

CZU 796.015.52:796.8.81

FEATURES OF A TRAINING PROCESS IN SPORTS WRESTLING FOR FORMING POWER ABILITIES IN THE MODERN STAGE OF SPORTS IMPROVEMENT

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Abstract. *This article presents an analysis of well-known specialized literature on the issue of proper coverage of the problems of the development of power abilities of wrestlers of various sports styles, as a leading motor quality in the formation of technical and tactical skills of athletes. This analysis compares the volumetric and substantive aspects of this issue in various sources and evaluates their significance for the practice of the preparatory process.*

Keywords: *power abilities; training process; types of sports wrestling; sports improvement; modern level; techniques; coordination opportunities; methods and measures; physical training; preparatory process structure; technique and tactics.*

Introduction. A study of the history of the development of knowledge and practical activity in the field of training athletes specializing in various types of martial arts, testifies to the huge attention paid to the study of techniques and technical and tactical actions of wrestlers of various styles. This knowledge is widely covered in the content of most textbooks, monographs, manuals and other publications related to the sports training of wrestlers-athletes [1, 2, 3, 4, 5 and others].

At the same time, we have revealed the fact that in most literary sources there is a clear underestimation of the importance of other types of training, especially physical and, in particular, such qualities as power, which are most important for fighting. That is why, the theoretical justification of the importance of strength training in various types of wrestling is relevant.

The objective. To determine, according to the studied literary sources, the degree of illumination and the importance of developing the power abilities of wrestlers of various styles, as the leading physical quality in the development and manifestation of technical, tactical and coordination capabilities.

The aims:

1. To study the available specialized sources for various types of martial arts on the

subject of recommendations the methods and means used to develop the power abilities of wrestlers of various styles.

2. To determine the most significant literary sources, in an accessible form, the methods of developing the power abilities of wrestlers of various styles were described as well.

Organization of the research. We have studied accessible, fundamental informational materials of a number of leading scientists on the structure of the sports-preparatory process in the types of wrestling

Results of the research and discussion. In the Moscow publishing house "Physical Education and Sport" (1960), the fundamental textbook for the institutes of physical education "Sports Wrestling" was published (Sorokin, 1960) [8]. The textbook details the history of wrestling, the basics of wrestling training, the organization, planning and accounting of educational and sports work, the features of working with children, and the planning of the training process. The total volume of the book in 483 pages - 290 pages, it is devoted to the technique and tactics of wrestling. As for the methodology for the development of strength, speed, endurance, dexterity and flexibility, all the information on this most important section of the training are

presented in 8 pages. The issues of strength training are presented in the most general form on two pages of the text and have been reduced to a list of general training exercises for the muscles of the hands and shoulder girdle, trunk and legs.

In the training manual for trainers and athletes "Wrestling", prepared by a large group of leading specialists under the general editorship of the USSR Honored Trainer A. N. Lenz and published by the same publishing house in 1964, which was approved by the state sports management body in the country and the USSR wrestling federation, the section "Development of power" is presented in 4 pages with a total amount of benefits 495 pages [9]. The main means of developing strength and methods are presented - to failure, short-term exercises, increasing weights, isometric method. A feature of recommendations on the development of power that distinguished this work from others published in those years is the desire to maximize the use of tools and methods that ensure compliance with the techniques and motor actions characteristic of the struggle.

In the training manual "Sambo wrestling" written by A. Kharlampiev, an outstanding specialist in this type of martial arts (1964), the recommendations on strength training, set out on two pages, were reduced to a list of general training exercises with a barbell and partner resistance [10].

In 1968, the publishing house "Physical Culture and Sport" published the next version of the textbook for the institutes of physical education "Wrestling", prepared by leading specialists of the USSR under the guidance of A. Z. Katulin and N. M. Galkovsky [2]. The section "Development of power" (3.5 pages of text from 584 pages) gives the most general ideas about the manifestations of power qualities in the struggle (explosive in fast movements) and methods of strength training - overcoming with several varieties ("to failure", large and maximum efforts, increasing weights), isometric, inferior ones. The basic

exercises are also presented - with a barbell, kettlebells, bags, stuffed balls, etc.

The section "Methods of Strength Development" in the textbook for the institutes of physical culture "Wrestling" prepared by a group of specialists under the general editorship of A. P. Kuptsov (1978) is set out on one and a half pages that list methods for developing strength - the maximum effort method involving exercises (lifting the bar, stretching the shock absorbers, etc.) with about ultimate and ultimate weights; a method of repeated efforts based on the use of weights 40–70% of the maximum with work "to failure"; method of dynamic efforts, involving the implementation of strength exercises of a special nature with high speed and moderate weights; isometric method, involving the use of static stresses in a certain position (holding the bridge, holding hold, etc.) [6]. The authors recommend that the load be distributed evenly to different muscle groups, exercises with maximum weights should be alternated with relaxation exercises, in exercises, speed-strength exercises should be applied first, then aimed at developing maximum strength and strength endurance.

The approaches to the strength training of wrestlers of free and Greco-Roman styles formed in the 30-50s of the last century do not change in subsequent years, extending not only to these types of wrestling, but also judo. For example, in the work of S. Matveev and Y. Voloshchuk (1974), it is recommended to develop strength using exercises with a barbell, hammer, kettlebells, dumbbells, expanders, the use of general gymnastic exercises - bending and unbending arms while lying down, bending and unbending arms focusing on the bars, pulling up on the rings, pulling the support on the crossbar, etc. Strange are the recommendations to develop strength by performing exercises "to failure", the onset of heavy fatigue, which contradicts the recommendations contained in serious work of those years on strength training.

In an interesting textbook "Judo", written by well-known Japanese experts (Iwai et al., 1977), a separate chapter is devoted to the training technique. However, all information related to the strength training of athletes is reduced to two phrases: "With the help of general developmental exercises, strength and other motor qualities of an athlete are developed. General developmental exercises contribute not only to the development of physical strength, but also to the so-called explosive strength, which helps to outstrip an opponent in an attack."

Many years have passed since then. However, in serious works on training in wrestling, the issues of physical fitness, including reflective approaches to the content of strength training, are practically considered at the level characteristic of the 1960s - 1970s. As a typical example, one can refer to the contents of the textbook for higher education institutions of physical education "Greco-Roman wrestling", prepared by a group of doctors and candidates of sciences under the general editorship of A. G. Semenov and M. V. Prokhorova (2005), published in Moscow publishing house "Olympia Press" in 2005. The book addresses the issues of physical fitness at the same scientific and methodological level as 40-50 years ago. In particular, the section "Strength training" is set out on four pages and includes recommendations practically indistinguishable from those contained in similar textbooks published in 1964 - "Wrestling" under the general reaction of A. N. Lenz, and in 1968 - "Wrestling" under the general editorship of A. Z. Katulin and N. M. Galkovsky [2].

The current state of knowledge in the field of theory and methodology of training athletes specializing in wrestling, as well as trends in their further development, can be comprehensively assessed based on the materials of the generalizing work "Fundamentals of sportsmanship" written by A. D. Novikov and built exclusively on the material of Greek Roman wrestling, freestyle

wrestling, judo and sambo [7]. The reason for this conclusion is that A.D. Novikov has been working in one of the largest scientific centers in the world for over 60 years. In the USSR, it was the All-Union Scientific Research Institute of Physical Culture, and at present - the All-Russian. The scientific and practical activity of A. D. Novikov and his many students from around the world, including more than 130 doctors and candidates of science, was devoted to research in the theory and methodology of training athletes specializing in wrestling, and the implementation of their results in practice training the strongest athletes. The training of most outstanding wrestlers who achieved victories at the Olympics and world championships, representing the USSR and modern Russia for more than half a century, was accompanied by a system of scientific and methodological support, headed by A. D. Novikov. We cite these facts only in order to show that the content of A. D. Novikov's monograph is based on a huge array of scientific knowledge, the objectivity and effectiveness of which has been verified by the practice of sports of the highest achievements.

A fundamental feature of this work is a methodological approach to the study of a wide subject area related to the training of wrestlers. It is based on the basic principles of the theory of complex dynamic systems and the methodology of their research: their main properties and capabilities as applied to motion systems and complex motor actions; the basics of their systemic structural analysis; cybernetic control systems for such systems. The specific methodology is based on a comprehensive analysis of the structure of receptions and motor actions in types of wrestling, an analysis of the training methodology and improvement of the techniques of wrestling, the characterization of problems, contradictions and prospects for improving the wrestlers' sportsmanship in the light of the theory of complex dynamic systems [7].

The implemented methodological approach allowed us not only to cover an exceptionally wide area of knowledge and problems in the field of training highly qualified wrestlers, but also, which is fundamentally important, to present them in unity, in the interconnectedness and interdependence of the processes and phenomena studied. The effectiveness of a number of experimental studies was provided by the development and justification of instrumental methods of research and monitoring the skill of athletes. Among them - a method that simulates actions in a competitive environment; a method simulating the opponent's defensive actions; methods that simulate situations associated with a change in the growth of the opponent; methods that simulate dynamic situations that occur at the edge of the carpet; methods that model tactical decisions and assess the effectiveness of the choice of technical and tactical actions [7].

The work subjected to a comprehensive analysis of the structure and content of the motor activity of wrestlers, the technique of techniques and motor actions, depending on the methods of attack and the variability of situations. Particular attention is paid to the most important elements of techniques, the variability of motor actions depending on the emerging dynamic situations, switching from one technique to another. The stability of the implementation of techniques to the knocking down effect of the opponent's protective actions, as well as depending on the growth of the opponents, the emotional state of the wrestler, the development of his fatigue, etc., was studied [7].

Taking into account the whole variety of factors that determine the effectiveness of competitive activity of wrestlers, the effectiveness of individual techniques and motor actions, a set of means and methods for providing and implementing complex technical and tactical actions in wrestling was subjected to experimental substantiation.

A separate chapter, entitled "Athlete Training System", is devoted to studying the techniques of techniques and motor actions, analyzing the structure of the training process - technical improvement, tactical improvement, methods of speed-strength training, developing endurance, managing the psycho-emotional state, developing and implementing individual models of motor actions, the use of special simulators to increase the selectivity and effectiveness of the impact of training exercises on the body of athletes [7].

However, for this fundamental work of a generalizing nature, the same problem is characteristic as for the vast majority of textbooks, manuals and monographs on the training of wrestlers, and, moreover, for the entire system of knowledge in this area. The vast majority of research and material presented under the general title "Fundamentals of sportsmanship", including the chapter "Athlete Training System", is devoted to the study of various aspects of technical and technical-tactical skill. As for the methodology for the development of motor qualities - strength, speed, agility, endurance, it is represented either by general statements, or by considering some of the many components. For example, it is noted that under the influence of fatigue, the effectiveness of motor actions decreases from 96.5% - at the beginning of the bout to 13, 7% - at the end. As for endurance, material related to this quality was limited to general recommendations for testing on special stands and using exercises with dummy throws (Novikov, 2012) [7].

At the same time, three groups of exercises are recommended for the development of wrestler strength: 1) exercises with large weights (80–90% of the maximum available) - for the development of absolute strength; 2) exercises with small weights (up to 30% of the maximum available), performed at maximum speed - for the development of the velocity component of explosive force; 3) exercises with competitive weights, performed at

maximum speed - for the development of explosive strength simultaneously with the improvement of technology. Recommendations on the duration of exercises, the amount of weights, the duration of pauses between approaches with reference to the long-published work of V.V. Kuznetsov (1970) are presented. The results of a pedagogical experiment are also described, in which the effectiveness of the predominant development of the strength of the muscles that carry the main load when performing a specific technique is shown. These materials, which took several pages, proved to be limited to the most important part of an athlete's training - the types of power qualities, their determining factors, the role to achieve results in the fight, development methods, etc. But it is well known that the necessary basis for the effective implementation of techniques and the implementation of successful motor actions are various manifestations of power qualities. Without the presence of a certain level of their development, the process of studying wrestling methods is impossible, not to mention their use in conditions of tough opposition in competitive activity.

Thus, in this fundamental work, we are faced with a provision according to which the development of physical qualities, primarily strength, is perceived as a secondary part of training compared to the improvement of technical skill, accompanying the study and development of technical methods and technical and tactical actions in training and competitive fights. But A. D. Novikov himself (2012), in the monograph analyzed, notes that such an approach to physical training, which provides for the simultaneous development of motor qualities with the study of techniques

and fights, dramatically reduces the possibilities for versatile and full-fledged physical training [7]. We completely agree with this opinion of the author and believe that for the development of power qualities of athletes, wrestlers, as one of their main abilities in various martial arts styles, a system-organizing approach is needed aimed at the sustainable formation of the required level of strength capabilities.

Conclusions.

1. An analysis of specialized literature on the types of wrestling showed that in most of the sources we studied, a fragmentary approach was allocated to the development of strength abilities of wrestlers of various styles.

2. In these same sources, the presentation of the development of the strength of wrestlers of various styles, as the leading physical quality, is perceived as a secondary part of training compared to the improvement of their technical skills.

3. However, the necessary basis for the effective implementation of techniques and the implementation of successful motor-technical actions are various manifestations of the power qualities of athletes-wrestlers. Without the presence of a certain level of their development, the process of studying the methods of struggle is also impossible, including in conditions of tough opposition in competitive activity.

4. Therefore, at the present stage, in rather difficult preparatory conditions for athletes of wrestlers of various styles, a system-organizing process of forming the proper level of development of power qualities, in the structure of many years of sports improvement, is necessary to achieve high sports results.

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