## A Comparative Study on Extracurricular Sports Goals of Chinese and Foreign Schools Based on Metrological Model

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**Abstract:** Extracurricular Physical Training is Helpful for Students to Develop Their Overall Physical Quality and Improve Their Athletic Ability. It is of Great Significance to Carry out Ideological and Moral Education and to Transport Reserve Talents for Sports Teams. in Modern Society, We Should Grasp the Trend and Law of the Reform and Development of School Physical Education in the World. This Paper Analyzes the Current Situation, System, Theory and Method of School Physical Education in Different Countries, and Makes a Comparative Study of the Relationship between Teachers and Students, Teaching Methods and Other Major Factors in the Process of School Physical Education Teaching in China and Foreign Countries. Based on the Econometric Model, This Paper Sums Up and Discusses How to Do Well the after-School Physical Training and Give Full Play to the Function of after-School Physical Training.

#### 1. Introduction

The Training Goal of Physical Education Major is the Most Fundamental Problem in the Training Process of Physical Education Teachers. with the Gradual Increase in the Number of Physical Education Majors in Our Physical Education Departments, the Number of Physical Education Talents Has Basically Met the Demand for Physical Education Talents from All Levels and Types of Schools in Our Country [1]. Since the Reform and Opening Up, with Chinese Social Stability, Sustained Economic Development, the Gradual Improvement of People's Living Standards, and the Deepening of Educational Reform, the Physical Health Level of Our Students Has Improved Significantly [2]. with the Development of Society and Education, It Has Obvious Social and Contemporary Characteristics. Each Country's School Sports Goals Have Their Own Characteristics and Have Different Hopes for the Selected Key Goals and Various Goals. How to Realize the Transition from Quantitative Improvement to Quality Improvement is an Important Issue That the Practitioners of Physical Education Majors Need to Study Seriously in the Future. Improving the Quality of Future Physical Education Talents is Certainly Not a Unilateral Problem of Training Objectives, But It Has an Inevitable Important Connection with the Training Objectives [3]. There Are Also Some Obvious Weaknesses in the Psychological Quality of Chinese Students, Such as Anti-Frustration Ability, Willpower and Competition Consciousness, Crisis Awareness, and Collaborative Spirit. These Issues Must Be Highly Valued by Us. This Paper Will Try to Establish a Measurement Model of the Sports Goals of Extracurricular Sports in Chinese and Foreign Schools, in Order to Provide a Theoretical Basis for the Comparative Study of the Sports Goals of Chinese and Foreign Schools.

#### 2. Competitive Significance of Extracurricular Sports

In addition to its normal fitness function, educational function and making up for the deficiency of physical education classroom teaching and ensuring the realization of school physical education goals, after-school physical education also has health goals, upbringing goals, entertainment goals and competitive goals. These goals cannot be well realized in classroom teaching due to time reasons, while after-school physical education can just make up for the deficiency of physical education [4]. The main task of school education in the United States is implemented according to the relevant laws and regulations of each state. This feature makes the physical education syllabus

of schools in each state of the United States different, and the teaching content is different in each state, even in different schools in the same state. However, due to different social systems, educational systems, cultural backgrounds, philosophical ideas, and economic development levels, Australia's curriculum objectives are significantly different in terms of educational thoughts, values, goals, and objectives [5]. Facing the new situation and new characteristics of international competitive sports development, it is necessary to seriously explore the development law of competitive sports, seriously study the problems and constraints of the development of competitive sports in China, and calmly analyze the problems of competitive sports efficiency. Based on the knowledge of culture and society, they can self-discipline and coordinate with others in social life; have the ability to analyze and solve problems; love and move things and nature, sense of justice to punish evil and promote good, basic ethics and morality to respect life and human rights, love and dedication to other people and society; strong physique.

# **3.** Comparative Analysis of Physical Education Teaching Contents in Chinese and Foreign Schools

The United States pays attention to let students master sports items and methods that can keep fit for a long time, so as to strengthen the physique of teenagers. Most of the teaching contents are mainly physical exercises. Schools should carry out various forms of extracurricular sports training on the basis of physical education and extracurricular sports activities to improve students' sports skills [6]. Japan has put forward health sports and safe sports and established the idea of unity of body and mind. The monism of body and mind is to promote the all-round development of students' physical and mental health and to seek the close connection between sports and health. Domestic coaches are only assistants, and some even become ornaments. Through visits and investigations, it was found that domestic coaches were not good at studying training theories, innovative learning and outdated concepts [7]. For the challenge of the knowledge economy, the future education will be more basic, integrated, socialized, networked and internationalized, and will build the educational values with the belief of lifelong education; form the four majors of learning, doing things, cooperation and survival. The pillar is the core educational concept [8]. Chinese new outline has initially established a scientific system combining physical exercise with health care education. It corrects the disadvantages of physical education and only pays attention to the biological transformation of students. It combines the scientific exercise methods and scientific sports and health care knowledge with physical exercise practices. Combine to form a scientific system combining theory with practice.

The sports population refers to the number of people actually participating in the standard sports activities, so the statistical population of the sports population is smaller than the natural population. In the actual statistical analysis, the following formula can be used:

$$S(t) = \frac{y(t)}{l} \tag{1}$$

According to this, the magnitude of the stadium's impact on the affected objects in the community can be measured by calculating the field strength of the stadium. First, a field strength measurement model for the community impact field of a single stadium can be established:

$$k_j = \frac{R_j}{Dj} \times Uj \times \operatorname{Re}_j \tag{2}$$

In the formula, Rj is the field strength of the venue, Uj is the number of sports population in the community where the venue is located, Dj is the rank value of the venue, and Rej is the distance between the venue and the object.

In real life, there may be multiple venues in the same community. However, the sports population in the community generally uses these venues, thus the number of sports population using each venue is a constant. At this time, the field strength of the impact of multiple venue

communities can be calculated as follows:

$$R_j = \frac{f_{ij}}{Tj} \times S_j \tag{3}$$

It can be seen from Table 1 that the average huffininger index value of three industries in China (sports competition performance, sports fitness and sports training industry) is 20.14%. According to our statistics of different industries, the sports competition performance is 47.22%, the sports fitness industry is 27.81%, and the sports training industry is 20.04%.

 Table 1 Statistical Table Of Description of Three Industries: Sports Fitness, Sports Competition

 Performance and Sports Training

Industry	Minimum value	Maximum value	Average value
Sports competition performance	0.02	0.68	0.223
Sports fitness	0.32	0.59	0.54
Sports training industry	0.14	0.88	0.61

In Japan, the basic starting point of school physical education is to cultivate students' survival ability, from knowledge instillation education to education focusing on cultivating students' selfstudy ability and independent thinking ability. Pay attention to moral education and fitness, establish an education curriculum system suitable for students to master, so that students can develop in an all-round way. This difference in value orientation is closely related to the educational systems, educational thoughts and cultural traditions of various countries. The curriculum of primary and secondary schools in Britain has always been diversified. For this reason, the British government has implemented a national curriculum to strengthen the government's unified leadership and control over the school curriculum. Comprehensive study course is a brand-new subject opened in Japan, taking health # information, environment, welfare and other topics of interest to students as teaching contents. As much as possible, let students directly contact the society and nature. Although the State Sports General Administration sends coaches to study abroad every year, it is often difficult to get into the woods and even to worship the foreigners, and to lose their own training characteristics, which ultimately leads to toddlers. However, we should also see that while paying attention to absorbing its reasonable core, it is necessary to guard against the interest of students and to make the physical education class laissez-faire, and the tendency to impact the central task of enhancing students' physical fitness appears.

In the curriculum of large, medium and primary schools in China, sports is included as a compulsory course in the syllabus. The physical education syllabus requires that the scientific training method, the scientific health knowledge and the practice of physical exercise be combined, and the knowledge and fitness should be combined. With the development of Chinese economy, the training system of competitive sports is gradually integrated into school sports, which is the socalled "physical education", which makes competitive sports training an important part of extracurricular sports training. By paying attention to the requirements of the state and society for students, we gradually shift to the individual needs of students, and focus on the development of students' individuality; This requires that school sports thought must adhere to the direction of social unsuccessful schooling. The transformation from a planned economy to a market economy has brought about the renewal of people's ideology. Sports ideology must keep pace with the development of the situation and make some breakthroughs in the transformation. Today, both countries are in a period of transition from a planned economy to a market economy, but the social background and connotation of physical education curriculum reform are different. Organize various activities according to students' interests and participate in the activities as a member, so as to make students unaware of the existence of teachers as much as possible, and teachers and students are integrated in the activities. Therefore, while increasing the proportion of basic knowledge of sports, sports principles have also been strengthened. The introduction of the exercise value of sports events, sports cultural knowledge, etc.

# 4. Comparative Analysis on the Competitive Goals of Extracurricular Sports in Chinese and Foreign Schools

In the United States, students in high and secondary schools not only attach importance to extracurricular sports activities in their spare time, but also have gradually formed a tradition. Relevant departments and schools also attach great importance to students' extracurricular sports activities. Schools make full use of complete sports facilities, stadiums and gymnasiums to carry out rich and colorful sports activities. Competitive sports are an important source of financial resources, which can bring considerable income to schools through the sale of tickets and television rights. U.S. television stations spend hundreds of millions of dollars on the broadcast of college athletic competitions. The assessment and evaluation criteria for physical fitness and athletic ability should consider individual differences, highlight factors such as students' efforts and progress, and adopt a combination of relative evaluation criteria and absolute evaluation criteria. The school's sports associations and sports clubs are responsible for organizing and managing the daily extracurricular sports activities of the school. The physical education teachers are respectively assigned to the designated event venues, responsible for the guidance and consultation of the physical exercise of the projects. In fact, there are many training methods, and you can participate in training and pay for it at any time. Only when the training system and personnel are effectively executed at the right place and time will the training method be effective.

In Japan, in addition to physical education classes, special events of 30 minutes are arranged every day. Including sports activities, safety activities, health activities, club activities, etc., sports activities are divided into sports club activities and sports department activities. The strong political, economic and social functions of competitive sports have been recognized by people. With these two functions, the benefits brought by the school are immeasurable, which in turn can promote the status of school sports in schools. In Australia, the trace of the examination is not so obvious. The uncertainty of the examination content and the uniqueness of the answer are more conducive to the students' play. This is related to everyone's values, development goals and perspective. The training facilities, space and personnel also have a direct impact on the framework structure. Foreign countries require that all elements can be integrated seamlessly, and the core mission is to improve the competitive level of athletes morally. In terms of traditional teaching materials, all countries pay attention to the localization and nationalization of the physical education content, and the local and national sports items occupy a certain proportion in the physical education teaching.

Our country's national physical exercise standard requires that we should arrange morning exercises, class exercises, and extracurricular physical activities more than once a week to ensure that students have one hour of physical activity time every day, including physical education classes, so as to facilitate the overall development of students' body and mind. After class physical training is an important part of school physical education, we should pay great attention to the combination of improvement and popularization, effectively promote the development of school mass sports, and better enhance the physique of all students. We should focus on both popularization and improvement. The choice of sports teaching content in various countries is to pursue the organic unity of the inheritance of competitive sports culture and the fitness of competitive sports. Because in the eyes of many people, such training objectives undoubtedly limit the employment of students and reduce the professional caliber. However, such target positioning is also a huge improvement, and its effectiveness still needs to be tested by practice. The correct way is to guide students to contact the actual life to carry out purposeful exercises. For example, when accidentally falls, you can use the body to roll to reduce the damage. Throughout the development of school sports thoughts in the past 50 years after liberation, although there are twists and turns in the meantime, there is no turbulence and it is impossible to violate the nature and direction of social school.

### 5. Conclusions

From the perspective of the development of sports in Chinese and foreign schools, some

countries with more developed education in foreign countries pay great attention to the development of after-school sports in school physical education, which is far ahead in terms of time, number of students, and investment and output. In our country. The diversity of physical education tasks and teaching content requires the cooperation of multiple teaching methods, and the diversity of teaching methods requires a reasonable combination of design. Only when the teaching methods of physical education teachers have a positive impact on the students' learning methods can students develop a strong interest in learning. The selection of physical education teaching contents in different countries reflects the requirements of lifelong physical education goals to varying degrees. Pay attention to the cultivation of students' lifelong sports ability, attitude and habits in different degrees. Therefore, the content of physical education in various countries is increasingly integrated into a large number of lifelong sports. Facing the situation of our country's extracurricular sports activities and the implementation of sports and health education, we should first make appropriate adjustments in the orientation of the objectives and functions of extracurricular sports, and learn a lot from the practices of advanced countries in form and mode of operation so as to gradually improve our extracurricular sports. The goal of physical education major training in China lies in physical education talents or physical education teachers, which is the basis for the survival of physical education major. If we lose this basis, we will lose the value of its existence, of course, it is difficult to cultivate qualified physical education teachers.

### References

[1] Hu Zhifeng. (2017). Pay attention to school physical education to promote the development of students' comprehensive quality. Urban family education: innovative education, no. 4, pp. 228-229.

[2] Zhihui Wang. (2017). Exploration of Optimizing School Physical Education Teaching Management-Comments on "School Physical Education Teaching and Management". Education Development Research, no. 07, pp. 93.

[3] Xu Jianglong. (2019). Physical Education in Secondary Vocational Schools Should Achieve Six Innovations. Henan Education (Adult Education), vol. 159, no. 03, pp. 1-42.

[4] Liu Qihua. (2019). The importance of extracurricular sports activities to the cultivation of sports talents. Huaxia Teachers, vol. 127, no. 07, pp. 5-6.

[5] Li Weidong. (2017). Development of Physical Education Evaluation Scale for Middle School Students. Journal of Beijing Sports University, no. 01, pp. 56-62.

[6] Xia Dan. (2018). Construction of College Physical Education Teaching Model Adapted to "Basic Standards". Cultural and Educational Materials, vol. 801, no. 27, pp. 185-186.

[7] Wu Xiongwen. (2017). Inheriting and Developing National Sports in School Physical Education. Sports Goods and Technology, vol. 16, no. 16, pp. 151-152.

[8] Wan Lijun. (2017). Optimization and reform of school physical education teaching content. Good parents, no. 26, pp. 212-212.