

A METHODOLOGY FOR PLANNING A PARTIAL TRAINING LOAD AIMED AT DEVELOPING LEG AND LUMBAR MUSCLE STRENGTH

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ABSTRACT

This article focuses on weightlifters' efforts to develop leg and lumbar muscle strength, determine size and intensity in sit-ups and barbell-lifting exercises, and plan a partial workout load.

Keywords: Leg, waist, muscle strength, sitting, lifting barbell to waist, partial, volume, intensity, general physical training.

RELEVANCE OF THE CASE

Representatives of our country are achieving high results at the Olympic Games, World Championships, Asian Games and championships and international competitions, further enhancing the prestige and sports potential of Uzbekistan in the world, the construction of world-class sports facilities in our regions. It is noteworthy that the Umid Nihollari, Barkamol Avlod and Universiade sports competitions are gaining popularity.

Weightlifters use a variety of training tools in their many years of training. In many foreign (L.S Dvorkin, Ivanov A.T) and local (R.M Matkarimov, E.I. Kadyrov, K.F. Bayazitov) literature we have studied the use of separate tools at different stages of weightlifter training. we did not encounter accurate systematic data on the number and size [2,3,4,5,6,7].

At the same time, the Resolution of the President of the Republic of Uzbekistan No. PP-3031 of June 3, 2017 in all regions of the country to promote the importance of mass sports in human and family life, its physical and mental health, to protect young people from harmful habits. Preservation, creation of necessary conditions for them to realize their abilities and talents, selection of talented athletes and improvement of the system of targeted training have been identified as important and urgent tasks [1].

The purpose of the work is to determine the optimal ratio of training equipment and load of weightlifters of the sports improvement group.

Starting from September 2019, a pedagogical experiment was organized for 2 months to achieve the set goal.

Experimental work students of the Uzbek State University of Physical Culture and Sports and Chirchik College of Olympic Reserve received weightlifting competitions in preparation for the improvement of sports, received mesocycles. It set the task to study the optimal ratios of the weight of the training equipment and load of weightlifters of the sports improvement group.

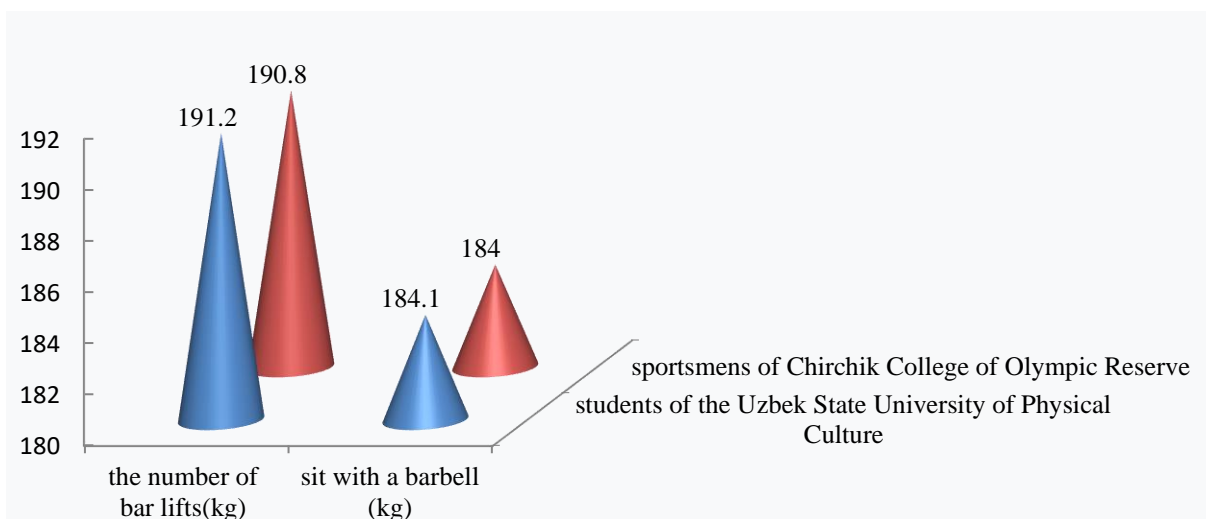


Figure 1. Experimental and control group Average mean waist and leg strength before the experiment (n = 4)

Note: Lifting the barbell to the waist, sitting with the barbell barbell.

The 4 weightlifters in the experimental group weighed 191.2 kg in the barbell and 184.1 kg in the barbell.

The 4 weightlifters in the control group weighed 190.8 kg in the barbell and 184 kg in the barbell.

Prior to the study, the difference between the results of the experimental and control group athletes was 191.2 kg, the difference between the control group was 190.8 kg and the difference was 0.4 kg. The average result of the experimental group athletes in the barbell sitting exercise was 184.1 kg, the average result of the control group athletes was 184 kg, and the difference was 0.1 kg. The experimental and control group athletes' pre-study physical condition was almost indistinguishable.

The objectives of the sports development phase have been identified by us as weightlifting training tools and applied to the research process. The first stage of pedagogical experiment consisted of 2 cycles of lessons. Phase 1 preparation 4 weeks (September), Phase 2 competition 4 weeks (October). At the end of the training, control tests were taken and a test race was held.

These exercises (sitting and lifting the barbell to the waist) are a major part of the overall exercise load, and their use increases the strength of the leg and lumbar muscles, which in weightlifters provide the basis for improving the skills of competitive exercise.

Partial loads in sitting exercises

The results in the squats and squats are directly related to the results of the sit-up exercises with the barbell. For this reason, coaches prefer to use these exercises more often among the special-auxiliary exercise complex.

The load capacity is of particular importance when sitting. Because this exercise has a positive effect on the development of leg and lumbar muscles. These muscles are important in the weightlifting orgy. At the same time, this type of exercise is a great help in improving the technical skills of athletes.

When we study the training process, the average volume and intensity of the sit-up exercise load with a barbell aimed at improving sportsmanship during the Mesozoic period of training is 628 times. This is 16.4% of the total load.

The average size and intensity of the sit-up exercise load with a race mesocyclist is 288 times. This is 15.4% of the total load. (See Figure 1).

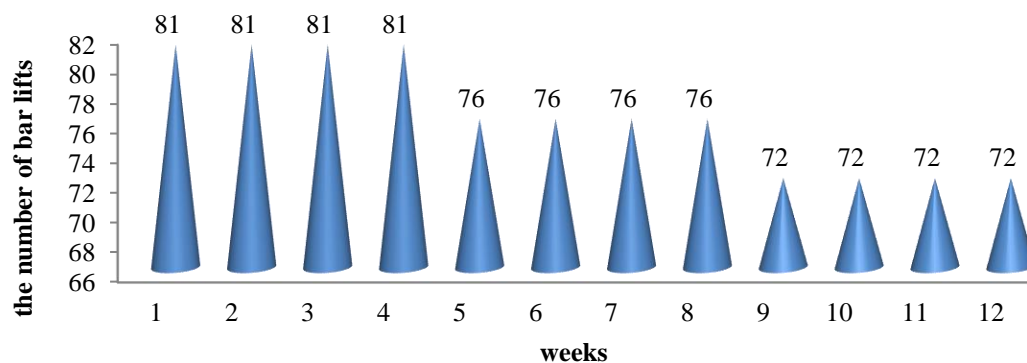


Figure 2. Weightlifters in the stage of sports improvement

An increase in load volume during sitting exercises during 12 weeks of training and competition.

In the sit-ups (Fig. 2), the load capacity varies from 1 to 4 weeks, from 5 to 8 weeks, and from 9 to 12 weeks over a twelve-week period. As the race approaches, the intensity of the exercise increases and the number of lifts decreases.

From 1 week in a sit-up exercise over a twelve-week period

Up to 12 weeks, the load capacity varies from 81 to 72 times. Athletes develop leg muscle strength while sitting. Properly selected load in a sitting exercise has a great impact on improving the athlete's athletic performance and technique. As noted, improper distribution of exercise load can lead to involuntary adaptation. During the 12-week preparation period, the study compared the load volume of the barbell to the waist and the sit-up exercise in the weeks compared with the Student's t-criterion (12 weeks and 4 weeks, 8 weeks and 3 weeks, 6 weeks, and 2 weeks). , Compared with 5 weeks and 1 week with 7 weeks) reliable and accurate results were determined.

It was found that weightlifters in the advanced stages of sports perform the same load from week to week on a monthly basis in sitting and barbell lifting exercises.

Partial load of waist-lifting exercises in push-ups and squats

When lifting weights, it is recommended to include barbell exercises in high-intensity zones when an athlete has a category 1 sport level. In a small category of athletes, sufficient strength characteristics are developed by planning such exercises in small intensity zones. These include exercises such as half-squatting and half-squat barbells. That is why there is no need for great intensity in the exercise of lifting the barbell to the waist.

Lifting the barbell to the waist in weightlifting is used in weightlifters to develop the strength of the writing muscles of the legs and waist, to improve the technical skills of lifting the barbell to the squat phase. The weight used to lift the barbell to the waist in the deadlift is

approximately 70% minimum and 120% of the maximum weight relative to the classical lifting limit.

Differences in the weight of the bar have a major impact on the development of strength and technique.

According to the marginal result in lifting, it is advisable to strengthen the skills and techniques with a barbell weighing 90-100%.

Lifting barbell exercises up to the waist have a great impact on improving athletic performance in classic lifting. This exercise increases the athlete's muscle capacity and shoulder strength and helps them master the technique of performing this exercise perfectly.

The load capacity and intensity of the lifting bar to the waist are determined. This Figure 2 also partially shows the number of lifts of loads weighing 90-100%. The number of approaches is reduced to about 1-3 times.

Lifting the barbell to the waist is usually done 3 times a week, and this includes lifting the barbell to the waist in one exercise and lifting the barbell to the waist in the second exercise. Lifting the barbell to the waist is usually done between or at the end of the workout.

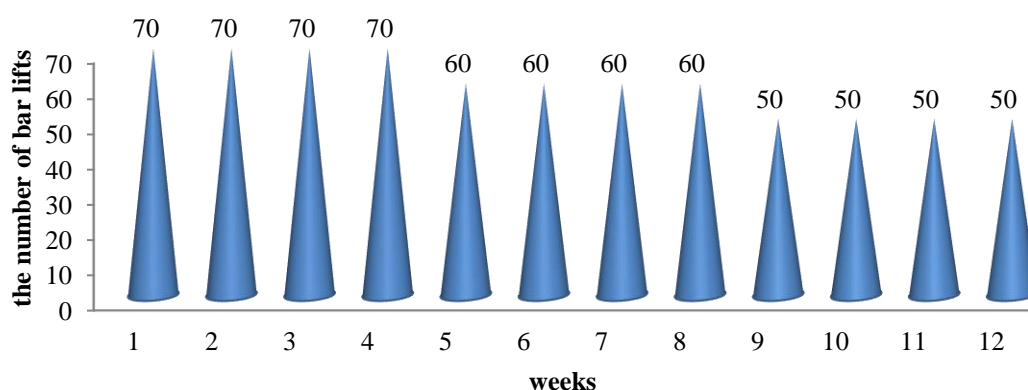


Figure 3. Twelve weeks of training and weightlifting for weightlifters in the developmental phase of the sport.

In the barbell lifting exercises (Figure 3) over a twelve-week period from 1 to 4 weeks, from 5 to 8 weeks, and

From 9 weeks to 12 weeks, the loading capacity will vary. This is because as the race approaches, the intensity of the exercise increases and the number of lifts decreases.

During the competition, at the beginning of the 4 weeks before the competition, the weightlifters will reduce the number of barbell lifts to 10.

As mentioned earlier, experts recommend distributing the load with special care during the race.

As shown in Figure 3, during the last 4 weeks of training, athletes slightly reduce the load capacity. However, it should be noted that the total workload over the 12-week period was appropriately distributed over the weeks.

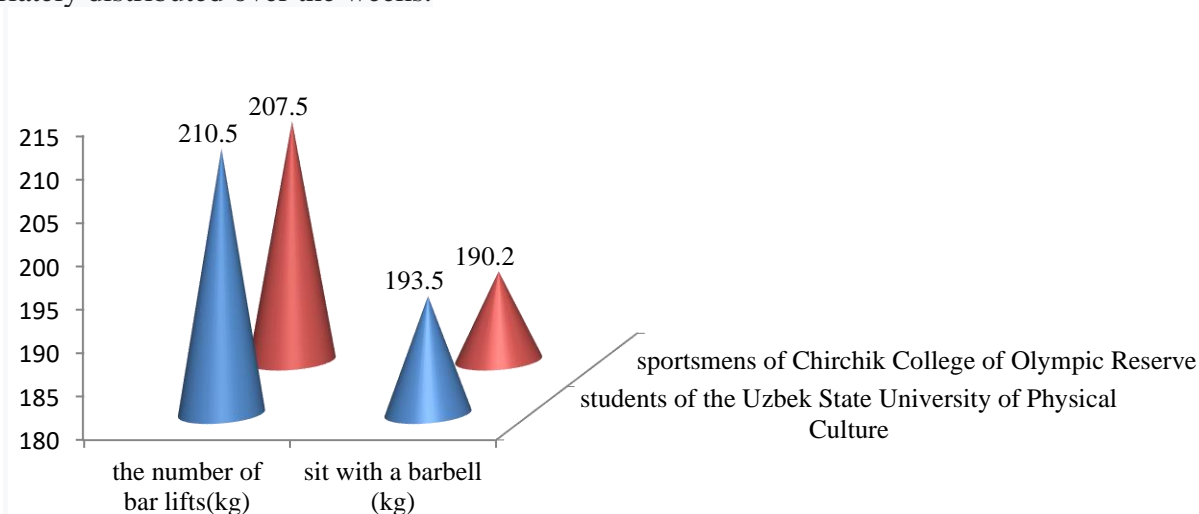


Figure 4. Experimental and control group participants' mean post-experimental lumbar and leg strength (n = 4)

Note: Pulling the barbell to the waist, sitting with the barbell

The 4 weightlifters in the experimental group weighed 210.5 kg in the barbell and 193.5 kg in the bench press.

The 4 weightlifters in the control group weighed 207.5 kg in the barbell and 190.2 kg in the barbell.

The difference between the results of the experimental and control group weightlifters in control exercises after the study.

In the weightlifting exercise, the average result of the experimental group was 210.5 kg, the average result of the control group was 207.5 kg, the difference was 3 kg.

The average result of the experimental group athletes in the barbell sitting exercise was 193.5 kg, the average result of the control group athletes was 190.2 kg, the difference was 3.3 kg.

The postoperative lumbar and leg muscle strength status of the experimental and control group weightlifters differed sharply in all control exercises compared to the control group weightlifters in the experimental group weightlifters.

CONCLUSION

What sets our program apart from other programs is that, firstly, developmental and supportive exercises were used together for the tools that were found to be most effective for general physical training, and secondly, special physical training tools were shortened and combined with restorative tools. This, in turn, has given good results to the transition of weightlifters to the stage of improving their technical skills, technically, tactically, physically and psychologically, without injuries and with a large reserve of physical fitness.

On the basis of the selected tools, a 2-month training program for weightlifters and a 1-month training program for the competition period was developed and research was conducted on this program.

During the preparation period, the largest volume (71-80%) of the push-ups and squats was performed in the 3rd intensity zone. At the same time, the exercise load was 45.4%. In special-development exercises (lifting the barbell to the waist and sitting) was set at 18.0% of the total volume, and in the exercises that improve the quality of rapid strength was 36.6%.

These figures confirm that the leg and lumbar muscle strength tools selected for weightlifters in the developmental phase of the sport and the load size and intensity selected for training are effectively affected.

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