	<u>79,83±3,13</u> <u>82,33±2,42</u>	<u>p>0,05</u> <u>p<0,05</u>

The methodology for the development of physical qualities, with the directed development of coordination abilities in students of 8-10 years old engaged in tennis, consists of four main sets of exercises that were used in the preparatory part of the lesson.

The analysis of the data obtained showed that the methodology for the development of physical qualities, with the directed development of coordination abilities in students of 8-10 years old engaged in tennis, had a positive effect on the level of physical fitness of children. After the experiment, significant differences were found between the control and experimental groups of the subjects (Table).

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