THE EFFECTIVENESS OF DEVELOPING STRENGTH AND PHYSICAL QUALITY OF HIGH SCHOOL STUDENTS THROUGH GYMNASTIC TRAINING

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Annotation
The article describes the results of the scientific research conducted on the effectiveness of the development of the physical quality of strength of high school students through gymnastics classes.

Keywords: physical qualities, strength, strength training, speed-power, muscle strength, push-ups, sit-ups, dumbbells, expanders, packing stones, barbell, trays, sandbags.

Today, gymnastics is one of the most popular sports in the world, both geographically and numerically. Various gymnastic movements for men and women, boys and girls, with their elegant and attractive behavior, technical methods and tactical combinations, attract the attention of millions of people of different ages, and the number of participants is increasing more and more. is going However, regular and serious participation in this type of sport from athletes is related to the performance of extremely large and intense loads, and requires athletes to have highly developed physical and psycho-functional capabilities. Nowadays, the sport of gymnastics is developing rapidly in many countries of the world.

At present, taking into account the need to improve the methodology of shaping the physical performance of young gymnasts and improving it, there is a need to conduct comprehensive scientific research in this direction.

Today, in our country, gymnastics is a sport, especially for the development of children's sports and popularization is considered as one of the priority directions. "The young generation to increase and realize creative and intellectual potential among children and young people it is important to form a healthy lifestyle, to involve them widely in physical education and sports".1

In recent years, physical education, mass and professional sports is one of the priority tasks of our state policy. Although gymnastics is one of the most popular sports in our country, achieving high results of our athletes in international sports competitions shows that there are enough mistakes and shortcomings in the system of training athletes in gymnastics, because if we do not develop special work skills in the training process of young gymnasts, we are put we can't reach the goal. For this, it is important to develop the physical qualities of students in

schools, especially the physical qualities of strength. There is a great opportunity to develop the physical quality of high school students, because at this age it is important to have a high interest of students in the sport of gymnastics and developing the physical quality of strength.

In order to qualitatively increase the level of strength training of students in planning the process of strength training, it is necessary to carry out strength exercises regularly, at least three times a week, using planned, optional classes, and independent training. the rule was justified. The method of planning strength training in physical education classes is recommended.

When making a plan, the teacher must define certain tasks that must be solved in order to improve the students' strength qualities during the training.

1. Increase the strength of arms and shoulders, legs and back;
2. Exercises of the "Alpomish" and "Barchinoy" complex: pull up 3-4 times individually; To achieve an increase in the results of performing 2-3 times lifting rotation exercises;
3. Using speed-strength exercises for leg muscles, to increase the standing long jump results of students by 10-15 cm.

Based on the assigned tasks, it is necessary to choose exercises that allow developing the necessary strength qualities in the limited class time. It is recommended to choose the types of exercises that are not complicated and affect large muscle groups or several groups. Many exercises consist of well-known movements to students and should be performed only with loads.

Exercises are combined into sets, each of which is performed in one lesson. It is advisable to make 3 different sets of 5-6 exercises each for three lessons a week. Exercise sets should be partially changed every month.

Pupils' strength training can be carried out with the help of various equipment: dumbbells, expanders, packing stones, barbell and its bars, sandbags, as well as heavy objects that replace them. In addition, it is necessary to perform exercises with your own body weight in each lesson. Exercises with dumbbells develop small muscle groups and individual muscles very well. Exercises that engage larger muscle groups can be effectively performed with barbells and dumbbells. Exercises that activate almost all muscle groups: the method of lifting and performing barbells on the chest and arms is the most comfortable sports equipment in terms of shape and weight.

In classes, exercises with loads should be performed in a repetitive manner. The number of repetitions recommended for exercises performed with 75-80% weight is 4-5 times, and 7-10 times for exercises performed with 50-55% weight.

In exercises performed with loads for maximum results, students should test themselves once a month, after completing the monthly training program, which allows the teacher to determine changes in the level of strength training.

Newly obtained results are calculated as maximum, and exercise weights are determined on this basis for further training. For the maximum result, attempts can be organized at a specially allocated time in the course of the lesson or outside of the lesson.

Strength exercises performed with your own body weight can be performed both by the repetition method and by the "possible level" method.

In the 1st half of the year when strength training is started, repetitions "at the level of possibility" are at most once every two weeks. It is advisable to make these attempts in the last week of the monthly training cycle, as well as when introducing a new exercise in order to understand the individual maximum levels of students.

Starting from the second half of the year, as the level of engagement increases, students will be able to make an attempt at the "possible level" in an exercise once in each lesson. In the next chapter, the issues of load planning and distribution in military training will be considered in concrete examples. Annual program of military training. The program of strength training of students in physical education classes for the academic year consists of two half-year cycles, the first of which is held from October to December, and the second from mid-February to May.

The program includes the most effective exercises with barbells, as well as exercises with own body weight, which are considered a test and are widely used in the physical training of military personnel.

According to data, the results of control exercises decrease slightly before the beginning of training in the 2nd half of the strength training cycle. This is explained by the fact that there was a 1.5-month break between regular exercise and strength training due to vacations and skiing training.

It is worth noting that students who have passed strength training according to this program can show much higher results in passing the standards of "Alpomish" and "Barchinoy" complexes than those who have not passed it.

In terms of strength training, it is planned to periodically organize attempts of students to perform exercises with their own body weight as many times as possible. If the maximum test is indicated in the column according to the exercise and the lesson, then the students should repeat the exercise as much as possible in one attempt, i.e. perform it "at the level of possibility".

It is not difficult for students to determine the weight of the barbell or the number of repetitions in strength training by mathematical calculation in connection with the relative intensity given in the lesson.

Because students reach different maximums in bodyweight exercises, they show different results for repetitions of the exercises, despite being given the same relative intensity. Thus, the size of the completed download is different for them.

In order to calculate the number of repetitions performed by students during a lesson, week, month, half-year, academic year, as well as the load, it is necessary to indicate the average number of repetitions for each lesson in the training group's strength training plan. The teacher can determine it by conducting a preliminary test of a certain group of students and calculating the average values of the maximum results. Using them, he includes in the plan the exact number of repetitions intended for the average student of the group, depending on the planned magnitudes of the relative intensity.

Due to the fact that the amount of loading is limited by the time allocated for strength exercises, in the second half of the year, the training effect is mainly achieved by increasing the intensity. By this time, sufficiently trained students are engaged in heavy barbells and perform a large number of repetitions with their own body weight in each attempt.

Efforts for maximum (or "maximum possible") results are now much more planned. In this way, the average relative intensity of exercises performed with a barbell increases by 10.4%, and by 5.9% in exercises performed with own body weight. Pupils now perform 27 more attempts at the maximum possible level of repetitions. Both half-year cycles are struck in a similar way, each of them consists of 3 four-week cycles.

The exception is the 1-month cycle, in which the student increases the weekly volume of the load. The weekly cycle consisted of three classes, in which sets of 6 strength exercises, each lasting 12 minutes, were performed. 2 minutes are allotted for one exercise.

According to the results of the tests, the following system of training can be recommended:

1. Determination of the time spent on the exercise, load size and speed according to the level of strength training of the students;
2. Determining the planned load of exercises for the next training depending on the level of the students' maximum results;
3. Divide the students, for example, into 6 equal groups according to their strength, and each of them will do the exercises at their own station.

Before starting the lesson, students should be introduced to the training plan and the order of passing the stations.

We will consider how to organize a strength training class using the rotational training method using the example of the 7th lesson of the annual program. We recommended that students perform 6 exercises in accordance with 6 stations:

1. Squeezing up; 2. Sitting; 3. Lifting the barbell to the chest; 4. To be weighed alone; 5. Leaning on the hands and bending them; 6. Raising the body from the lying position. Each exercise is performed in 2 attempts with a planned load.

12-15 minutes, approximately 2 minutes for each station. Groups of students, each of them will consist of approximately 4 people, all groups will start doing exercises at the same time. At the 1st, 2nd, and 3rd stations, students alternately approach the barbell and perform 2 attempts. The time allotted for lifting the barbell is 15-20 seconds, and 100 seconds are given for rest.

In stations 4, 5, 6, students can do the exercises at the same time, if possible. It depends on the size of the area allocated for the station. Each student makes 2 attempts in two minutes. After completing the exercise at their station, the groups move to the next station. At the teacher's command, students begin to measure the pulse rate and write the indicators on a sheet, after the same command, they complete the procedure. It is also possible to measure pulse directly in the children's dressing room.

When performing strength exercises in a circular way, if the pulse is equal to 70-80% of the result of subtracting the age of the person from 220, it is considered normal. regularly measuring the students' pulse during strength training allows the teacher to change the load based on the functional state of the body of the students and thus make timely corrections to the training plan he has developed.

Based on the results of the research, it became known that the development of the physical quality of strength is directly related to the qualitative acquisition of the studied movement skills and competencies.

In order to develop the quality of strength, it is necessary to use more practical exercises in the teaching of materials included in the physical education program of secondary schools. It is appropriate to teach students ways of self-control while performing strength quality development exercises. 6. In terms of strength training, from time to time students will try to perform exercises with their own body weight as many times as possible, and students will repeat the exercise as many times as possible in one attempt, that is, the possibility level" should be performed.

LITERATURE

1. Патиддинов, К. Д. (2022). Сравнительная динамика показателей физической подготовленности детей младшего школьного возраста с нормативами тестов

здоровья “Алпомиш”. In Актуальные проблемы науки: взгляд студентов (pp. 297-299).

2. Agzamovich, M. A. (2021). Monitoring of the Motor Readiness of the Students of the National Guard Courses. European Journal of Research Development and Sustainability, 2(12), 108-110.
3. Ogli, Z. U. M., & Ogli, P. K. D. (2020). УМУМИЙ ЎРТА ТАЪЛИМ МАКТАБИ 7–8 СИНФ ЎҚУВЧИЛАРИНИНГ ЖИСМОНИЙ ТАЙЁРГАРЛИГИНИ ЖИСМОНИЙ РИВОЖЛАНИШИГА БОҒЛИҚЛИГИ. Academic research in educational sciences, (4), 693-697.
4. Yuldashev, M., & Yakubova, G. (2022, October). ADAPTIV JISMONIY TARBIYADA QAYTA TIKLANISH (REABILITATSIYA). In E Conference Zone (pp. 14-17).
5. Хакимов, С., Мухторов, А., & Рахмонова, М. (2022). ЁШ ВОЛЕЙБОЛЧИЛАРНИНГ ЖИСМОНИЙ РИВОЖЛАНИШИ ДАРАЖАСИНИ ХИСОБГА ОЛГАН ҲОЛДА ЖИСМОНИЙ СИФАТЛАРНИ ТАРБИЯЛАШ УСУЛЛАРИ. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(5), 123-128.
6. Khakimov, S. T. (2022). INCREASE IN THE LEVEL OF PHYSICAL TEXT CHAMPIONSHIP, DIFFERENTIATED BY YOUNG VOLLEYBALLS ACCORDING TO THE SPECIALTY OF THE GAME. Academic research in educational sciences, 3(3), 549-556.
7. Agzamovich, M. A. (2021). Monitoring of the Motor Readiness of the Students of the National Guard Courses. European Journal of Research Development and Sustainability, 2(12), 108-110.
8. Mamirjan, Y. (2022). DEVELOPMENT OF VALELOGIC PHYSICAL CULTURE OF FUTURE TEACHERS OF PHYSICAL CULTURE. Spectrum Journal of Innovation, Reforms and Development, 8, 57-62.
9. Haydaraliev, X., & Isakov, D. (2022). Methods of Controlling the Physical Loads of Players. Texas Journal of Multidisciplinary Studies, 8, 133-135.
10. Haydaraliev, X., & Malikov, I. (2022, June). LOADING AND ITS NORM IN PHYSICAL EDUCATION LESSONS. In E Conference Zone (pp. 60-63).
11. Rasul, H., & Zulfiyakhon, M. (2022). FEATURES AND IMPORTANCE OF ACROBATIC EXERCISES. Spectrum Journal of Innovation, Reforms and Development, 8, 31-39.
12. Haidaraliev, H., & Nizamova, S. (2022). AGE-RELATED FEATURES OF MOTOR QUALITIES IN YOUNGER SCHOOLCHILDREN. Academicia Globe: Inderscience Research, 3(05), 94-100.

13. Хайдаралиев, Х. Х. (2022). ТЕХНОЛОГИЯ КОМПЕТЕНТНОСТНОГО ПОДХОДА ДЛЯ СОВЕРШЕНСТВОВАНИЯ АНТИКОРРУПЦИОННОГО МЫШЛЕНИЯ СТУДЕНТОВ. World scientific research journal, 2(2), 202-210.
14. Хакимов, С., Мухторов, А., & Рахмонова, М. (2022). ЁШ ВОЛЕЙБОЛЧИЛАРНИНГ ЖИСМОНИЙ РИВОЖЛАНИШИ ДАРАЖАСИНИ ХИСОБГА ОЛГАН ҲОЛДА ЖИСМОНИЙ СИФАТЛАРНИ ТАРБИЯЛАШ УСУЛЛАРИ. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(5), 123-128.
15. Khakimov, S. T. (2022). INCREASE IN THE LEVEL OF PHYSICAL TEXT CHAMPIONSHIP, DIFFERENTIATED BY YOUNG VOLLEYBALLS ACCORDING TO THE SPECIALTY OF THE GAME. Academic research in educational sciences, 3(3), 549-556.
16. Gennadyevna, K. G. (2022). LONG JUMP FROM A PLACE. Galaxy International Interdisciplinary Research Journal, 10(3), 521-529.
17. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(9), 32-37.
18. Agzamovich, M. A. (2021). Monitoring of the Motor Readiness of the Students of the National Guard Courses. European Journal of Research Development and Sustainability, 2(12), 108-110.
19. Temur, E. DEVELOP THE QUALITIES OF STRENGTH AND AGILITY IN YOUNG PLAYERS.
20. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(9), 32-37.
21. Agzamovich, M. A. (2021). Monitoring of the Motor Readiness of the Students of the National Guard Courses. European Journal of Research Development and Sustainability, 2(12), 108-110.
22. Gennadyevna, K. G. (2022). HISTORICAL SKETCH OF THE LONG JUMP. Galaxy International Interdisciplinary Research Journal, 10(3), 530-534.
23. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(9), 32-37.
24. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(9), 32-37.

25. Gennadevna, K. G. (2021). Athletics in the System of Physical Education of Student Youth. In Interdisciplinary Conference of Young Scholars in Social Sciences (pp. 143-145).
26. Gennadievna, K. G., & Gilfanovna, K. S. (2022). Injury prevention in athletics. Eurasian Medical Research Periodical, 12, 56-62.
27. Temur, E. DEVELOP THE QUALITIES OF STRENGTH AND AGILITY IN YOUNG PLAYERS.
28. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(9), 32-37.
29. Хакимов, С., Мухторов, А., & Рахмонова, М. (2022). ЁШ ВОЛЕЙБОЛЧИЛАРНИНГ ЖИСМОНИЙ РИВОЖЛАНИШИ ДАРАЖАСИНИ ХИСОБГА ОЛГАН ҲОЛДА ЖИСМОНИЙ СИФАТЛАРНИ ТАРБИЯЛАШ УСУЛЛАРИ. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(5), 123-128.
30. Agzamovich, M. A. (2021). Monitoring of the Motor Readiness of the Students of the National Guard Courses. European Journal of Research Development and Sustainability, 2(12), 108-110.
31. Khakimov, S. T. (2022). INCREASE IN THE LEVEL OF PHYSICAL TEXT CHAMPIONSHIP, DIFFERENTIATED BY YOUNG VOLLEYBALLS ACCORDING TO THE SPECIALTY OF THE GAME. Academic research in educational sciences, 3(3), 549-556.
32. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(9), 32-37.
33. Shohista, Q., & Xokimjonovich, A. X. (2022). WAYS OF USING MODERN INFORMATION TECHNOLOGY OPPORTUNITIES IN TEACHING SPORT PSYCHOLOGY. Uzbek Scholar Journal, 8, 85-89.
34. Khairullo, A., & Mohinur, R. (2022). Analysis of Physical Development Indicators. Eurasian Research Bulletin, 13, 8-14.
35. Abdurakhmonov, X., & Rakhmonova, M. (2022, May). PHYSICAL INDICATORS OF SCHOOLCHILDREN. In E Conference Zone (pp. 39-43).
36. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(9), 32-37.
37. Хакимов, С., Мухторов, А., & Рахмонова, М. (2022). ЁШ ВОЛЕЙБОЛЧИЛАРНИНГ ЖИСМОНИЙ РИВОЖЛАНИШИ ДАРАЖАСИНИ ХИСОБГА ОЛГАН ҲОЛДА

ЖИСМОНИЙ СИФАТЛАРНИ ТАРБИЯЛАШ УСУЛЛАРИ. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(5), 123-128.

38. Khakimov, S. T. (2022). INCREASE IN THE LEVEL OF PHYSICAL TEXT CHAMPIONSHIP, DIFFERENTIATED BY YOUNG VOLLEYBALLS ACCORDING TO THE SPECIALTY OF THE GAME. Academic research in educational sciences, 3(3), 549-556.
39. Хакимов, С., Мухторов, А., & Рахмонова, М. (2022). ЁШ ВОЛЕЙБОЛЧИЛАРНИНГ ЖИСМОНИЙ РИВОЖЛАНИШИ ДАРАЖАСИНИ ХИСОБГА ОЛГАН ҲОЛДА ЖИСМОНИЙ СИФАТЛАРНИ ТАРБИЯЛАШ УСУЛЛАРИ. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(5), 123-128.
40. Абдурахмонов, Х. (2022). УМУМТАЪЛИМ МАКТАБЛАРИДА ЕНГИЛ АТЛЕТИКАНИ ЎҚИТИШ МЕТОДИКАСИНИ ТАКОМИЛЛАШТИРИШ. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(9), 32-37.
41. Khairullo, A., & Mohinur, R. (2022). Analysis of Physical Development Indicators. Eurasian Research Bulletin, 13, 8-14.
42. Shohista, Q., & Xokimjonovich, A. X. (2022). WAYS OF USING MODERN INFORMATION TECHNOLOGY OPPORTUNITIES IN TEACHING SPORT PSYCHOLOGY. Uzbek Scholar Journal, 8, 85-89.
43. Khairullo, A., & Mohinur, R. (2022). Analysis of Physical Development Indicators. Eurasian Research Bulletin, 13, 8-14.
44. Хакимов, С., Мухторов, А., & Рахмонова, М. (2022). ЁШ ВОЛЕЙБОЛЧИЛАРНИНГ ЖИСМОНИЙ РИВОЖЛАНИШИ ДАРАЖАСИНИ ХИСОБГА ОЛГАН ҲОЛДА ЖИСМОНИЙ СИФАТЛАРНИ ТАРБИЯЛАШ УСУЛЛАРИ. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(5), 123-128.