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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –  
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**DEVELOPMENT OF STRENGTH ENDURANCE OF QUALIFIED  
SAMBO WRESTLERS WITH THE HELP OF SPECIAL CROSSFIT EXERCISES****Hasan A. Abdurazakov**

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**Key words:** wrestling, strength endurance, freestyle wrestlers, Style, crossfit system.

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**Abstract:** The improvement of the sports training of freestyle wrestlers was influenced by the development of individual physical qualities, on the basis of which it was announced to increase the level of activity in competitions, exercise complexes were developed, including a crossfit training system in order to develop strength endurance. The strength endurance of athletes at the stage of sports specialization, which contributes to the successful performance of technical movements in the technique of attack. The dynamics of indicators of strength endurance development in the studied groups is shown.

**INTRODUCTION.** In the world, modern sports wrestling is one of the main tools of strength endurance of an athlete. To achieve high sports results, it is important to develop physical qualities, as a result of which the success of technical actions increases in wrestlers through the activity of conducting competitive boxing, which is an important factor in modern sports wrestling. An important topic in the study of this issue is the search for effective means and methods of improving the physical fitness of sports wrestlers. Sports wrestling, as in many sports, the leading physical qualities, taking into account the level and mode of body activity, are strength endurance. [1,8] In the world, a huge amount of strength and speed-strength elements of athlete training are used. It should be noted that the duration of the acquisition of wrestlers on average lasts 4 minutes. Competitions are held dynamically, at high speeds, various techniques are performed, and a high level of strength development is required to

successfully complete them. Due to the high pace of competitive combat, athletes should not only control the course of the acquisition over the allotted little time, but also actively carry out offensive and counter-offensive actions, demonstrating strength endurance. The wrestler's stamina is seen as the ability to perform high-speed moves throughout the fight, as well as the ability to actively perform multiple takes throughout the event. Wrestlers have to put in maximum effort at any time during the baxs, and sometimes even in a few takes where speed and power effects have to be increased. At the same time, the athlete must have strength in combination with general and special endurance. In this regard, the means and methods of developing the physical qualities of wrestlers are demanding to be similar to the structure of actions in martial arts. [3,5] Sport Wrestling as a mass sport in our Republic has been adequately defending the honor of our country in prestigious international competitions, including Olympic and Asian Games, World and Asian Championships. "the introduction of advanced innovative, scientific and methodological technologies into the training, competition and tournament preparation process of national teams and the medical and pharmacological provision of athletes, the organization of groups of specialists (trainers, doctors, physiologists, nutritionists, scientific analysts, etc.) to scientifically analyze the participation of athletes in them during the period;". In the high performance of sports wrestlers of our country, their scientific support also plays an important role, and constant improvement is required. One of the main tasks of improving the scientific provision of Sports Reserves and training of Uzbekistan's national teams in various sports, including sports wrestling, is to increase competitiveness in the modern high – performance sports system. The training of competitive athletes at the international level, world and Asian competitions in sports wrestling is determined by the effectiveness of the management of the multi-year preparatory process. From the above, the implementation of scientific research on the development of strength endurance of wrestlers in sports wrestling remains one of the important tasks of scientists and specialists in the field. [2,4,6]

The purpose of the study is to improve the training process based on the development of complexes aimed at developing the strength endurance of freestyle wrestlers using the CrossFit training system. Research tasks: - determine the feasibility of using the CrossFit system in training qualified freestyle wrestlers; -develop exercise complexes to develop strength endurance of freestyle wrestlers at the stage of sports specialization using the CrossFit training system and justify their effectiveness;Methodology and organization of research. In order to optimize the training and training process of freestyle wrestlers, a pedagogical experiment was organized that lasts 5 months. The study involved qualified athletes, training in the sport of

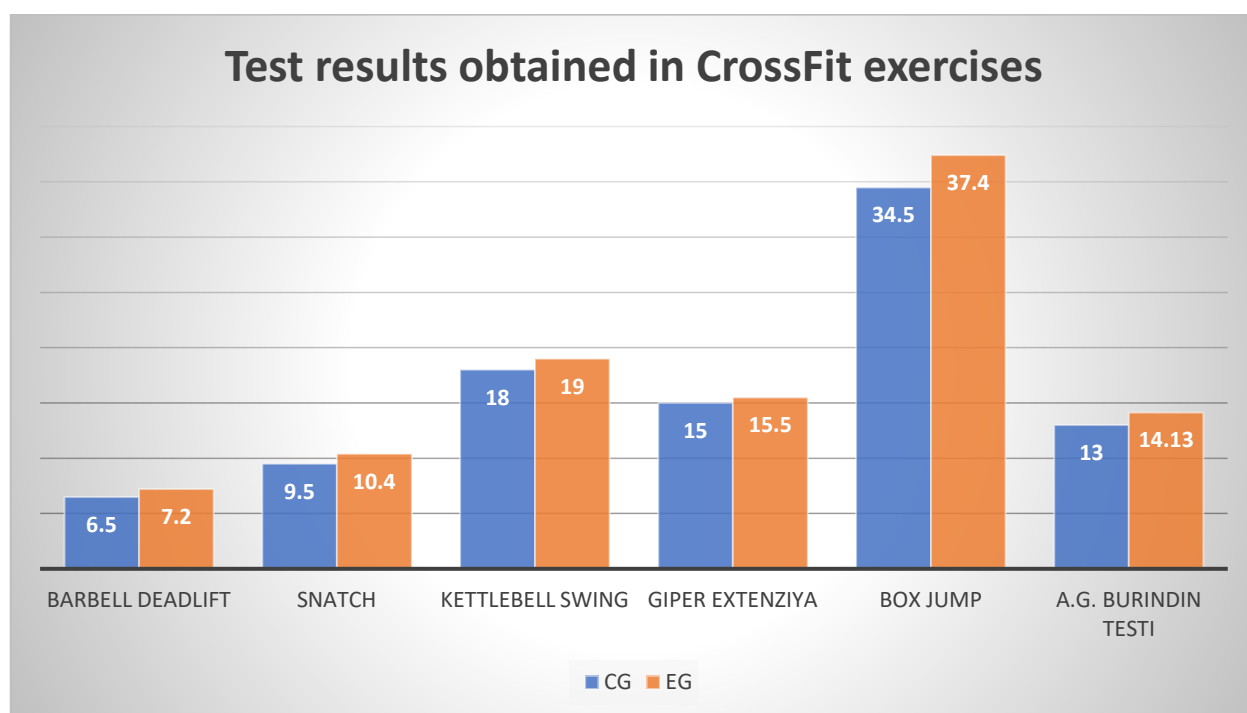
freestyle wrestling in training groups, control and experimental groups were organized. Preliminary tests were carried out using the tests recommended by the program to determine the development indicators of strength endurance, speed-strength qualities and strength engaged in freestyle wrestling. Exercises to assess physical qualities were chosen for groups of qualified freestyle wrestlers. Each athlete completed six test assignments he had proposed and recorded results. Research results and their discussion. The initial test did not reveal reliable differences in strength endurance performance between groups of qualified freestyle wrestlers. The results of the completion of the Test tasks corresponded to the level of values below the required values for the study groups. In order to develop strength endurance in qualified freestyle wrestlers, exercise complexes using the CrossFit system were developed and included in the training process of the experimental group (three times a week lasted up to 25 minutes in different parts of the training. The essence of these complexes was the organization of high-intensity circular training, both with weight and with body weight. Exercises aimed at different muscle groups and the development of strength endurance were performed twice a week at the core of the training. athletes had resistance exercises ranging from 20-25% of their body weight, such as: barbell deadlift Race 1 (waist lift in standing position), snatch Race 2 (barbell swing), Race 3 pole swing forward (Kettlebell swing), etc.

Once a week, a weightless complex was applied, exercises performed using only body weight to perform basic exercises and practice strength development techniques: exercises that develop the lumbar muscle (hyper extension), box jump (jumping over the box), jump squat (jumping where standing), etc. The use of exercises of the CrossFit complex in the CrossFit training system there are three different types of loads: G – mainly exercises with their own body weight (Gymnastics), W – exercises related to strong sports (for example, weightlifting), M-cardio exercises, then in developed complexes, with instructions of an organizational and methodological nature, students were informed about the type and speed of The control group was conducted with the help of exercises, among those involved in the study, typical tools and methods of developing physical qualities are in training groups, namely: climbing a rope, pulling on a turn, writing and bending hands on the floor (otjimania), bending hands on a Bruce, lifting and lying on a lying posture, high jumping where standing, long jumping, training with a shock-absorbing tourniquet. Group training took place 5 times a week during the general training phase and the preparatory period. At the end of the experiment (5 months later), the athletes were retested. In the studied tests of the experimental group (EG) and control group (CG), the dynamics of indicators were analyzed, the results are presented in the table.

Table-1

**Table of analytical results of test tests designed to develop strength endurance of wrestlers and improve competition performance**

Nº	Tests	Control group	Experimental group	t	P
1	Lifting the barbell with a waist in a standing position (Barbell deadlift) times	6,5±0,82	7,2±0,56	2,37	≤0,05
2	Shaking the barbell (Snatch	9,5±0,85	10,4±0,68	2,50	≤0,05
3	Flick polwontosh forward (Kettlebell swing	18,0±1,7	19,0±1,52	2,72	≤0,05
4	Exercise that develops the lumbar muscle (hyper extension) 20 seconds	15,0±1,69	15,5±0,95	2,40	≤0,05
5	Jump on the box and Fall (Box jump) times	34,5±1,85	37,4±1,86	2,80	≤0,05
6	A.G. Burindin test	13,00±0,73	14,13±0,76	2,85	≤0,05



The effectiveness of the implementation of the developed set of exercises was assessed by comparing the results of NG and TG at the beginning and end, the pedagogical study was found to be the final indicators of the experiment was found to be effective from the results of the group control group.

All motor functions:

- In the test "lifting a barbell with a waist in a standing position (Barbell deadlift)", the indicators improved by 9.7% in the experimental group ( $p \leq 0.05$ ) and  $7.2 \pm 0.56$  times, in the control group  $-6.5 \pm 0.82$  times; - in the experimental group, the indicators improved by 8.65% in the test "lifting a barbell" ( $p \leq 0.05$ ) and  $10.4 \pm 0.68$  times, and in the control group  $-9.5 \pm 0.85$  times; - In the experimental group, the indicators improved by 5.2% in the "polwontosh flick forward" Test ( $p \leq 0.05$ ) and were  $19 \pm 1.52$  times, and in the control group  $-18 \pm 1.7$  times; in the

experimental group, the indicators improved by 3.2% in the "waist muscle developing exercise" test ( $p \leq 0.05$ ) and  $15.5 \pm 0.95$  times, and in the control group  $-15 \pm 1.69$  times;- In the experimental group, the indicator was significantly improved by 7.75% in the "standing jump" test (the maximum time to hold the pose) and was  $37.4 \pm 1.86$  s, and in the control group  $-34.5 \pm 1.85$  s; A. G. In the trial of burindin (the twist of the wrestling mannequin without rest for three minutes, the weight of the mannequin was 35-40% of the athlete's body weight), the indicators in the experimental group were significantly improved by 7.9% ( $p \leq 0.05$ ) and  $14,125 \pm 0.76$  times, and in the control group  $-13 \pm 0.73$  times. This test describes the special durability and stability of the wrestler under the conditions of motor hypoxia, from which it can be assumed:

The higher the stability of the wrestler in the conditions of motor hypoxia, which develops during the performance of the exercises, the lower the time of the Spurs by the end of the test.

**Conclusions.** The study shows that exercise complexes developed using the CrossFit system are effective for qualified freestyle wrestlers, helping to increase their endurance performance, and we believe that their use by national team coaches in the training process will pay off. It can be noted that the use of an unconventional set of exercises in the CrossFit system has a similar effect on the training of wrestlers as a "natural simulator".

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