© Eurasian Journal of Sport Science 2021; 1(2): 131-135
https://eajss.uz

Development of strength and operational strength skills of qualified judoists aged 15-17 years in sports improvement groups

Qodirov Sirojiddin Erkinboevich[1]
[1]Uzbekistan state university of physical education and sport, Chirchik, Uzbekistan

Abstract
Purpose: To theoretically develop a differentiated method for improving the quality of strength and dexterity of qualified judokas aged 15-17 in various weight categories at the stage of sports development and substantiate the effectiveness of the selected exercises in the study .
Methods: The program developed for the development of general and special physical training is structured as follows. Two sets of exercises are aimed at improving the special physical training of judoists (SPT - 4 sets of exercises) (GPT - 7 sets of exercises). The first set of general physical exercises is 4 turns, each series is performed in a series of maximum repetitions with sports rubber for 30 seconds, rest between series is 30 seconds, between laps - 4-6 minutes. Series 1-2 - imitate your partner by turning back and turning left and right; series 3-4 - imitation of throws from left to right face to face; series 5 - imitation of a throw through the chest. When developing various research results, the following statistical methods (arithmetic mean) and analysis methods were used. To determine the reliability of the data obtained, statistical hypotheses were investigated (in accordance with the Student's t-criterion) .
Results: As a result of the conducted experience, the effectiveness of the use of special training methods in improving the physical training of qualified judoists aged 15-17 years was proved. At the end of the study, there were significant changes in both SPT and GPT scores. The difference between the beginning and the end of the study in the weight category of 46,50,55 kg in the 30 m run in GPT was 0.1, the difference between the beginning and the end in the weight category of 60,66,73 kg was 0.2, 81,90 , + 90 kg in the weight category we see that the difference between the beginning and the end of the study changed by 2.1, and the difference between the beginning and the end of the study in the weight category of 46,50,55 kg, and lifting the legs to the holding position on the horizontal bar changed by 2.1. The dynamics of the above-mentioned SPT and GPT indicators confirms the effectiveness of the developed program to improve the physical training of qualified judoists aged 15-17 years .
Conclusion: Some trainers use exercises that develop special physical qualities in order to develop speed and strength qualities in a short period of time. In this regard, it determines the need to pay attention to the physical capabilities of the athlete, especially with the development of the athlete's speed. Excessive speed training can lead to overtraining of judoists. Therefore, before using rapid strength training, it is advisable to use popular special test exercises that assess speed. Based on the purpose of the study, the following exercises were used to develop the operational and strength qualities of a qualified judoists, identified on the basis of the results obtained.

Keywords: Judoists, sports training, strength and speed-strength training, general and special physical training, the training process, the skill of the athlete.

Introduction

Currently, a specific trend in the development of modern judo, according to many experts, is a further increase in the intensity and effectiveness of competitive wrestling. A modern judoists must have excellent technical and tactical skills, be able to move quickly in wrestling on the mat (tatami), make the right decisions and implement them quickly. It is necessary to perform complex actions and techniques in conditions of constant and strong opponent resistance, with a lack of time and space (Salamov, 2018; Novikov, 2012).

Knowledge and consideration of these characteristics largely determines the specific features of training. Important issues of improving the skills and special abilities of judoists are of particular importance, and their solution directly depends on the choice of the methodological direction of the training process, the rational use of general physical training and special physical training. This is considered one of the important factors of professional development and special performance of wrestlers. Scientists and sports practitioners have always tried to study the problem of developing the strength qualities of athletes and rationalizing the means and methods of training, but the scientific justification of the strength qualities of judoists was somewhat overlooked from the point of view of specialists (Tumanyan, 2000; Laptev, 1996). Recently, a number of aspects related to the optimal ratio of loads in different directions, their inclusion in the speed and strength training of judoists of different skill levels and training have become relevant (Kerimov, 2018; Kerimov, 2020).

Currently, in the process of long-term sports training in the republic, the methodology for the development of strength and operational -strength abilities, taking into account the age-

related features of the development of the body of judoists, has not yet received scientific justification. Therefore, the dynamics of this level of abilities among judoists aged 15-17 years of different weight categories was not observed enough. And this, in turn, does not contribute to improving the quality of the training process and competitive activity (Matveev, 1999).

Methods

As a result of the analysis of the above problems , the following were identified:

- Between the inefficiency of the existing pedagogical practice and the need to develop the strength and operational abilities of qualified judoists aged 15-17 years;
- between the possibility of developing the strength and operational-strength skills of judoists of different weight categories on the basis of individualization and differentiation of the process of physical education and the lack of adequate equipment;
- between the need to use a differentiated method of developing the readiness of judoists for operational force in the preparation process and the lack of conditions for its design.

The revealed dependence, the relevance of improving the quality of training of qualified judoists aged 15-17 years for competitions, the need to create a methodology for sports training in different weight categories, determined the problem of our study. The choice of adequate educational content based on the consideration of the individual characteristics of judoists will certainly contribute to the effectiveness of the training process. The relevance, theoretical and practical significance of this problem, the lack of adequate development determined the choice of the research topic.

The following methods were used to solve the tasks. - study and analysis of scientific and methodological literature - pedagogical supervision: - pedagogical control tests - conducting research. - methods of mathematical statistics. When developing special physical training of qualified judoists , the following methods are used to train speed skills: 1. Volume increase method 2. Intensity increase method 3. Style change 4. Interval method 5. Repetition method.

Results and discussion

In the course of the study, 18 judoists of different weight categories aged 15-17 years were selected for sports improvement groups. The experiment was conducted at the “Dinamo” sports complex from September 2019 to March 2020. During the experiment, the functional state of athletes and the norm of loads were monitored. The second complex of SPT is 2 laps, a high-quality throw without rest between series, rest between laps for 5 minutes (3 partners support the judoists). 1st series of exercises: throwing partners over the shoulder at a slow pace for 50 seconds, then 10 seconds at maximum speed, 2nd series of exercises: partner's throw with a hook at a slow pace for 50 seconds, 10 seconds at maximum speed, 3rd series of exercises: two-hand reap at a slow pace for 50 seconds, 10 seconds at maximum speed, 4th series of exercises: throwing after pre-hooked position at at a slow pace for 50 seconds, 10 seconds at maximum speed.

The first complex of GPT is 1 turn, each stop is performed at the maximum speed of the exercise, rest between stops is 15 seconds. 1st Stop – 3 repetitions of pulling up 5 times on the horizontal bar, 15 seconds of hanging on bent arms; 2nd stop - running on the tatami - 100 m; 3rd stop - throwing a partner over his shoulder - 10 times; 4th stop - run in the “bridge” position - 5 times to the right, 5 times to the left; 5th stop - carrying a resisting partner on the shoulder - 20 meters; 6th stop - squats with a partner on the shoulder for half – 10 times; 7th stop - twisting the arms and returning to the starting position, push-ups on the floor - 10 times; 8th stop - lifting a partner standing on all fours to chest level - 10 times; 9th stop - stretching the arms held by the partner to bend the elbow - 2-3 attempts within 10-15 seconds; 10th stops - climbing the rope - from 5 meters is done 2 times.

The second set of GPT is 2 laps, at each stop you need to perform a maximum of 8 repetitions. 1st stop - lifting the barbell to the chest (50% of the maximum weight); 2nd stop - imitation of the method of lifting the opponent from the waist on a tatami; 3rd stop - bending and straightening of the arms on the bars; 4th stop - pulling up on horizontal bar; 5th stop - sports ways of entering and exiting a turn with rubber; 6th stop - traction lifting of the deadlift 50% of the maximum weight; 7th stop - face to face with partner, perform the “Uchikomi” technique.

At the beginning and at the end of the study, the indicators of the control exercises

passed by the judoists at SPT and GPT were very close to each other. This ensures that the athletes of the experimental and control groups were correctly selected. The dynamics of SPT and GPT indicators was determined during a pedagogical experiment (see table 1).

The table shows the indicators of physical fitness of young judoists aged 15-17 years in different weight categories.

Table 1. Dynamics of GPT and SPT indicators of young judoists aged 15-17 years in pedagogical experiment

№	Tests Control standards	At the beginning of the experiment			At the end of the experiment		
		Weight category (kg)			Weight category (kg)		
		46.50.55	60.66.73	81.90.+90	46.50.55	60.66.73	81.90.+90
General physical training							
1.	Running up to 30 meters (seconds)	4.7	4.8	5.2	4.5	4.6	5.1
2.	Pull-up on the horizontal bar (number of repetitions)	16.3	15.4	11.2	18.4	17.3	13.4
3.	Bending and straightening of the arms on parallel bars (number of repetitions)	31.4	29.3	17.7	34.3	32.4	19.5
4.	Lifting the legs in suspension on the wall bar (number of repetitions)	12.3	8.8	6.7	16.6	10.4	8.7
5.	Climbing a rope without the help of a legs (seconds)	8.4	9.3	12.0	7.2	8.1	10.4
6.	Pull-up on the horizontal bar in 20 seconds (number of repetitions)	8.4	6.2	5.1	9.6	8.5	6.8
7.	Push-ups from the floor in 20 seconds (number of repetitions)	16.7	14.6	12.3	18.3	16.2	14.9
Special physical training							
1.	Run in the “bridge” position - 5 times to the right, 5 times to the left (seconds)	17.0	18.0	23.2	15.4	16.3	21.7
2.	Rollover to the “bridge” position 10 times (seconds)	23.0	25.0	28.0	19.4	22.4	26.5
3.	Throwing over shoulder 10 times	29.4	28.3	32.3	25.7	26.2	30.1
4.	Throwing 10 times with a twist	31.6	30.5	38.6	27.5	28.7	36.4

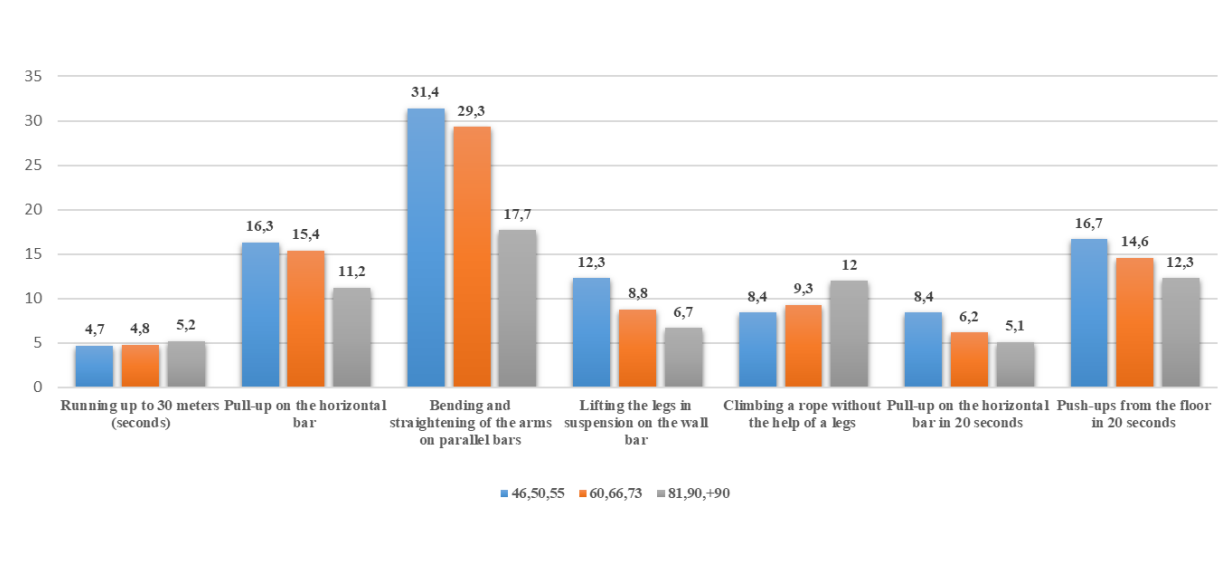


Figure 1. General physical training (at the beginning of the experiment)

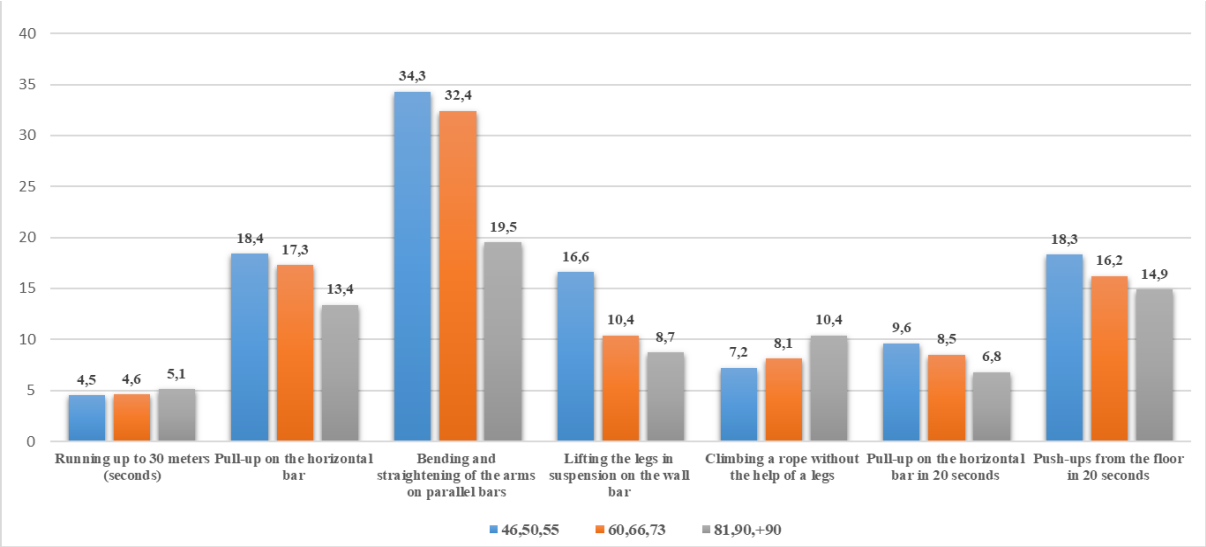


Figure 2. General physical training (at the end of the experiment)

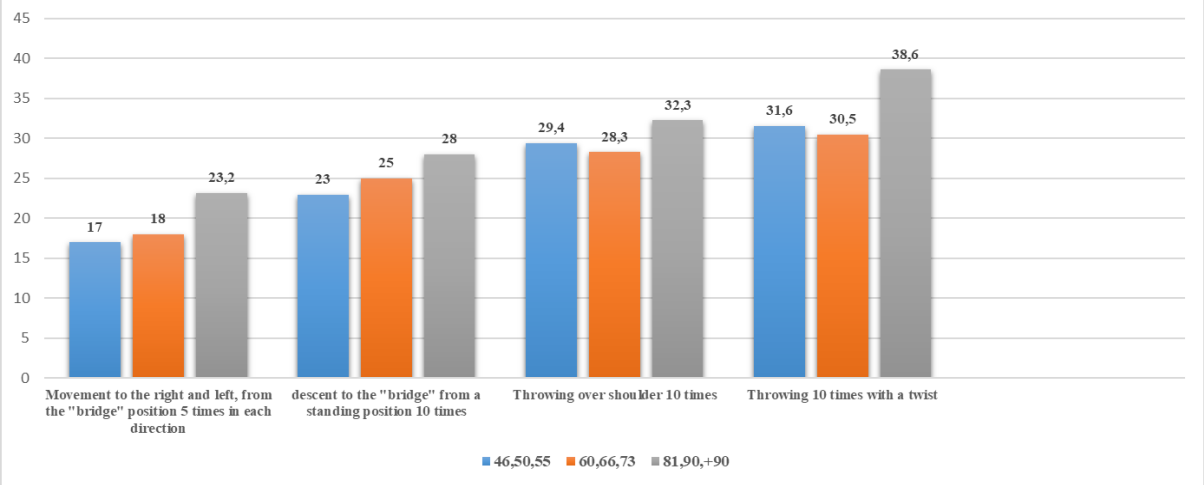


Figure 3. Special physical training (at the beginning of the experiment)

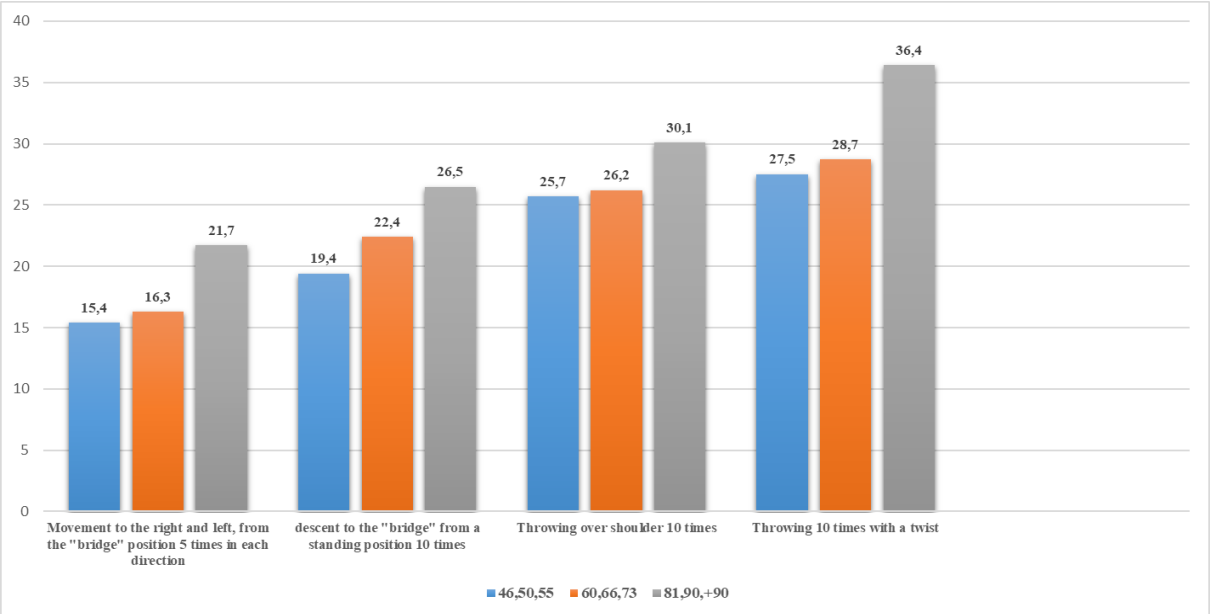


Figure 4. Special physical training (at the end of the experiment)

Conclusion

An analysis of the literature on the topic of training operational strength skills in the development of special physical training of qualified judoists and an analysis of training conducted with qualified judoists shows that in non-training forms, the effectiveness of exercises aimed at training movement skills related to practice and related strength abilities is not sufficient.

At the same time, the opinion expressed in many literary sources plays an important role in the preparation of qualified judoists for speed training, for the preparation of qualified judoists in the future. This proved once again that there is still a lot to be done to train speed skills of judoists. As a result of the research work carried out, it was found that the speed abilities of judoists in the research group were increased due to the fact that we increased the volume of exercises used in the training of athletes when teaching speed and strength skills. As a result of the study, which was aimed at improving the speed and strength qualities of judoists, it was revealed that: it is necessary to attach special importance to the training process of qualified judoists in training operational and strength skills, and it is important that judoists achieve high results in competitions; the use of strength exercises as a standard in practice does not allow judoists to form the necessary skills and abilities.

One of the main directions of speed development in 15-17-year-old judoists is the use of standardized exercises. It should be noted that the level of study of issues related to the methodology of training qualified athletes for strength and speed qualities in various sports is very diverse. At the stage of sports improvement in judo, the issues of methods of training 15-17-year-old qualified judoists of different weight categories in strength and speed have not been resolved yet. It follows from the analysis of the literature that a number of studies that have been successfully conducted in the field of sports practice are devoted to wrestlers, such sections as improving the technical and tactical actions of the modern system of sports training, resistance to mixed factors in the process of competitive activity, training methods, etc.

The inability to truly assess the current strength and rapid strength training of judoists of different weight categories at the stage of sports improvement is one of the most important reasons why it is difficult to manage the training process in wrestling .

References

Kerimov F.A. (2018) *Sport kurashi nazariyasi va uslubiyati* [Theory and methodology of wrestling]. Uzbekistan State university of Physical Culture and Sport. Tashkent (in Uzbek).

Kerimov F.A. (2020) *Sport sohasida ilmiy tadqiqotlar* [Scientific research in the field of sports]. Uzbekistan State university of Physical Culture and Sport. Tashkent (in Uzbek).

Salamov R.S. (2018) *Jismoniy tarbiya va uslubiyati* [methodology of physical culture and sports]. ITA -press. Tashkent (in Uzbek).

Novikov A.A. (2012) *Osnovy` sportivnogo masterstva* [Fundamentals of sportsmanship]. Soviet sport. Moscow (in Russian).

Tumanyan G.S. (2000) *Sportivnaya bor`ba* [Sports wrestling]. Soviet sport. Moscow (in Russian).

Laptev A.L. (1996) *Sovremennaya sistema vosstanovleniya i povy`sheniya rabotosposobnosti sportsmenov //Primenenie vosstanovitel`ny`kh sredstv dlya optimizaczii trenirovochnogo proczessa* [The modern system of recovery and improvement of the athletes' working capacity. The use of rehabilitation means to optimize the training process]. Moscow (in Russian).

Matveev L. P. (1999) *Osnovy` obshhej teorii sporta i sistemy` podgotovki sportsmenov* [Fundamentals of the general theory of sports and the system of training athletes]. Olympic Literature. Kiev. (in Russian)

AUTHOR BIOGRAPHY



Sirojiddin Erkinboevich QODIROV
Employment
Scientific researcher at Uzbekistan state university of physical education and sport.
Degree
MD
Research interests
Sport Science, Physical Education, Theory and methodology of judo.
E-mail: qodirov.sirojiddin@list.ru