On the Practical Application of Computer Technology in the Field of Volleyball Training in China

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Abstract. Volleyball is a popular sport in the world. It is a complex tactical sport with strong antagonism and comprehensiveness. Volleyball training and volleyball competition are the work that our country sports circles attach great importance to. In order to help the players improve their skills and competition ability, China has invested a lot of manpower and material resources in the field of volleyball training. The relationship between modern volleyball training methods and computer technology is more and more close. This paper analyzes and studies the application of computer technology in the field of volleyball training, and finally comes to a conclusion.

Keywords: Volleyball Training, Computer Technology, Practice

1. Introduction

In order to embody the spirit of human sports, people hold the Olympic Games. In the process of Olympic Games, each kind of ball game shows its unique sports charm. Volleyball is a civilized competitive sport in the world. The volleyball matches in the Olympic Games are very fierce. In order to improve the competitive ability of volleyball players, researchers put forward many kinds of volleyball training methods[1].

With the update of the times and the popularity of computer technology, researchers found that computer technology can help athletes to train volleyball technology. Compared with the way of artificial training, the use of computer technology has greatly improved the efficiency and quality of volleyball training[2]. With the continuous progress in the field of volleyball training, computer technology is more and more widely used in the training of athletes.

2. A brief summary of volleyball training techniques

If you are a person who doesn't understand volleyball, you will feel that the training of volleyball is only the training of athletes' skills. There is no doubt that this idea is wrong. There are various training items
in the field of volleyball training. They include physical training, competitive technology training and psychological training.

Physical training refers to the improvement of athletes' physical quality and the cultivation of their flexibility[3]. The physical consumption of volleyball is very serious. Without good physical fitness and flexible sports ability, it is difficult for athletes to play a good game. The training of competitive technology refers to the tactical training and technical training of athletes. The training of psychological quality is an important training item. Volleyball match is easy to make players nervous. This kind of emotion will make it difficult for athletes to play their full strength normally. Improving psychological quality is an important part of athletes' training. Although these training programs are different, their overall purpose is to improve the physical quality and competitive ability of athletes[4].

3. The development of volleyball training technology in China

Volleyball can embody people's sports soul and spirit. This is an indisputable truth. It can also improve the physical fitness and endurance of athletes. China strongly supports the development of volleyball. With the progress of science and technology, the development of volleyball training in China is very fast.

In the early stage of volleyball training, the training method adopted in our country is a single artificial training method. Compared with the assistant training method of computer technology, the artificial training method is relatively backward. This method can ensure the enthusiasm of athletes. However, this kind of training lacks innovation[5]. According to the above description, we know that there are many volleyball training items. If a single way of artificial training is adopted, it will slow down the speed of volleyball training. We must improve the speed and efficiency of training. After that, the researchers learned from foreign volleyball training techniques. Therefore, gradually our country introduced and studied the application of volleyball training under the computer technology[6].

**Table 1.** An example of the practical application of computer technology in the field of Volleyball Training

| Application | Example                                      |
|-------------|----------------------------------------------|
| 1           | Multimedia training                          |
| 2           | Use of high speed camera                     |
| 3           | Computer aided training technology           |
| 4           | Fuzzy tracking technology and infrared tracking technology |
| 5           | Electronic action library                    |

4. The practical application of computer technology in the field of volleyball training in China

The application of computer technology improves the training speed and efficiency of many sports. In the field of volleyball training, the application of computer technology has a great influence (see Table 1).
4.1. Computer multimedia Volleyball Training Teaching

The use of computer video technology and audio technology can help athletes to see their performance on the court. At the same time, players can also see the tactical and technical expression of professional volleyball players in the competition. Multimedia teaching can help athletes find their own advantages and disadvantages and learn other people's tactics and techniques.

4.2. The use of high-speed computer photography and volleyball training

People habitually call this kind of training as quantitative training. This means that the computer can analyze the kinematics of the individual athletes through high-speed camera to analyze the standard degree and error rate of the athletes' movements. There is no hiding place for athletes' habitual wrong actions under the high-speed camera.

4.3. Computer aided training technology

The use of computer technology can help athletes to carry out scientific training mode. In the process of volleyball training, computer analysis technology can make scientific competition plan according to the kinematic analysis data of the enemy. In short, we can understand it as a computer tactical analysis system.

4.4. Computer fuzzy tracking and infrared photography

Compared with the training mode of high-speed photography technology, the error of infrared camera tracking technology is very small. Fuzzy tracking technology and infrared camera can track the athletes' competition state in real time. The combination of infrared camera and computer analysis system can form athletes' sports data. Coaches can customize athletes' new training plans based on sports data.

4.5. Construction of electronic action library

In the process of volleyball training, the use of electronic action library is essential. Because athletes and coaches are not robots. They all make mistakes. Some habitual wrong actions of players may lead to the failure of volleyball match. Therefore, the electronic action library can help athletes learn some details of volleyball skills.

5. The relationship between volleyball training and artificial training based on computer technology

When people find that the role of computer technology in volleyball skill training is so great, they will ask why we don't abandon the way of artificial training. This question is the habitual question of many volleyball fans. Although the application of computer technology is very conducive to the training of athletes, the way of artificial training can not be given up.

Volleyball players need not only fine skills and advanced tactics. They also need encouragement and company. Coaches can not only help athletes improve their skills, but also encourage and accompany their growth. This emotional comfort is something computer technology can't do. In a word, the skill training of volleyball players needs not only the support of computer technology, but also the emotional comfort of artificial training.
6. Conclusion

With the development of economy and technology and the growth of people's comprehensive quality, we pay more and more attention to the improvement of our sports spirit. In recent years, the application of computer technology in the field of volleyball training is very extensive. However, we can’t completely abandon the way of artificial training and only use the way of computer technology training. The combination of the two can help the players to improve the skill training of volleyball.

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