

DEVELOPMENT OF PHYSICAL FITNESS OF YOUNG BOYS 14-16 YEARS OLD SAMBO

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Abstract: The training of athletes in modern sports is a multi-level system that includes physical, technical, tactical and psychological aspects that are mutually dependent. Ignoring at least one of the training areas may negatively affect the results, especially in martial arts, where the athlete's activity takes place under conditions of limited time and active resistance from the opponent. In such situations, the speed of analysis, decision-making and their immediate implementation become important. Sambo as a universal type of wrestling integrates the most effective techniques from judo, freestyle and sport wrestling, Brazilian jiu-jitsu, boxing, kickboxing and Thai boxing. This versatility is confirmed by the successful performances of athletes in related disciplines - mixed martial arts, hand-to-hand combat, muay thai, karate and wushu sanda. The variety of technical actions in sambo requires high psychomotor fitness, precise coordination and consistency of movements. The unity of motor qualities and skills is formed on the basis of anatomical and physiological patterns and conditioned reflex mechanisms, which ensures the development of both technical and physical characteristics of the athlete.

Key words: sambo, martial arts, training of athletes, coordination skills, technical training, tactical training, psychomotor skills, physical qualities.

Introduction. The preparation of athletes in all sports is a complex system consisting of four aspects: physical, technical, tactical and psychological. Each aspect of preparedness has its own characteristics and features. Underestimation of at least one will undoubtedly lead to defeat, because they are all interconnected and complement each other [1, 5].

This problem is especially acute in martial arts, where competitive activity occurs under non-standard variable conditions, in a short time allocated for analyzing the situation, making a decision and implementing it. Here, the direct struggle between opponents is obvious, and the achievement of the result is reflected in overcoming active resistance to a specific opponent [2, 3, 6].

Sambo is a universal type of martial arts. It contains the most effective techniques from many types: free wrestling, judo and sport sambo, Brazilian jiu-jitsu, boxing, kickboxing and Thai boxing [4, 7, 8, 9].

The versatility of the type is also confirmed by the successful performance of leading athletes in open championships of related sports: hand-to-hand combat, fights without rules, muay thai, karate, wushu-sanda [12, 13, 14].

The variety of technical techniques used in sambo places high demands on psychomotor ability: it is necessary to quickly and accurately coordinate the work of many links of movement when performing sweeps, trips, throws, grabs, hooks, spins and other attacking technical actions and counter-techniques [10, 11].

The unity of motor qualities and skills, determined by anatomical and physiological patterns, as well as the commonality of the conditioned reflex mechanism, which is the basis for the development of not only motor but also physical qualities, appears as the main relationship between technique and physical fitness [15, 18].

In addition, as A.K. Ustoyev notes, “High moral and volitional qualities of a sambo wrestler must be combined with well-developed physical qualities and motor abilities. Gaps in quality become the cause of defeats” [1, 3, 4].

To date, scientific developments and practical recommendations in combat sambo are isolated. This problem is associated with the choice of optimal ways to form the required volume of motor actions that determine the technical fitness of an athlete; improving the level of development of specific motor abilities, which determines physical fitness, and, at present, it is becoming especially relevant [16, 17].

Methodology and results. The issue of training athletes of different qualifications and ages in martial arts, and in particular in sambo, has been and remains relevant for theorists and practitioners of sports. Therefore, we have attempted to analyze the scientific heritage of specialists in this area:

- training of martial artists in sambo using technical means has become the subject of scientific research;
- the content and sequence of mastering technical techniques by athletes in sambo;
- tactical and technical training of athletes for sambo competitions;
- technical and tactical actions on the ground using sambo as an example;
- improving the technical and tactical training of 11-12 year old sambo wrestlers by means of special coordination exercises taking into account weight categories;
- features of training martial artists in sambo using technical means;
- research of the basic technique of highly qualified athletes in sambo;
- formation of a system of technical actions of sambo wrestlers at the stage of initial training;
- modeling technical and tactical actions of 14-15 year old boys in sambo;
- using elements of sambo in physical education lessons for high school students;
- developing striking techniques of sambo wrestlers aged 14-16;
- developing a methodology for cultivating volitional qualities in 12-13 year old sambo wrestlers;
- analysis of technical and tactical preparedness of highly qualified athletes specializing in the sambo section.

Popularization of combat sambo as a type of martial arts, expansion of exchange between various sports delegations, as well as coaches and scientists, deepening of research in various areas of sports contribute to the search for more effective means of conducting combat in sambo and, accordingly, impose new increased requirements for the physical training of sambo wrestlers [19, 20].

The process of training athletes requires a scientific approach based on the level of special physical fitness, the nature of training and competitive loads. This approach allows for the training of athletes at the level of modern requirements.

Physical training in the system of the athlete's training process, along with solving various kinds of tactical problems, as well as technical, theoretical, moral-volitional and psychological types of training, is given one of the most important places. Thanks to the development of strength, speed, as well as coordination abilities, endurance and flexibility, rhythm-speed structures of the athlete's motor actions are formed, and rational sports technique is consolidated. Physical training, as is known, is divided into general physical training aimed at increasing the overall performance of the sambo athlete (in particular, motor action, even in other sports), as well as special physical training, which is built on the basis of general, is already aimed at developing special, in particular muscle groups in the sambo athlete. Therefore, the purpose of special

physical training of sambo wrestlers is to prepare for counteraction, overcoming external forces that affect the athlete.

Discussions. As a result of the analysis of scientific studies that reveal various aspects of the development of physical qualities of martial artists, it was possible to establish that for researchers in recent times, the study and selection of the most effective means and methods of physical training that place increased demands on the functional systems of the athlete's body, the capabilities of which determine the success of competitive activity, is of increasing interest. In the current practice of combat sports, complex forms of manifestation of physical properties occupy a significant place. Thanks to the development of strength, speed, as well as coordination abilities, endurance and flexibility, rhythm-speed structures of the athlete's motor actions are formed, and rational sports technique is consolidated.

In the process of training martial artists, it is necessary to maximize the level of functional systems that ensure a high level of general and special training; in the educational and training process, develop motor qualities (strength, speed, endurance, flexibility, agility), as well as the ability to demonstrate physical qualities in competitive activities. High characteristics of general physical training are the functional basis for the development of special physical properties to improve the aspects of training: technical, tactical and mental.

The fact that a high level of physical fitness is extremely important for athletes of various specializations and qualifications has been proven by both sports practice and special research in various sports. As for combat sports, the opinions of most coaches can be reduced to the following statement: "Physical training plays a decisive and main role in the preparation of a wrestler".

The level of physical fitness determines the ability of a martial artist to adapt to high loads, helps to restore athletic form in the shortest possible time, maintain stable fitness, and reduce the recovery period when performing individual exercises during training sessions and during training in general.

As a result of a special analysis of the structure of the aspects of physical fitness of martial artists and the effectiveness of their competitive activity, the percentage significance of the influence of the structure of physical qualities of martial artists on the sports result was determined. Thus, experts point to the smallest share (only 14.2%) of the strength qualities of martial artists, 20.3% and 24.0%, respectively, of special speed and speed-strength abilities. The most significant for the competitive activity of athletes was special speed-strength endurance.

The analysis of the influence of physical qualities on the sports result in wrestling is also presented in the monograph. Using the method of factor analysis, the author identified three main physical qualities - precision of movements, speed of special reaction and speed endurance.

Conclusions. 1. Analysis of specialized literature has proven that the authors have paid sufficient attention in their studies to the issue of training athletes of all ages and qualifications in single-event sports, and, in particular, in sambo. As a result of studying the specifics of training athletes in single-event sports, we came to the conclusion that since the conditions of a real fight imply a constant change in situations, accordingly, different muscular efforts are needed: dynamic and static, therefore, the importance of both general and special physical fitness is absolute.

2. Testing was conducted, the results of which made it possible to identify individual and average group indicators of sambo athletes. The developed standardized scales for assessing the general and special physical fitness of athletes made it possible to determine its level, which is

characterized as low, below average, average, above average and high. We note an insufficient level of physical fitness of the contingent under study. This fact indicates the need for targeted pedagogical influence.

3. The proposed and implemented in the educational and training process program for improving the level of physical fitness of sambo athletes.

4. The dynamics of shifts in the indicators of general and special physical fitness of sambo athletes in the sports improvement group during the study period was analyzed. We observed progressive changes in the dynamics of fluctuations in individual and average group indicators throughout the study. A comparative level characteristic was made. The improvement in the level of general and special physical fitness of sambo athletes confirms the effectiveness of the proposed program.

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