*European Journal of Innovation in Nonformal Education (EJINE)*
***Volume 2 | Issue 4 | ISSN: 2795-8612***

# Efficiency of Using Exercises Used in Leading Countries for Short-Distance Running Youth Rapid Force

***Danieva Yarkin Chorievna***
*Docent, Termez state university*

A B S T R A C T

*This article presents a pedagogical and technological analysis of the training exercises of student athletes running short distances. The article is focused on the coverage of a new technique based on the experience of leading specialists and trainers in training speed-power abilities in young athletes running short distances. Much attention is paid to the special and general developing properties of speed-strength exercises and speed agility.*

A R T I C L E I N F O

*Article history:*
**Received** 19 February 2022
**Received** in revised form
25 March 2022
**Accepted** 30 April 2022

**Keywords:** speed strength, strength dexterity, endurance, physical development, psychological preparation, special and general developmental exercises, running, jumping.

***Hosting by Innovatus Publishing Co. All rights reserved. © 2022***

One of the main reasons for the development and popularity of physical culture and sports in our country is the correct organization of the policy pursued by our President and Government. President Sh. Resolution No. PQ 3031 of June 3, 2017 "On measures for further development of physical culture and mass sports" by Mirziyoyev imposes responsibilities on professionals working in the field. These resolutions set priorities for finding, selecting and directing promising athletes for the multi-year training phases and periods.

During the years of independence of the Republic of Uzbekistan, the skills of our sprinters have grown significantly. G.Khubbieva was one of the winners and prize-winners of the XV and XVI Asian Games (Doha 2006, Gunchzhou 2010) in the 100-200 m. L. Perepelova set a record in the 100 m - 11.04 sec. (2000), in the men's 200 m race O. Juravlev in 2008 won 20.74 sec. set a record with the result. These results testify to the high skills of our athletes.

Running for short distances is an ancient sport, and sprinting, that is, running for short distances, places high demands on the physical and mental qualities of the athlete. All the record results of world sprinters are due to modern scientific approaches specific to the training of short-distance runners. This requires a study of the accumulated world experience on the methodology of training athletes.

In training short-distance runners, coaches have very complex tasks to perform. In an interview with Honored Coach of Uzbekistan EE Kvyatkovskaya, it was noted that many years of sports experience have shown that among the physical qualities it is much more difficult to increase the speed of running in short distances. The range of specific exercises used to increase speed will first lead to a rapid increase in performance in the sport and then stabilize the athlete's speed level.

Advanced experience and research have shown that in order to achieve comprehensive physical development and to prevent instability in the quality of speed, it is necessary to use a comprehensive set of exercises, training methods. In the system of training short-distance runners, it is necessary to pay

attention to the cases of speed-strength and speed-agility exercises, which have special and general developmental features. It is also necessary to perform sports exercises at a complex and simplified level.

It should be considered as a whole system in the system of training fast runners, as it addresses specific tasks, the formation of technical skills and the impact of a wide range of tools, methods and training in the development of movement qualities at each stage of improving sportsmanship. According to the head coach of the national team EE Kvyatkovskaya, these processes are organized in proportion to the specific objectives, which are expressed in terms of promising results and are carried out in accordance with the training program. It is known that each level of sportsmanship has its own growth (development) limit.

The research was conducted on young athletes aged 15-16 years, who are engaged in BOSM in Termez, Surkhandarya region. These athletes have been involved in in-depth sports training from the age of 12-13 to the age of 15-16. The coach N.Yu.Kholodova conducted experiments on young athletes who ran short distances in the group. The trainings in this specialized group focused on the identification and development of speed-strength qualities in running. On this road, the processes of running with the highest speed and force are organized in the main (standard) treadmills (stadiums) and non-traditional (natural) conditions. -40) cases such as down-running were used. Here are some examples:

A) Exercises to control your own weight (weight): slow and fast jumping and running on one and two legs while standing and running. These activities were combined with up and down as well as long jump exercises;

B) Perform with additional means, such as pulling back in running and jumping;

C) Use of external influences: running up and down in the mountains, running in the backstroke in the ground types (sand, wood chips-sawdust, against the wind);

D) Occupying the external influences with the highest movements, running in pairs in different weights (pull-otyagoshcheniya) (cuffs weighing 0.5 kg, pull-back belt, stuffed ball - 2-5 kg, weight 16-32 kg - stones and dumbbells);

E) Running on comfortable paths (3-40 slopes).

It has been found that such types of exercises and methods of application have a strong impact on the training and development of high-speed qualities of young athletes running short distances.

The exercises and techniques used in the research were performed alternately in light and complex natural conditions. Exercises that were difficult to perform in light conditions (slope, descent) were also used. In turn, light exercises were used in difficult conditions (running up the mountain). The implementation of these tools and methods has been tested in practice even in normal running areas. The above steps were also used in the training of runners. These processes required more dynamic acceleration of the locomotor organs (apparatus) in them. These include strength exercises such as sitting on your feet, half-sitting, and sitting with the barbell on your shoulder. Exercises in the form of "jumping" (sprigivanie-vyprygivanie - 40-50 cm), which seem to be popular and have the advantage (usefulness), play an important role in preparing for a high jump by rapid pushing (ottalkivanie). These movements were also used to perform in a difficult position (backward pull-ups, load-bearing, belt-tying, etc.) even during a very fast run.

In the practical measures aimed at training the quality of operational strength, barrier runs were tested in 5-6 places. These methods are the basis for the development of the muscle group system of runners, i.e. lead to high results.

In these movements, the soles of the feet in fast running are enhanced by the bending and stretching of the knees, as well as the stretching (bending) of the thighs.

It should be noted that the above-mentioned practical activities were performed in the main part of the training. Here are some examples of special exercises for runners used in group experiments:

1. Running with the knees raised. After the supporting leg is depressed, the number of the swinging leg rises to a horizontal position and above, the shoulders are relaxed, the arms are bent at the elbows, and as in running, the base leg and body form a line. This exercise is performed on the move (running) moderately and fast (tempo), on the treadmill of the stadium, as well as on the stairs. This exercise can

also be done in sprinting and at a varied tempo, slowly moving from knee-high running to normal running. The position of the arms can be different: the arms can be placed below or behind the waist in a relaxed position. This exercise can also be done by jumping on a rope. When performing the exercise, it is necessary to pay attention to the fact that the heel is flattened from the ground to the end of the support leg. The knees should move to the sides, the body should not bend backwards, and the shoulders should not be raised.

2. Running with legs swaying back. The legs are alternately bent at the knee joint and thrown back in frequent motion, with the pelvis slightly forward, the foot free, and the foot placed close to the projection of the total central weight (U.O.M.) of the body. The arms are bent at the elbows and move as if running.
3. Jumping from foot to foot forward (deer-like). This exercise is performed in the same way as when running with the knees high, after the depressing leg is depressed, the body bends slightly forward, the swinging leg is bent forward, and at this point the depressing leg straightens and the flight phase occurs. When performing the exercise, attention should be paid to depression and hand movements. Because the active movement of the hands helps to perform the exercise correctly.
4. Jumping from foot to foot. In doing so, the arms are actively assisted in movement as in running, with the legs alternately bending at the knee joint and at the tip of the foot and jumping upwards at the expense of the corrective force as a result of depressing. The exercise is performed at the expense of the angle and speed of depressing, moving forward and upward at different speeds. In this case, special attention should be paid to the performance of the exercise and complete bending of the depressed leg.
5. Move as if running, keeping your knees high while standing. Care should be taken to keep the body straight while performing the exercise.
6. Step-by-step running, that is, running in small steps. The foot in front runs alternately at the tip of the foot, with the foot in the base position fully straightened, forming a line with the body. The shoulder girdle is loosened. The arms are lowered below. Exercise on the stadium path, on the stairs, from top to bottom, at a moderate and fast pace. The exercise can be switched from quail running at a variable tempo in different parts of the exercise to a slow to normal run or to a fast run. In doing so, the feet are placed forward along the length of the sole of the foot and gradually the step length is increased. In this case, it is necessary to pay attention to the complete straightening of the base leg when writing on the knee joint. However, the pelvis should not be sent back. Compensation is placed in parallel.
7. Moving the arms as in running From the initial position, the legs are shoulder-width apart (or the left right leg is in front), the body is slightly bent forward, the arms are bent at the elbow joint. Performing the movement with the hands at right angles is done with repetitions (series) of 10-20 seconds at a moderate and fast tempo. It is important to note that the arms move in a wide amplitude and are relaxed at the shoulder joint.
8. Running at speed with acceleration from a low or high start.
9. Running with knees raised high while standing leaning against a wall or a Swedish gymnastics wall. The torso should be at an angle of 45-500 feet. The exercise should be performed at a moderate to fast pace for 10-20 seconds of repetition (series), paying attention to the correction of the foot in the base position.
10. Performing the same movements as running while lying down and leaning on the shovels. Care should be taken to ensure that the feet move freely and widely.
11. Performing movements similar to running while lying on your back, leg movements are performed at a moderate and fast pace in 10-30 seconds repetitions (series). Care should be taken to ensure that the feet move freely and widely.

The growth of physical development and the level of development of agility were studied in students - athletes, short-distance runners, engaged in athletics at the sports complex "Surkhan".

Table 1. Indicators of physical development and movement training of athletes running short distances

| T/c | indicators | $X \pm m$ | | P |
|---|---|---|---|---|
| | | 2019 year | 2020 year | |
| 1 | Height | 175 | 177 | P>0,05 |
| 2 | Weight | 65,5±2,2 | 66,5±1,6 | P>0,05 |
| 3 | Chest circumference | 92,0±1,5 | 93,5±0,9 | P>0,05 |
| 4 | Running upright 30 m (s) | 3,88±0,03 | 3,69±0,03 | P<0,05 |
| 5 | Tin running 5x10m (s) | 15,6±0 | 14,4±0,2 | P<0,01 |
| 6 | Jumping | 2.36,0±3,7 | 2.40,5±1,9 | P>0,05 |
| 7 | Running to 30 meters from start | 4,62±1,2 | 4,36±1,4 | P>0,05 |
| 8 | Running to 1000 meters in a minute | 3.07,3±0,07 | 2.58,5±0,09 | P>0,05 |

The study made it possible to obtain data based on physical development and physical qualities control tests. They were calculated according to the average performance of the youth. On this basis, it can be said that there have been successful changes in the group, i.e., basic movement qualities have developed. It is known that the following indicators were studied: participants' body length, ie growth - body weight (anthropometric) from September to March, the average growth was 2 cm, chest circumference increased from 92.05 cm to 93.5 cm. It was found that the actual difference (R <0.05) was not significant. This evidence is a feature of the physical development of young people.

When physical fitness indicators are compared in the group, it can be observed that the rate of rapid development in young people is high. These results are noticeable when running a distance of 30 m in an upright position. The results in the group increased from 3.88 to 3.69 seconds. Decreased (increased speed) from 15.6 to 14.4 seconds when running with a bag. Young people also have a rapidly developing ability of agility. The result of the long jump from the ground improved by 4 cm. Endurance quality was tested when running 1000 m, taking into account the formation of physical qualities. The study participants ran the 1,000 m distance for the first time in 3.07.3 times, while at the end of the study they showed a result of 2.58.6 times. In this case, the growth varies slightly.

Thus, the results obtained in practical experiments indicate the advantage of a complex exercise aimed at developing speed-strength qualities. This, in turn, proves that it can be used in training sessions to train short-distance runners. Data on each student-athlete participating in the study group were presented in tabular results at the beginning of the experiment (7 months ago) and at the end.

Conclusion: The results of the study show that young athletes-students who run short distances are associated with the development of rapid strength qualities, the gradual development of their physical qualities and a sense of self-confidence through general developmental and special training exercises. We are confident that short-distance runners will be able to achieve good results in the future if they can develop both mental and physical training together.

**Used literature**


1. Resolution of the President of the Republic of Uzbekistan "On measures to further develop physical culture and mass sports" gi-T., June 3, 2017 No PQ 3031.
2. Mirziyoev.Sh.M. Ensuring the rule of law and human interests is a guarantee of the country's development and the well-being of the people. - Tashkent: "Uzbekistan", 2017. - 48 p.
3. MSOlimov, IRSoliev, B.Sh.Haydarov., Improving sports pedagogical skills (Athletics). Tashkent-2017
4. Chorievna D. Y., Or'olovich B. C. OPPORTUNITIES TO USE NATIONAL AND MOVEMENT GAMES IN PHYSICAL EDUCATION AND ATHLETICS // Web of Scientist: International Scientific Research Journal. - 2021. - T. 2. - №. 05. - S. 909-913.

5. Shakirjanova K.T., Tuxtaboev N.T. Basics of techniques, methods of training and exercises in short distances. T., 2012.
6. Chorievna D. Y. et al. CONDITIONS FOR PREPARING FUTURE PHYSICAL EDUCATION TEACHERS FOR PROFESSIONAL ACTIVITIES ON THE BASIS OF SPORTS COACHING // Web of Scientist: International Scientific Research Journal. - 2021. - T. 2. - №. 05. - S. 897-900.
7. Kenjabayev.J.A Linguodidacic features of the development of oral speech competence of students in the field of physical culture education (in the example of sports terms) Conferences Online, 47-48 Humino Congress 2021.08.26
8. Kenjaboev. J. A. "Yazykovoe testirovanie kak sposob kontrolya pri obuchenii angliyskomu yazyku." Vestnik sovremennoy nauki 2-2 (2017): 50-54.
9. Kenjaboev.J.A. New lichnostno-orientirovannыe teknologii obucheniya. Bulletin of modern science, 2017, №. 3-2, pp. 45-47.
10. R.Qudratov. Athletics Tashkent: 2011 - 363.
11. www.tdpu.uz
12. www.pedagog.uz