CHEN, Qiuyi, JIANG, Bo, CHEN, Zhijun, DENG, Wenquan and WANG, Shaojie. A study on the inspiration of Japan's football youth training model on the cultivation of school football reserves in China. Quality in Sport. 2024;36:56551. eISSN 2450-3118. https://dx.doi.org/10.12775/QS.2024.36.56551 https://apcz.umk.pl/QS/article/view/56551

The journal has been 20 points in the Ministry of Higher Education and Science of Poland parametric evaluation. Annex to the announcement of the Minister of Higher Education and Science of 05.01.2024. No. 32553.

Has a Journal's Unique Identifier: 201398. Scientific disciplines assigned: Economics and finance (Field of social sciences); Management and Quality Sciences (Field of social sciences).

Punkty Ministerialne z 2019 - aktualny rok 20 punktów. Załącznik do komunikatu Ministra Szkolnictwa Wyższego i Nauki z dnia 05.01.2024 r. Lp. 32553. Posiada Unikatowy Identyfikator Czasopisma: 201398.

Przypisane dyscypliny naukowe: Ekonomia i finanse (Dziedzina nauk społecznych); Nauki o zarządzaniu i jakości (Dziedzina nauk społecznych).

© The Authors 2024;

This article is published with open access at Licensee Open Journal Systems of Nicolaus Copernicus University in Torun, Poland

Open Access. This article is distributed under the terms of the Creative Commons Attribution Noncommercial License which permits any noncommercial use, distribution, and reproduction in any medium, provided the original author (s) and source are credited. This is an open access article licensed under the terms of the Creative Commons Attribution Non commercial license Share alike. (http://creativecommons.org/licenses/by-nc-sa/4.0/) which permits unrestricted, non commercial use, distribution and reproduction in any medium, provided the work is properly cited.

The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 02.11.2024. Revised: 05.12.2024. Accepted: 12.12.2024. Published: 14.12.2024.

A study on the inspiration of Japan's football youth training model on the cultivation of school football reserves in China

Qiuyi Chen¹, Bo Jiang², Zhijun Chen^{3*}, Wenquan Deng^{4*}, Shaojie Wang^{5*}

Qiuvi Chen

1. Chongqing Metropolitan College of Science and Technology, Chongqing, China 1045758557@qq.com ORCID:0009-0009-4792-5266

Bo Jiang

2.School Physical Education Development Institute, Southwest University, Chongqing, China jbo@swu.edu.cn ORCID: 0000-0001-6896-0233

Zhijun Chen

 ${\bf 3. Chongqing\ Metropolitan\ College\ of\ Science\ and\ Technology,\ Chongqing,\ China\ chenzhijun@cqcst.edu.cn\ ORCID:0009-0003-6770-9751}$

*Corresponding Author

Wenquan Deng

4. Chongqing Metropolitan College of Science and Technology, Chongqing, China 474290617@qq.com ORCID: 0009-0000-3647-7685

*Corresponding Author

Shaojie Wang

5.School of Physical Education, Southwest University, Chongqing, China 17623073462@163.com ORCID: 0009-0005-5083-581X *Corresponding Author

Fund Project:(1)Supported by. "National Education Science "14th Five-Year Plan" key project of the Ministry of Education in 2021, title: Research on the bottleneck and collaborative governance of the construction of Chinese campus football schools in the New

era", Project No:DLA210371; (2) Supported by "Chongqing City Higher Education Teaching Reform Research Project" Project No:223507; (3) Supported by "Teaching and Research Project of Chongqing City Science and Technology College" Project No:YJ2314

Abstract: This article mainly introduces the Japanese football youth training model and its inspiration to the cultivation of school football reserves in China. The article firstly outlines the development history, system structure and core concept of Japanese football youth training, pointing out its focus on basic training, team spirit and the pursuit of excellence. Then, the article analyses the current situation and problems in the training of school football reserves in China, including the training mode, selection mechanism and training and competition system. Afterwards, the article focuses on the inspiration of the Japanese football youth training model to China's school football, and proposes to optimise the conceptual change, system construction, coach training and tournament organisation, etc. The article also describes in detail the current situation and problems of school football reserve talents training in China. The article also elaborates on the optimisation strategies for the cultivation of reserve talents in China's school football, including policy support, education and teaching reform, social force participation and international exchanges. Finally, the article points out that by learning from the successful experience of Japan's football youth training model, it can promote the level of China's school football reserve training and lay a solid foundation for the development of a strong sports country.

Keywords: Youth training model; School football; Reserve talents

1 Introduction

The level of China's men's national football team has continued to decline in recent years, and in order to change the status quo, the State General Administration of Sport and the Ministry of Education jointly issued the Circular on the Launching of National Youth Campus Football Activities in April 2009, a move that signalled a new journey for the development of school football in China. At the 10th meeting of the Central Leading Group for Comprehensively Deepening Reform held on 27 February 2015, General Secretary Xi Jinping presided over the deliberation and adoption of the Overall Programme for the Reform and Development of Football in China, which positioned the development of football to the national level at an unprecedented strategic level, and injected a shot in the arm for school football. Compared with the development of school football in China, Japan's school football supports Japan's professional league, national team and all age groups league system, which delivers a large number of high-achieving players to its professional league, and also guarantees the systematicity and consistency of the technical and tactical playing style of Japan's national team^[1]. This paper studies and analyses the development of school football in China.

2 Successful experience in the development of Japanese football youth training model

2.1 Integration of national cultures

Football is a typical product of Western civilization, and it first originated in Britain. If football is treated as a sport only and its cultural background is not taken into account, there is a great risk that its development will fall into the traditionalist materialistic view of "not seeing the forest for the trees". Therefore, from the perspective of body and culture, football, as one of the main expressions of Japanese national culture, cannot emerge and develop without various social environments and cultural constraints^[2]. In a sense, without Japanese national culture, football is like a forest without a source of water.

Therefore, the success of Japanese football is closely related to its inherent national traditional culture, which also has a direct impact on the development of Japanese football youth training. Japanese football

combines with the development of Japanese traditional culture and spirit through the process of historical changes, and the Japanese national culture shows collective consciousness, the concept of hierarchical status, and attaches importance to the national honour, etc., and continues to learn from the successful experience of the football powerhouses to gradually form its own football style and cultural characteristics, i.e. strong collectivist football spirit, thus creating the team spirit of Japanese football. The Japanese national culture shows the collective consciousness, the concept of hierarchical status, the importance of national honour, etc., and constantly draws on and learns from the successful experience of the strongest countries in football, gradually forming its own football style and cultural characteristics, i.e. the strong collectivist football spirit, which creates the team spirit of Japanese football; the Japanese football culture attaches importance to the honour of the game and humbly learns from the strongest countries in football, which shapes the nature of becoming a strong player in football and the spirit of tenacity and hard work that desires to win the victory; the emergence of the Japanese national spirit makes the athletes fully demonstrate their resilience, tenacity, and spirit and willpower quality that will never lose in an international football match The emergence of the Japanese national spirit has made athletes fully demonstrate their tenacity, perseverance, never-lose spirit and willpower quality in international football matches. [3] For Japanese nationals, football is not only a traditional sport in the sense, but has gradually developed into an important part of the Japanese national study and life, a national spirit, affecting a kind of self-esteem of Japanese nationals, who regard football as the honour and disgrace of the Japanese nation, one of the important symbols of the rise and fall of the country's prosperity, which provides a spiritual impetus to the successful experience of the development of the Japanese football youth training model. A kind of spiritual impetus.

2.2 JFA 2005 Dream Declaration and JFA 2015-2022 Medium Term Plan

Sports development planning appeared in the earliest 1960s, the end of the 20th century sports development planning is widely used, after scientific research out of the special sports planning model such as (SDP) model (Figure 1), from the SDP model can be known as the main body is who, what is the purpose, how to achieve the purpose, and for the establishment of this series need to be through the prestudy, planning concepts, planning objectives, construction tasks and safeguard measures and other content to be elaborated, therefore, for the above aspects of the Japanese football planning to analyse and more research.

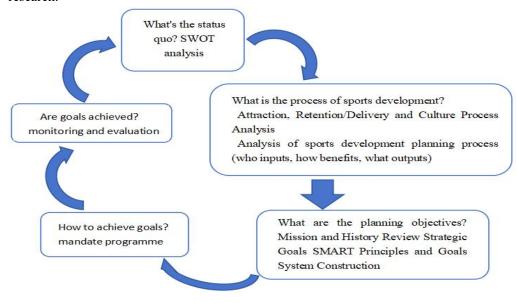


Figure 1 Sports Development Planning (SDP) Model

The depth of planning is determined by the degree of preliminary research. In the direction of planning itself, the ontology of the current stage of planning, the environment and project justification and other

factors are analysed in order to better grasp the strengths of the main body of the plan, the challenges, opportunities, etc.^[4]. On January 1, 2005, the then President of the Japan Football Association (JFA), Saburo Kawabuchi, issued the "JFA 2005 Manifesto", a declaration on the future development of Japanese football. On 1 January 2005, then JFA President Saburo Kawabuchi issued the "JFA 2005 Manifesto", which positioned the future development of Japanese football^[5]. The JFA Dream Manifesto aims to realise the rise of Japanese football from three aspects:

Philosophy: To create a rich sporting culture through football and to contribute to the sound physical and mental development of people and the development of society.

Idea: To endeavour to popularise football and integrate sport into people's lives to create a happy living environment. We will increase our efforts to strengthen football so that the Japanese national team can perform well in world championships and give people courage, hope and inspiration. We will always maintain the spirit of fair play, deepen friendship with our citizens and other countries, and contribute to the international community.

Objectives: (Medium term) By 2015, the Japan Football Association (JFA) will be ranked among the world's top 10, and will achieve the two goals of reaching 5 million people in the football family, who are football-loving partners, and the Japanese national team will be ranked among the world's top 10; (Long term) By 2050, we will achieve the goal of reaching 10 million people, who are football-loving partners, in the football family. (In the long term, by 2050, the number of football-loving partners - the football family will reach 10 million people; and Japan will host the World Cup on its own, and the Japanese national team will win the World Cup.

When Japan did the JFA 2015-2022 Medium Term Plan, it summarised the detailed development of the Dream Manifesto enacted by Japan in the previous 10 years as shown in Table 1:

Table 1 Achievement of the 2015 targets of the JFA 2005 Dream Declaration in Japan

| First-level indicators | Result | Evaluate | Secondary indicators | Result | Evaluate |
|---|---------------|------------|--|---|--------------------------|
| Football population reaches 5 million | 5,262,200 | accomplish | 3 million athletes Coach 150,000 | 279.85 million 150,200 | unfinished accomplish |
| Japan enters top 10 in world | FIFA50 bit | unfinished | Judges 300,000 500,000 managers 1.5 million fans | 27.8 million 547,500 1,980,700 | unfinished accomplish |

From Table 1, we can see that Japan has achieved the goal of having more than 5 million people in football by 2015, but it has not yet achieved the targets for athletes and coaches. The number of athletes is only 2,798,500, which is 201,500 short of the goal of 3 million; the number of referees is only 278,000,

which is 22,000 short of the goal of 300,000. The JFA Medium Term Plan 2015-2022 also provides a very detailed breakdown of athletes, teams, coaches, referees, etc., and publishes trends and final figures of the breakdown, prompting the JFA to take effective measures to improve the targets of the Information Plan for Response Initiatives.

Japan has not only summarised the development of the previous decade, but the JFA 2015-2020 Medium Term Plan also provides a detailed SWOT-PEST analysis of the current internal and external environment of Japanese football as shown in Tables, 2 and 3:

Table 2 Analysis of Environmental Factors for the JFA Medium Term Plan 2015-2022 (PEST)

| Political Factors | Economic Factors | Social Factor | Technical Factor |
|----------------------------------|---|---|-----------------------------------|
| education reform | Increase in startups | Population decline and international status decline | Big data development |
| Government support accelerated | Increased number of overseas enterprises | Severe aging | Multimedia development |
| Globalization advances | Increased number of people crossing the border | National medical expenses and nursing expenses have risen | Development of Social networks |
| Increased private financing | Reversals in economic Size between developed and developing countries | Tokyo <u>unipolarization</u> intensified | VR wearable high-tech |
| Increase in social capital stock | | | |

Table 3 Self-organisation analysis of the JFA Medium Term Plan 2015-2022 (SWOT)

| Opportunity | Harm | Advantage | Inferior position |
|---|---|---|---|
| 2020 Tokyo Olympic Games | The Olympics require a lot of money | Japanese Overseas Players Active | Club culture didn't materialize. |
| Estimated economic benefit 3 trillion yen | aging | Success in popularizing work | Number of registered players decreased |
| 150,000 new jobs | the Japanese earthquake | People love football. | Discrimination, stadium violence serious problem |
| Football is the first sport in the world | japan's economy grows slowly, fiscal situation deteriorates | Football is Japan's top sport. | J-League advertising revenue and audience decline |
| Community funding | Overseas football in Japan | 47 <u>prefectural</u> associations incorporated | Youth team performance drops |
| Sports diversification | Advertising revenue decreased | Japanese team (men and women) high attention | Insufficient football facilities |
| Market economy support | | social support | TV ratings are down. |

As can be seen from Table 2, Japan's JFA 2015-2022 Medium-Term Plan is not a one-sided analysis of football itself, but combines the national situation of internal and external environmental factors

for a multi-faceted division, from the political, economic, social and technological four aspects of the positive and negative impacts of systematic analysis, such as the development of big data, multimedia can be more effective and intuitive for the football federation, the coach to provide domestic and international technical and tactical theoretical data, the reform of education to provide better education and learning environment for players playing football and channels for further education; in the face of aging, the decline in the total number of the population affects the selection of materials, there will be indirect bridges between the different industries, between and across fields, and there are plans to solve the current problems.

As can be seen from Table 3, Japan has used SWOT analysis to accurately grasp the overall level of Japanese football by targeting within the football department, which is a strategic analysis method. To find out its opportunities, hazards, strengths and weaknesses and its core competitiveness, the factors involved are interlocking and affect each other^[6]. Such as Japan's hosting of the 2020 Tokyo Olympics will certainly use a lot of money to operate, so as to impede the planning of follow-up work; such as Japan's 47 prefectural training centres is Japan's football development over the past decade to achieve important results, which is the fundamental system of training Japanese football talent, but the decline in the performance of Japan's domestic youth team due to their own; such as football as the world's No. 1 sport, the diversification of Japan's sports to a large number of overseas players to enter Japan, increasing the domestic level of competitiveness. A large number of overseas players entering Japan, increasing the competitiveness of domestic players. The opportunities and hazards mentioned in the table can be regarded as the external environment of Japan, while the advantages and disadvantages can be regarded as the reserves of internal resources of Japan. The JFA Medium-Term Plan 2015-2022 accurately locates the advantages and disadvantages in the country as well as the advantages and disadvantages of the external environment, so as to make the internal resources better adapted to the external environment, and to grasp the opportunities when they appear, and to neutralise the threats in time when they appear.

2.3 Trinity Strengthening Strategy

The Technical Committee of the Japan Football Association (JFA) published the "Trinity Strengthening Strategy (Figure 2)" for strengthening Japanese football based on the proposition of what measures should be taken to narrow the gap between Japan and the world's leading football nations.

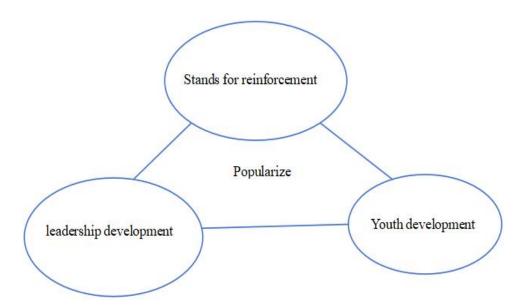


Figure 2 Trinity Strengthening Strategy

The so-called Trinity Strengthening Strategy is a comprehensive method of representative strengthening, youth development, leadership development and popularisation, and is a system that aims to achieve the common knowledge and information shared by these three sections, to maintain closer contact with each other, to strengthen the development of players, and to raise the level of Japanese football.^[7] The "Japanese Football Issues", which are analysed, evaluated and extracted from the World Cup for each age group, are disseminated throughout Japan through these three sections. Through the Trinity Strategy, Japan has closely linked all the sectors, and it is indispensable to coordinate all these elements in order to improve the level of Japanese football. In order to improve the level of football players, Japan does not only gather them for short-term training, or train them in the team they belong to on a day-to-day basis, or improve the level of the entire team just because one player has grown up, but it is the level of the whole team that is improved. It's about raising the level of the team as a whole. It is obvious to the world that countries that slacken on team development cannot last long, and the world's top footballing powers and top clubs attach great importance to team development.

Japanese football talent development relies heavily on elite programmes and JFA academies to improve the standard of football. The JFA recognises that it is the coaches who train these players on a daily basis, so the development of high level coaches is also very important in order to improve the level of training on a daily basis. In other words, in order to develop good teams, it is indispensable to improve the quality of coaches, and for this reason, Japan is also implementing educational activities to increase the number of courses and coaches in order to develop more high-level coaches. Noting that strengthening the grassroots players is the only way to raise the level of the national team players, Japan has continued to deepen the development of school football by launching a variety of activities, including children's programmes.^[8] It is precisely because of the presence of a large number of football fans, including children

and young people, that the country's football foundation has become deeper and its overall strength has become stronger. As mentioned above, the Technical Committee of the Japan Football Association (JFA) has issued the "Trinity+Popularity," a short-, medium-, and long-term plan to strengthen and popularise Japanese football in the direction of integration.

2.4 Staged talent development standards

Japan also conducts training for different targets and contents in phases (Figure 3), with short-term contents for players, medium-term contents for team development, and long-term contents for coach development, reflecting the policies of different technical committees. Japan also applies these (creation of guidelines and review of coaching development contents) in a variety of ways to each programme. As world football is constantly evolving and Japan is constantly catching up with the trends in world football, Japan realises that it is only through the establishment of a Technical Study Group (TSG), the analysis of trends and the writing of technical reports, and the promotion of strengthening the game based on this, that it will be possible for Japan to reach the top of the world's football standards by gaining the attention of the world.

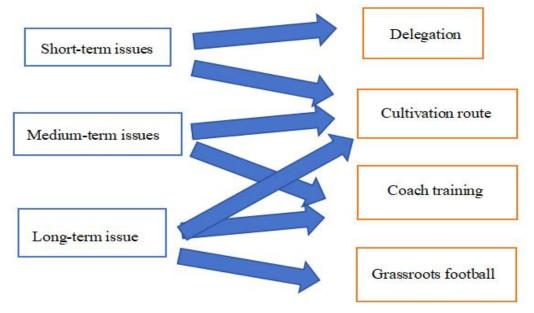


Fig. 3 Japan's policy on cultivation at different stages

Japan is looking towards the direction of the development of the world's football, while learning more from strong foreign rivals, continue to improve their own football talent training system, to promote the development of Japan continues to learn, not copying the formula of foreign football powerhouse, but to take advantage of their own national strengths in the pursuit of the establishment of their own style of football, the characteristics of the Japanese football, although it is not by virtue of the physical size and strength of the win, but the use of technology, agility, The characteristics of Japanese football are not based on physique and strength, but on skill, agility, organisation, diligence, toughness and so on, which reflect the style of Japanese football^[9]. The Japanese character of toughness has been developed by striving harder

to exceed world standards where there are shortcomings, thus establishing the most basic elements of a Japanese footballer (Figure 4):

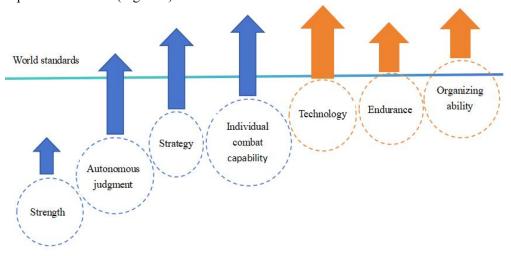


Fig. 4 Basic elements for Japanese football players to be of world standard

The basic elements include skills (technique + judgement), endurance (amount of movement), and individual tactics related to attack and defence that must be mastered during the growth phase, which are shared as the backbone of the cultivation phase, and should not be forgotten after it is implemented that the world's overall level is also improving, and that the world's countries will continue to work hard, and will never stop putting in more effort in order to keep catching up with and surpassing the target.

2.5 Japanese Football Talent Development Model

The Japanese school football talent cultivation model is built on the Japanese football youth training cultivation model. Although Japanese school football and professional football belong to different systems, the two systems can complement each other and jointly promote the development of Japanese youth football. After the JFA proposed coach qualification training as early as 1994, it extended coach qualification training to the whole of Japan and covered school football and amateur football, turning the original single pathway into multiple pathways (Figure 5). In order to strengthen the selection surface, the Japanese Football Association, Japan's education system and sports system cooperate with each other, and relying on the Japanese high school league and the J-League as a middle bridge, to attract more young people to participate in football, school football and J-League clubs, two sets of youth training model each play a role in the selection of talent, through the improvement of the training centre system for the cultivation of Japanese football talent to provide a solid guarantee^[10]. In addition, Japan will also select the elite of the school game into the football academy for more professional training, to achieve the school and professional complement each other.

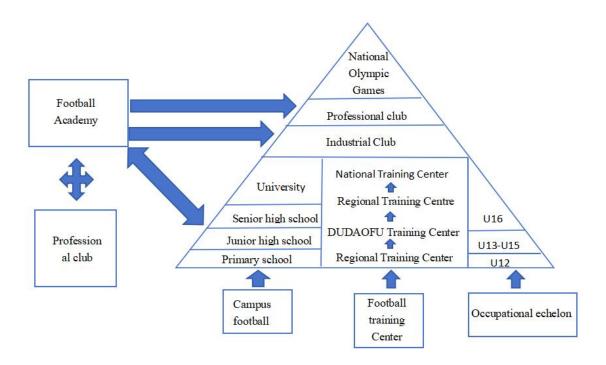


Figure 5 Japanese Football Talent Development Model

The term "elite" is a concept that is strongly rejected and not well accepted in Japan. Although it can be easily misunderstood, the JFA has focused on its original meaning and uses it deliberately^[11]. The term "elite" is used to refer to the leaders in various fields of society, or those who are like the leading figures, and those who have taken responsibility for the society well, and Japan wants to cultivate truly elite talents in the football world. This will not only help to improve the important judgement and leadership on the football field, but also help to cultivate people who will be leaders in the football world, or who will break through the football world and cultivate the future society. Therefore, the JFA Football Academy aims to provide consistent education in a logical manner in junior high and senior high schools based on the "world standard", giving good guidance and a good environment to those with high abilities, and concentrating on training them from a long-term perspective. JFA Academy also focuses on humanistic education to develop people who always face everything with a positive attitude and who can live and work with confidence.

2.6 Perfect coach training system and diversified competition platforms

Japan trains its athletes and coaches to "world class" standards. Japanese coaches undergo regular training, which includes research and analysis of national and international football matches, as well as the use of topics to solve current and future problems. Secondly, the Japanese Football Association will also collect and disclose to all coaches of Japanese football through its own way on the development trend of today's football, so as to achieve the updating of the training programme. The strengthening system of Japanese football is very comprehensive, and it analyses the status quo of the developed football countries, and then combines with the status quo of the national situation, reasonably learns from the successful experience, and explores the direction of the development of the Japanese football, not only that, but also

the strengthening system of Japanese football puts the quality of youth training as the key factor of research and analysis. Not only that, the Japanese football reinforcement system puts the quality of youth training as the focus of research, and explores new methods in line with international standards, analyses and formulates solutions based on selected topics, conveys the results of the demonstration of the topics to coaches at all levels, and finally examines the results of its research in the world. The JFA has set up a technical analysis team to promote the effective implementation of the football reinforcement system. The technical analysis team's research includes: systematic analysis and processing of data from the world's matches at all levels, pre-match preparation, technical and tactical analysis of matches, post-match recovery, players' style of play, team style of play, etc. The technical analysis team is also responsible for the analysis and development of technical data from the world's matches, and the analysis and development of solutions based on the selected topics. Japan is not the only country to have such a systematic team of technical data for matches, but year after year, through continuous practice, the Japanese men's and women's football teams have proved that they have a place in the world's level of football, and the women's football team has even won the World Cup, which is not without the efforts of the technical analysis team. The JFA will also categorise and publish the collected data by age group, in order to raise the attention of Japanese coaches at all levels and apply the results of the research to their teams.

As the JFA pointed out at the 2016 JFA Congress, the coaching level of a coach plays a decisive role in the growth of individual players. Therefore, coach training needs to actively learn from advanced foreign experience and scientific methods, and convey sequential information and data analyses of world football techniques and tactics to coaches at all levels in a timely manner. As a youth training coach in Japan, regardless of age, you need to provide a coaching qualification certificate that meets the level of football, and only students who have passed the "qualification" will be able to enter the coaching profession. 2004, the Football Association adjusted the grades of local coaches, from the original S, A, B, C4 to S, A, B, C, D5, and in 2015 the grades of S, A, B, C, D5, and in 2015 the grades of S, A, C, D5, and D5, were adjusted, C, D5, and after 2015, in addition to setting a grade qualification for early childhood coaches at the children's age level, a new grade E football coach was added. Coaches at different levels are responsible for the training of athletes at different age groups, with coaches up to level D being able to coach the U6-U10 age group, coaches up to level C being able to coach the U12 age group, and coaches holding a level up to level S being able to coach the U18 and above age groups and the professional leagues. As of 2016 (e.g. Table 5), the total number of coaches certified by the JFA's Coaches' Grade Qualification Committee was 77,722, of which the number of grade D coaches accounted for 55.2% of the overall number, and the number of grade C coaches accounted for 36.9% of the total number. This shows that the JFA attaches great importance to grass-roots coaches.

Table 5 Training of football coaches at all levels in Japan

| Class | S | A | В | С | D | Sum |
|-----------|-----|------|------|-------|-------|-------|
| Number of | 427 | 1496 | 4251 | 28658 | 42890 | 77722 |
| people | | | | | | |

The JFA conducts coach training at national training centres and local organizations. The JFA uses national data analysis to enrich the knowledge of coaches and continuously improve their coaching level. The training of coaches at the National Training Centre is top-down, with outstanding coaches selected from 47 local municipalities to participate in the training of coaches. The National Training Centre of the JFA also regularly appoints lecturers to conduct theoretical classes for football coaches, and organizes exchange meetings for coaches in various regions to learn from each other and promote the level of coaching improvement among coaches.

The JFA has added a series of measures to improve the level of young football coaches: (1) Encourage coaches to go abroad for study and training, and provide a guarantee mechanism for coaches going abroad (2) Hire outstanding foreign coaches to instruct in the country (3) Set up a coach evaluation system and implement it rigorously (4) Regularly organize seminars for young coaches, and set up a training committee, so as to provide solid guarantees for the development of youth football in Japan.

Secondly, Japan has a wide variety of competitions, with hundreds of thousands of participants per year in each competition, a total of more than 20,000 schools, and more than 50 matches per player per year. For example, after a century of changes in the league system and experience, the high school football league has become one of Japan's world-renowned leagues. Every autumn, more than 4,000 schools in every state enter the league, and the final four teams play the championship match at Tokyo Stadium; there are close to 150,000 players in the high school league every year, and the league is broadcast live on as many as 43 national TV stations, garnering a great deal of attention from all walks of life. [12] . And through the official website of the Japan Football Association, various detailed guidelines for the tournament are also available. Such an atmosphere also led to numerous sponsors investing money in its operation, and the national news media simultaneously broadcasting the team's results, rapidly increasing the influence of the high school league. By 2015, the final of the high school football league was held at the Tokyo National Stadium, with a crowd of approximately 50,000 people, a far larger crowd than expected compared to the J-League, and the leagues have made a significant contribution to the high level of football in Japan, for example, Japanese football superstar Keisuke Honda was selected as a "Specially Designated Player of the J-League" in 2004, and went on to play for the Nagoya Whalers, who were the first to be selected by the J-League. For example, Japanese football star Keisuke Honda was selected as a "Special Designated Player of the Japanese J-League" in 2004, then joined the Nagoya Whale football club, and was selected for the national team in 2008.

3 The current situation of the development of school football reserve talent model in China

3.1 Policy orientation

In March 2015, the State Council officially promulgated the Overall Programme for China's Football Reform, and in order to implement the reform efforts of the Overall Programme for China's Football Reform, in April 2016, the State Council officially promulgated the Medium and Long-Term Development Plan for Football in China (2016-2050). Immediately after that, in 2019, the Ministry of Education in the national development of youth sports and campus football three-dimensional education work report (2015-2019) clearly pointed out that "the characteristic school + college high-level football sports team + pilot counties (districts) + reform pilot area + "full of stars training camp" +" The "five-in-one" youth school football development pattern. In order to further deepen the combination of sports and education, youth training clubs and schools have become the main way to cultivate talents in campus football in China, and the sports department and the CFA have jointly promoted the development of campus football and football youth training clubs with the aim of "integrating design, integrating advancement, forming a self-contained system, and supporting each other", and strengthened exchanges and mutual learning between campus football and professional clubs, and youth training teams. Youth training team exchanges and mutual understanding, and jointly promote their growth^[13].

Among them, by age, the professional clubs' ladder team digs out seedlings in each school, and sets the potential athletes in advance, and arranges them to carry out cultural education in designated schools, and the training is guided by the clubs. From the exchange between the best school teams and the U team of the Football Association, a flow of talents is formed, such as the cooperation between local education departments and professional clubs to build a "full star" training camp^[14]. Secondly, campus football not only large-scale popularity, but also in the establishment of teaching, training, competition and protection system based on the opening of campus youth football professionals growth and development channels, and the Ministry of Education, the Chinese Football Association Sports Department of the Ministry of Education to jointly study and formulate the rules on the national university youth to participate in the campus of professional football players summer camp education and training activities and the implementation of the qualification recognition of the grade of professional football players. Initially opened a channel for the development and development of national professional football players on campus, attracting and driving more and more schools and parents to support their children to participate in football as an important option for their growth and development.

3.2 Cultivation mode of reserve talents of school football in China

The level of youth football talent cultivation determines a country's football competitive level and development prospects, and under the vigorous popularisation of campus football, a large number of

football talent seedlings have emerged. Currently, China's campus football talent cultivation mode is based on campus football as the main, clubs as the auxiliary, campus football talent cultivation mode mainly adopts the primary school, junior high school, high school, university one-stop cultivation mode (such as Figure 6), which is the foundation of the development of football, through the layers of selection of outstanding football seedlings, will be transported to the national team^[15]. Using campus football as a carrier to continuously develop diversified talent delivery paths, the campus football system and the competitive football system complement each other, each playing a different system attributes.

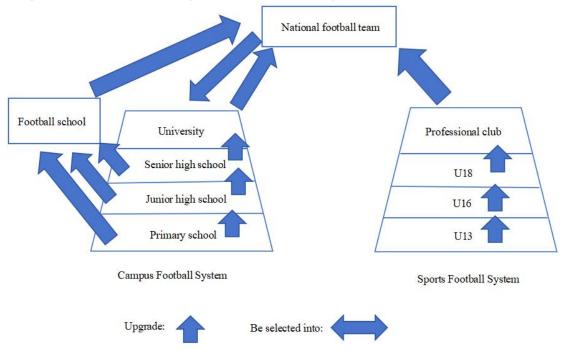


Figure 6 School Football Talent Cultivation Model

3.3 Overview of School Football Coach Training in China

The C4 grades were adjusted to S, A, B, C and D. As of 2018 (Table 9), the CFA has 41,255 D-level coaches, 11,855 C-level coaches, 2,298 B-level coaches, 985 A-level coaches, and 158 professional-level coaches, a total of 56,551 people.

Table 9 Training of youth football coaches in China

| Class | Occupation | A | В | C | D | Sum |
|-----------|------------|-----|------|-------|-------|-------|
| Number of | 158 | 985 | 2298 | 11855 | 41255 | 56551 |
| people | 136 | 903 | 2296 | 11655 | 41233 | 30331 |

Different grades of coaches correspond to the guidance of different age groups of players, D-level coaches target children aged 6-8, the game is mainly set up for 5vs5 small field, the coach training time is often 1 week; C-level coaches target 9-12 year old teenagers, the game format is mainly 8vs8, the coach training time is 2 weeks; B-level coaches need 13-16 year olds, the game format is mainly 11vs11, the

coach training time is 3 weeks; A-level coaches target 17-21 year olds, with the top level of the youth to guide players. Level B coaches are required for youths aged 13-16, the game format is mainly 11vs11, and the training time for coaches is 3 weeks; Level A coaches are mainly for youths aged 17-21, with top youth games as the main focus, and the training time for coaches is 4 weeks; Professional level coaches are required for professional teams, and the training time for coaches is 10 weeks. Professional level coaches are for professional teams and the coach training is 10 weeks. [16].

Secondly, to how to become a football coach in China, the Football Association has also made certain instructions: China's coaching grade is divided into five grades: professional grade, A, B, C, D^[17], coach training is mainly divided into two grades, the first grade is mainly for the general population, through the progressive assessment of the training, and each grade has different requirements (such as Table 10):

Table 10 Overview of first-tier training pathways for coaches

| Class | D | С | В | A | Occupation |
|-----------|--|--|---|--|---|
| Condition | At least 18 years of age, pass the member association selection test or training | Holds China Football Association D level coach certificate, for primary and secondary school football education service situation and school teachers and students evaluation proof, sports and teaching and school teachers and students experience, leading, teaching and practice proof | Holds China Football Association C-level coach certificate for 12 months, member association recommendation letter, proof of service for primary and secondary school football education and evaluation of teachers and students, sports and coaching experience, leadership, teaching and practice proof | Holds China Football Association B level coach certificate for 12 months, member association recommendation letter, sports and coaching experience, leading, teaching and practice | Holds China Football Association Class A Coach Certificate for 12 months, member association recommendation letter, sports and coaching experience, leadership, teaching and practice certification |

The second stage of coach training is a fast-track training programme for professional players and high-level athletes who have represented their country in international competitions (see table 11).

Table 11 Overview of fast-track second-tier training for coaches

| Class | D-B | A | Occupation |
|-----------|--|--|--|
| Condition | 1 Professional players aged 18 or over who have played in professional competitions for more than 5 years and who represent their national first team in Asian and above competitions. | At least 24 months of youth training | Holds China Football Association Class A Coach Certificate for 12 months, recommended by member associations |

3.4 Overview of the development of school football competitions in China

China's current youth football competitions are mainly divided into two major sections, namely the Campus Section Football League and the Competitive Section Football League. Both leagues share a common goal, which is to increase the popularity of football, improve the physical quality of students and increase the football population base. The competitions of the two segments include: Campus Football Summer Camp Competition, Secondary School Football League, Inter-City Competition, Youth Super League, Youth Football Association Cup and Youth Championship Cup, and football reserve talents are selected through leagues of different natures^[18]. Under the leadership of the Ministry of Education, the Youth Campus Football Tournament mainly consists of primary and secondary school teams from various cities in the form of double round-robin home and away matches, with the first place winners selected through the urban areas going on to the province-wide campus football tournament. Competitive football consists mainly of teams from various professional football clubs. The U-series youth league organised by the CFA is divided into five age groups, U19, U17, U15, U14 and U13, and the competition area is divided into three regions: north, west and south. There has been an increase in the types of matches, but the format is too homogeneous, and no far-reaching brand value of the tournaments has been formed^[19]. The survey found that most of these matches were arranged on weekends, in order to speed up the progress of the matches, the relevant organizations did not carry out scientific arrangements for the matches, took a short period of time to arrange a large number of matches, and paid too much attention to the form of the matches, resulting in the imagery of the players eventually giving up the matches due to fatigue or injuries occurring frequently, which hinders the physical and mental health of the players in our country and the smooth development of the atmosphere of the football tournaments.

4 Implications of the Successful Experience of Japan's Youth Training Model for the Development of China's Campus Football Reserve Cultivation Model

4.1 One of the revelations: adherence to policy orientation and innovation in football culture

In April 2016 the State Council officially promulgated the Medium and Long Term Development Plan for Football in China (2016-2050), and the document briefly explains the plan in the following five important aspects:

Football is gradually developing. The number of people participating in football in China has reached a certain scale, the initial popularity of school football, campus football, social football, professional football is developing steadily; the football industry has taken shape, the international attention of the Chinese Super League has been steadily increasing and improving since the last decade, the average international audience of the Chinese Super League First Division has reached 15,000 for the first time; the international exchanges within the Chinese Super League are becoming more and more in-depth and constantly increasing, and a close cooperation and communication mechanism has been formed between domestic clubs and a number of international higher level league clubs. International exchanges within the Chinese Super League team have become increasingly deeper and stronger, and a close co-operation and communication mechanism has been formed between domestic clubs and a number of international high-level league clubs such as the Chinese Super League.

Adherence to the overall guiding ideology. Comprehensively implement the spirit of the 18th CPC National Congress and the Third, Fourth and Fifth Plenary Sessions of the 18th CPC Central Committee, thoroughly study and implement the spirit of the series of important speeches made by General Secretary Xi Jinping, promote and implement the "Four Comprehensives" development strategy and overall layout, and endeavour to speed up the realization of the "Dream of the Rise of Football, Dream of a Strong Country and Dream of National Rejuvenation". The "dream of the rise of football, the dream of a strong nation, the dream of national rejuvenation"; from the strengthening of national sports and fitness, improving the national economy is a new industry, sports is an important cornerstone of a strong nation, and enhance the spirit of the Chinese nation, to carry out the correct strategic layout and positioning; always adhere to the principle of the four development, sustained globalization, innovation and globalization, standardised globalization, open and cooperative development, and to further build up a harmonious football development environment.

Medium- and long-term development strategic objectives (e.g., Table 12). The near-term development goal (2016-2020) is to endeavour to maintain the basic, strengthen the grassroots and lay a solid foundation; the medium-term development goal (2021-2030) is to strive to achieve as soon as possible to promote China's professional football to have more endogenous impetus, stronger vitality and greater influence, and to be among the world's strongest teams of professional football; and the long-term development goal

(2031-2050) is to promote the strategic goal of China to achieve the world's first-class sports power of football, and China's football career to achieve a comprehensive and healthy development, and to achieve the billions of Chinese people to become a professional football team. The long-term development goal (2031-2050) is to fully promote China to realise the strategic goal of becoming a first-class sports power in the world, to achieve a comprehensive and healthy development of the football industry in China, to fulfil the dream of billions of Chinese children of Chinese professional football, and to make its own contribution to promoting the development of the world's football and sports.

Main tasks. In order to promote synergies and cooperation among various departments to build a system; to strengthen the cultivation of school football, professional football and coaching personnel, and to insist on the combination of sports skills and cultural education; to build venues and facilities; to enrich tournament activities; to grow the football industry; to cultivate a football culture; and to promote the opening up of football.

Supporting policies and safeguards. Financial support, land planning, relevant tax policies, training and introduction of talents, and construction of evaluation system.

Although the Medium- and Long-Term Development Plan for Football in China (2016-2050) has achieved some effective results, the concept is not in line with reality, the system of the relevant departments is outdated, the development of tournaments lacks supervision, there is a shortage of football talents, and there is an unhealthy football culture.

Table 12 List of development goals of the Medium- and Long-Term Development Plan for Football in China (2016-2050)

| Time | 2016-2020 | 2021-2030 | 2031-2050 |
|------------------------|---|--|---|
| Goal of development | 1. there are 20,000 special football schools nationwide, and more than 30 million primary and middle school students regularly participate in football sports. 2. More than 50 million people regularly participate in football in the whole society 3. The number of fields exceeds 70,000, making 0.5-0.7 football fields per 10,000 people | 1. 1 football field per 10,000 people 2. Become an important engine for the sports industry 3. The national men's football team ranks among the top in Asia, and the women's football team returns to the ranks of world-class teams | Make every effort to achieve the goal of a first-class football power |

Currently China's football culture is weak, for the history and culture of football where the development of the law is not enough to understand, unilateral exaggeration of the subjective role, but seriously ignored the importance of football on the development of society and the endogenous power, ignored the value of lifelong education of football, ignored the construction of our football culture and the cultivation of outstanding talents, resulting in a serious lack of football reserve talents.

Based on this, China's school football talent training in the policy orientation not only to grasp the macro political, social and other phenomena, but also need to grasp the micro football development law, drawing on the successful experience of Japan's football youth training model, collated a set of school football training concepts suitable for China, and integrated into the excellent sports culture of our country, shaping the spirit of China's excellent football and culture. One of the main reasons for the success of so many football powerhouses, not only Japan, is the underlying national spirit and culture. Therefore, in the construction of China's football culture, we need to think about how to adhere to and endeavour to inherit our excellent local culture. Football concepts and local culture are integrated with each other to produce a promotional effect and form a synergy. In addition, take the initiative to change and combine our national conditions to innovate and integrate foreign culture. The ability to innovate is the powerful driving force and soul of a great country and nation's continuous progress, the inexhaustible source of prosperity and strong power, and a nation that has not fundamentally attached importance to the ability to innovate in social and cultural reforms is unlikely to stand in the ranks of the strongest countries. Therefore, the development of football in China, while drawing on the successful experience of foreign countries, should also be combined with the current actual situation in China, actively improve, endeavour to innovate, put into practice, so as to make it work and produce better results, and create its own style of football.

4.2 Revelation No. 2: Unify the concept of football cultivation and improve the campus football talent cultivation mode

China's football talent training positioning based on the popularity of school football, only intention to the height of the development of football talent in school sports, relying on the policy of this big goal to complete the football talent training positioning, and did not regard the football talent training as a long-term project, although China's popularity of football in schools has achieved certain results, but our country is only advocating the link between football and education, not really put football up to the National happiness, only one-sided on the benefits of the sport of football set, in the concept of youth training is not uniform and clear instructions, ignoring the regularity of youth development, resulting in the youth football population continues to decline, the talent selection surface is becoming more and more narrow, football development into a vicious circle. China's campus football talent development model is mainly through the "four" campus popularity to select outstanding seedlings, but China's football school partial professional, and China's campus football has no effective articulation flow, which led to the level of difference is too

large, the selection of narrow, and secondly, China's football school lack of comprehensive quality of the player's training, through the Investigation found that Luneng football school and Evergrande football school the same, players in addition to daily study courses, no social practice, family education, thinking and logic and other related courses, and full-time in school students in a very different way^[20]. Chinese football school primary and middle school students' cultural studies and training are all conducted in the same place, only after the winter and summer games can they go home and reunite with their parents, the communication with the outside world and parents is seriously insufficient, and the players' motivation to learn is greatly reduced. Finally, because our country has not yet formed a unified football concept, our common school football school and our football school coaching staff of varying levels of reasons, the college in order not to unify its philosophy and school motto, our students' understanding of the school motto is only embodied in the slogan, and the students do not have the understanding of the football game in place, which impedes the formation of the football culture in the school.

Based on this, firstly, our country should unify the concept of football training, and raise the improvement of football talent training mode to the height of national strategic development. Secondly, on the basis of guaranteeing the popularity of school football in our country, pay attention to the comprehensive quality training of football talents in our country, the Football Association and the Ministry of Education can divide the work of articulation with each other, learn from the successful experience of Japan's youth training model in the cultivation of talents, based on the long-term cultivation of young people, and do not rush for success. In ordinary schools and football schools and clubs to form a good transport relationship, strengthen the football school in the training of diversified talents, in the unified football concept to improve the school motto, the formation of a good school football cultural atmosphere, to do the ordinary and professional complement each other, so as to facilitate the development of China's school football talent training to form a benign cycle, so that more young people to get the full range of enhancement, to promote China's football reserve talent foundation. Football reserve talent root.

4.3 Insight No. 3: Build a bridge for coaches to communicate and create a popular tournament

China has not yet completed its coach training system, and most coaches train according to their own ideas and methods, leaving the quality of coach training to be improved. There are still a large number of unlicensed on-the-job training in China, not only that, in recent years, the CFA started to convene the "Coaches' Conference", basically inviting famous experts at home and abroad to give lectures, but it did not solve the substantive problems raised. And the establishment of China's youth training centre and coaching system has not formed a link structure, currently only from the direction of training players to train. 2018 CFA technical development conference clearly pointed out that the quality of China's top-level coach training needs to be improved, goalkeeper and physical fitness coach training needs to be strengthened. Out of the geographical differences in China, there is a large gap between the development level of each layout

city and the level of football. In the process of the development of campus football leagues, the Office of Campus Football issues unified administrative orders to each layout city, which is characterised by centralised management of local work, does not start from the actual situation in each place and ignores local differences, making it difficult for some cities to carry out campus football leagues in accordance with uniform standards, and inter-school leagues between schools are not grouped in accordance with the actual level of the teams, resulting in chaotic spectacles, unsatisfactory results, and a level of competition that is is not high, and there are too few competitions for the participating teams^[21]. In addition, the mode of competition between primary and secondary schools is too monotonous and utilitarian; it is too difficult to promote urban teams in the senior secondary school and college leagues and football levels. In some places, there is even a situation that a team has to play many matches in one day. There is no uniformity in the form, time and ball of the school football league at all levels. The promotion of the league is in a single form, which makes many strong teams not get the results they deserve and affects the motivation of the game. High school and university group matches are unevenly divided into districts, and the distance between teams is too large, resulting in a waste of funds and a decline in the quality of matches for players due to road labour, and so on.

Based on this, we can know from the Japanese youth training model of coach training and tournament building, the standardisation and specialisation of coaches is the foundation of training football talents, and the influential tournament platform is the bridge for screening excellent football talents. Actively learn from the successful experience of Japan's youth training model in this regard, standardise the training market for football coaches in China, require coaches participating in football training to be licensed, hold regular seminars for coaches in youth training centres, build bridges of communication, collect information on municipal and provincial football, and form the collected content into a book to be publicised with the help of the official website. Increase the training cycle of football coaches and the renewal training of licensed coaches, and expand the quantity and quality of grassroots football coaches. According to the needs of each age group, it is necessary to increase the number of tournaments as well as improve the quality of tournaments, give full consideration to the time allocation of different age groups, reasonably arrange the cycle of tournaments, and, according to the operation mode of professional tournaments, broadcast tournaments through a variety of multi-media forms, increase the influence of tournaments, promote the construction of a platform for quality and high-level competitions, and provide avenues for high-level athletes.

5 Conclusion

General Secretary Xi Jinping attaches great importance to the work of school football, and has repeatedly made important instructions and instructions to systematically explain the direction, goals and path of school football reform. From a strategic and overall height, he deeply understands the great

significance of the development of school football for accelerating the construction of a strong education and sports country, improving the physical health of young people, cultivating the spirit of patriotism, collectivism and tenacity, and promoting the improvement of China's football competitive level. Through the study of the success of Japan's youth training model, drawing on the successful experience of Japanese youth football talent cultivation, and combining the current situation of China's campus football talent cultivation thinking, we get inspiration and put forward the following suggestions: first, adhere to the policy orientation, innovative football culture. Strengthen the construction of football culture and improve the accumulation of national spirit. Second, change the thinking of family education. Strengthen parents' understanding of campus football, combine with national conditions, open up the channel of football as a way to further education, and provide academic security for families. Thirdly, improve China's campus football talent cultivation mode and establish a unified football cultivation concept and guiding ideology. Strengthen the diversified talent training in football schools, improve the school motto on the unified football concept, form a good school football cultural atmosphere, so that ordinary and professional complement each other, so as to facilitate the development of China's school football talent training to form a virtuous cycle. Fourth, actively learn from the Japanese football youth training training model, create a bridge for coaches to communicate, and build a platform for influential tournaments. Standardise the criteria for coaches to be licensed and increase the retraining of coaches. In the construction of tournaments, fully consider the distribution of time for different age groups to learn and train, reasonably arrange the cycle of the game, through a variety of multimedia forms of event publicity, improve the influence of the tournament, promote the construction of high-quality, high-level competition platforms, and provide fair and impartial promotion channels for high-level athletes.

Competing Contributions

QY.C and B.J led the study. All authors conceived and designed the study. QY.C, B.J, ZJ.C, WQ.D and SJ.W drafted the article. All authors made critical revisions to the manuscript for important intellectual content and gave final approval of the manuscript.

Competing interests

The authors declare no competing interests.

References:

- [1] Chen Xingtan, Kang Tao. A comparative study of school football development in China and Japan. Journal of Nanjing Institute of Physical Education, 2017, 31(02):70-75.
- [2] Sun Y, Liang YQ, Hai Bo et al. Comparison of football youth training between China and Japan. Journal of Beijing Sport University, 2008, 31(09):173-176.

- [3] QIAO Yuanyuan, TANG Xia, JIANG Ning, WANG Xiaochen. Japanese football "Meiji Restoration" course, characteristics and inspiration. Journal of Guangzhou Sports Institute, 2018, 38(02):43-47.
- [4] Xie Songlin, Gong Bo, Li Fengrong, Liu Fei. A comparative study of football development planning in China and Japan--Taking China Football Medium and Long-term Development Plan (2016-2050) and JFA Medium-term Plan (2015-2022) as examples. Sports and Science, 2018, 39(05):84-92.
- [5] QIAO Yuanyuan, TANG Xia, JIANG Ning, WANG Xiaochen. Japanese football "Meiji Restoration" course, characteristics and inspiration. Journal of Guangzhou Sports Institute, 2018, 38(02):43-47.
- [6] Xie Songlin, Gong Bo, Li Fengrong, Liu Fei. A comparative study of football development planning in China and Japan--Taking China Football Medium and Long-term Development Plan (2016-2050) and JFA Medium-term Plan (2015-2022) as examples. Sports and Science, 2018, 39(05):84-92.
- [7] Zhu Ning. Youth training model in the "trinity" system of the Japan Football Association. Sports and Science, 2002, 23(04):18-21.
- [8] Xia Zhengqing, Zhou Qiang. The Japanese Football Association's Youth Excellent Football Talent Cultivation Programme. Sports Science and Technology Literature Bulletin, 2017, 25(02):16-18.
- [9] (Japanese) Kei Kumazaki, translated by Li Zhihong. Japanese football exclusively reveals the J-League's 100-year vision. Football Club, 2011,(18).
- [10] Japan Association of Saka official website.JFA 2005 Manifesto ~DREAM 夢があるから強くなる~. [2017-8-12]. http://www.jfa.jp/about-jfa/dream/.
- [11] CHENG LONG, ZHANG ZHONG. The development of Japanese football youth training and its inspiration. Sports Culture Guide, 2014(07):95-98.
- [12] Fu Haitao in. Analysis of Japanese school football competition system and its inspiration. Sports Culture Guide.2017, (01): 171-174.
- [13] General Office of the State Council. Overall programme for football reform and development in China. [2015-03-16]. http://www.gov.cn/zhengce/content/2015-03/16/content 9537.htm.
- [14] Ministry of Education website. Ministry of Education Introduces the Development of School Football in Three Years and the Key Work of School Football in 2018. [2018-02-02]. http://www.gov.cn/xinwen/2018-02/02/content 5263179.htm
- [15] Mao Zhenming, Liu Tianbiao. On the Top-Level Design of "New School Football" (07)-The Ten Successful Symbols and Keys to Achievement of School Football. Journal of Wuhan Institute of Physical Education, 2019, 53(03):77-80.
- [16] Ma Zhangsheng, Li Hong. Research on the status quo and countermeasures of the training system of football coaches in China. China Sports Science and Technology, 2006, 42(03):97-100.
- [17] Chen Win in. Research on the ability structure of youth football coaches in China. Journal of Shenyang Normal University (Natural Science Edition), 2005, 23(04):415-417.

- [18] Luo Bingquan, Pang Bo. Research on the operation status of Beijing campus football competition system. Journal of Capital Institute of Physical Education, 2019, 31(02):157-165.
- [19] Feng Aimin. Research on the construction of "four-level league" model of school football in China. Sports Science and Technology, 2017, 38(02):131-138.
- [20] Chen Wei. Japan and South Korea football reserve talent cultivation mode and the inspiration to China. Shandong Sports Science and Technology, 2015, 37(03):35-38.
- [21] Wang Changqi. On the successful operation paradigm of school football in Japan and its inspiration to China. Journal of Nanjing Institute of Physical Education.2017, 36(05): 86-89.