

Sports Education and Training Based on Synergy based on Special Physical Quality Training of Students Majoring in Table Tennis

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Abstract: In sports teaching and training, students' physical fitness exercises can not only enhance and improve students' physical fitness, but also ease students' tense learning atmosphere. It is the main goal and task of table tennis special training course to improve the technical and tactical level and ability of table tennis special students. Quantitative and accurate data are used to test and feedback the process and effect of teaching and training, which can promote the quality of teaching and training. Regardless of the sport, the specific physical fitness is based on general physical fitness. From the perspective of synergy, the cultivation of professional practice ability of masters of physical education training should pay attention to the coordination of management level, improve management methods, and make the management system consistent with the training objectives. From the perspective of synergy, this paper constructs ways to strengthen the professional practice ability of postgraduate students in physical education training according to the requirements of the society for the masters of physical education and training.

1. Introduction

At present, the aim of quality education is to make students develop both physically and mentally, including physical quality, psychological quality, cultural quality and ideological and moral quality [1]. With the deepening of teaching reform and the streamlining of specialized courses, special physical fitness training has been gradually diluted [2]. Table tennis in China has gone through nearly a hundred years of history, and gradually developed into a competitive advantage of our country. In the syllabus of table tennis special course in physical education institutes, it is clearly stated that the course nature of table tennis special course is a compulsory course for physical education majors and sports training majors [3]. In sports training, various physical exercises that are directly related to the performance of table tennis are used to improve the professional sports quality of students. For students with higher levels, it is mainly for special physical training and special quality training because they have a higher level [4]. It is meaningful and necessary for students to use the extra time to train the special items. This can further improve the special technical skills of students majoring in physical education, and help to cultivate their talents with special technical skills that are needed by the society [5].

The quality of a human body also reflects the level of physical fitness. Good physical fitness is the basis for learning and mastering basic skills, skills, and improving athletic performance [6]. Table tennis sports education, fun, fitness and other functions gradually emerged. Physical education and training is a dynamic process, especially the differences between individual students, and the technical level of students in different majors is different [7]. Regardless of the sport, the specific physical fitness is based on general physical fitness. The people who work on this project are also required to perform special physical training while performing general physical training. It is necessary to correct the speed, strength and other related exercises and related actions according to the actual situation of the students, and to discuss the methods of exercises [8]. In this paper, the degree of specialization of table tennis specific physical fitness training methods and the control of exercise load in the implementation process are studied. The aim is to provide a theoretical framework for the systematization of table tennis specific physical fitness training from the perspective of sports training, which can be used as a reference for coaches and selected students in training.

2. The Purpose and Significance of Physical Quality Training in Table Tennis Teaching

Physical training is essential in any sport, and table tennis is no exception. After the implementation of the new teeing rules, the proportion of the holdings may increase, and the proportion of offensive and defensive conversions will increase. Regardless of the practice of table tennis teaching and training, or the theoretical knowledge system of table tennis, special physical fitness training is an important part of the knowledge and skills of table tennis. The key to carrying out the teaching and training of sports entrances is to correctly understand and accurately grasp the characteristics and laws of the project itself [9]. Table tennis belongs to the anti-resistance group of skill-led nets. Table tennis technology determines the athletic ability and training ability of table tennis graduates. Physical training is often carried out by means of speed, strength and endurance to improve the athlete's basic physical fitness and specific physical fitness. Table tennis students in physical education major are the main body of special training. Their special basic level has an important influence on students' special study and mastery of table tennis skills. It is necessary for the students majoring in table tennis to master the practical and theoretical knowledge of special physical fitness training, which will enrich their knowledge and skills of table tennis.

Good physical quality is one of the necessary conditions for students majoring in physical education. Special physical fitness training can not be ignored, which is the purpose and significance of special physical fitness training for table tennis majors. The test of lower limb stretching knee and bending knee of table tennis players can be used as one of the indicators of special strength evaluation. Comparison of muscle contribution rates by different methods is shown in Figure 1.

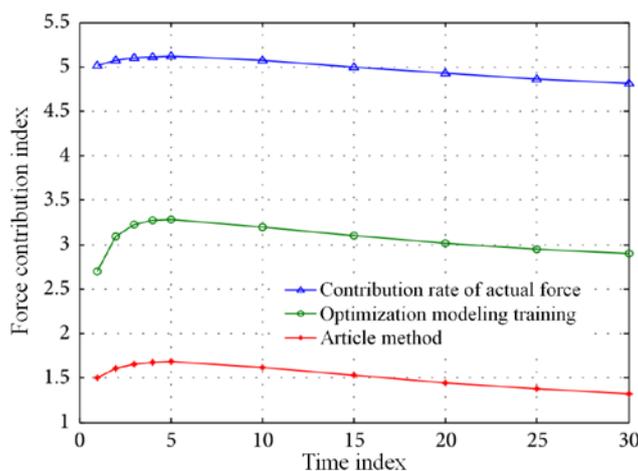


Fig. 1 Contributing rate comparison

Physical education is guided by the concept of quality education, the concept of lifelong physical education or the concept of ability teaching. The training time cannot be guaranteed, which restricts the practice of table tennis techniques. Physical fitness refers to the use of a variety of physical exercises to enhance the health of students, improve the performance of students' various organ systems, comprehensively develop sports quality and transform their body shape training. With the curriculum reform, the technical time is streamlined, and the development of its physical quality is affected to some extent. The main teaching goal of the table tennis specialization course for physical education is to develop teaching skills. The primary teaching method is demonstration and explanation. The choice of indicators should be based on science, guided by correct theories, based on the internal relations between objects and the essential links between things.

Cognition is the reflection of the human brain on external reality based on practice, including perceptual knowledge and rational understanding. Here, it refers to the perception, understanding and evaluation of the individual's performance on the subject. The special physical fitness training for table tennis students can be used as the preferred way to develop physical fitness. Through the exercise of greater exercise intensity, not only can students experience the joy of overcoming difficulties, but also cultivate the quality of tenacious will. Specialized students must have strong

ability of demonstration and explanation. High-quality demonstration and explanation must be based on skilled application of technical movements. Specific physical fitness refers to the development and improvement of special physical fitness which is directly related to the performance of special sports by adopting special physical exercises closely related to specific needs. In order to ensure the accuracy and effectiveness of statistical data, we should proceed from the actual situation of students' technical and tactical characteristics and abilities at different training stages. In the special physical fitness training, the training content should choose the training content of low or medium load intensity - short high intensity load, which is reflected in the arrangement and combination of the intensity and quantity of the exercise.

3. Content and Method of Physical Fitness Training in Table Tennis

Regardless of the practice of table tennis teaching and training, or the theoretical knowledge system of table tennis, special physical fitness training is an important part of the knowledge and skills of table tennis. The special course for table tennis has a scientific and reasonable teaching and training program, which requires students to master the sports technology. The key to the technical and tactical monitoring and quantitative research of the table tennis special course is to accurately grasp the actual situation of the special practice class and combine the statistical theory with the actual operation. Physical education is guided by the concept of quality education, the concept of lifelong physical education or the concept of ability teaching [10]. The special strength needed in table tennis is mainly the fast power needed in hitting the ball. Students' learning attitude and training atmosphere are better, and coaches can play a more active role in training, but in terms of venues and facilities, it has a greater impact on students' participation in extracurricular special training. The greater the power, the faster the ball will spin or spin. Schools and coaches should pay more attention to the special training of after-school table tennis and give full play to the great role of students' subjective initiative in their individual learning mentality.

In the process of using the special physical fitness method of table tennis, one of the first problems to be solved is how to make a variety of special physical fitness training methods conform to the special physical training law of table tennis. The physiological basis of synergy is the synergy of the conduction process of the central nervous system, and the synergy is mainly acquired by heredity. Training has an important influence on synergy. In the fierce competition, especially in the area in front of the goal. During exercise training, the adaptation of cardiovascular function to exercise load can be understood based on changes in blood pressure. The ideal response after exercise is an increase in systolic blood pressure and a diminished or diastolic pressure. First obtain the minimum spanning tree, then control the loop according to the condition, and block the edge with the largest weight. If you need to get two clusters, you only need to cut one of the longest edges. as shown in Figure2.

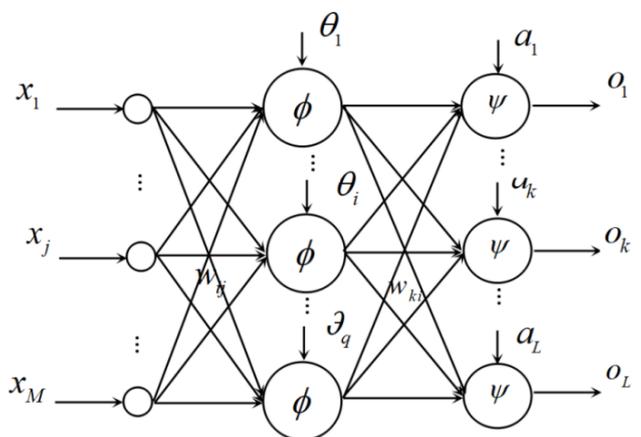


Fig. 2 Spanning Tree Process

It is necessary for the table tennis specialization students to master the practical and theoretical knowledge of the special physical quality training, which will enrich the students' knowledge and

skills in table tennis. In the training of table tennis, the training effect is often influenced by many factors. When the relationship between the training effect and many factors is studied, the multiple regression method can be used to analyze and discuss. Appropriately adjust the method of assessing the final scores of the table tennis specials for physical education majors, and integrate the students' participation in the special training after class into the special assessment to improve the motivation level of students participating in extracurricular special training. In the distinction of specialization degree, two different concepts of specialization degree, namely, special basic physical fitness training and special physical fitness training, are used. The special physical fitness training of table tennis majors can be used as a preferred way to develop their physical fitness. Through the exercise of greater intensity, students can not only experience the joy of overcoming difficulties, but also cultivate the quality of indomitable will.

Special basic physical fitness training can closely focus on specific physical fitness needs and provide the most direct help for improving the level of special physical fitness training. Many theoretical research and practical measures of special physical fitness originating from table tennis matches can not be completely copied to the special physical fitness training of table tennis specialized courses. Competitive table tennis is an endurance load with low average intensity. With the increase of the load duration, the more quickly athletes rely on fat to provide energy. The order of the muscles of the table tennis technique is that the force is applied from the proximal end of the total center of gravity of the human body to the end of the force. Only in this way can the special quality practice be used to achieve practical results, so as to better promote the improvement of technology. Professional basic ability is the basic ability of physical education, including basic teaching ability, teaching operation ability and teaching development ability. In order to make the special speed, strength and other qualities truly meet the needs of each technical movement, it is necessary to pay attention to the action structure and muscle force form of the selected special body training content to be as similar as possible.

4. Conclusion

Table tennis graduates must define their own development direction, understand their strengths and weaknesses, and foster strengths and avoid weaknesses. Through the test and evaluation of the special table tennis students, the actual level of the special students can be accurately reflected, and the quality and effect of the training can be checked and evaluated. In order to effectively control the training process, it provides a reference for better teaching and training of table tennis skills and tactics. From the perspective of synergy, the cultivation of professional practice ability of masters of physical education training should pay attention to the coordination of management level, improve management methods, and make the management system consistent with the training objectives. Then there is the synergy of knowledge and skills to strengthen interaction and communication between the tutor and the students. While giving full play to their guiding role, tutors should be good at discovering graduate students' professional practical ability and innovative ability. The training contents of table tennis majors in physical education should be determined according to the characteristics of the main technical movements of table tennis, and the creative methods and training methods of training means for reference are put forward. Correctly grasp the specific physical quality of table tennis practice methods, and reasonable practice in classroom teaching or training. Systematic teaching or training, students' table tennis skills and tactics will be improved with the improvement of specific physical fitness.

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