On the Relationship between the Development of Computer Technology and Track and Field Training Informationization

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Abstract. With the continuous increase of national quality and national scientific research strength, China pays more attention to the development of sports. The combination of computer technology and sports has greatly promoted the progress and renewal of sports in China. According to the foreign sports training information system, Chinese researchers put forward the construction of our sports training information system. As a part of sports events, the training of Chinese athletes' track and field events should also be innovated by information technology. This paper analyzes and discusses the relationship between the development of computer technology and track and field training information system, and finally comes to a conclusion.

Keywords: Computer, Development, Track and Field Training

1. Introduction

In fact, track and field is the most popular sport in the world. In the process of ordinary track and field training, the psychological condition and physical quality of athletes are important training parts. In the traditional teaching of track and field training, coaches make reasonable training programs and training intensity for athletes[1]. However, a single way of artificial training can not meet the training volume of our country's track and field athletes.

With the gradual progress of science and technology and people's sports spirit, computer technology has been well integrated into the field of sports. The researchers found that the effective combination of computer science and sports training can improve the training efficiency of athletes to improve their performance. How to combine computer technology with track and field events effectively has become the main task of scientific researchers in the field of sports. In this environment, people put forward the construction of track and field training information system based on computer technology[2].
2. The main theoretical advantages of the application of computer technology in the training of track and field events

At present, computer technology has gradually infiltrated into all aspects of track and field training. However, the domestic papers seldom mention the application of computer in track and field. The main application technology is put forward by some foreign researchers. In order to study the relationship between computer technology and sports training, a national electronic information center has been established in China\cite{3}.

According to a large number of practices, researchers in the field of sports in China have found that the quality of high-tech application in the field of sports determines the efficiency of track and field athletes' performance improvement. Therefore, the implementation of sports tactics in the Olympic Games depends on the application of computers in track and field events. According to the theory of computer sports training, the main application of computer in sports training should include training plan management, training management, action design and information system development.

3. The application of computer in the information system of track and field training

3.1. The application of computer in the scheme setting of track and field training

The technology of computer information processing is an important auxiliary way of sports training. It can help athletes to improve the accuracy and efficiency of movement training. It can realize the setting of scientific training program. It can improve the comprehensive strength and economic level of athletes to make an effective training plan by using the information processing technology of computer processing technology. In addition, the computer can also record the data, images, and other information in the training process of athletes. This information can help trainers improve their work efficiency (see Table 1)\cite{4}.

| Application                              | Research direction                |
|------------------------------------------|----------------------------------|
| Setting of computer training program     | Training program                 |
| Application of computer in training load | Calculate training load          |
| The application in training management   | Training program                 |
| The electronic action library            | Standard movements of athletes   |
| Result evaluation                        | Examination of athletes          |

3.2. The application of computer technology in calculating training load

As we all know, track and field training is very hard. In the process of track and field training, athletes should not only overcome physical exercise pressure, but also psychological pressure. Low training load will lead to insufficient training. Training load leads to bad reaction of athletes. This will cause serious harm to the physical and mental health of athletes. In order to provide appropriate training load for far
mobilization, computer analysis technology helps coaches to determine the training load of athletes\cite{5}.

3.3. The application of computer in training management

In the process of track and field training, training management is an important part. Proper training management can improve the self-control and binding force of athletes. Some of the athletes are more casual and lazy. The management of track and field training can supervise the training of athletes very well. We can use computer technology to manage the training of athletes.

3.4. The application of computer technology in the establishment of electronic action database for track and field training

It turns out that the basis of any track and field sport is correct and standard action. The quality and difficulty of track and field action determine the comprehensive strength of track and field athletes. In the process of training track and field athletes, computer technology can establish corresponding standard training action library\cite{5}. This kind of electronic library can help athletes to find the shortcomings of their actions and improve them.

3.5. The application of computer technology in the result evaluation of track and field training

Each student's performance represents the student's learning situation. An athlete is a student of a coach. The coach is the instructor of the track and field players. Therefore, track and field athletes also need the final exam. Comprehensive evaluation can help coaches to determine the training status of athletes. The application of computer evaluation information system is essential in track and field training.

4. On the relationship between the development of computer technology and track and field training Informationization

With the progress of the times and the continuous development of society, we pay more attention to the training of sports literacy and the yearning of sports spirit. The emergence of the Olympic Games marks the yearning of people's sports spirit. Track and field as the main event of the Olympic Games. It is deeply concerned and loved by people. It can improve people's physical and psychological quality.

Our country pays close attention to the cultivation of physical and psychological quality of track and field athletes\cite{6}. According to the construction of the computer information system of track and field training in foreign countries, our country also gradually learns and draws lessons from some foreign scientific research technologies. At present, the combination of computer technology and track and field training information technology is not mature. We need further development and innovation. However, we can find that the relationship between the development of computer technology and track and field training information is very close. There is no doubt that their emergence is complementary.

5. Conclusion

The combination of computer and track and field training information realizes the information-based cultivation of sports competitive spirit. It provides people with scientific track and field training methods. On this basis, I believe that the development of the application of computer technology in track and field training is very extensive. Computer technology will certainly become an important pillar in sports
training.

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