

*Original Research Article*

## Development Strategies of Scientific Training of Basketball

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**Abstract:** Basketball is a popular sport at present, and is not only an important way for people to exercise and develop their hobbies, but also the main competition in the Olympic Games. From the formulation of rules to the globalization of basketball, basketball has become more and more confrontational, interesting, fitness-oriented, collective and ornamental after long-term development. In essence, the basketball competition is that two teams carry out back and forth offensive and defensive conversion activities within the specified time, and scores will determine the outcome of the competition. In order to effectively improve athletes' basketball level and keep up with the development of basketball, scientific training of basketball is undoubtedly important. This article first explains the characteristics and present situation of modern basketball, and then explores the development strategies of scientific training of basketball.

**Keywords:** Sports Science of Basketball; Innovation; Development

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### 1. Introduction

With the continuous development of modern sports in China, the effective development of basketball will gradually show the characteristics of high speed, high confrontation and outstanding personal skills. Basketball is mainly divided into three important stages: offensive, defensive, and transformation of offensive and defensive. In these three stages, athletes' respective responsibilities are slightly different, and their coordination and awareness of instantaneous actions are particularly important. To achieve these, scientific and modern training methods are required.

### 2. Characteristics of modern basketball

#### 2.1 Unity of collective and individual

Basketball is a confrontational competition, which requires teamwork. Traditional basketball emphasizes the concentration of individuals and collectives in the competition, and it can not only consider individual actions, but also carry out strategic and tactical analysis with team planning as a whole. Modern basketball has strengthened individual play on the basis of wholeness, such as Michael Jordan and retired star players such as Kobe Bryant. These individual performances can determine the outcome of the game. Therefore, properly handling the relationship between the collective and the individual can effectively improve the overall sports efficiency, give full play to the role of the individual, and master the initiative of the competition.

#### 2.2 Balance between offensive and defensive

Basketball requires two teams to exchange offensive and defensive skills within the specified time. In view of the mutual transformation of basketball control rights, the three aspects of instantaneous actions, cooperation mode and

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tactics are organically combined and coordinated. Modern basketball consists of three different stages: offensive, transformation of offensive and defensive, and defensive. In the process of training, strengthening the consciousness of self-transformation is quite helpful to gradually transform basic theoretical knowledge into practical experience and form a new training system.

### **2.3 Accuracy**

Fairness must be the characteristic of any game, which is also true in basketball game. The two teams have the same chance of getting the ball right. As for the difference of the ball right in actual game, it is mainly caused by foul, tackle and rebound. Goal is the only way to score. In order to win the game with limited ball rights, the shooting percentage is particularly important. Whether a team leader is qualified depends on whether he can drive the rhythm of his team and stand up to score when his teammates are in a downturn. It also tests a team's scoring ability and defensive ability, and nothing can explain the problem better than the hit rate. Modern basketball not only emphasizes the score of inside players through physical confrontation, but also pays attention to the score of outside players. Throughout the world's top teams, there are often a number of pitchers in the main force with super high hit rate, diversified shooting methods are diversified, and outstanding shooting speed and mentality of facing high pressure.

### **2.4 “Fast”, “high”, “big” and “many”**

“Fast” refers to the speed. In modern basketball games, fast attack can effectively get rid of the opponent's defense, and can score high hits without interference. Fast defense can easily resolve the opponent's attack, and fast attack and defense can increase the number of counterattacks and improve the efficiency of fast attack scoring. “High” refers to the high-altitude competition. The advantages of jumping ability and players' height advantage usually make it easier for athletes to compete for defensive rebounds and offensive rebounds, thus increasing their own ball rights and scoring more. “Big” means stronger strength. Now athletes are usually tall and strong, and their physical confrontation becomes more and more fierce during the competition. Because their physical confrontation can usually make them suppress their opponents, better stand and hold positions, and then increase their scores. “More” means diversified attacking ways, such as Kobe Bryant's backward jumper and Carmelo Anthony's cross step. In this kind of high-intensity confrontation events, it has become the main feature of modern basketball to use diversified ways to carry out quick offensive and defensive conversion.

## **3. Training status of basketball**

The purpose of basketball training is to improve the level of basketball players and increase the advantage of winning games through regular training. Therefore, if there is no effective and scientific management form in the training process, it will affect the overall training effect of basketball team. The training conditions are usually limited. Under normal circumstances, the actual tactics and professional skills are taken as the focus of training, and general training methods are used. Basketball training can exert a lot of pressure on athletes in terms of energy and physical strength. Therefore, in the normal training process, besides psychological and physical training, training methods should be designed according to the actual situation of funds. Meanwhile, it should also ensure that athletes are adequately supplemented with nutrition during training. Only when physical strength and exercise intensity are organically combined can better training effect be achieved. Basketball training should have certain stability, provide a platform for basketball players' training and development, and constantly enable basketball players to strengthen their own technical level. In the training process, it is easy for athletes' physical qualifications to fail to meet the competition qualifications, which makes basketball players lose opportunities for further development. Training achievements and performance can't guarantee professional skills to be matured after joining a professional team. Under normal circumstances, most athletes who work hard during the training period can relax their attention to their training after joining a professional team, or they cannot further enhance their awareness of training intensity, thus affecting their further development.

## **4. Scientific training methods of basketball**

## **4.1 Innovating training methods and tactics**

Social development and human innovation are inseparable, and the development of basketball is no exception. In order to stand out in the highly competitive basketball events, the innovation of basketball events is essential. First of all, it is necessary to innovate the training methods and the existing training system, break the traditional training mode of single and fixed content, and innovate a set of training methods suitable for team members. On the basis of ordinary training activities, interesting training activities is helpful. What is more important is the innovation of technical movements and team tactics. Tactical innovation should be taken by surprise, so as to help athletes win the game. The innovation of technical action can interfere with and block in the process of traditional shooting in the past, so as to achieve the goal of scoring.

## **4.2 Training psychological quality**

Athletes' training not only includes their own psychology and their physical aspects, but also refers to the changes of psychological characteristics related to competition, and the ability training of regulating psychological changes during competition and training. In addition to tactics, this level of basketball confrontation also tests the psychological quality of coaches and basketball players. The improvement of coaches' psychological quality mainly comes from their own experience accumulation and mastery of professional knowledge in the process of training athletes. Therefore, coaches should first have professional basketball knowledge, possess advanced teaching concepts, be good at summing up experiences in basketball training and competition every time, and be able to integrate theories into competition and training process reasonably. In addition to their own tactics and skills, the psychological quality of basketball players also depends on the training of coaches in training activities. Basketball, especially competition activities, can exert great pressure on athletes' psychology, which is extremely easy to cause changes in their own emotions. Therefore, basketball players should strengthen the training of their own psychological load and psychological state in the process of real life, such as the psychological coping ability when encountering unexpected situations in the training process, and the ability to maintain the technical level with significantly lagging scores. Only with a stable and positive psychological state can the effectiveness of training activities be ensured and excellent results in the course of competition be created.

## **4.3 Scientifically training shooting techniques**

Shooting is the only way to score. Therefore, shooting is still a very important project in the scientific training process of modern basketball. According to the online data, the athletes of the world's top teams have to throw more than 1,000 balls every day, and there is a high standard for shooting percentage. It can be seen that large amount of exercise and high intensity are the basic principles of basketball training. However, in the process of shooting training, instead of a single shot, it needs to simulate various situations in actual combat to launch shooting activities. After all, the shooting percentage of the game is more important.

## **4.4 Scientific training and arrangement**

Basketball is slightly different from other sports training programs, and its training load is relatively large. Both the intensity and time of training are relatively large. The intensity and the amount of training need to be planned scientifically. If the amount of training is too large, it may cause basketball players to feel physically and mentally exhausted. Once the intensity of training exceeds the load range of human body, athletes would hurt during the training process and lose more than they gain. Only by combining the amount of training and the intensity of training reasonably and scientifically can the physical quality of basketball players be effectively improved.

## **5. Conclusion**

The scientific management of basketball training is very important, which needs constant practice and improvement with a scientific and reasonable development vision. According to the current level of basketball in China, the

scientific management of basketball is a very important development trend. Therefore, both coaches and athletes should seize the opportunity of development and study, strengthen the reserve of professional knowledge, strengthen the innovation of combat ability, and improve the ability of applying basic theoretical knowledge to the competition process, so as to make a new breakthrough in the level of Chinese basketball.

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