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DEVELOPMENT OF TECHNICAL TRAINING OF SAMBO WRESTLERS BASED ON INCREASING SPEED AND STRENGTH QUALITIES

F. A. Sadullayev

Associate Professor

Uzbekistan State University of Physical Education and Sports

Tashkent, Uzbekistan

ABOUT ARTICLE

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Abstract: As a result of the research, specially selected sets of exercises were developed and practically tested for the development of fast-strength qualities of sambo wrestlers: a set of general developmental exercises using the striking method; a set of special exercises and a set of outdoor games. The use of a specially selected set of exercises during sambo training allows you to more effectively develop speed and strength qualities.

Introduction

Currently, numerous researchers are working on the problems of developing sports technologies in Sambo. There are specific reforms in the development of a wrestling discipline like Sambo. Such research includes the fundamental studies on Sambo by V.A. Koleda, F.A. Kerimov, B.M. Rybalko, B.S. Tumanyan, Yu.A. Shakhmuradov, Sh.Sh. Gaziev, and others [1-5].

These studies highlight various aspects of the sports training of modern Sambo and wrestlers. The authors pay special attention to the physical fitness of Sambo wrestlers, as the sports result mainly depends on its level of development. Among various physical qualities in the training of a Sambo wrestler, speed-strength abilities occupy an important place. The research of a number of authors [2; 4] examines various aspects of the development of speed-strength abilities of Sambo wrestlers of different skill levels. It was found that the effectiveness of teaching technical and tactical actions to Sambo wrestlers largely depends on the development of their motor qualities during sports training [5].

Among the physical qualities in the training of a Sambo wrestler, speed-strength abilities occupy an important place. The research of a number of authors [2; 4] examines various aspects of the development of speed-strength abilities of Sambo wrestlers of different skill levels. A high level of development of speed-strength qualities is necessary for a Sambo wrestler, since offensive, counter-offensive, and counter-attack actions are performed directly in intense and extreme conditions. In many cases, the execution of a technique is accompanied by unbalancing the opponent. By acting a fraction of a second faster than the opponent, the attacker can gain a significant advantage. To successfully execute offensive actions, a Sambo wrestler must move as quickly and powerfully as possible. In such cases, the effectiveness of technical actions depends on the Sambo wrestler's ability to explosively demonstrate the necessary movements. Thus, a Sambo wrestler must not only possess great strength but also be able to demonstrate it in the shortest possible time. The ability to demonstrate rapid movements allows a Sambo wrestler to effectively perform attack, counter-attack, and counter-techniques. Our research aims to resolve the contradiction between the needs of the country's highly qualified athletes in Sambo practice and the insufficient development of modern sports training methods in the training of Sambo wrestlers [1]. All of the above indicates the importance of increasing athletes' ability to exert great force in the shortest amount of time. At the same time, the study of this

issue shows that the methodology for developing speed-strength abilities in Sambo wrestlers is currently not fully developed from the modern pedagogical perspective.

Research Results. In developing a special methodology for the development of speed-strength abilities of qualified Sambo wrestlers, the main theoretical and methodological principles of modern sports training design were taken into account:

The expediency of selecting special exercises that help develop explosive strength becomes apparent even in the initial stages of training [2; 5]. The development of the ability to demonstrate explosive muscle actions requires long-term systematic training. For this purpose, special exercises should be selected in such a way that they correspond to the structure of technical movements. This rule forms the basis of the method of influence based on the organic relationship of means, qualities, and skills [5];

An effective means of developing the ability to demonstrate directed combined movements is isometric exercises performed in characteristic wrestling positions [1]. When using isometric exercises, it should be taken into account that when overcoming large resistances, the speed of movement increases significantly with isometric muscle training in body positions where maximum force exertion is required. When overcoming small external resistances, the speed of movements increases faster when isometric strength exercises are performed with body positions corresponding to the beginning of the movement [1];

As a result of the research, specially selected sets of exercises were developed and practically tested for the development of speed-strength qualities of Sambo wrestlers: a set of general developmental exercises with a shock method; a set of special exercises; and a complex of active games. It was found that the most effective means of developing speed-strength qualities are specially prepared exercises and fast-paced exercises. The use of a specially selected set of exercises during training sessions in Sambo allows for a very effective development of speed and strength qualities. Experiments show that the increase in results in the EG was significantly higher than in the CG.

Research Aim. To scientifically substantiate, develop, and determine the effectiveness of methods for developing the speed-strength abilities of Sambo wrestlers.

Research Methods. The following scientific research methods were used in the research work: analysis of scientific and methodological literature, pedagogical observation, pedagogical testing, pedagogical experiment, mathematical-statistical 1 methods.

One of the main means of developing a wrestler's speed-strength qualities should be exercises divided into three groups: the first group - exercises with large, near-maximal weights (80-90% of maximum); the second group - light-weight exercises performed at high speed (30% of maximum); the third group - exercises related to competitive submission holds performed at maximum speed. It is recommended to use variations of submission holds in the development of speed and strength qualities. In training, we can recommend alternating submission holds as follows: the amount of weight is initially less, then more than the average value; the amount of weight is initially larger, then less than the average value; the amount of weight is initially larger, then equal to the average value; the amount of weight is initially less, then equal to the average value;

Special exercises should not only help increase overall strength but also improve the ability to develop the maximum possible strength in the minimum amount of time. Based on this, in the formation of speed-strength qualities, serious attention should be paid to the formation of skills for instantly mobilizing volitional and physical efforts. This can be achieved by performing high-intensity special exercises, increasing the speed of movements, and performing various tasks in improving technical movements [1; 5];

Situations in wrestling are constantly changing, and this requires muscle movements of a different nature [2; 3]. The ability to perform a technique characterizes the athlete's ability to control their movements, which is also one of the most important conditions ensuring the maximum manifestation of muscle strength. In this regard, the need to use special exercises

that develop the ability to quickly switch from one mode of muscle work to another becomes apparent [3; 4];

An important factor in the successful manifestation of speed-strength qualities is the athlete's ability to use the necessary muscles in a timely manner;

Effective methods: technique method, variable load method, impact method, training and load variation, circuit training method, and others.

Based on the aim of this work, which was to develop a methodology for increasing the speed and strength qualities of Sambo wrestlers, we developed and experimentally tested the following set of exercises. The first complex includes general developmental shock exercises. We used them in the preparatory part of training sessions, as well as on general physical training days. The second complex, consisting of the volume of special exercises for a targeted impact on the development of speed and strength qualities, was used in the main part of training sessions and on sparring days. The third complex includes sports and active games according to simplified rules, where there are more complex conditions for the tasks performed, relay races, and group exercises. This complex was mainly used on general physical training days. We used this set of exercises for conducting training sessions in Sambo.

To determine the effectiveness of the developed methodology, we used the pedagogical experiment method. It was conducted on the basis of the "Uzbekistan State University of Physical Culture and Sport" educational institution with the participation of Sambo student-athletes. A total of 32 people participated in the study: 16 people in the experimental group (EG) and 16 people in the control group (CG). The content of the classes was the same in both the CG and the EG. The main difference was the use of specially selected exercise complexes for those training in the EG. It should be noted that these complexes were used in such a way that their use did not interfere with solving the problems of mastering motor skills during sports training. To monitor the development of speed-strength abilities in Sambo wrestlers, the following tests were used: standing long jump, speed jumps over a bench for 20 seconds, speed

push-ups for 20 seconds, speed pull-ups for 20 seconds; sit-ups for speed (hands behind the head) from a prone position for 20 seconds, throwing a training dummy for speed for 20 seconds, pivot throw for speed for 20 seconds, high-speed sprawl for 20 seconds. To determine the statistical differences between the CG and the EG in terms of the level of development of speed-strength qualities of Sambo wrestlers, the non-parametric Student's t-test was used.

The analysis of the obtained data showed that the average increase in results in the EG was significantly higher than in the CG in almost all tests. The calculation of the Student's t-value made it possible to determine that there were significant statistical differences in favor of the EG among all indicators obtained after the experiment in the CG and EG. According to the results of the pedagogical experiment, our proposed method for developing speed-strength qualities in Sambo wrestlers led to positive consequences in the central nervous system (CNS) and improved the functional states of the neuromuscular system, which allows us to conclude that it has a general tonic effect on the musculoskeletal system and improves speed and strength indicators. In conclusion, all the data obtained as a result of the study indicate the practicality and effectiveness of the proposed methodology.

Conclusions. The analysis of scientific and methodological literature shows that physical training plays an important role in the sports training of Sambo wrestlers at the present time. Among all physical qualities for a Sambo wrestler, speed and strength qualities are considered fundamental. However, the methodology for their development has not been sufficiently developed. This significantly affects the special physical training of athletes.

References:

1. Matushchak, P.F. Free-style wrestling: a textbook / P.F. Matushchak. – M: Publishing house: 1INFRA-M, 2019. – 291 p.
2. Rybalko, B.M. Features of the development of explosive strength in Sambo wrestlers / B.M. Rybalko. – Minsk: Polymya, 1976. – 169 p.
3. Verkhoshansky, Yu.V. Fundamentals of special physical training of an athlete / Yu.V. Verkhoshansky. – M.: FiS, 1988. – 243 p. Lyalikov, I.L. Speed-strength training of Sambo wrestlers / I.L. Lyalikov, M.G. Pilyaev, B.P. Yakimovich. – Omsk: SibADI Publishing House. – 2018. – 118 p.
4. Lyalikov, I.L. Speed-strength training of Sambo wrestlers / I.L. Lyalikov, M.G. Pilyaev, B.P. Yakimovich. – Omsk: SibADI Publishing House. – 2018. – 118 p.
5. Shakhmuradov, Yu.A. Free-style wrestling. Scientific and methodological foundations of long-term training of Sambo wrestlers / Yu.A. Shakhmuradov. M: Higher School, 1997. – 189 p.