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Dynamics of endurance indicators in young middle-distance runners

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Abstract
Aim: Teaching 10 ages children to run medium distances, improving general physical fitness, improving the body in all aspects, and mastering running exercise techniques while increasing the level of special physical fitness.
Methods and Results: The results of the 10 ages children running 600 meters in the first year of the primary training group were 2: 06.0 ± 0.21 in the experimental group and 2: 08.0 ± 0.30 in the control group. The statistical difference between them did not differ on the Student- t criterion t = 0.44.
Conclusion: The results of the research showed that high -level performance did not adversely affect the development of speed (results in running 60m were significantly improved). The children in the experimental group met the criteria for transition to the next age group and showed the III, II junior category.

Keywords: young runners, middle-distance runners, primary preparation, physical preparation, physical developing, loading.

Introduction

Today, physical culture and sports are becoming an integral part of the lives of young people in our country.

The Decree of the President of the Republic of Uzbekistan "On the establishment of the Fund for the Development of Children's Sports of Uzbekistan" states: "Development of modern forms and methods of physical and spiritual education of children and assistance in their implementation."

To inform young athletes about the stages of perennial sports in the selection of sports and to give them a load, to acquaint children with the principles of sports, taking into account their age characteristics. The solution to the above-recognized problem allows for improved results in a variety of sports.

Based on this, we can say that the chosen topic of the research work is one of the current issues.

Methods

The results of the 10 ages children running 600 meters, admitted to the first year of the primary training group, were 2: 06.0 ± 0.21 in the experimental group and 2: 08.0 ± 0.30 in the control group. The statistical difference between them did not differ on the Student- t criterion t = 0.44.

At the age of 10, running for only 6 minutes was t = 3.11 by the Student Criterion. For all other tests, no statistical differences were found between the experimental and control groups. Therefore, starting from the second academic year, we increased the total volume of running loads in the experimental group to 456 km. Of this, the volume of running in aerobic mode (Cardiovascular contraction 150 beats / min) - 411 km; mixed running speed (Cardiovascular contraction 156-175 beats / min) - 45 km; General Physical Training was 96 hours.

In the third academic year, the total volume of running loads was 490 km. Of this, the volume of running in aerobic mode (Cardiovascular contraction 150 beats / min) - 388 km; mixed mode running volume (Cardiovascular contraction 150-175 beats / min) - 71 km; running volume in anaerobic mode (Cardiovascular contraction 175 beats / min) -31 km; Total Physical Training was 100 hours. Under the influence of these loads, in the 600-meter run at 12 years of age, those in the experimental group improved their results by 0.54 seconds, while those in the control group also performed better by 0.8 seconds. The difference between the experimental and control groups was t = 2.4 according to the Student- t criterion. This showed that the results shown by the children in the experimental group were different from those in the control group (Figure 1).

In 11 ages children running for 6 minutes, those in the experimental group showed a statistical difference t = 8.0 between the experimental and control groups in terms of mathematical statistics.

In the 6-minute run, the children in the 12 ages experimental group showed a result of 1260 m, while those in the control group achieved a result of 1140 m. Athletes in the experimental group ran 120 m more than those in the control group. The difference between them was t = 9.2 on the Student -t criterion (Figure 2).

At age 10, there was no statistical difference t = 0.70 between the experimental and control groups in the 1000-meter run.

In the 1,000-meter run, the 11ages in the experimental group showed an average of 3: 48.0 ± 0.35 seconds, while those in the control group achieved a result of 5: 38.0 ± 0.33 seconds. This indicates that the total run in the experimental group increased with the aerobic load volume. The performance of the children in the experimental group was t = 4.60 on the Student-t criterion compared to the control group.

At the age of 12, those in the experimental and control groups had a score of t = 2.36 on the

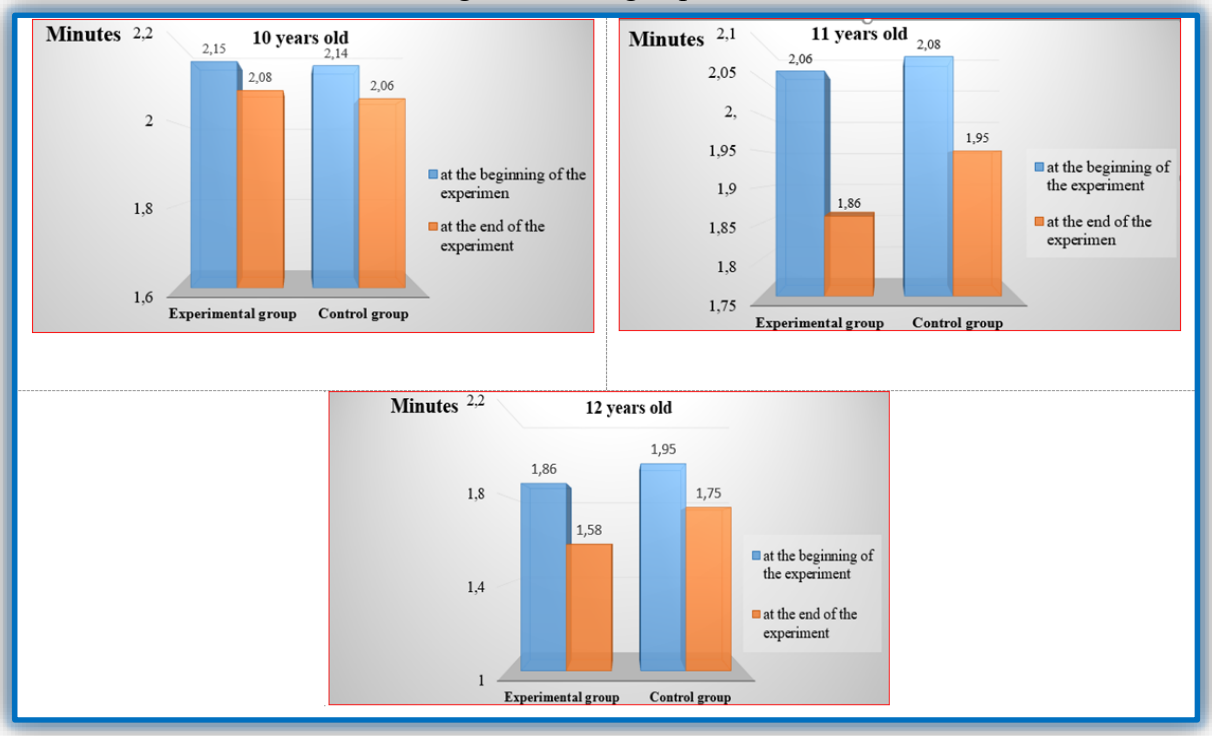


Figure 1. **Dynamics of running performance of children aged 10-12 ages at 600 m**

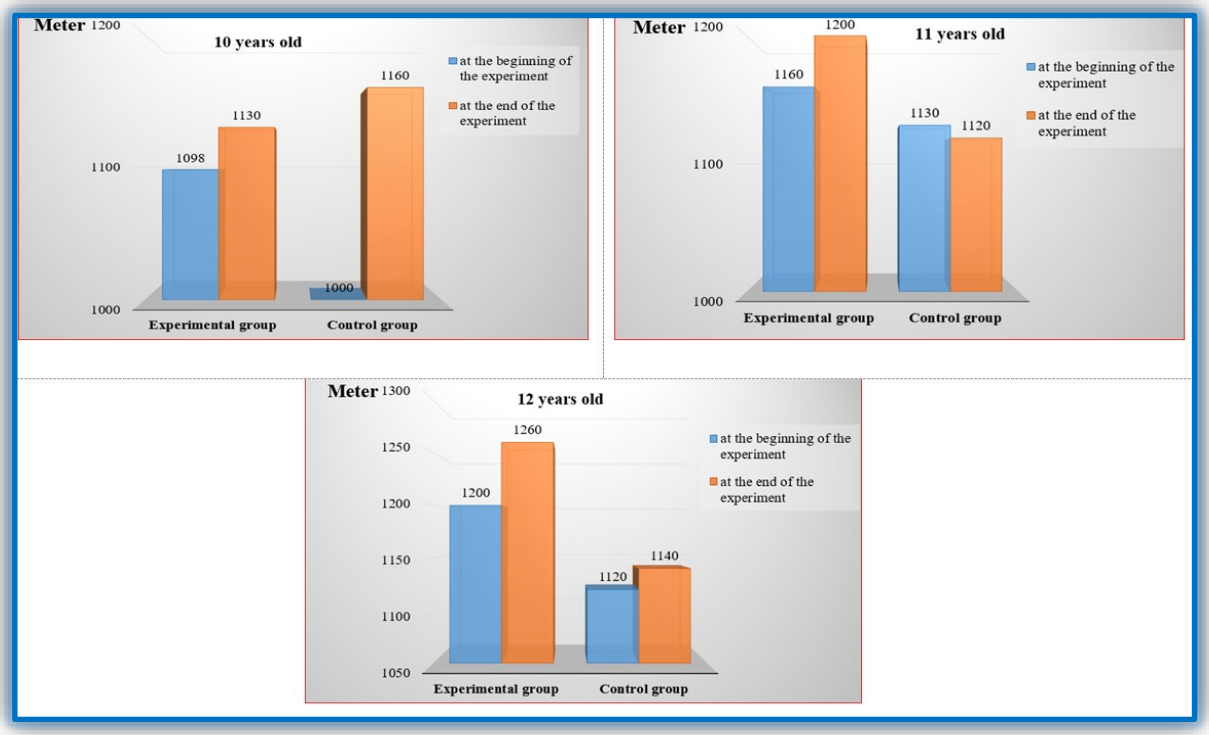


Figure 2. **Dynamics of endurance performance in 6 minutes of running (meters)**

Student-t criterion in the 1000 m run, and the children in the experimental group met the transition criteria to the next age group and showed the III and II junior categories. In addition, 10 of those in the control group met the transition criteria for the next age group (Figure 3).

dren's and Youth Sports School for training with the students of the primary preparatory groups of the Children's and Youth Sports School.

Before the beginning of the experiment, the anthropometric parameters of the athletes of the 10 –12 ages group of initial training were determined,

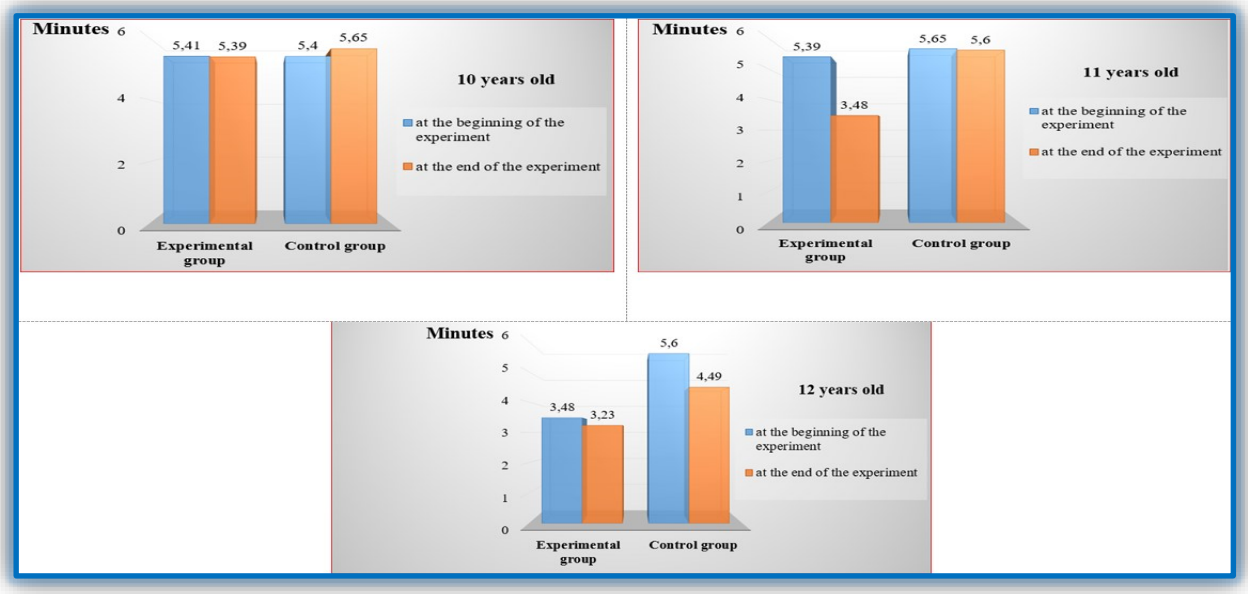


Figure 3. Dynamics of running for 1000 meters (minutes)

It is known that static resistance is determined by the number of semi-sittings. No statistical difference was found between 11-year-old experimental and control group children. At 12 years of age, the statistical difference between the experimental and control groups was t = 2.6 (Figure 4).

which determine their physical development.

In the annual schedule of training hours, the total number of hours is 312 hours, of which 32% are allocated for general physical training, 16% for special physical training, 48% for studying and improving the technique of athletics (running at

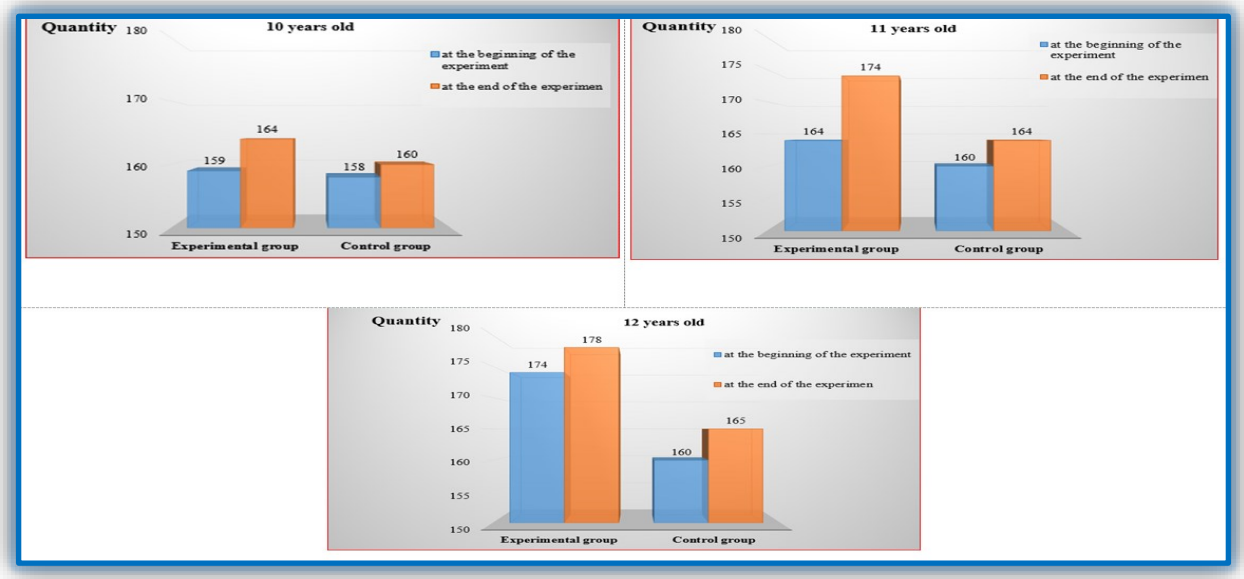


Figure 4. Static resistance (semi-sitting) indicators (number)

Results and discussion

According to the track and field athletics program of the secondary school, the runners of the first academic year (pupils 10 ages) of the Chil-

medium distances). Trainings with middle distance runners were carried out 3 times a week for 2 hours. Of these, 76 hours were spent in gyms and 224 hours outdoors.

During the three-year experiment, the phys-

ical development of children 10-12 ages old was as follows: body length in the experimental group was 138.7 cm in 10 ages, 148.9 cm in 11ages, the average difference in body length in children 10-11 ages t = 6 ha teng.

The physical fitness of children who entered the group of initial training of 10-12 ages was determined with the help of tests.

Conclusion

The results of the research showed that the performance of exercises at a high level did not have a negative effect on the development of speed (the results in running 60 m were significantly improved). The children of the experimental group met the criteria for moving to the next age group and showed III, II junior category. In addition, 10 people from the control group met the criteria for moving to the next age group. In 11ages children running for 6 minutes, the children of the experimental group showed a statistical difference t = 8.0 between the experimental and control groups in terms of mathematical statistics. In a 6-minute run, the children of the 12-year-old experimental group showed a result of 1260 m, and the children of the control group - 1140 m.

The athletes of the experimental group ran 120 m more than the athletes of the control group. The difference between them was t = 9.2 according to Student's t test. It is known that static resistance is determined by the number of half-seats. No statistical difference was found between the 11-year-old children of the experimental and control groups. At the age of 12, the statistical difference between the experimental and control groups was t = 2.6.

References

Verhoshanskij Yu. (2002) Osnovy special'noj podgotovki sportsmenov [Fundamentals of special training for athletes]. Moscow: FiS. (in Russian)

Volkov L. (2002) Teoriya i metodika detskogo i yunosheskogo sporta [Theory and methodology of children's and youth sports]. Kiev: Olimpijskaya literatura. (in Russian)

Matveev L. (1999) Osnovy obshchej teorii sporta i sistemy podgotovki sportsmenov [Fundamentals of the general theory of sports and the system of training athletes]. Kiev: Olimpijskaya literatura. (in Russian)

Salamov R. (2002) Zhismonij tarbiya nazariyasi va uslubiyati [Theory and methods of physical education]. Tashkent: ITA - PRESS. (in Uzbek)

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