Analysis on Different Strength Characteristics of Track and Field Athletes Based on Physical Health Consciousness

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Abstract: In track and field sports, the technology is complex and the intensity of sports is high. Sports training and sports load are increasing, and the fatigue of athletes’ organisms is also deepening. Obtaining the recognition of athletes' attention quality under different sports intensity and finding out its changing rules will undoubtedly play an important role in promoting sports training and competition, and also provide theoretical basis for developing athletes' attention ability and improving their sports skills in the process of teaching practice. Awareness training has a stable state in training athletes in training and competition, promotes the improvement of training quality and creates excellent results. It also proposes corresponding measures for the problems existing in the research, and provides research suggestions for the comprehensive development of physical fitness of track and field athletes.

1. Introduction

With the rapid development of modern track and field sports, the research of track and field sports has increasingly attracted the attention of sports experts at home and abroad, and from various aspects to study the methods to improve the all-round results [1]. As we all know, track and field sports technology is complex. Average intensity training system and maximum intensity training system are two different training systems in track and field training. They are suitable for different situations and have no advantages or disadvantages. The purpose of these two training systems is to achieve the goal of improving sports performance by controlling training intensity, so training is of course to improve the energy supply ability of the energy supply system through speed exercises. To improve its energy supply ability, it is necessary to make full use of its energy supply system [2]. Therefore, control of exercise intensity during this exercise. It plays a decisive role in the outcome of the game. The basics of muscle strength and endurance and the flexibility of joints and muscles. The implementation of physical health will enable track and field athletes to have a clearer understanding and understanding of the main factors affecting their health. According to the basic forms of walking, running, jumping, and casting, and the basic requirements of track and field events, new forms of movement formed by some sports factors have been added [3]. Good attention performance is the key to the effective implementation of motor skills, and an important psychological guarantee for achieving excellent results, so that athletes can more effectively select, recognize and explain those meaningful. Predictive visual information and perceptual and decision processing of this information [4].

Athletes' physical health is an important issue related to the future of the nation and national competitiveness. In exercise intensity, exercise intensity is defined as "symbolic training of physical activity in the brain without any obvious muscle activity" [5]. It is to develop the athletic ability of athletes and improve their special qualities. Pre-competition psychological preparation is its main purpose and task. In our country, track and field activities are very common, resulting in many deficiencies in track and field competitions, which restricts the development of track and field undertakings, and makes great differences in the physical health of athletes [6]. Sports psychologist Martens regards attention as a psychological skill, which requires athletes to master and improve through training. This point of view also proves the importance of attention in competition [7]. According to the characteristics of the competition in the track and field competition. Starting from the needs of actual combat, with the continuous improvement of the level of athletics, the physical
quality of athletes is also higher. During exercise, proprioceptors and receptors continuously introduce large-intensity impulses into the cerebral cortex [8]. Cortical cells are constantly stimulated by the intense stimulation of the stratification, and these changes do not disappear immediately with the cessation of movement. The different requirements for strength are derived from different theoretical foundations. Therefore, different requirements and different adaptations are required for training programs, training objects, and training methods. This also allows different coaches to start from their own projects, athletes, etc. Consider considering different training systems [9].

2. Materials and Methods

AIn order to strengthen the adaptability of track and field athletes to the venue, climate and equipment, and to be well-informed and orderly, the coaches should strengthen their training before the competition. Specific practice is: coaches should properly arrange for athletes to train and test on the ground close to the competition. For competitive sports, the ability to maintain a certain level of glycolysis is the main factor, but sometimes it is necessary to maintain the ability of glycolysis repeatedly in training. According to the requirement of the average intensity training system, the intensity of each athlete should be more than 26.22 seconds. The intensity of the training program is 29 meters. According to the requirements of the average strength training system, the athlete's distance should not be lower than 34.09 meters. Therefore, the teaching model of track and field sports should be reformed and developed in the sports mode, changing its structure and form. This will not only enhance the athletes' changes in sports, but also allow more athletes to establish a healthy awareness to a greater extent, thus promoting the athletes' physical health.

The influence of exercise on the body varies with the intensity of exercise. Only by objectively and accurately determining and mastering the intensity of exercise can the repeatability of experimental research be effectively improved, and the athletes can obtain the greatest training effect with the minimum cost of exercise (energy consumption). The atmosphere of the competition is warmer and more complicated than usual. There are audiences, referees and even journalists around. At this time, the environment has changed. Athletes have been stimulated, and some athletes can not adapt immediately. In addition, in competition or competition, in competition and competition to improve their physical health. At the same time, make up for its own shortcomings, promote the further development of its own sports advantages, and promote the progress and development of the physical and mental health of track and field athletes. The fatigue caused by long-term moderate-intensity muscle movement is dominated by the protective factors of the central nervous system. The proposal of this theory is undoubtedly helpful for us to understand the different types of fatigue in sports training and to find a way to recover.

Track and field is a closed sport, which is regulated by the feedback of the internal proprioceptor, but the feedback of the external receptor has little effect on it, that is to say, the relying degree of closed sport skills on external help is low. Coaches can choose according to the characteristics of the project, different training stages and different athletes. For different events, the average intensity training system should be chosen more in competition events. The application of the two intensity training systems is shown in Table 1. Coaches and athletes should focus their training on improving athletes' special abilities. Targeted nutrition supplement. For example, protein is mainly consumed in throwing events. At the same time, the improvement of muscle strength and the thickening of muscle fibers also depend on protein synthesis in the body, so more protein should be added. However, long-distance running events mainly consume sugar and rely on aerobic metabolism of sugar for energy supply. Theoretically speaking, on the one hand, the amount of training in track and field should be as large as possible several times in a row; on the other hand, it should be controlled so that athletes can recover naturally. To put it more popularly, the amount of exercise should be large while preventing athletes from "collapsing".
### Table 1 Application of Two Intensity Training Systems

<table>
<thead>
<tr>
<th></th>
<th>Train</th>
<th>Control</th>
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<tbody>
<tr>
<td>Average intensity</td>
<td>15.05</td>
<td>14.19</td>
</tr>
<tr>
<td>Maximum strength</td>
<td>16.71</td>
<td>13.12</td>
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</table>

### 3. Result Analysis and Discussion

Consciousness training before competition. Track and field competitions are in a limited time or number of times, athletes' physical and mental abilities are focused on the use of instantaneous competitions. In addition to eye and hand exercises, more precisely, their nervous system function is exercised, which improves the accuracy, coordination, agility and flexibility of various movements. Taking part in proper exercise will inevitably cause muscle contraction. Muscle contraction produces a signal. That is to say, pay attention to the time of keeping on the same object. Reasonable arrangement of exercise load and scientific training methods are used to create the best conditions for body recovery. For example, in training, the intensity and interval of each exercise should be strictly controlled, which is beneficial to the recovery of fatigue without affecting the quality of training. If the interval time is too short, the physical strength will not be fully recovered, which will inevitably lead to fatigue. Attention to stability plays an important role in the performance of track and field athletes. The results of the analysis of the total scores of the physical health of the athletes in the track and field events are shown in Table 2 and Figure 1. We know that as the intensity of exercise increases, the stability of the attention of track and field athletes increases.

### Table 2 Difference Analysis of Athletes' Physical Health Groups in Track and Field Events

<table>
<thead>
<tr>
<th>Physical Fitness Dominates Velocity Item Group</th>
<th>Saliency</th>
<th>Difference value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical stamina dominates endurance</td>
<td>0.25</td>
<td>0.42</td>
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</table>

![Fig.1. Difference Analysis of Athletes' Physical Health Groups in Track and Field Events](image)

Speed endurance exercises mainly use glycolysis energy supply system. If the energy supply capacity of glycolysis energy supply system is improved, of course, speed endurance exercise capacity will be improved accordingly. For different training stages, coaches can also make different choices. For example, in the pre-preparation period and the preparation period, the training can be carried out according to the average intensity. Other kinds of sports activities can be arranged in the preparatory activities before training and the organizing activities after training. These activities can divert athletes' attention from their monotonous special sports, so as to help athletes recover their central nervous system as soon as possible. The change of exercise intensity
after stimulation is statistically significant. However, the average of each intensity is greater than that of the quiet state, that is, the attention span increases in different degrees under the stimulation of the intensity of exercise, that is, the attention span increases in different degrees under each intensity of exercise compared with the quiet state. At the same time, the cooperation between the coaches and the athletes and the unity of the members of the training team are strengthened. This is a guarantee for the smooth progress of psychological training. The tireless reminder of the team members "consciousness" is in place.

As the intensity of exercise continues to increase, the excitation intensity of cerebral cortex will be further enhanced, and the excitation intensity of nerve cells will be further enhanced, but the appropriate level of arousal in the cerebral cortex will be destroyed. The coordination of excitation and inhibition of nerve cells decreased, which showed that the balance, flexibility and sensory ability of nerve cells in cerebral cortex decreased. Relaxation in exercise is carried out voluntarily under conscious control. With continuous intensive training, the alternating functions of excitation and inhibition in the cerebral cortex will gradually tend to adapt and stabilize, and the muscle relaxation ability will be improved and strengthened with contraction. It will be more flexible and more coordinated to control the muscles to do a variety of complex and changeable movements. The track and field competition is definitely not the final victory or defeat in one or two games. In particular, there are many athletes in the current competition. It often takes several days of fierce competition, which brings certain difficulties to the mastery of training. Relaxation after exercise begins directly from exercise relaxation, while relaxation of psychological training requires tightness to relaxation. Focus on improving athletic ability and ensuring the stability performance of each competition: For athletes with absolute strength and relatively poor technology, the highest intensity system is adopted, and it is expected to have outstanding performance in the competition.

4. Conclusion

This paper analyses the different intensity characteristics of track and field athletes based on physical health awareness. Coaches in the training process according to the different training stages of athletes should achieve the maximum training intensity as the goal, according to the intensity of training. Note that each quality increases with the increase of exercise intensity, and decreases with the increase of exercise intensity when a certain intensity is reached. The requirement is that athletes should be trained repeatedly in multiple groups and times. Note that each quality increases with the increase of exercise intensity, and decreases with the increase of exercise intensity when a certain intensity is reached. While attaching importance to sports training methods, we must also pay attention to the long-term, systematic and periodicity of exercise intensity training, which is the prerequisite for smooth training. Therefore, the coach should reflect the exercise intensity problem in the athlete’s training plan for many years.

References


