Limits and Adjustment of "Three-grade Training Network" in the Development of Competitive Sports: A Case study of Fencing in X Province

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Abstract: Through the investigation and analysis of the research, there is a lot of relevant research and application of the competitive sports policy of the "three-grade training network"; however, this policy no longer can meet the development of competitive sports at the current stage. So far, the official still has no clear direction for reform of the current three-grade training network policy, which is the purpose of this research. This research will use the method of the questionnaire survey, case analysis, and literary analysis to summarize, analyze and improve this policy based on the exploration of this policy at home and abroad nations. It is hoped that it can be used in the future development of China's competitive sports to make Chinese competitive sports management more scientific and efficient. At the inaugural meeting of the Tokyo Olympic delegation, Sports Director Gou Zhongwen expressed the downward trend in competitive sports. In recent years, the overall direction of the development of competitive sports in China is mainly manifested in the continuous decline of the level. In particular, the downward trend of collective projects represented by football is more pronounced. This paper primarily aims at the problem of the decline of the domestic competitive sports level and analyzes the successful cases and management models of other countries in the world, which are represented in recent years, and seeks reference.

Keywords: competitive sports, three-grade training network, China

1. Introduction

On September 22, 2020, during the general conference of education, culture, health, and sports, President Xi Jinping emphasized that he is highly concerned about the management and development of domestic competitive sports and pointed out that it is necessary to study scientifically, judge, and insist on creating a new situation for the development of sports. With the changes in economic growth and the continuous development of sports management, the existing

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competitive sports management law has achieved some results in competitive sports management. Still, its overall improvement is limited, and the new management system and system have not been fully established. Existing competitive sports management law in China is government-led. In the planned economy period, this effectively promoted the development of most competitive sports, but we can also see its problems. First, the government's discretionary investment of most funds makes people lose their enthusiasm for sports. Second, the government is the leader and manager of the sports industry, which contradicts the socialization of sports under the market economy [1]. In terms of strategic layout, the local sports bureaus focus on the inability to connect with the strategy of the Olympic Games in the National Games. In competitive sports education, the school's competitive sports management cannot form a complete system and cannot cultivate reserve talents. Under such circumstances, Chinese competitive sports have shown a downward trend [2]. With the continuous economic and sports development, references to some successful experiences in the development of foreign competitive sports will help provide a connection for China to explore the direction of sports reform, and it will also help to achieve comprehensive, healthy, stable, and sustainable competitive sports. Therefore, it has become a realistic choice to improve the progress of one's own competitive sports career through the study and exchange of advanced experience [3]. The "Whole national system" of China's sports development comes from the study and reference to the "Soviet model" of competitive sports in the former Soviet Union [4]. The highly centralized management system of the "Soviet model" of competitive sports is directly related to the nature of state power, an inevitable product of the Stalinist social, political and economic system, and an integral part of the Soviet model [5]. The core content is that sports are included in the national planned economic system, sports management power is highly concentrated in government agencies, sports development is directly controlled by planning and administrative means, and most sports funds rely on state financial appropriations.

The "Whole nation system" of Chinese sports was formed in the 1950s; however, this term officially appeared in the early 1980s [6]. On October 26, 1949, at the National Sports Workers Congress, it was proposed for the first time that Chinese sports should learn from the Soviet model. In the 1950s, the Chinese learned from the Soviet model and established a model of directly running sports by the government, which is compatible with the Chinese planned economic system and can "concentrate efforts to do big things [7]." After the 1984 Los Angeles Olympic Games, the State Sports Commission began formulating the "Olympic Strategy." In the past 30 years, Some experts and scholars have summed up the advanced experience in the development of advantageous sports projects in China and have called the sports model that realizes the high integration of resources in the sports system in the Chinese "Whole national system [8]." The "Whole nation system" in China during this period was manifested as: based on stable political support and a high concentration of resources; a top-down administrative decision-making model under the supervision of the Central Sports Commission; A "one-stop" training system, and talent training model composed of a highlevel training network; an investment system composed of staffing and funding guarantees; the guiding ideology and competition mode of "training troops at home and coordinating with foreign countries"; focusing on "winning glory at every level" purpose target system.

Chinese sports reform does not change the "Whole national system," adheres to the socialist nature of sports, insists on the leadership of the party and the government plays a vital role in the development of sports, and the innovation of government plays a leading role in the society and the market [9]. The "Opinions of the State Sports Commission on Deepening Sports Reform" and "Opinions" promulgated in 1993 proposed to speed up the pace of substantive sports, achieve the unification of powers and responsibilities of sports associations, and establish a sports association dominated by individual sports. Management system. It marks the beginning of Chinese sports reform [10]. After 30 years of development, the Chinese national sports system has shown new

features and changes [11]. Presently, the changes in the "whole nation system" of sports in China are manifested in five aspects. The target audience has changed from only professional athletes to all citizens, from "only gold medal theory" to national fitness; the environmental background has changed from a "one-stop" sports talent training system to "integration of sports and education"; the main body of participation is from "the power of the sports administrative system" The pattern of multi-subject participation in sports; the value concept has shifted from focusing only on instrumental value to the joint consideration of sports humanistic value, invisible value, total contribution, and potential benefits; in terms of mechanism of action, from the "government-assigned" planning system to the market-based approach. As the main body of resource allocation, government means are used in various aspects to realize the effective combination of government and market.

2. A Three-grade Training Network for Fencing Events in X Province

Taking the development of fencing in X province as an example, as the amateur training of competitive sports, it has established a sports school based on school sports, with provincial sports schools and city-level sports schools as the main body, with county-level, city-level, The training network with the district-level minor sports school as the central link. It is precisely the nationwide system of China's sports training management of "one game of thought, one-stop organization, and consistent training". The actual training network of the x provincial fencing project is a network training form in which the provincial excellent training team is the leader, the city training bases are the foundation, and the county individual training points are supplemented. Such a training mode is the x provincial fencing project

In the "Notice on Further Strengthening Basic Physical Fitness Training and Complementing Weaknesses in Physical Fitness" issued by the General Administration of Sports of China, the physical fitness test is linked to the selection of athletes, and fencing athletes must also participate in pull-ups., sitting forward flexion, 3000-meter running, and other physical fitness test items. All parts of the three-grade training network have begun to pay attention to physical training while paying attention to technical and tactical levels, to make up for shortcomings in physical fitness. During the preparations for the 14th Games, the General Administration of Sports of X Province has taken a series of measures to strengthen basic physical fitness and complement the shortcomings of physical fitness and staged results have been achieved. The fencing project continues to strengthen the understanding of physical training, constantly update training methods and means, and enhance the competitiveness of the team. Each echelon in the third-level training network conducts several physical fitness test training in the special gymnasium, basic gymnasium, and sports performance evaluation center to make up for the shortcomings of physical fitness for the 14th National Games and other national fencing championship cycles, and enhance the competitiveness of the competition. The provincial fencing team has a new understanding of physical training from coaches to athletes and has made breakthroughs in training methods.

The existence of the tertiary training network in X province has effectively compensated for the shortcomings of physical fitness, but the tertiary training network has also encountered many problems in the development process. Sports schools are shrinking in size, cultural shortcomings are obvious, conflicts between school and training, limited knowledge of athletes make it difficult to find employment and change careers, athletes' elite training is not high, and limited financial allocations lead to outdated and insufficient sports facilities, and insufficient information resources. Sports science application rate is low and so on.

3. Difficulties and Causes of Three-grade Training Network in China

The current three-grade training system for competitive sports in China is narrowly defined as consisting of a primary (sports teams represented by traditional sports schools and primary and secondary school sports teams), Intermediate (sports teams represented by sports schools and amateur sports schools), advanced (sports teams represented by national training teams and provincial professional teams) training network. In addition to the traditional school-based training network, the three-grade training system also includes school high-performance teams and club training teams. However, the traditional three-grade training system, i.e. the training echelon consisting of district and county level gymnasiums - municipal gymnasiums - provincial professional teams, is no longer adapted to the needs of competitive sports development, especially as gymnasiums are currently facing many problems as a vehicle for training reserve youth sports talents.

To conduct an in-depth study, a questionnaire survey was conducted among the fencing industry in X province, covering both athletes and industry professionals, with over 200 valid data. The questionnaire collected the views of the insiders on the realities of the three-grade training system and the views and outlook on their career development. After statistical analysis of the questionnaire data, the following observations were made.

3.1. Shrinking Size of Gymnasiums

Affected by the eugenics policy, China's population base has decreased, and the number of reserve talents in children's amateur sports schools has decreased accordingly. What's more, most parents place more emphasis on their students' academic courses and believe that too much time should not be spent on sports training. In our survey, 20.11% of the respondents said that the biggest difficulty they had encountered in their sporting career was the conflict between training and course studies; 20.11% of the athletes thought it was the difficulty of future job placement. These facts are also a concern for most parents, so the development of sports schools is becoming more and more difficult. But schools, families, and social sports are not yet capable of provoking the burden of competitive sports.

3.2. Irrational Layout of Projects and Little Effort to Cultivate Niche Projects

The public interest in public sports is an important consideration in China, and resources are more heavily weighted towards programs with a high popularity rate. However, sports such as fencing and equestrian are niche in China, have received limited support, and have a low market share. The current low number of participants and lack of high-level athletes and coaches in niche sports makes it difficult to achieve a virtuous cycle of Echelon construction of competitive sports in China.

3.3. Athletes Have Academic Knowledge Shortcomings Making Employment and Career Transition Difficult

According to the questionnaire data, more than 70% of the athletes believe that the study time for academic courses is insufficient. In addition, the results of the survey show that plenty of athletes are pessimistic about their major coursework. This indicates a conflict between the athletes' academic studies and their sports training, with a more pronounced academic knowledge shortcoming among athletes. One of the reasons for that is universities in China adopt a 'score reduce policy' for those athletes who passed the high-level sports teams' admission tests, which means they can be admitted to the same university at a much lower score than normal students in the university entrance examination. As a result, the gap in academic knowledge between athletes

and normal students is widened. In addition, the contradiction between study and training is exacerbated by the unreasonable scheduling of athletes' study and training time in colleges and universities. At the same time, according to the interviewees, athletes have a very limited choice of major. To some extent, this phenomenon cuts off athletes' access to comprehensive knowledge and makes it difficult to achieve personal development.

3.4. The Degree of Elite Training of Athletes is Not High

The talent training model of China's three-grade training system can be regarded as a pyramid, which follows the "tower base theory" [12]. For a long time, it is generally believed that "the bigger the base of the tower, the better the performance", so China keeps trying to expand the number of athletes at the expense of quality development. As a result, many talent resources are wasted.

3.5. Problems in the Acquisition and Repair of Sports Facilities

This paper reviewed the departmental account reports of the State General Administration of Sports from 2011 to 2021. We found that there are currently problems in the acquisition and repair of training facilities in China, such as insufficient financial support, long time, and many attached conditions for approval of payments. In addition, a series of problems have surfaced in the construction of information systems, including insufficient disclosure of information, delays in the availability of related budgets, inability to complete established plans, and so on.

4. How to Improve China's Three-grade Training System

4.1. Building a School-community-family Governance Model

In the United States, the "Whole School, Whole Community, Whole Child" model (WSCC) has been developed in the practice of increasing youth sports participation, which constructs a framework for cooperation among multiple subjects including family, school, and community [13;14]. China can refer to this model, allowing different subjects to cooperate in the cultivation of youth's interest in physical exercise and sports activity participation. Parents' recognition of sports activities can be improved, and the role of community sports facilities can be promoted. This model helps expand our sports population, enriching the sources of talent selection at all levels in the three-grade training system and providing a strong mass foundation for the rise of competitive sports programs.

4.2. Increasing the Media and Market Publicity Efforts for Niche Sports

For niche sports in China, the government can cooperate with the media to provide professional sports commentary on relevant events at both home and abroad to increase the media exposure of niche sports. In addition, the market publicity of niche sports can increase by organizing more events and activities. It can stimulate the interest and investment enthusiasm of market forces for niche sports, which enables their infrastructure and talent construction to get more financial support. The development of niche sports can drive the rational layout and balanced development of China's overall competitive sports.

4.3. Equal Emphasis on Academics and Training and Innovation in Teaching Models

In the training of sports talents in China, it is important to emphasize the student identity of young athletes and provide them with the same learning process as ordinary students. Schools and related organizations also must arrange training and competition time scientifically, so as not to take up the

student-athletes original study time as much as possible. For courses that are missed due to training or competition, schools should rearrange them in various ways to ensure the continuity of academic course learning. In addition, schools can innovate teaching models to improve athletes' learning efficiency, such as combining traditional classroom teaching with online video lectures and answering questions software systems. Achieving a parallel emphasis on academics and training and ensuring good education can better help young athletes become well-rounded and highly qualified individuals with diverse future life options.

4.4. Establishing a Long-term Training System for Athletes

In the training of competitive sports talents under a three-grade training system, China can refer to the LTAD model implemented in Canada and Australia, which means building a long-term training system for athletes by planning the training process scientifically according to the laws of physical development and focusing on high-quality talent training at each stage [15;16]. Coaches at each level of the three-grade training system are required to have rich theoretical knowledge and training experience to conduct both scientific and personalized stage-specific training. They should also develop reasonable long-term capacity-building programs based on the physical characteristics and physiological features of athletes.

4.5. Broadening the Financing Channels and Strengthening the Relevant Departments of Their Governance

The construction of facilities related to competitive sports in China should strengthen cooperation with social forces while the government increases its investment. It can broaden the investment channels and attract social funds to achieve the timely update and enrichment of training equipment in this way. At the same time, the government and sports departments should strengthen their governance. They should not only focus on the integration of funds and the efficiency of resource input but also achieve the openness and transparency of work-related information. Timely publication of information helps them to be better monitored by the public.

4.6. Strengthening Cooperation Between Venues and Resource Sharing of Training Facilities

In Japan, schools are encouraged to cooperate and integrate with local communities, so that athletes can use training facilities in other regions to participate in training when their school's sports facilities cannot meet their training needs [17]. China can also learn from Japan's policy of complementary venue resources to strengthen cooperation in sports equipment. This will not only provide athletes with more comprehensive and high-quality scientific sports training facilities but also help ensure the continuity of athletes' physical exercise or training by reducing the occurrence of training interruptions due to the failure or breakage of training facilities.

5. Conclusions

This paper presents a case study of the current situation of the "three-grades training system" system for fencing in X Province, China, from the perspective of exploring a viable model of government-institution cooperation and community participation. We focus on the fact that the low competitive level and difficulty in finding talent in certain areas of Chinese athletics are related to the difficulties in the practice of the "three-grades training system" system of youth training in China. On this basis, we surveyed fencing professionals using a more visual, professional, and representative questionnaire and validated the analysis of the data obtained.

Through statistical analysis of questionnaire data from over 200 insiders, ranging from student-athletes to international level athletes, we suggest that the practice of the "three-grades training system" in Chinese competitive sports suffers from a lack of sports resources, poor resource allocation, limited program layouts, contradictions in athlete learning and training, and a lack of elite athlete training, which hinders the development and improvement of the program.

Another important finding of our subject is that, within the framework of the original Chinese sports management system, innovative youth training governance systems, strengthening sports publicity, establishing a long-term training system, enhancing academic education, and unblocking the channels for resource mobilization and allocation in the practice of the 'three-grades training system' can effectively deal with various real-life problems. This will help to enhance the development of China's sports talent pool and improve the level of competitive sports in China. To prove the point above, we have reviewed a large amount of literature, and through the analysis and refinement of textual materials and cases on the experiences and management models of the United States, Canada, Australia, Japan, and other countries in the relevant fields, which provided effectively supports. Of course, more empirical studies are needed to verify whether the above theories can be piloted and tested in China, whether they meet the realistic conditions for the development of competitive sports in China, and whether the results can meet the needs of China for the improvement of the level of competitive sports due to the reality of the differences between countries.

Nonetheless, the findings of this paper are significant and tend to suggest that, in the absence of a fundamental reform of China's sports management system, the recommendations made in this paper are actionable and can alleviate much-needed problems in the practice of China's 'three-grades training system'. The results of this paper creatively suggest possible reform initiatives that follow the existing institutional framework, deepen the understanding of the dilemma of improving Chinese competitive sports and provide a direction for further research in the future.

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