

Research on the Application of Multi-ball Training Method in Table Tennis Training in Colleges and Universities

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Abstract: This paper aims to explore the practical application effect and strategy of multi-ball training method in table tennis training in colleges and universities. As an efficient and systematic training method, multi-ball training method has significantly improved the technical proficiency, physical fitness level and competition adaptability of athletes through continuous and repeated hitting practice. The study also pointed out that when applying multi-ball training method, we should pay attention to following the principle of moderation to avoid overtraining leading to physical fatigue and injury of athletes; At the same time, we should fully consider the individual differences of athletes and make personalized training plans; In addition, the importance of technical details should be emphasized to ensure that athletes form correct technical action stereotypes in training. Therefore, it is suggested that table tennis coaches in colleges and universities actively adopt this method in teaching and training to improve the quality and effect of training.

Keywords: Multi-ball training; Colleges and universities; Table tennis training; Study

Introduction:

As a popular sport, table tennis has many fans and professional players all over the world. With the update of table tennis competition rules and the improvement of competition intensity, the requirements for athletes' technical level and physical fitness are getting higher and higher. Although the traditional table tennis training method has its advantages, it is difficult to meet the needs of modern competition in efficiency and effect. Therefore, as an efficient and systematic training method, multi-ball training method has been gradually introduced into table tennis training in colleges and universities. This paper will discuss the concept, principle, advantages of multi-ball training method and its application in table tennis training in colleges and universities in order to provide useful reference for table tennis teaching.

1. The concept and principle of multi-ball training method

1.1 Concept

Multi-ball training method was first put forward by Japanese women's volleyball coach Daimatsu Bowen, and then introduced into table tennis training by Chinese table tennis coach Li Rensu. This method refers to the continuous and repeated batting training for athletes by using multiple table tennis balls, so as to improve their technical level and physical fitness level. Multi-ball training method simulates the game scene by setting up multiple tables and rackets, so that players can increase their contact times with the ball in a limited time, thus improving their reaction speed, coordination ability and technical level.

1.2 Principle

The core of multi-ball training method is to improve athletes' reaction ability and physical coordination through continuous and high-intensity hitting practice. During the training process, the coach will continue to provide the ball, which can be provided directly, off-stage or mixed, and the speed, strength and rotation of the ball can also be adjusted as needed. Athletes need to catch and serve multiple balls continuously in a short time. This training method can effectively improve the athletes' ability to catch and serve, enhance their ability to control the ball, and thus improve their technical level.

1.3 Advantages of multi-ball training method in table tennis training in colleges and universities

Multi-ball training method can increase the contact times of athletes with the ball in a limited time, thus improving training efficiency. In traditional single-ball training, athletes need to keep picking up the ball, which greatly wastes training time. The multi-ball training rule reduces the time of picking up the ball through continuous ball supply, which enables athletes to practice hitting more balls in a shorter time and improves the training efficiency.

Multi-ball training method can enhance the player's sense of ball and reaction ability through continuous hitting practice. In the training process, athletes need to constantly judge the impact point, speed and rotation of the ball, so as to make the correct hitting action. This kind of high-intensity exercise can enable athletes to judge the direction of the ball more accurately in actual combat, improve the reaction speed, and thus enhance their competitive ability.

Multi-ball training method can improve the technical level and competitive ability of athletes in an all-round way by setting up a variety of ball supply methods and combinations. In the training process, the coach can make a targeted training plan according to the actual situation of the athletes, and adjust the speed, strength and rotation of the ball supply, so that the athletes can gradually adapt to different competition scenes and opponent styles. This training method can significantly improve the athletes' technical level, movement speed and physical fitness level, thus enhancing their competitive ability.

The time of table tennis course in colleges and universities is limited, and the traditional teaching methods are often difficult to achieve the ideal training effect. The multi-ball training rule can carry out high-intensity exercises in a limited time, thus making up for the lack of curriculum arrangement. Through the multi-ball training method, students can get a lot of batting practice opportunities in a short time, improve the stability and proficiency of technical movements, and lay a solid foundation for future competitions.

2. The specific application of multi-ball training method in table tennis training in colleges and universities

2.1 Basic technical training

In the basic technical training, the multi-ball training method can help students better master the basic technical actions such as serving, receiving, forehand and backhand. The coach can let the students practice these basic technical movements repeatedly through continuous ball supply, thus improving the accuracy and stability of the students. At the same time, the coach can also adjust the speed and strength of ball supply according to the actual situation of students to meet the needs of students at different levels.

2.2 Tactical awareness training

In the aspect of tactical awareness training, multi-ball training method can simulate different game scenes and opponent styles by setting different ways of ball supply and combination. Coaches can make targeted training plans according to students' technical level and competitive ability, and improve students' tactical awareness and adaptability by simulating competition scenes. This kind of training method can enable students to cope with various challenges more calmly in actual combat and improve their competitive level.

2.3 Pre-competition warm-up and adaptation training

In the pre-match warm-up and adaptation training, multi-ball training can help students improve their physical fitness and reaction speed by setting up high-intensity exercises. According to the actual situation of the competition venue and atmosphere, the coach can make a targeted simulation practice plan to let students adapt to the rhythm and atmosphere of the competition before the competition. This training method can make students more active and agile in the competition and improve their competitive level.

2.4 Personalized training

Multi-ball training method can also make personalized training plan according to the individual differences of students. According to the age, gender, technical level and physical condition of students, the coach can adjust the parameters such as speed, strength and rotation of ball supply to meet the needs of different students. This personalized training method can give full play to the potential of each student and improve the training effect.

3. The specific application of multi-ball training method in table tennis training in colleges and universities

3.1 Basic technical training

In the basic technical training, such as serving, receiving, forehand attacking and backhand pushing, the coach can adopt the multi-ball training method to let the athletes catch the ball continuously, and consolidate the basic technical movements through

repeated practice to improve the technical stability and proficiency.

3.2 Combination technical training

After the athletes have mastered certain basic skills, the coach can design the training scheme of combination techniques, such as forehand attack after serving, backhand block attack after sideways attack, etc. Through multi-ball training, the athletes can complete the combination techniques in continuous catching, thus improving the technical and tactical level.

3.3 Simulated Competition Training

In order to enhance the actual combat ability of athletes, the coach can simulate the game scene for multi-ball training. For example, setting different opponent styles (such as fast attack, loop, etc.) and competition rhythm (such as fast attack and defense conversion, stalemate ball, etc.) allows athletes to experience the tension and pressure of the game in continuous catching, and improve their psychological quality and competitive level.

4. Matters needing attention of multi-ball training method in table tennis training in colleges and universities

4.1 Pay attention to the principle of moderation

Multi-ball training requires high-intensity practice, but overtraining may lead to physical fatigue and injury of athletes. Therefore, the coach should arrange the training amount and intensity reasonably according to the athlete's physical condition and training objectives to avoid overtraining.

4.2 Personalized training

Every athlete's physical quality, technical level and psychological state are different, so coaches should make personalized training plans according to the individual differences of athletes when adopting multi-ball training methods to meet the needs of different athletes.

4.3 Emphasis on technical details

In the process of multi-ball training, coaches should pay close attention to the details of athletes' technical movements, correct wrong movements in time, and help athletes form correct technical movements. At the same time, we should also pay attention to cultivating athletes' tactical awareness and competition strategy ability.

To sum up, the multi-ball training method has a significant application effect in table tennis training in colleges and universities, which can effectively improve athletes' technical level, physical fitness and competition ability. Therefore, it is suggested that table tennis coaches in colleges and universities actively adopt this method in teaching and training to improve the quality and effect of training.

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