

The Principles and Contents of Physical Fitness Training for Sports Dance

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Abstract: This article uses literature method, logical analysis method, mathematical statistics method combined with the sports characteristics of sports dance; grasps the actual situation of the development of sports dance in my country; analyzes and discusses the content, methods and means of sports dance special physical training. Relevant professional knowledge and data show that domestic sports dancers lack physical fitness, which is also one of the factors that limit the status of Chinese high-level athletes in the forefront of the world. Starting from the current status of the special physical fitness of ethnic sports dancers; this article conducts a preliminary analysis and research on the related concepts of dance, training content, training methods, exercise methods, and special physical conditions. It is believed that the special physical training system for physical exercise consists of two The composition of the following elements: One is the particularity of physical exercise. The factors that affect specific physical fitness include specific strength, specific speed, specific flexibility and specific coordination.

1. Introduction

Special physical fitness training for sports dance refers to a training method that comprehensively improves quality through preliminary comprehensive quality training according to the needs of the specific development of sports dance, combined with the characteristics of sports dance. The special physical training of sports dancers is mainly composed of four parts: the ability to perform alone, the possibility of a whole set of performances, the cooperation ability of partners and the ability of competitive performance. Among the ten sports dances, there are three characteristics of strength, flexibility and endurance.

At the same time, the quality of competitive display and partnership as an external performance is also very important for the performance of these four skills.

2. Current Status of Research on Physical Fitness Training of Sports Dance in My Country

2.1 Unable to Grasp the Intensity and Quantity of Specific Physical Exercise

In sports training, especially in the more difficult technical traffic training, coaches often consider more technical issues, ignore the athletes' specific physical training, and focus on mastering technical connections. The number of exercises meets the training requirements, but the training intensity does not meet the training requirements. Especially young athletes missed the best time for physical development.

2.2 The Content of Physical Training is Not Strictly Related to the Characteristics of Sports Dance

According to the "Physical Exercise Convention" and the main content of physical exercise in this document, the physical exercise content of sports dance includes not only the quality of the exercise, but also the strength of the exercise, the expressiveness of the dance, the posture of the body, and the cooperation with the dancing partner. Reflects the characteristics of this project. At present, the physical fitness training in sports dance in my country is limited to physical fitness training,

especially the general fitness training such as flexibility and sensitivity. General basic physical fitness and personal physical fitness are not strictly combined with special techniques. Facts have shown that ignoring the physical training of athletes will not only cause sports dancers to be unable to learn and control some difficult technical movements that are currently popular in the world, but also ensure that athletes always maintain strong energy to complete the game.

2.3 Physical Training is Unscientific and Unsystematic.

In regular repetitive training, most athletes only attend classes with the teacher and then train. What they learn and absorb in this way are only new things in technology, but they have no in-depth understanding of the problems in physical exercise, let alone further research. Without scientific analysis and determination, of course, it will not be able to adapt to the needs of technological updates. As time goes by, it can't keep up with the development trend of modern sports dance technology. The practical development of modern competitive sports has proved that physical exercise is the basis and guarantee for skill creation and development, and an important cornerstone for the success of sports dancers.

3. Main Content of Physical Training for Sports Dance.

3.1 Special Forcestrength is the Most Basic and Most Important Quality in All Sports. Different Designs Have Different Strength and Quality Requirements.

The special quality of the power of sports dance is the basic guarantee of the physical structure of sports dancers and the cornerstone of other elements. In sports dance, the use of power emphasizes the degree of control of power (immediately continuous winding and deceleration). The ability to control continuous acquisition and release also requires athletes to cooperate with music rhythms, conventional systems, dance performance and other conditions. This is why the explosive power of sports dance belongs to "cohesion." The athletic power shown in the conventional movement of sports dance is the speed of athletic training, that is, explosive power. The intensity of traffic training should use training-mature sensitive time. During this period, we should strengthen muscle training, including absolute strength and relative strength.

Reasonable use of ankle, leg, knee, hip, abdomen, waist, back, shoulder and other joint strengths should be trained through special basic sports dance movements. For example, the training of leg support and elasticity is achieved by constantly playing and kicking cowboy dance; through the in-situ squeeze movement in rumba dance and the front step to block the chacha dance, you can train to resist the relative tension of the abdomen, back and waist muscles. The ability to balance and balance; long-term waltz training can supplement symmetry and the ability to control the shoulders and shoulders; the ability to jump and brake is trained through the time period of the cha-cha dance and the buddha steps in the samba dance. In the training of the force parts of sports dance, attention should be paid to the correct music rhythm of footwork, body orientation, body rotation, body lifting, body rotation, body lifting and body tilting.

3.1.1 Strength Exercises Should Be Classified According to Anatomical Characteristics:

- (1)Should strengthen the arm and shoulder muscles.
- (2)Should strengthen the muscles of the body and legs.

3.1.2 The Development Method of Special Forces:

- (1)Repeated force method:
 - (a)Specify the number of times to complete the exercise.
 - (b)The maximum number of times of exercise is set according to the endurance status.
- (2)Power law: terminate the operation as much as possible within the specified time;

- (3) Static method: determine the position and keep it long enough;
- (4) Maximum strength method: complete the exercise under maximum load.

3.2 Specific Endurance

Special sports dance refers to the ability of athletes to mobilize their physical stamina within a certain period of time and continue to perform intense special sports in order to obtain special results. According to organ function, it can be divided into muscle strength and circulatory system. Muscle strength refers to the ability of muscles to contract for a long time. The circulatory system is divided into oxygen and anaerobic intensity. Oxygen resistance refers to the strength of the body when the flow of oxygen is sufficient. Anaerobic endurance refers to endurance that is affected by insufficient oxygen flow and oxygen liability. Special fitness dance performance characteristics:

(1) Maintain the endurance of the dance posture. In modern dance, from the beginning to the end of the music, the posture of holding the partner should always remain the same. The coordination of dance postures and body lines serves as a prerequisite for the completion of regular movements. The strength of the long-term contraction of the pectoralis major and latissimus dorsi is the key to maintaining a graceful dance posture.

(2) Balance control endurance. Balance control is carried out through the beginning and end of conventional sports dance movements. Sports transportation technology rarely stands still and supplements sports actions, which requires long-term sustainability. The body starts to move and continues to move through the work of the muscles. At the same time, it is necessary to maintain balance and perfect body lines, and maintain circulation. In order to achieve the best possible state of these keywords in sports dance.

(3) The endurance of the complete set of movements, the completion of the complete set of movements requires the coordination of different body functions to complete the physical ability, that is, the durability of the complete set of movements. For this reason, all movements must be carried out to achieve full physical efficiency. Sports competitions are generally divided into preliminaries, semi-finals and finals. Sometimes, when there are many players in the group, there will be semi-finals (first round semi-final and second round semi-final). In the five dance competitions, if the preliminaries and semi-finals are held on the same day, the contestants must dance ten sets of dance steps; sometimes the finals will be held on the same day, and the athletes will jump more times in the whole set of activities. The load intensity of each dance set has high requirements for muscle strength. At the same time, coupled with the tense competition on the ground and the pressure exerted by competitors, we can imagine huge physical labor.

(4) Expressive endurance. Athletes should always maintain communication with their dancing partners, as well as the public and referees. Make sure the eyes and facial expressions are relaxed, keep calm, and continue to relax the facial muscles.

3.3 Methods and Training Measures:

3.3.1 Method: Balance Exercise over Time.

practice repeatedly within one to five minutes and rest for three to five minutes; the number of repetitions depends on the duration of continuous practice and rest.

3.3.2 Measures:

On the basis of basic technical movements, they control the entire range of movements of gold, silver and bronze, and practice repeatedly (single or double), practicing the entire length of music to perform basic movements and endurance; competitions Routine procedures are repeated for a long time; the rest time is reduced in practice; when the correct technical actions are completed, the load should not exceed 2-5% of its own weight.

3.4 Special Speed

It includes three types: reaction speed, action speed and action frequency. Questionnaire surveys and on-site observations also found that most coaches regard speed training as a very important content of special physical training for sports dance athletes. In the modern dance department, fast step dance has 52 bars per minute (four songs per bar), and the Vienna Waltz has 60 bars per minute (three songs per bar); in the Latin dance department, cowboy dance has 46 bars per minute (4 per bar). Bit), Niuqiao Dance has 62 bars per minute (2 bits per bar). In these four kinds of dances, sports dancers must complete 180-240 movements within one minute, which puts forward higher requirements for sports dancers' reaction speed, movement speed and movement frequency.

3.4.1 Training Method:

- (1) Need to respond quickly to moving and transmitting instruments, and move flexibly and freely;
- (2) Complete exercises according to games, competitions, etc. ;
- (3) Control speed and rhythm: calculation, clapping, metronome, music, etc. ;
- (4) The practice of repeating normative measures at the speed of the nearest border;
- (5) Complications: practice in a state of rapid growth, discomfort, improper adjustment and accident
- (6) Take the form of who is faster and who is more suitable for competition or practice in the competition.

3.4.2 Training Methods:

- (1) Quick response exercise:

The movement of the body under variable speed is controlled to different degrees, such as emergency stop, quick start, etc. Follow the instructions of the coach to terminate the operation.

- (2) In sports dance, actions that must be completed quickly, such as starting, spinning, and some pair cooperation

- (3) Actions that must be performed at the fastest frequency are: fast running and jumping, frolicking and kicking in cowboy dancing, etc.

3.5 Special Flexibility

Flexibility refers to the range of motion of human joints and the ability to stretch muscles and ligaments. This ability depends on the flexibility of human joints, the extension and flexibility of muscles and ligaments, and the coordination of muscle tension and relaxation. Flexibility is divided into dynamic flexibility and static flexibility. Sports dance is based on dynamic performance, supplemented by static performances, and at the same time demonstrates the power of determination. According to the type of traffic performance, the flexibility of sports dance can be divided into active flexibility and passive flexibility. Active flexibility is a joint action of the athlete's own active performance, and passive flexibility is an activity performed by external forces. Sports dance incorporates the artistic movements required for dance. This requires the body to exhibit a wide range of ordinary movements. The content of sports is very complex and rich. It requires high flexibility for athletes. If the flexibility of athletes is high and the flexibility of each joint is high, they can better play the athlete's body speed, coordination and strength. More difficult sports actions can improve athletes' competitiveness. On the contrary, if the athlete's flexibility is low, it is not only easy to cause damage to the body's ligaments and joints, but also unable to make more difficult movements. During the development of sports dance, many coaches and experts analyzed the flexibility training of athletes and summarized various training methods and techniques for flexibility of arms, waist, knees and ankles. At the same time, they also noticed the importance of speed and strength. Many new techniques and more difficult movements require the perfect combination of high flexibility and speed, which also reflects the soft and hard characteristics of sports dance. With the development of sports dance to a higher level, sports dance athletes must show higher speed and stronger strength under the premise of

high endurance, which also puts forward higher requirements for sports dance athletes' training and competition. In sports dance, flexible movement plays a very important role in controlling body posture and filling difficult movements. No matter what stage of training, we should pay attention to this point most. Methods and ways to develop flexibility: Relaxation exercises usually increase by 12%-15%; repeat flexible movements; passively maintain the maximum amplitude of work; actively maintain the maximum amplitude of activities; gradually upgrade.

3.6 Special Coordination Features

Some foreign sports training experts usually divide the coordination ability into six forms:

- (1) The ability to assess and adapt to movement dynamics and “temporal and spatial” parameters.
- (2) The ability to maintain a balanced and stable body posture.
- (3) The difference in rhythm.
- (4) Spatial orientation skills.
- (5) The ability to relax.

(6) The ability to coordinate actions. Some experts believe that in addition to these six forms, there are four skills: the possibility of action changes; the ability to combine actions; adapt to changing situations and unusual actions and postures; and be able to control the action response time. In sports, the concepts of coordination, flexibility and adaptability are often applied.

This kind of movement coordination includes: the coordination of dance organization and dance style; the coordination of music and movement rhythm; the coordination of the continuity of dance movements between partners. The coordination of sports dancers determines the quality of the movement and the effort on the level of exercise. In order to improve the level of special coordination training, strengthen sports movement reserves and dance skill training, it is very important to improve the dance coordination ability of sports athletes.

Specific methods of coordinated development include: repeatability; transformation; different starting and ending positions; method reflection; games and competitions. Symmetrical movement exercises (left hand movement, body direction change, movement coordination, speed change, movement force change, etc.), difficulty change exercises, etc. are effective methods to develop body coordination. Special coordination methods should be: muscle relaxation exercises; rapid response exercises; coordination of movements between different parts of the body; according to the conversion parameters of time, space and muscle strength, reproducing the accuracy of movement exercises; skill transfer practice; non-traditional mobility compete. There are reversal exercises; changes in normal speed and movement rhythm; taking concerted actions that they are not accustomed to; exercises to control more complex movements.

4. Effective Strategies for Physical Fitness Training of Sports Dance

4.1 Establish a Complete Personal Profile of Sports Dancers.

The amount of physical exercise is strict and accurate, and each load factor in physical exercise should be clearly defined. Educational quantification is an important part of improving the level of science education. The definition of training quantification is reflected in the specific data through different physical function indicators, which is the embodiment of the function file. Athlete's functional profile should include a complete system for measuring and evaluating physical functions, as well as precise data on the physical functions of each pair of dancers in each training period and recovery period.

4.2 Introduce Physical Exercise Plan.

comprehensively plan physical exercise and professional development. According to the current development trend of sports dance, the physical fitness of sports dancers gradually develops and

improves in the long-term training. Throughout the player's career, it is necessary to regularly conduct annual and multi-year physical training as planned. High-level competitive sports training is a coherent and continuous whole. When organizing the overall plan of sports training, starting from the overall situation of sports training, putting sports training in an important position in sports training, clarifying the content of sports training and corresponding sports training standards, so that the development of athletes' physical fitness can always meet sports training Need at the appropriate stage.

4.3 In Sports Training and Sports Dance Competitions, Excessive Physical Fitness is Used to Adapt to the State of the Game. There Are Many Aspects That Can Be Started from the Following Aspects:

increase the degree of load stimulation in pre-match sports training, so that the body can adapt to the game in a short time; through implementation Heavy adjustment, the body has a greater over-recovery effect; rationally organize the time for the appearance and maintenance of the best competitive state, and strive to make the best competitive state appear in the game. Therefore, the principle of overloading and the right of excessive restoration can be used to rationally adjust physical labor.

4.4 Real-Time Monitoring and Feedback Guide:

artificial intelligence tools to accelerate the modernization of sports training. Sports gymnastics training should pay attention to monitoring and feedback. Using modern science and technology, through blood routine testing, you can understand the dancer's resilience and fatigue, especially in the intensive training phase, the coaches organize physical training in a timely and scientific manner according to the athlete's situation. Through urine routine analysis, blood lactic acid analyzer, arterial analyzer, the athlete's physical condition can be grasped at any time, and the scientific and modern level of dance sports physical training can be improved.

5. Conclusions

According to the current development trend of sports dance, the physical fitness of sports dancers gradually develops and improves in the long-term training. Throughout the player's career, it is necessary to regularly conduct annual and multi-year physical training as planned. High-level competitive sports training is a coherent and continuous whole. In order to maintain a high level of competitiveness for athletes, long-term physical training must be planned, which cannot be ignored.

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