

Application Research of Badminton Teaching Based on Functional Training Perspective

Zhe Ruan*

*Sports Institute, Zhengzhou Normal University, Zhengzhou 450000, China

Corresponding author email 15566625@qq.com

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Abstract: Functional training has achieved remarkable results in sports training. This research uses research methods such as literature, expert interviews, questionnaires, and logic analysis. It focuses on the application of functional training as a perspective in badminton teaching. Based on the current state of badminton teaching, we first analyze the functional training research overview, secondly introduce the application of functional training in badminton teaching research, and finally start with action prevention training, action preparation training, rapid contraction comprehensive training, Functional strength training, energy metabolism conservation training, and functional restorative regenerative training are explained in depth and explore the effective application of functional training in badminton teaching. The purpose is to provide useful reference and experiments for related research.

1. Introduction

Functional training, as a new teaching concept that was first introduced in China's physical education and sports training, is popular in China. Functional training, including training ideas, training content, training methods, training feedback, and training methods, runs through all areas of physical education, and is highly competitive and practical. Functional training is mainly a fixed action mode performed by athletes based on conditions such as quantitative load. It can effectively mobilize multiple joints and organs in the human body to maintain the balance of the body, Coordination, sensitivity and flexibility are the main goals [1]. Under the background of the era of "water courses" and the establishment of "golden courses", the reform of physical education education and teaching is facing arduous tasks. For badminton teaching, college students in ordinary universities need to perform batting movements in an unbalanced environment and state, and in the process of this exercise chain, they need to complete at the fastest speed with extremely high physical energy reserves. In this way, students are required to receive professional training and practice in their daily learning, in order to be able to continuously improve the development level of their own badminton. Application in badminton ball teaching and put forward related measures for future development.

2. Overview of Functional Training Research

Functional training originated in developed countries such as Europe and the United States, and was first applied to physical fitness-led events such as track and field, swimming. It has been greatly promoted and practiced in other projects, and has achieved very good results. As an advanced training idea introduced abroad in recent years, relevant experts and scholars in the field of sports training and sports human science in China have conducted in-depth and detailed research. The earliest experiments were conducted on athletes at all levels in China. The training methods With strong specialization and personalization, it can significantly reduce the gap between training and competition, which is convenient for athletes to do sports injury work, and obtain excellent competitive status, so as to obtain the best competitive results. Understand that functional training is a training process of competitive action [2]. At the same time, functional training focuses on the

quality of the movement, that is, the effect of the movement during the exercise, not the number of movements and the number of loads. The purpose is to ensure the flexibility of the athlete's body through multiple planes and dimensions. Coordination, and then integrate the action method and process to prevent athletes from being injured and provide certain economic support for athletes' professional training activities.

For functional training, the focus is on the quality of movement, not quantity. It can be understood that the quality of movement is the core of integrating physical movements. The quality of movement in functional training can be reflected by the range and physical control skills and balance. Only by ensuring the improvement of the athlete's own movement quality, can he promote the creation of a good sports flow system in sports training, and promote the athletes to achieve effective movements in a highly efficient manner [3]. In addition, the main purpose of functional training is to improve the quality of movement. The body, as the carrier of the movement, assumes all links from the beginning to the closing of the movement. Therefore, it strengthens the stability and coordination of the athlete's body as Basic guarantee. Therefore, the application of functional training concepts in badminton teaching has an important role, which is in line with the basic rules of badminton teaching and development. The most obvious effect of applying functional training in badminton teaching is to help students prevent various injuries to their bodies during sports and ensure that the body is always in a good state. Because the essence of badminton is a sport that combines physical strength and skills, it requires athletes to quickly respond to feedback within a limited period of time and make the most accurate judgment. As well as the coordination and integration of joints, this verification will cause a large part of the strength of the students' body and joints to be impacted to a large extent. The action essentials involved in functional training can help students better prevent physical damage .

3. Application Status of Functional Training in Badminton Teaching

Throughout the country, the author randomly conducted questionnaire surveys and interviews with experts and scholars engaged in badminton teaching in 24 provinces, municipalities, autonomous regions, and municipalities. The survey results show that most experts and scholars and students have introduced "functional training" in badminton teaching. Generated a strong interest and enthusiasm, and I look forward to introducing new ideas in badminton classroom teaching to increase the vitality and vitality of badminton teaching. From this, it can be concluded that "functional training" is convenient to break through the boring features of previous sports classrooms and become more prominent. "Teacher's dominance and student's subjective status" better attracts students' attention, stimulates students' motivation for learning, and then improves students' efficiency in learning badminton knowledge. For teachers, they believe that the "functional training" teaching idea can not only improve their own teaching level, but also fully stimulate students' interest in learning, thus reflecting the high recognition of the teaching concept of "functional training" given by many badminton teachers Knowing and affirming, we will actively guide students to carry out corresponding training activities, so that this training project will develop into an organic whole in badminton teaching and better convey the Olympic spirit.

4. Application of Functional Training in Badminton Teaching

4.1 Action Preventive Training

The so-called action prevention training mainly exists before the course, that is, the preparation stage of teaching. The goal is to prevent athletes from suffering physical injuries during sports training, and to ensure that athletes have strong stability and coordination Training method. At the same time, preventive training of movement is the key to achieve perfect sports with high quality and high integration of athletes [4]. In the process of applying functional training concepts, teachers should first ensure that each joint in the student's body is flexible and stable enough, make random plans and emergency preparations for classroom teaching, further clarify the student's physical

posture and physical state during exercise, and then The teacher introduces the free stretching method of the fascia to the students, and guides the students to train the key joints and muscles on the body. Since the entire process of badminton teaching requires high integrity of the student's physical energy reserve, the students are organized to participate in preventive actions the training time should be greater than or equal to 10min.

4.2 Action Readiness Training

The so-called action preparation training refers to the use of functional training concepts before the start of the badminton teaching course, to guide students to stretch the muscles of their joints before the start of teaching. After the action preparation, students who study badminton themselves The existing nervous system will be more excited, so that it can maintain the symmetry and flexibility of the body during the exercise, so that the athletes can master the basic movements of badminton, prevent sports injuries, improve the teaching effect, and ensure the student's sports efficiency. In addition, movement training often includes hip movements, upper limb movements, movement optimization, and rapid response. The teaching time should be greater than or equal to 5 minutes.

4.3 Comprehensive Training for Rapid Contraction

Generally speaking, the training methods of rapid contraction comprehensive training and super isometric training are similar. During the teaching of badminton, teachers should actively guide students to train their nerves and muscles to ensure that the body gathers its own muscles within a limited time. power. Teachers can make full use of the rapid contraction comprehensive training method to help students transform their strength into the sports field and achieve excellent results. During this period, the content of the exercise involves taking off with two feet or the continuous alternation of the left and right feet, and the direction of the movement involves front, back, rotation, and sides. 20min.

4.4 Functional Strength Training

For functional strength training, it mainly means that on the basis of ensuring the successful completion of work movements in the training course, with the use of multiple joints and multiple planes to increase different loads, teachers can follow four, six, The concept of six organizes students to participate in training. The "four" is the horizontal, coronal, sagittal, and frontal planes, and the "six" is the six parts of the body involved in student training, namely the cervical, thoracic, lumbar, knee, foot and naked joints, and hip joints. "Six" is the back chain, the front chain, the side chains involved on both sides of the body, and the two diagonal chains in front of and behind the body. This skillfully helps students complete the training of single joints and single planes of the body, and comprehensively promotes the speed at which students' own muscle strength is transformed into special strength. In addition, functional domestication is not only training the strength of a part of the student's body, but also the overall strength of the student to ensure that the student's strength develops their limbs evenly. The training time should be within 15-20 minutes.

4.5 Energy Metabolism Conservation Training

The human brain, as the organ that generates commands, plays the key role of the commander in the entire badminton teaching. The bones and muscles are a tool for students to perform actions, and the energy metabolism system provides the driving force for these tools. The concept of functional training is a manifestation of students' oxygen and aerobic abilities when performing an action, but in the past training activities paid more attention to the number of actions, including energy metabolism tests performed by athletes. The time corresponding to the highest heart rate [5]. Under the concept of functional training, teachers organize students to carry out energy metabolism development training activities, which can ensure the functionality of their cardiovascular system during the execution of badminton, and ensure that the students themselves maintain a brand-new energy level, which has reached the goal of conservation And, during the organization of students'

energy metabolism development training activities, it is advisable to set the requirements of this training no more than 3 times a week.

4.6 Functional Recovery Regeneration Training

The so-called functional restorative regenerative training refers to effective ways to restore physical fitness. However, these methods are not the same as the recovery status in normal times, but refer to the subliminal massage and physical therapy before, during, and after training. This way relaxes the body itself, helps students reduce the body's pain, and facilitates the compounding of lymphatic blood and skeletal muscle in students' body [6]. At the same time, functional recovery regeneration training is mainly to help students to relieve the physical fatigue caused by strenuous exercise psychologically and physiologically, and to avoid the occurrence of psychological fatigue as much as possible. At this stage, for the teaching process of badminton, teachers often pay too much attention to the efficiency and frequency of training, neglecting the process of recovering students' physical skills, resulting in the problem of sports injuries. In addition, teachers need to arrange the time to be greater than or equal to 8 minutes in the process of organizing students to participate in regeneration training activities to ensure the effect of regeneration training.

5. Conclusion

Badminton is a physical sport. The teaching process has its own development rules. The application of functional training concepts in badminton teaching has very important value and significance. Teachers should fully understand the basic connotation and extended attributes of functional training. Actual sports situation, formulate badminton teaching system, carefully design teaching links, adopt scientific and effective teaching methods, through motion preventive training, motion preparation training, rapid contraction comprehensive training, functional strength training, energy metabolism conservation training, functional recovery Regenerative training, etc., cleverly improve the coordination of students' own body, and promote the improvement of students' badminton skills.

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