ФИЗИЧЕСКАЯ КУЛЬТУРА И СПОРТ В СОВРЕМЕННОМ СОЦИУМЕ

УДК 796.344.

IMPROVING THE LEVEL OF TECHNICAL TRAINING OF YOUNG BADMINTON PLAYERS USING TRAINING DEVICES

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Due to the widespread introduction of the state sports and recreation complex of the Republic of Belarus into work with the population, physical education specialists faced the problem of collecting, processing and storing test data. Within the framework of the conducted research, the prerequisites for the development of an automated data accounting system of the complex have been identified. ***Keywords:*** *automated system, physical education and recreation complex, TRP, accounting system, pedagogical testing, population.*

Introduction. Badminton is a fast-growing Olympic sport that is gaining more and more popularity around the world. The number of fans of this game is rapidly increasing, and the network of sports schools engaged in badminton is significantly expanding. The increase in interest in badminton, combined with the insufficient level of scientific and educational literature on this sport, emphasizes the need for scientific research and the development of methodological recommendations to improve the process of learning and practicing the technique of playing movements of badminton players.

The logical and structural analysis of domestic and foreign literature on the problem under study revealed a number of contradictions:

– between the key importance of physical and technical training in the training and competitive process of badminton players and the insufficient development of this topic in educational, methodological and scientific sources, as well as the existing developments in the training process of training in badminton;

– between the dominant role of game movements in badminton and the insufficient development of methods for teaching young badminton players to move using simulators. *Purpose of the study* – to substantiate and experimentally test the methodology for improving technical training based on the use of specialized equipment.

Materials and methods of research. The pedagogical experiment was conducted with a group of 20 young badminton boys aged 7–10 years: the experimental group (EG) – 10 people, the control group (CG) – 10 people. It was aimed at identifying the progress of training badminton players using a simulator for teaching game movements in the training process.

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. According to the research program, the physical and technical training of young EG badminton players includes special exercises with a simulator to improve technical fitness in the amount of 5% in the total volume of special physical training and 15% in the total volume of technical training. CG badminton players trained according to the generally accepted method (Table 1).

Table 1 – Ratio of volume by types of training at the stage of initial training in the control and experimental groups, %

Types of sports training	CG	EG
General physical training	30	30
Special physical training	15	10
Application of the simulator	-	5
Technical training	40	25
Exercises with the simulator	-	15
Tactical, theoretical, psychological training	10	10
Participation in sports competitions, instructor and referee practice	5	5

The training process was a systematic training with a consistent, progressive increase in physical load and provided for the interrelated activities of the coach and badminton players, taking into account the individual capabilities of the student. An important condition for the classes was constant self-control over the technique of performing the exercise, thanks to which the high-quality performance of the spatial characteristics of the movement was ensured.

№	Content of pedagogical testing	Research stage	Experimental Group	Control group	The significance of the differences
			$\overline{X} \pm \sigma$	$\overline{X} \pm \sigma$	
1.	Juggling with a shuttlecock, num. of times	before *after*	8,20±6,18 18,20±8,87	7,10±4,38 14,40±10,14	p>0,05 **p<0,05**
2.	The serve is short, num. of times	before *after*	5,24±2,48 7,89±2,30	4,30±1,98 5,75±2,18	p>0,05 **p<0,05**
3.	Long Distance Feeding, num. of times	before *after*	3,73±2,30 5,78±2,87	3,60±1,30 4,71±2,37	p>0,05 p>0,05
4.	Smash Strike, num. of times	before *after*	3,0±1,22 5,44±2,6	2,8±2,29 4,86±1,77	p>0,05 **p<0,05**
5.	A high-distance blow, num. of times	before *after*	2,90±2,56 5,56±1,81	2,30±2,11 4,67±2,65	p>0,05 **p<0,05**
6.	Перемещения, sek.	before *after*	12,10±1,38 10,04±1,38	12,02±1,53 11,80±1,84	p>0,05 **p<0,05**

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.

References:

1. Chen, Y. The influence of badminton equipment on children's technical training / Y. Chen, Z. Li // Journal of Sports Equipment and Technology. – 2020. - № 15 (3). – P. 56-62.

2. Wang, S. Basic principles of badminton technical training for children / S. Wang, T. Zhang // Journal of Sports Training. – 2020. - № 22 (4). – P. 178-185.

3. Zhang, L. The role of badminton in improving children's coordination and flexibility / L. Zhang, H. Chen // Journal of Physical Education and Health. - 2021. - № 19 (2). – P. 112-118.

УДК 796.342.084.2

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

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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