# **Analysis of Basketball Shooting Technique** and Teaching Strategy

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ABSTRACT. in the official competition, the level of shooting skills of basketball players directly determines the outcome of the competition. It can be said that shooting is the most core content in the basketball technical system. This paper first analyzes the technical movements of basketball shooting, and then expounds the teaching strategies of basketball shooting technical movements. The research shows that the coach should first do a good job in theoretical explanation, so that athletes can master the principles of shooting techniques, and then use a variety of teaching methods to improve the enthusiasm and initiative of athletes to learn, and then to combine physical fitness training with shooting technical action training. In addition, the college should give full play to the auxiliary role of modern science and technology and improve the training quality of basketball shooting skills.

KEYWORDS: Basketball, Shooting, Technical action, Technical training

### 1. Introduction

Shooting is the only way for basketball players to score and win the competition. In the competition, basketball players need to make full use of the shooting skills they have mastered under the conditions of abiding by the established rules of the basketball game to put the basketball into the opponent's frame to complete the score. To give full play to basketball players' shooting skills, they need to master the essentials of shooting techniques.

### 1.1 Analysis of Spot Shooting Technique

There are two kinds of spot shooting, one hand over the shoulder and the other over the head. One hand over shoulder spot shooting is the most widely used one in the game. Take the right hand spot shooting as an example, the anthletes should naturally separate the five fingers of the right hand, hold the ball above the root of the finger, the wrist should be greatly tilted back, the palm of the hand should be empty, the right elbow should be bent, and the ball should be placed in front of and above the right shoulder, the forearm and the ground should be at a right angle of 90 degrees; the left hand should gently hold the left side of the ball; both feet should be

opened from left to right or back; the knees should be slightly bent, and the center of gravity should be on the feet. When shooting, push feet on the ground, bend right wrist forward, and push the ball forward and up with your index and middle fingers. When the ball is released, the right arm holding the ball is extended as far as possible with the body.

### 1.2 Analysis of Shooting Technique in Marching

There are three kinds of shooting in marching: one hand over shoulder shooting, one hand low hand shooting and hook shooting. Although the three shooting methods are different, their action structures are basically the same, that is, catching the ball in the first step, lifting the ball immediately after the second step, and jumping to complete the shooting action at the same time. Because it is difficult to master the one hand low hand shooting and the hook shooting, the technical movements of the two shooting methods are analyzed here. When shooting with one hand low hand during marching, the body should be fully extended forward, the arm should be extended forward, the palm of the ball holder should be upward, and the ball should be pushed upward with the finger tip to make the ball fly in and out of the basket. During the hook shooting, the body should be slightly inclined, the arm of the player should be extended, and the arm will drive the palm of the hand from bottom to top to swing the ball. The fingers should not be too hard, and the arms should be as little as possible. Only four fingers except the thumb and the soft shaking of the wrist can be used. Try to rotate the ball slightly from the top to the bottom when the fingers are exerting force, so that the ball will be easier to enter the basket because of the rotation.

#### 1.3 Analysis of Jump Shooting Technique

There are two kinds of jump shooting: spot jump shooting and stop jump shooting. Because it is difficult to master the technical action of stop jump shooting, this paper only analyzes the technical action of stop jump shooting. In the process of stop jump shooting, the athlete should quickly lower the body center of gravity and decelerate, push his feet on the ground, and quickly change the forward impulse of left, right, front and back into upward bounce force, so as to ensure body balance. When jumping up, the action should be light and strong, with a certain amount of idle time. When the body jumps to the highest point, the ball will shoot decisively, and the shooting action is the same as that of spot shooting.

### 2. The Teaching Strategy of Basketball Shooting Technique

# 2.1 Deepen the Theoretical Explanation, Make the Athletes Master the Principle of Shooting Technique

Coaches should combine physical education, sports physiology, mechanics and

other disciplines to explain the principles of basketball shooting techniques to athletes, and lay a solid theoretical foundation for athletes' shooting technique training. For coaches, the purpose of in-depth theoretical explanation is to enable athletes to master correct and standardized shooting techniques, and to correct athletes' wrong understanding of shooting techniques. When explaining, the coach should pay attention to the communication and activities with the athletes and encourage the athletes to ask more questions and provide more feedback. This will not only enhance the athletes' awareness and understanding of shooting techniques, but also build a good teaching atmosphere and improve the athletes' motivation to learn [1].

## 2.2 Adopt Various Teaching Methods to Improve athletes' Learning Enthusiasm and Initiative

Coaches should adopt a variety of teaching methods to enhance the teaching quality of shooting techniques. This paper believes that coaches can adopt comparative teaching methods, game teaching methods and competition teaching methods. Comparative teaching method, that is, the coach compares and analyzes the shooting techniques of the athletes, so as to obtain a reliable basis that can guide the athletes to continue the shooting technique training. The comparative teaching method is suitable for athletes in the early stage of learning shooting techniques, so as to help athletes form an action representation of correct shooting techniques. Game teaching method, that is, the coach integrates shooting technique into some games, and allows players to master basketball shooting technique through the game [2]. The game has rich and diverse forms and strong interest, allowing athletes to subtly learn shooting technique in a relaxed and pleasant atmosphere. Competition teaching method is the method that coaches test, consolidate and improve the players' shooting technique by organizing simulated games. During the teaching period, the coach should organize some simulation games which are close to or exceed the requirements of the formal basketball match regularly to test, consolidate and improve the players' shooting techniques. During the competition, the coach should carefully observe and record the shooting posture of the players (such as the radian of the shot). After the game, a summary meeting should be held in time to discuss the shooting problems with the players.

### 2.3 Combine Physical Fitness Training with Shooting Technique Training

The standardization of shooting technical movements of athletes directly affects the shooting percentage, so athletes must strictly follow the standard shooting technical movements for training. The standardization of basketball technical movements is not only affected by the athletes' learning ability, imitation ability and practice ability, but also by the athletes' strength quality, flexibility quality and agility quality [3]. In the current teaching of shooting technique, many coaches do not pay attention to the strength quality, flexibility quality and agility quality of the athletes, which leads to the athletes' poor results after long-term training. In view of

this, the coach should combine the characteristics of shooting techniques to guide the athletes to carry out some special strength, flexibility and agility training. For example, coaches can use push-ups, dumbbell lifts and other exercises to develop athletes' upper limb strength.

# 2.4 Improving the Training Quality of Shooting Technique with the Aid of Science and Technology

The rapid development of modern science and technology provides a good background for physical education teaching and training. The scientific nature of training can be improved by introducing modern science and technology into shooting technique action training [4]. For example, coaches can use motion capture technology to fully grasp and analyze the physiological information of the athlete's motion angle, motion trajectory, center of gravity distribution and joint force when shooting. In addition, the coach can also compare and analyze the shooting techniques of different athletes, correct the wrong shooting actions of the athletes, and improve the standardization of the athletes' shooting techniques. For another example, the coach can establish the sports database of the athletes' daily training and official competition through the database technology, and carry out statistical analysis on the shooting times, types and percentage of the shots of the athletes during the daily training and official competition, so as to provide reliable basis for the follow-up training and competition guidance.

#### 3. Conclusion

Shooting is the only means of scoring in basketball games, so coaches should attach great importance to the teaching of shooting techniques. Coaches should make athletes have a deep understanding of the importance of shooting technique teaching, use scientific and feasible teaching strategies to cultivate athletes' shooting awareness and improve their shooting technique. In the process of teaching, the coach should formulate personalized teaching strategies according to the actual situation of the athletes, so as to ensure that each athlete's shooting technique can be improved and developed.

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