

Analysis and Research on Basketball Layup Technology based on Action Decomposition

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Abstract: With the increasingly fierce competition of modern basketball, the result is often one point short, so free throws have become the key factor to determine the outcome in modern basketball games. Therefore, the author thinks that training students' ability and accuracy of fast dribbling is the focus of daily training, and daily training should focus on how to shorten the dribbling layup time and constantly improve every detail. In this paper, based on action decomposition, the technical analysis of basketball layup is made, and the technical training and psychological training of basketball layup are guided, which provides reference for improving students' basketball layup performance.

1. Introduction

Basketball is a sport that scores offensively and limits the opponent's score to win. The means of scoring in the game include shooting, layup, dunk and so on. At present, in the process of basketball teaching in ordinary colleges and universities, for non-sports majors, basketball teaching is mainly carried out in two ways: one is through studying in physical education class; Second, by studying in basketball elective courses. No matter which of these two ways, in the teaching courses of ordinary colleges and universities, they are in a position of being ignored [1]. As we know, passing and catching is one of the most used combination techniques in the offensive game. Almost all offenses begin with passing and catching, except for directly layup after stealing and directly making up the basket after rebounding in the front court. Because the proportion of technical evaluation scores in this test project is very small, the actual emphasis is on dribbling and shooting quickly and accurately, and paying attention to time first [2]. Therefore, based on action decomposition, this paper designed a set of teaching methods, from the practice of wiping the board on one hand's shoulder, to the practice of striding between walks, and then trying to lay the basket until the complete practice, so as to achieve the effect of actual combat development training.

2. Subjective Factors Affecting Basketball Hit Rate

2.1. Basic Technology

If you want to shoot accurately, first, handle the combination relationship between related technologies; The second is to deal with the relationship between shooting technique and combination technique. Only in this way can we give full play to our technical advantages and improve our shooting percentage. In basketball, students should have good bounce, speed, agility, endurance and strength. In particular, jump shot technology requires players to have good jumping ability, balance ability and coordination; Secondly, jump shot technology. If you want to have a good hit rate, you must lay a good technical foundation.

2.2. Changes in Mental State

Some experts put forward that 30% of the outcome of the competition depends on the psychological state [3]. The stable psychological state of shooting should be as follows: calm mind, no impatience, strong confidence, resolute determination, concentrated attention to target, anti-

interference and implementation of techniques and tactics, etc. From the physiological point of view, stress is a kind of stress and excitement of physical functions and nerves to external stimuli, and it is the protective instinct of organisms to cope with various stimuli. In competitions, people are usually nervous about the coming of some danger. Nowadays, the degree of confrontation in basketball is becoming more and more fierce, and the requirements for students' psychological quality are getting higher and higher. Basketball is characterized by complexity, changeability, fierce confrontation and ups and downs of scores. In the process of jumping and shooting, psychological activities are influenced by many factors.

2.3. Physical Quality

Good physical fitness is needed to complete all technical movements, and it has a great influence on the hit rate. In a ball game, students have to keep running, jumping, fighting for and defending the card position, which consumes a lot of physical strength. Abundant physical strength and good physical quality have an impact on shooting. If we want to improve the shooting percentage, we must attach importance to the training of students' physical qualities, especially speed, endurance, strength, agility and flexibility. Combine physical fitness with shooting practice, so as to improve and maintain good shooting percentage. This requires students to adjust themselves, control the wrist and finger movements to send the ball into the basket. Especially in an aggressive environment, it will be more irritating to the free throw players, distract them, increase the psychological burden of the free throw players, and then lead to the deformation of the free throw technical movements and reduce the hit rate [4].

3. Technical Analysis of Basketball Dribbling and Layup at Halftime

3.1. Technical Analysis of Dribbling

Commonly used dribbling techniques include high dribbling, low dribbling, sudden stop, changing hands in front of the body, dribbling in front of the body, dribbling behind the back, dribbling around, dribbling under the crotch, etc. Some have been exposed to basketball, but their technical level is average and there is still much room for improvement; There are still some people who have never been exposed to basketball at all, and their technical level is basically zero, and they are still in the stage of "beating indiscriminately" [5]. When everyone takes off at the same time, the first step is if the span is large, and the defender wants to cover you from behind, he must jump higher and farther than you. That is to say, the second step should be small. Mainly to prepare for the "Three High Jump". When dribbling and layup, two feet should alternate quickly, and take-off should not be too high, but try to shoot and land quickly. The outgoing ball should be beneficial to the next action after the companion catches the ball, that is, the companion can shoot, pass or dribble and break through smoothly after catching the ball. In the process of dribbling these two times, it is required that both feet run fast and stride long. When the second dribble is over, you must step on the center line with one foot, support your body with the other foot, hold the ball with both hands, and face the rim.

3.2. Technical Analysis of Shooting

Action decomposition training method occupies a high position in the teaching of basic skills and tactics. It is cumbersome and difficult to remember if it only follows the action essentials from the script. According to the continuity of action, remember the core essentials of scoring, and then push back and remind each other involuntarily in group communication. Taking in-situ one-handed shoulder shooting as an example, the five fingers of the shooter are naturally separated, and the lower back of the ball is supported by the outer edge of the palm and the part above the finger root, with the palm empty and the wrist leaning back. The center of gravity of the ball falls between the middle fingers, and the elbow joint naturally sags, placing the ball in front of the upper side of the shoulder on the same side. Passers should be good at concealing their passing intentions, movements, eyes, facial expressions, etc., and can use various ways to lure and confuse opponents,

which is the defender's misjudgment. Because you don't need to consider the final stability to control the ball, you only need to let people and the ball surpass the center line of the basketball court at the fastest speed, so during the dribbling process, the ball always stays in front of the body, so that you can run on both feet with a large stride and high frequency. In the process of dribbling these two times, it is required that both feet run fast and stride long. When the second dribble is over, you must step on the center line with one foot, support your body with the other foot, hold the ball with both hands, and face the rim.

The rotation of the ball is a factor that determines the accuracy of shooting. When shooting the ball, the rotation of the ball depends on the force generated by stretching the arm to lift the ball, bending or turning the wrist forward, and pulling the ball by fingers, which makes the ball rotate regularly. The ball-protecting arm stands at the left and right height of the chest. According to the constant adjustment of the defender, the ability of the trunk to protect the ball is increased, and the fist is clenched in the confrontation as much as possible to increase the strength of the ball-protecting arm. Therefore, we should pay attention to improving the absolute height of jumping, mastering the jumping opportunity and improving the jumping speed. The good explosive force and jumping speed of lower limbs affect the hit rate of jump shot. In order to improve the hit rate, it is required to match the shooting angle and shooting speed to make the ball have a certain radian. However, the shooting angle needs to be adjusted according to the changes of different shooters, shooting distance and other factors.

4. Technical Training of Basketball Layup Technique

4.1. Step Range and Catching Skills

Teachers should focus on explaining the pace and catching skills of basketball after shooting, and improve students' ability of hand and foot coordination, especially the connection between the first step of three-step layup and catching is a difficult point in teaching. When practicing, you can use bare hands to demonstrate the simultaneous catching of the ball across your right foot. For "skilled" students, we mainly observe the competition between them, check their mutual cooperation ability and tactical execution ability, and correct their technical deficiencies. This requires the cooperation of the whole team of students and excellent personal ability to get a good scoring opportunity. Adjust with the change of technical movement, based on the accurate completion of technical movements. The whole process of jump shot requires adjusting breathing and using breath properly. In the process of knee lifting, holding the ball on the chest should transition to the purpose of delivering the ball with one hand and low hand in two modes of moving the ball; Transverse movement is the primary stage, but the shooting point is low, and oblique movement is a "diagonal" route, which is rapid and in line with actual combat. The purpose is to master the correct shooting technique, and to understand the power, speed, rotation, aiming point, parabola and angle of entering the basket.

4.2. Control the Ball's Rotation and Aiming Point

Training students to develop the habit of leaving the ball until the arm is straight can shorten the distance between the shooter and the basket. The shooting point is relatively high, which makes it difficult for opponents to seal the basket, thus increasing the probability of shooting. Teachers should let students choose the appropriate distance in natural running according to their own situation, and realize the rhythm and size of the three steps. Every player can not only throw, transport, but also pass. Teachers should change the guiding ideology of paying attention to the training of guard players' passing and catching skills, while ignoring the training of striker players' passing skills. The shooting action is often completed after the application of various technical actions, which requires students to consume a lot of physical strength. From the lower limbs through the waist and then through the trunk to the upper body and to the upper limbs, shoulders, arms, wrists and fingers. The curve reflected by the running track immediately before the ball enters the rim and the angle formed by the tangent line at this point and the rim plane. The level of

parabola depends on the angle and power of shooting. Adjust the body position quickly when the ball falls, so that the body faces the starting position of dribbling, so as to catch the ball and push forward as quickly as possible.

4.3. Shooting on the Move

The common point of shooting during traveling is to catch the ball while crossing the first step, and to take off and complete the shooting in the air after crossing the second step. The body is fully extended in the direction of the basket to keep the stability of the supporting ball, with the shot point higher than the head and the wrist soft to provoke the ball [6]. First, we should pay attention to the consistency of demonstration actions, which actions are often connected with this action, and what problems are easy to occur in the process of connection; Second, we should pay attention to the integrity of the movements, and put the movements into the whole basketball teaching. The sequence of movements is unclear, and the run-up is not in harmony with the three-step layup. Corrective method: Repeatedly explain and demonstrate the three-step layup, emphasizing the action sequence of striding before taking the ball and taking the ball in the air, so that students can practice the three-step layup according to the password prompt during jogging. It requires every student not only to have superb technical and tactical level, but also to have stable and mature psychological quality. In the face of defense, students can jump and stop after throwing the ball, cross step after fake action, break through the defense, and make a successful layup, so that students can learn the method of highlighting the defense preliminarily and practice it. Finally, students should be able to accurately choose the breakthrough point to make a layup according to the opponent's position.

5. Conclusion

To sum up, when practicing one-handed shoulder-throwing cricket, students will throw more or less. In the process of dribbling and layup, many students like to throw hollow balls into the basket in pursuit of beautiful movements, but it is easy to have unstable shooting, and the stability of hitting the board into the basket is higher. Therefore, students can experience the joy of shooting and improve their learning enthusiasm. Especially for those students with poor psychological quality, they should practice the shooting method of hitting the board and entering the basket. In short, passing and catching the ball should be purposeful and aggressive. It should be observed, judged, resourceful and confident before passing and catching the ball, so as to organize effective tactical coordination quickly, timely, concealed, in place and skillfully.

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