

**The influence of sports games on the level of physical fitness and functional capabilities of the
human body**

Ivanova Svetlana Yurievna

Candidate of Pedagogical Sciences, Associate Professor

Kemerovo State University

Bakanov Maxim Vladimirovich

Candidate of Technical Sciences, Associate Professor

Kemerovo State University

Kungurtseva Marina Dmitrievna

Senior Lecturer

Kuzbass State Technical University named after T.F. Gorbachev

Smyk Fyodor Dmitrievich

Senior Lecturer

Kuzbass State Technical University named after T.F. Gorbachev

Annotation. The article examines the influence of sports games on the level of physical fitness and functional capabilities of the human body. Testing was carried out and the results of tests of athletes involved in volleyball, basketball and badminton were presented. Pedagogical observations of the athletes were carried out during training sessions in volleyball, basketball and badminton. Initial testing was carried out in February 2020, repeated in December 2020. The purpose of testing is to reveal the level of general and special physical fitness of athletes.

Keywords: physical training, tests, general physical training, special physical training, functionality.

It is impossible to achieve high sports results in team sports without the development of physical qualities and special physical training. The manifestation of such physical qualities as speed, endurance, flexibility, dexterity, speed-strength readiness are especially relevant for playing sports. The manifestation of other abilities of the human body, necessary to achieve victory, in the first place, as well as technical and tactical skill, depends on the level of their development. The analysis of scientific, scientific and methodological literature, the study of collections of proceedings of conferences of various levels and the experience of sports practice made it possible to determine the range of problems of the influence of sports games (volleyball, basketball, badminton) on the level of physical fitness and functional capabilities of the human body. For athletes in each sport, certain control exercises, sections, tests, trainings are carried out, which are developed by leading specialists, coaches. The results of these tests help plan, program the training process, and monitor the level of development of functionality.

Physical qualities are innate morphological and functional qualities that determine the physical activity of a person, manifested in purposeful motor activity. The innate physical qualities of a person are genetically determined and determined by the corresponding inclinations, acquired and realized in the process of life in a particular social sphere. According to Academician I.V. Rozhdestvensky, physical qualities are the basic concepts that characterize the level of physical culture. The development of motor abilities depends on two reasons: innate properties of a person that change with age, and training in certain motor actions, which also changes over time [5].

When carrying out the research, we also relied on the work "Research of the influence of practicing various kinds of sports on the level of development of physical qualities" [1].

The purpose of our work is to assess the impact of sports games on the level of physical fitness and functional capabilities of the human body.

Research objectives: to analyze the scientific, scientific and methodological literature on the research topic; to develop the content of tests of general physical training and special physical training of athletes; to conduct testing to determine the level of general physical fitness and special physical fitness of athletes. The study involved 56 athletes, including 21 volleyball, 20 basketball, 15 badminton.

The content of the tests for general physical fitness included: hand dynamometry, 30-meter run, shuttle run, long jump, forward bend of the trunk (flexibility test) [1].

To determine the special training of athletes, the following tests were used: running in a herringbone, high jumps with running pressure with both legs, 9 - 3 - 6 - 3 - 9, jumping from a squat, bending over for 20 seconds, throwing a packed ball, abdominal muscle strength and back, throwing a tennis ball [1].

The athletes had to perform the tests we proposed for general physical and special fitness at the beginning of the study and again. As a result of the primary and repeated testing, we analyzed the data obtained: as a result of the primary testing, the level of general physical fitness of volleyball players was the highest, their average score was 4.28. The result of basketball players is slightly lower - 4.17 points. The lowest level was shown by badminton players - 4.06 points. As a result of repeated testing, we received the following data. Volleyball players had an average score of 4.31, basketball players - 4.29, badminton players - 4.2 points. The dynamics of the development of general physical readiness among volleyball players was 0.03 points, among basketball players - 0.12 points, among badminton players - 0.14. From the data obtained, it can be concluded that the greatest positive growth was shown by athletes specializing in volleyball, but there is also an increase in results in other team sports. Proceeding from this, we can say that playing sports allows you to develop basic physical qualities and achieve a high level of general physical fitness.

As a result of the initial testing on special physical training, we received the following data: the average score of the special physical training of volleyball players was 3.9, basketball players - 3.7, badminton players - 3.5 points. As a result of repeated testing, the level of special physical fitness among volleyball players averaged 4.4 points, among basketball players - 4.5 points, and among badminton players - 4.4 points. From the above it follows that the dynamics of growth among volleyball players was 0.5 points, among basketball players - 0.8 points, badminton players - 0.9 points.

Based on the obtained data, we can say that badminton and basketball players have the highest dynamics of growth in the development of special physical qualities, slightly lower it can be traced among volleyball players.

The functional capabilities of the athletes were determined by combined running (Letunov's test). The scheme for its implementation is as follows: counting the pulse and measuring blood pressure in the initial state; squats for 30 seconds; counting the pulse in the first, second, third minutes; measuring blood pressure in the first and third minutes, running for 15 seconds; measurement of pulse and blood pressure in the first, second, third and fourth minutes; running for 3 minutes; measurement of pulse and blood pressure in the blood 1-, 2-, 3-, 4- and 5 minutes [3].

The research methodology and the scheme for recording the pulse and blood pressure data, as in the study of 20 squats, with the only difference that after a 15-second run at a maximum pace, the study takes 4 minutes, and after 2-3 minutes of running - 5 minutes. The advantage of Letunov's

test is that it can be used to assess the body's adaptability to various and sufficiently large physical loads with the speed and endurance that are found in most physical culture and sports disciplines. During the functional test, attention should be paid to possible signs of fatigue (excessive shortness of breath, pallor of the face, impaired coordination of movements, etc.), which indicates poor load tolerance. Thus, athletes had to perform the Letunov test at the beginning of the study and during retesting [3].

According to the test results, the type of reaction to the proposed load was assessed. The ideal normalized response to the test is considered to be an increase (in humans) in heart rate, an increase in upper blood pressure to no more than 180, and the lower one either does not change or decreases slightly (to 60). With a normalized reaction, the pulse and blood pressure of a person rest very quickly (after 4 minutes of rest). All other types of reactions to stress - hypertensive, hypotonic and dystonic - indicate either overwork, or "overtraining" or poor adaptability of the cardiovascular system to physical activity.

As a result of the test, a normalized reaction to the Letunov test was established in all athletes participating in the study at the beginning and during the repeated study.

Thus, the goal set by us in the work has been achieved by us, the tasks have been solved. The study showed that sports games have a positive effect on the level of physical fitness and functional abilities of the human body. Further research is planned for December 2021 - May 2022.

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