Martial arts in the system of physical education of students of younger adolescence

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Abstract

Objective of the study was to develop and experimentally test the effectiveness of a set of exercises to improve the motor qualities of younger adolescents aged 10-11 years using hand-to-hand combat.

Methods and structure of the study. The study was conducted on the basis of secondary school No. 78 in the city of Rostov-on-Don, which was attended by 5th grade students aged 10-11 years. Methods of scientific research: pedagogical testing, pedagogical experiment, methods of mathematical statistics. The study included three consecutive stages. The experiment involved 30 boys of the fifth grade, who were divided into control and experimental groups of 15 people each.

Results and conclusions. The results obtained during the experiment clearly demonstrated the effectiveness of the developed complex used in physical education lessons and general physical training classes for students aged 10-11. The authors recommend using this complex when solving the problem of developing physical qualities in students when organizing physical education in a general education institution.

Keywords: students, martial arts, physical training.

Introduction. The intensive educational process and insufficient amount of physical activity are sometimes often reflected in the physical indicators of schoolchildren. The content of physical education at school does not always meet the interests of students; classes are monotonous and do not sufficiently motivate children to perform physical exercises, which creates a problem for the development of physical qualities among students. One of the promising directions for solving this problem will be to supplement the system of physical education of students of early adolescence with the means of combat sports using the example of hand-to-hand combat.

This type of martial art originates from fist fights held in Rus'. Being a national treasure, a native Russian form of martial arts, hand-to-hand combat in the history of Russia has always had practical significance and acted as a means of training military personnel, special services, and law enforcement agencies. Nowadays, the arsenal of tactical actions of hand-to-hand combat accumulates almost all types of martial arts (boxing, freestyle wrestling, karate, sambo, judo) having the status of combat sports. The rules of combat exclude any methods of cruelty or the use of traumatic actions. The philosophy of hand-to-hand combat is based on the moral and spiritual norms of our people. A distinctive feature of martial arts is considered to be the patriotic education of those involved and the development of their sense of purpose, discipline, fortitude and perseverance of character, nobility and honor, courage, courage.

Objective of the study was to develop and experimentally test the effectiveness of a set of exercises



aimed at improving the motor qualities of younger adolescents using hand-to-hand combat.

Methods and structure of the study. The experimental study was organized from November 2022 to May 2023 (7 months), which was conducted in secondary school No. 78 in Rostov-on-Don, in which 5th grade students aged 10-11 years and 30 took part Human. The students were subsequently divided into control and experimental groups of 15 people each.

The study included a number of successive stages. At the first stage of the study, in November 2022, testing was carried out on the level of development of physical qualities in students using control tests in physical education. The results obtained assessed the level of physical fitness of schoolchildren at the beginning of the experiment, and made it possible to substantiate the ways of developing physical qualities. Tests to assess the level of physical fitness: 1000 m run, pull-up on a high bar, 30 m run, seated forward bend, 3x10 m shuttle run, standing long jump, lifting the body from a supine position, jumping rope.

Additionally, in both groups, the degree of development of psychomotor processes was determined based on the "Catching a Ruler" test (S.A. Dunamina), which involves assessing reaction abilities, and the "Running to numbered balls" test (K. Meinel, G. Schnabel), to determine the ability to rearrange motor actions.

The second stage of the study, conducted in November 2022, involved the development of a set of physical exercises using hand-to-hand combat, mainly aimed at developing physical qualities in children 10-11 years old during the experiment at a general education institution.

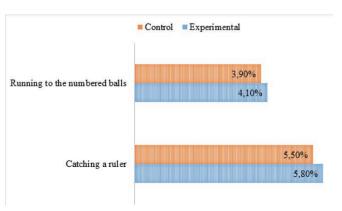


Figure 1. Average increase in psychomotor scores

The start of the third stage of the experiment was implemented from December 1, 2022 to May 2023. In the control group, classes were held according to the school physical education curriculum. The training program for the experimental group included special physical exercises using hand-to-hand combat for the initial level of training. The forms of organization of physical education for students in the experimental study included: physical education classes for 3 hours, extracurricular classes in general physical training (GPT) for 1 hour.

In classes with the experimental group, tools from the developed set of exercises were used with the predominant use of the game and competitive method. These exercises and games combined motor actions characteristic of hand-to-hand combat. The compiled complex included more than 20 exercises, divided according to their primary focus.

Results of the study and discussion. According to the results of testing in the control and experimental groups at the beginning of the experiment, the level of development of strength abilities, flexibility, general and coordination endurance in students had the lowest indicators compared to coordination, speed and speed-strength qualities. We can say that the level of development of physical qualities among students at the beginning of the experiment is approximately equal. The degree of development of psychomotor processes in the control group turned out to be higher in relation to the experimental group.

Statistical analysis of the resulting data at the end of the experiment showed a significant increase in

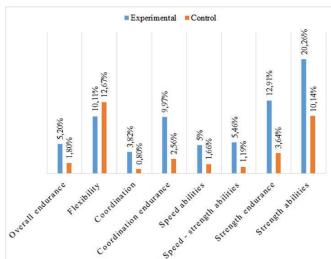


Figure 2. Average increase in indicators of development of physical qualities

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physical indicators in the experimental group compared to the control group, with the exception of flexibility. The result of repeated assessment of psychomotor processes showed a slight difference in favor of the experimental group presented in Fig. 1. Ultimately, the use of an experimental set of physical exercises led to a significant superiority in the level of physical fitness of students in the experimental group over students in the control group, in almost all parameters presented in Fig. 2.

Conclusions. Thus, the results obtained during the experiment clearly demonstrated to us the effectiveness of the developed complex, used in physical education lessons and general physical training classes for 10-11 year old students. Therefore, as a recommendation, it would be advisable to use this complex in solving the problem of developing physical qualities in students of early adolescence when organizing physical education in a general education institution.

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