

# Research on Specialized Practice Method of Teenage Amateur Sprinters

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**ABSTRACT.** *Many of the sensitive development periods of athletes' physical fitness are in the primary and middle school stages, and the current exam-oriented education system limits the time that young children can spend in amateur training at this stage. Therefore, it is necessary to find a method that does not affect the study time of students, but also can improve the training level in the most effective way, so as to train more reserve talents for my country's competitive sports. Through data analysis method, teaching improvement method, sports measurement method, etc., the traditional specialized exercises of young amateur sprinters have been improved and discarded, and specialized exercises closer to the characteristics of new sprint skills have been added, and they have been organically combined in sprinting. During the training, the expected results were received.*

**KEYWORDS:** *Amateur sprinters, Teenages, Practice method*

## 1. Introduction

Sprinting has always been one of the most concerned sports in track and field sports. In recent years, my country's track and field sprint has made great breakthroughs in the international arena. The sprint performance, especially the 100m men's sprint, has continuously made breakthroughs. Sprinting is an exercise where athletes use the fastest speed to complete a prescribed distance. It is a sport that human organs and internal organs complete under conditions of a large amount of hypoxia during exercise. Sprinting is very helpful to improve the physical fitness of the human body. In the past, young sprinters paid more attention to the training of limb strength, and the relative training volume of waist and abdomen muscle groups was obviously insufficient. In recent years, as some advanced foreign sports theory systems have entered my country's sports system, some sports workers have carried out a lot of practical exploration, and the core strength training of young sprinters has gradually received attention and recognition from sports workers. Core strength training is an organic supplement to my country's traditional sprint training model. At present, it is widely used in many sports such as race walking, taekwondo, and ice sports, and has achieved remarkable results. In the process of core strength training for young sprinters, we can learn from the experience of other sports, increase and pay more attention to the research of core strength training methods for young sprinters, and continuously improve athletes' sports skills.

## 2. Training Practice and Analysis

At present, the most lack of systematic amateur training in primary and secondary schools is sufficient time. There is basically no time for training in the morning, especially in the high school and college entrance stages, and it is not suitable for heavy exercise and high-intensity training in the morning. You can only have more than an hour in the afternoon every day. To achieve good training results in this insufficient time, you must find a more reasonable method. Through years of training practice, the use of "highlighting load intensity" training method is very suitable for the characteristics of youth amateur training. Because of this scheme, the absolute speed of the sprinter can be effectively developed in a shorter time of training and control, while the speed endurance has also been improved, the acceleration and sprint ability are strong, and the participation in the competition is comprehensive. In terms of means, highlighting the intensity of the load. Theoretically: the body response caused by the intensity of the load is much stronger than that of the load, which can quickly improve the response level of the body's various organ systems, and the resulting training adaptation is also deeper. And the competition is mainly more intense than the specific events. Regarding the effect of load intensity, Canadian scholar Bonan has done three different arrangements of experimental research on load capacity and load intensity. He designed three schemes: The first one: 100% of the athlete's ultimate strength, weekly Train once, 15 minutes each time; the second type: use 75% of the athlete's upper-moderate intensity, three times a week, each time 60 minutes; the third type: use the athlete's 50% intensity, 5 times a week, each time 120 minutes each time. Of the above three schemes, the first one is obviously the outstanding load intensity, and the third is the outstanding load. According to the experimental results, the training effect achieved by the first and third programs is the same, but the training time of the third program is 40 times longer than that of the first program. This strongly shows that to obtain the maximum benefit of training per unit time, increasing the load intensity, especially the special load intensity, is an extremely effective way. In addition, highlighting the specific load intensity is an effective method that must be used in training, and the load intensity directly reflects the purpose of training. Any training is for the purpose of competition, and any competition has the characteristics of exerting the greatest intensity of people. The intensity of the load directly reflects the degree of exertion of the body during the exercise in unit time, and the influence on the adaptation of the organism plays a more important role than the amount of load. Otherwise, it will be difficult to improve their specific ability and performance. The main methods used in training should be closely related to the competition event, and students are required to achieve the training load required by the plan in every training session. Among the several factors in this process, Special emphasis should be placed on the quality of training.

The key to highlighting "load intensity" is to highlight "training quality." Take speed endurance training as an example: Intermittent running is usually used. The first method runs 12 200 meters, with a distance of 2400 meters, 4 groups 1, each interval is 2 minutes, and the rest between groups is 8 minutes. The intensity is completed, the whole process takes nearly 1 hour, which is to obtain the load

intensity by quantity. The second method runs 3 350 meters, 1050 meters, with a break of 10 minutes. It requires 95% of the intensity to complete. The whole process is less than 30 minutes. This is to obtain load intensity by quality. Both methods are aimed at developing speed and endurance, but although the second method does not run much, it is closer to the specific intensity requirement and takes less time. The entire training session can be completed in more than one hour, and the effect is obvious .

During daily training and competition, young sprinters need to ensure that their supporting legs exert greater strength and increase their speed when they step on the ground in order to maintain a high speed in the course of curves and straights. To achieve this goal, you need a strong core force. Young sprinters have good coordination, control and strong core muscle groups, which can effectively help athletes to keep their bodies in a dynamic balance state during the journey, and ensure that the main muscle groups of the supporting legs are always properly relaxed when they are in the air. In this stage, unnecessary energy waste of the body is avoided, thus ensuring that the young sprinters can better concentrate their strength and fully exert their strength during the kicking stage, thereby increasing the speed of the young sprinters' kicking, shortening the reaction time and improving The kick-start effect is improved.

### **3. Methods of Core Strength Training for Young Sprinters**

Through core strength training for young sprinters, the muscle groups of young sprinters can be in a relatively stable state to a large extent, which can better ensure that the center of gravity of young sprinters is stable. In sprint sports, the overall muscle coordination requirements of young sprinters are very high. Normally, a single muscle group cannot improve the performance of young sprinters. Actively developing core strength training can better train young sprinters. The coordination of muscle groups. In the specific process of core strength training for young sprinters, it is necessary to combine the physical and psychological development characteristics of young sprinters, and comprehensively apply a variety of methods and methods for relevant training to ensure the scientificity and rationality of training.

Power training is the most commonly used and frequently used training method for core training of young sprinters at this stage. In this training mode, the physical coordination and muscle coordination of young sprinters can be improved to a large extent. There are many methods of power training, and the athletes' different physical qualities and characteristics should be combined in the process of training. First, perform core strength training through sit-ups. This training mode allows the waist and abdominal muscles of young sprinters to be trained to a large extent. In the specific training process, the coach should combine the physical fitness and psychological development characteristics of the young sprinters, formulate scientific training tasks, and focus on the core explosive power training of the young sprinters. In the training process, ensure the accuracy of the sit-up posture, avoid wrong training and fail to achieve the desired effect. In addition, in the training

process, the coach should teach the students to form the correct breathing habits, the breathing should be kept smooth during the training, do not hold their breath; secondly, use the corresponding sports equipment to carry out the training. In the core strength training process of young sprinters, the equipment that can be used mainly includes rubber bands, solid balls, barbells and dumbbells. For example, young sprinters can hold a solid ball for training, or they can lift dumbbells and barbells for training. In the process of using equipment for training, attention should be paid to the coordination of exercises, and the necessary protection of athletes can avoid accidents during operation.

In the process of sprint training, in addition to high requirements for the physical coordination and speed of young sprinters, higher requirements are also put forward for the self-control ability of young sprinters. In addition, the muscle type of youth sprinters should be endurance type, so in addition to power training, static training is also required. The training process mainly includes static side bridge, hanging, plank support, supine bridge support and other training methods. These static training methods mainly train the waist core muscles of young sprinters to improve the stability of the athlete's core area. Sex, so it is generally welcomed. In the process of static training, it is also necessary to train the leg muscles of the young sprinters, which can also improve the stability of the legs of the athletes and ultimately improve the exercise efficiency of the young sprinters. Similarly, in the process of static training, we must pay attention to the accuracy and precision of the young sprinters' movements, otherwise it will affect the training effect.

The core muscle group formed by the core strength of the young sprinter is regarded as a closed box or cylinder. The abdominal muscles are the front cover, the back muscles and femurs are the back cover and bottom cover, the diaphragm is the top cover, and the basin muscles. And the muscle group surrounding the abdomen is the surrounding face. When young sprinters exert their limbs to exercise, the core muscles begin to accumulate energy and transfer energy from the core to every muscle tissue and body of the body. The core part of the athlete has the largest muscle group, and also has the most production capacity and energy storage. During the kicking action of the young sprinter, it seems that the foot and the ground produce the interaction force, but it is actually the power muscle of the hip joint muscle group of the waist. The group generates power, which is transmitted to the lower limbs through the body's power chain, and becomes an effective source of power for athletes to kick the ground.

#### **4. Conclusion**

The amateur training of youth sprinting is a complex subject. It is a multi-factor, multi-level and multi-step process. This article only evaluates and summarizes the training program of "highlighting load intensity" combined with the current amateur training situation-that is, by intensity. Develop training programs for the main body and attach importance to technical training to achieve the best results in the limited time of amateur training. Core strength training has gradually become the key to the training of young sprinters. It plays a very important role in improving the athletic

ability of young sprinters. In the future training, physical educators need to raise awareness and continuously explore new training methods to promote our country. The sprint career continues to develop.

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