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# Analysis Based Sports Training Mode Industry Professional's Gray System Theory

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**Abstract:** The rationality and sustainability of the development of sports industry structure is very important in sports industrialization process and the sports industry talents are the key factor. Therefore, it becomes exceptionally significant to study the relationship between the training of sports industry talents in colleges and universities and social needs. In order to analyze the sports industry and talents training model in Hubei Province in a rational way and provide a more reasonable proposal for that, this study uses gray system theory to establish a gray evaluation model. According to the characteristics of sports industry talents, a model of application-oriented interdisciplinary sports industry talents is presented, as well as strategies in the process of training model construction.

**Key words:** Gray model, gray correlation degree, sports industry, talent training

## INTRODUCTION

Sports industry produces material products and spiritual products of sports, including the total of sports services provided by all industries. Sports industry, as part of the national economy, shares some characteristics with other industries that is, to focus on market efficiency and on economic efficiency, but it is also different from other industrial sectors. Important features of their products lie in the improving the physical fitness of residents, developing social production, uplifting the national spirit and achieving a comprehensive personal development and social progress of civilization (Wang, 2003). In order to meet the growing needs of sports consumption, the number of people currently specializing in the producing and operating sports services is increasing. China's sports industry is facing an unprecedented domestic and international new opportunity for development. It is in urgent need of professionals who are familiar with economic operation of sports, the processes and practices of sports industry and can translate favorable business opportunities into economic benefits (Jiang, 2001).

With the rapid development of China's sports industry, especially the successful holding of 2008 Beijing Olympic Games, China's sports industry development trend has some new requirements of the existing sports industry management theory and experience, as well as the number and quality of relevant professionals (Zhang and Yang, 2007). For this reason, some colleges and universities have set up relevant professional courses to train more sports industry management talent. However, in terms of the current situation, the problems in the training in the sports industry professionals cannot be neglected. In recent years, the model of application-oriented interdisciplinary talents has been proposed in many disciplines (Liu, 2003). The application-oriented interdisciplinary talents in science and engineering subjects should be based on the theory of comprehensive human development, harmonious education, human capital and constructivist, reflecting the regular relationship between objectives, specifications, process, as well as the evaluation of talent training (Sun *et al.*, 2008). Modern tourism talent training should actively explore the training approaches to international interdisciplinary tourism talent and speed up the process of training talents with international management level and a master of international tourism etiquette and operation skills (Zeng and Huang, 2002). The training of sports industry management talents should concentrate on objectives of training, structure of expertise and their overall quality to cultivate professionals meeting the realistic demand for sports management. Many scholars have expressed their own ideas of the training in application-oriented interdisciplinary talents but only from the perspective of theoretical analysis (Feng *et al.*, 2004). There are no discussions about curriculum, specific ways of talent training and other operational aspects (Yuan *et al.*, 2003).

This study, based on the gray prediction model, will propose some corresponding countermeasures and suggestions on the basis of the investigation and analysis of the comprehensive quality of sports professionals in Hubei Province which will provide a reference to the training of sports industry talents in China from another dimension.

## INTRODUCTION OF THE GRAY SYSTEM MODEL THEORY TO THE ANALYSIS OF TALENT TRAINING

The so-called gray model analysis refers to the analytical and forecasting method of a system containing both known and uncertain information. Gray correlation analysis is a "comprehensive comparison" that is to say, the comparison of a reference sequence and degrees. Essentially, it is to compare the degree of closeness between data and the geometry of the curve.

**Broad applicability:** The so-called gray means the color between gray and white. In terms of talent training in the sports industry, the factors affecting the level include objective and subjective ones, clear and vague ones, all of which constitute a gray system.

**Small quantities of data requirements:** It is theoretically proved that when n> 3 (n represents the number of data), GM (1, 1) has more than one solution that is to say, a model can be established in the absence of the data (only 4 or more). This is also important characteristics and advantages of GM model different from other ones.

**High accuracy:** Practice has proved that the gray modeling method has very high prediction accuracy. The gray modeling approach is used to forecasting the performances in the Los Angeles Olympics and compared the performance forecasting of this method with that of linear regression, exponential smoothing and other eight models. The results showed that the gray modeling method obtained the minimum value in terms of the mean square error, mean error, the maximum error and the error number higher than 2% (1 and 0.5%).

**General process of gray prediction model:**

- The first order is accumulated to generate (1-AGO)

Supposing there is a raw non-negative data sequence with the variable $X^{(0)}$:

$$X^{(0)} = [x^{(0)}(1), x^{(0)}(2),..., x^{(0)}(n)] \quad (1)$$

Then, the first order of $X^{(0)}$ is accumulated to generate sequence:

$$X^{(1)} = [x^{(1)}(1), x^{(1)}(2),..., x^{(1)}(n)] \quad (2)$$

In the equation:

$$x^{(1)}(k) = \sum_{i=1}^{k} x^{(0)}(i), k = 1, 2, \cdots, n$$

- Conduct quasi-smooth and quasi-exponential inspection on $X^{(0)}$, set:

$$\rho(k) = \frac{x^{(0)}(k)}{x^{(1)}(k-1)} \; k = 2, 3 \ldots n \quad (3)$$

If $\rho(k)<1$ and $\rho(k)\in[0, \varepsilon](\varepsilon<0.5)$ are satisfied, $\rho(k)$ shows a decreasing trend, then $X^{(0)}$ is referred as quasi-smooth sequence and $X^{(1)}$ shows the regularity of quasi-exponent.

Otherwise, the first-order weakening process is performed:

$$x'^{(0)}(k) = \frac{1}{n-k+1}(x(k) + x(k+1) + ... + x(n)) \; k = 1, 2 \ldots n \quad (4)$$

And $x^{(0)}(k) = x'^{(0)}(k)$ that is, $X^{(0)}$ is replaced by $X'^{(0)}$.

- It can be seen from step 2 that $X^{(1)}$ indicates an approximate growing trend of exponent. Therefore, $X^{(1)}$ sequence can be considered to meet the following first-order linear differential equations:

$$\frac{dx^{(1)}}{dt} + ax^{(1)} = u \quad (5)$$

It can be obtained that:

$$\begin{bmatrix} \hat{a} \\ \hat{u} \end{bmatrix} = (B^T B)^{-1} B^T Y_n \quad (6)$$

In the equation:

$$Y_n = \begin{bmatrix} x^{(0)}(2) \\ x^{(0)}(3) \\ \vdots \\ x^{(0)}(n) \end{bmatrix}, B = \begin{bmatrix} -\frac{1}{2}[x^{(1)}(1) + x^{(1)}(2)] & 1 \\ -\frac{1}{2}[x^{(1)}(2) + x^{(1)}(3)] & 1 \\ \vdots & \vdots \\ -\frac{1}{2}[x^{(1)}(n-1) + x^{(1)}(n)] & 1 \end{bmatrix}$$

Substitute the obtained $\hat{a}$ and $\hat{u}$ into the differential Eq. 5 and the following formula can be obtained:

$$\frac{dx^{(1)}}{dt} + \hat{a}x^{(1)} = \hat{u} \quad (7)$$

- The establishment of gray forecasting model

The gray forecasting model of the cumulative sequence $X^{(1)}$ can be obtained according to the differential Eq. 7:

$$\hat{x}^{(1)}(k+1)=\left[x^{(1)}(0)-\frac{\hat{u}}{\hat{a}}\right]e^{-\hat{a}k}+\frac{\hat{u}}{\hat{a}},k=1,2,\cdots n \quad (8)$$

If $X^{(1)}$ comes from the sequence obtained from the first-order weakening process of $X^{(0)}$, the following equation can be obtained from Eq. 4 after the restoration of first-order weakening:

$$\hat{x}^{(0)}(k+1)=\hat{x}^{(1)}(k+1) \quad (9)$$

On the contrary, a diminishing restoration is conducted by Eq. 8 and the gray forecasting model of $X^{(0)}$ can be obtained as follows:

$$\hat{x}^{(0)}(k+1)=(e^{-\hat{a}}-1)[x^{(0)}(n)-\frac{\hat{u}}{\hat{a}}]e^{-\hat{a}k},k=1,2,\cdots n \quad (10)$$

- Inspection of gray forecasting model
- Application range

When $-\hat{a}\leq 0.3$, it can be used for long-term forecast; When $0.3<-\hat{a}\leq 0.5$, it can be used for short-term forecasting which should be avoided for medium and long-term use; When $0.5<-\hat{a}\geq 0.8$, it is not suggested for the use of short-term forecasting; when $0.8<-\hat{a}\geq 1$, it is advisable to use residual correction; when $-\hat{a}\geq>1$, the gray system forecasting model should not be considered.

- Posterior error test

Set the residual sequence as:

$$\varepsilon^{(0)}=(\varepsilon(1),\varepsilon(2),\ldots,\varepsilon(n))=(x^{(0)}(1)-\hat{x}^{(0)}(1), x^{(0)}(2)-\hat{x}^{(0)}(2),\ldots,x^{(0)}(n)-\hat{x}^{(0)}(n))\bar{\varepsilon}=\frac{1}{n}\sum_{k=1}^{n}\varepsilon(k)$$

and:

$$S_{\varepsilon}^2=\frac{1}{n}\sum_{k=1}^{n}(\varepsilon(k)-\bar{\varepsilon})^2$$

are, respectively, the mean and variance of the residuals:

$$\bar{x}=\frac{1}{n}\sum_{k=1}^{n}x^{(0)}(k)$$

and:

$$S_x^2=\frac{1}{n}\sum_{k=1}^{n}(x^{(0)}(k)-\bar{x})^2$$

are the mean and variance of $X^{(0)}$.

Then, the posterior error ratio:

$$C=\frac{S_e}{S_x}$$

and the small error probability $p=P(|\varepsilon(k)-\bar{\varepsilon}|<0.6745\,S_x)$, wherein C should be as small as possible while p should be as large as possible:

- Recursion of equal dimension and new information

The first value $X^{(0)}$ is removed and $\hat{x}^{(0)}(k+1)$ is added as the last value of $X^{(0)}$. Maintain the equal dimension and metabolism of the sequence and forecast them one by one. Conduct recursion by turns until the completion of the forecasting target.

The total number of sports industry professionals is used as an example for forecasting, with the number from 2001-2008 shown in Table 1:

- Accumulated generation operation:

$$X^{(0)}=[166.7, 214.6, 256.3, 342.8, 406.4, 644.3, 736.2, 805.4]$$

is accumulated to generate:

$$X^{(1)}=[166.7, 3813, 637.6, 980.4, 1386.4, 2030.7, 2766.9, 3572.3]$$

- Carry out quasi-smooth inspection and quasi-exponent regularity inspection on $X^{(0)}$

It is obvious that $\rho=[1.29, 0.67, 0.54, 0.41, 0.46, 0.36, 0.29]$ does not satisfy $\rho(k)\epsilon[0,\ \varepsilon]<0.5$, then $X^{(0)}$ is disqualified as the quasi-smooth sequence, needing to be processed by the first-order weakening:

$$X^{(0)}=[446.54, 486.51, 531.834, 586.94, 647.98, 728.63, 770.8, 805.4]=X^{(0)}$$

Table 1: Total of sports industry professionals in China

| Year | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|
| Total of professionals in Sports industry | 166.7 | 214.6 | 256.3 | 342.8 | 406.4 | 644.3 | 736.2 | 805.4 |

Then, the new $X^{(0)}$ is accumulated to generate:

$$X^{(1)} = [446.54, 933.05, 1464.89, 2051.83, 2699.80, 3428.43, 4199.23, 5004.63]$$

- Seeking a solution to â and û

Using MATLAB tools to obtain that â = -0.0856 and û = 437.24, in which -â≤0.3, indicating it can be used for long-term forecasting.

- The establishment of gray forecasting model:

$$\hat{x}^{(1)}(k+1) = \left[x^{(1)}(0) - \frac{\hat{u}}{\hat{a}}\right]e^{-\hat{a}k} + \frac{\hat{u}}{\hat{a}} = 5557.39 \times e^{0.0856k} - 5110.85$$

Due to the first-order weakening process of $X^{(0)}$, $\hat{x}^{(1)}(k+1) = \hat{x}^{(0)}(k+1)$ which means the forecasting data of 2008 is $\hat{x}^{(0)} = 805.4$:

- Model checking:

$$S_e = 10.34,\ S_x = 134.\ 28$$

$$\varepsilon^{(0)} = [0\ \ 9.860600774608656\ \ 8.876768838703015\ \ 2.065250968582859\ \ 6.360973787144417\ \ 29.71162091038707\ \ 9.451993037681632\ \ 23.95009372654897],\ \bar{\varepsilon} = 11.28$$

Then, posterior error ratio C = 0.077<0.35 which shows that it has great prediction accuracy.

Small error probability $p = P(|\varepsilon(k)-\bar{\varepsilon}|<0.674S_x) = 1>0.95$, suggesting high prediction accuracy:

- Recursion of equal dimension new information:

$$X^{(0)} = [446.54\ 486.51\ 31.8345\ 86.846\ 47.987\ 28.6\ 3770.8\ 805.4]$$

carry out cyclic operation until the forecasting data is up to 2015.

## ESTABLISHMENT OF GRAY CROSS CORRELATION ANALYSIS MODEL FOR TALENT TRAINING QUALITY IN SPORTS INDUSTRY OF HUBEI PROVINCE

**Data collection and classification:** Sort the scores of self-evaluation of respondents and the highest score is 9 while the lowest score is 1. Then calculate the weighted average value of the data of different cities, thus obtaining the status quo of talent cultivation and the related data of their qualities, as shown in Table 2.

**Horizontal modeling:** Analyze the correlation of the talent training quality in Sports Industry. In the horizontal model, political consciousness, physical quality, psychological quality,professional qualification and development potentialare regarded as the reference or evaluation criteria which are then used to evaluate the levels and relationship of qualities of talent training in Sports Industry.

Determine the reference number sequence and comparison sequence.

Specify the reference sequence, denoted by $X^0$, wherein the kth standard value $X^0_k$, k = 1, 2, 3, 4, 5. The maximum numbers in the rows of every city are selected as the reference sequence which is denoted by $X_0$ = (9, 8, 7, 7, 8, 7, 8, 8, 8). The columns where other qualities lie in are defined as the comparison sequence, denoted by $X^k_i$, i = 1, 2,..., 8, as shown in Table 2):

- Respectively carry out normalization processing for the reference number sequence and comparison sequence, namely, the extent of its qualities are converted to percentages, as shown in Table 2. Take the maximum numbers of the rows of each city as the reference number sequence, shows as follows:

$$X^0 = (100, 88.89, 77.78, 88.89, 77.88, 88.89, 88.89)$$

Conversion results are as shown in Table 3.

Table 2: Original scores of comprehensive quality of talents in the sports industry of Hubei Province

| Cities | Political consciousness | Physical quality | Psychological quality | Professional qualification | Development potential | Reference value |
|---|---|---|---|---|---|---|
| Wuhan | 9 | 6 | 8 | 7 | 8 | 9 |
| Yichang | 8 | 8 | 7 | 6 | 8 | 8 |
| Xiangfan | 7 | 7 | 7 | 5 | 5 | 7 |
| Jingzhou | 7 | 6 | 6 | 4 | 5 | 7 |
| Jingmen | 8 | 7 | 6 | 5 | 6 | 8 |
| Shiyan | 7 | 7 | 6 | 5 | 5 | 7 |
| Huangshi | 7 | 8 | 8 | 8 | 7 | 8 |
| Ezhou | 8 | 6 | 7 | 6 | 7 | 8 |
| Suizhou | 7 | 8 | 8 | 7 | 7 | 8 |
| Reference value | 9 | 8 | 8 | 7 | 8 | |

Table 3: Normalization table of the overall quality scores of talent training in sports industry of Hubei Province

| Provinces and cities | Political consciousness | Physical quality | Psychological quality | Professional qualification | Development potential | Reference value |
|---|---|---|---|---|---|---|
| Wuhan | 100.00 | 66.67 | 88.89 | 77.778 | 88.89 | 100.00 |
| Yichang | 88.89 | 88.89 | 77.78 | 66.670 | 88.89 | 88.89 |
| Xiangfan | 77.78 | 77.78 | 77.78 | 55.560 | 55.56 | 77.78 |
| Jingzhou | 77.78 | 66.67 | 66.67 | 44.440 | 55.56 | 77.78 |
| Jingmen | 88.89 | 77.78 | 66.67 | 55.560 | 66.67 | 88.89 |
| Shiyan | 77.78 | 77.78 | 66.67 | 55.560 | 55.56 | 77.78 |
| Huangshi | 77.78 | 88.89 | 88.89 | 88.890 | 77.78 | 88.89 |
| Ezhou | 88.89 | 66.67 | 77.78 | 66.670 | 77.78 | 88.89 |
| Suizhou | 77.78 | 88.89 | 88.89 | 77.780 | 77.78 | 88.89 |
| Reference value | 100.00 | 88.89 | 88.89 | 88.890 | 88.89 | |

Table 4: Analysis of column difference of horizontal model

| Provinces and cities | Political consciousness | Physical quality | Psychological quality | Professional qualification | Development potential |
|---|---|---|---|---|---|
| Wuhan | 0.00 | 33.33 | 11.11 | 22.22 | 11.11 |
| Yichang | 0.00 | 0.00 | 11.11 | 22.22 | 0.00 |
| Xiangfan | 0.00 | 0.00 | 0.00 | 22.22 | 22.22 |
| Jingzhou | 0.00 | 11.11 | 11.11 | 33.34 | 22.22 |
| Jingmen | 0.00 | 11.11 | 22.22 | 33.34 | 22.22 |
| Shiyan | 0.00 | 0.00 | 11.11 | 22.22 | 22.22 |
| Huangshi | 11.11 | 0.00 | 0.00 | 0.00 | 11.11 |
| Ezhou | 0.00 | 22.22 | 11.11 | 22.22 | 11.11 |
| Suizhou | 11.11 | 0.00 | 0.00 | 11.11 | 11.11 |
| minΣi(i) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| maxΣi(i) | 11.11 | 33.33 | 22.22 | 33.34 | 22.22 |

Respectively calculate the column difference. i (k) = xi (k)-x0 (k), as shown in Table 4.

Solve the maximum and minimum value that is $\max_k \max_i \Delta_t(k)$ and $\max_k \max_i \Delta_i(k)$, wherein the maximum difference of the first layer $\Delta_t(k)(\max) = \max|x_0(k) - x_i(k)|$ means to select the maximum value from the absolute difference $|x_0(k)-x_i(k)|$ based on I; the maximum difference of the second layer $\Delta_{ik}(\max) = \max_k \max_i |x_0(k) - x_i(k)|$ means to select the maximum one from $\Delta_t(k)(\max), k = 1, 2, 3, 4, 5$. Therefore, $\max_k \max_i \Delta_t(k) = 33.4$, $\max_k \max_i \Delta_i(k) = 0$ can be obtained. Solve the gray correlation coefficient:

$$\varepsilon_k(i) = \frac{\min_k \min_i |x_0(k) - x_i(k)| + 0.5 \max_k \max_i |x_0(k) - x_i(k)|}{|x_0(k) - x_i(k)| + 0.5 \max_k \max_i |x_0(k) - x_i(k)|}$$

In the above equation, 0.5 is the distinguished factor. So:

$$\varepsilon_1 = (1, 0.9999, 0.9998, 0.9998, 0.9993, 0.9998, 0.6000, 0.9999, 0.6000)$$

$$\varepsilon_2 = (0.3334, 0.9999, 0.9998, 0.6000, 0.9998, 0.9999, 0.4286, 0.9999)$$

$$\varepsilon_3 = (0.6000, 0.6000, 0.9998, 0.6, 0.4286, 0.6, 0.9999, 0.6000, 0.9999)$$

$$\varepsilon_4 = (0.4286, 0.4286, 0.4285, 0.3333, 0.3333, 0.4285, 0.9999, 0.4286, 0.6000)$$

$$\varepsilon_5 = (0.6000, 0.9999, 0.4285, 0.4285, 0.4286, 0.4285, 0.6000, 0.6000, 0.6000)$$

Solve the gray correlation coefficient:

$$r_k = \frac{1}{N}\sum_{i=1}^{N} \varepsilon_k(i)$$

and sort the data. $r_1 = 0.911$, $r_2 = 0.774$, $r_3 = 0.714$, $r_4 = 0.490$, $r_5 = 0.568$. Therefore $r_4 < r_5 < r_3 < r_2 < r_1$

**Longitudinal modeling:** A comparative analysis of the comprehensive quality of talent training in Sports Industry among different cities

The longitudinal model regards political consciousness, physical quality, psychological quality, professional qualification and development potential as variables and different provinces and cities as objects to analyze the comprehensive quality of talent training in Sports Industry among different cities.

Determine the reference number sequence $X^0$, $X^0$ = (9.8, 8.7, 7.8). Other sequences are regarded as a comparison group.

Respectively carry out normalization processing for the reference number sequence and comparison sequence, namely, the extent of the qualities are converted to percentages, as shown in Table 2. Take the reference number sequence as $X^0$ = (100, 88.8, 88.89, 88.89, 88.89). The conversion results are as shown in Table 3.

Table 5: Analysis of column difference of longitudinal model

| Provinces and cities | Political consciousness | Physical quality | Psychological quality | Professional qualification | Development potential | MinΣi(i) | MaxΣi(i) |
|---|---|---|---|---|---|---|---|
| Wuhan | 0.00 | 22.22 | 0.00 | 11.11 | 0.00 | 0.00 | 22.22 |
| Yichang | 11.11 | 0.00 | 11.11 | 22.22 | 0.00 | 0.00 | 22.22 |
| Xiangfan | 22.22 | 11.11 | 11.11 | 33.33 | 33.33 | 11.11 | 33.33 |
| Jingzhou | 22.22 | 11.11 | 22.22 | 33.33 | 22.22 | 11.11 | 33.33 |
| Jingmen | 11.11 | 11.11 | 22.22 | 33.33 | 22.22 | 11.11 | 33.33 |
| Shiyan | 22.22 | 11.11 | 22.22 | 33.33 | 33.33 | 11.11 | 33.33 |
| Huangshi | 22.22 | 0.00 | 0.00 | 0.00 | 11.11 | 0.00 | 22.22 |
| Ezhou | 11.11 | 22.22 | 11.11 | 22.22 | 11.11 | 11.11 | 22.22 |
| Suizhou | 22.22 | 0.00 | 0.00 | 11.11 | 11.11 | 0.00 | 22.22 |

Calculate the number sequence difference $\Delta_k(i) = |x_k(i) - x_0(i)|$ as shown in Table 4.

Solve $\max_i \max_k \Delta_k(t)$ and $\max_i \max_k \Delta_k(i)$. As can be seen from Table 5, $\max_i \max_k \Delta_k(t) = 44.45$, $\max_i \max_k \Delta_k(i) = 0$.

Solve the GM correlation coefficient $\varepsilon_i(k)$:

$$\varepsilon_1 = (1, 0.5006, 1, 0.66672, 1)$$

$$\varepsilon_2 = (0.66672, 1, 0.66672, 0.50006, 1)$$

$$\varepsilon_3 = (0.50006, 0.66672, 0.66672, 0.40005, 0.40005)$$

$$\varepsilon_4 = (0.50006, 0.50006, 0.50006, 0.33333, 0.40005)$$

$$\varepsilon_5 = (0.66672, 0.66672, 0.50006, 0.40005, 0.50006)$$

$$\varepsilon_6 = (0.50006, 0.66672, 0.50006, 0.40005, 0.40005)$$

$$\varepsilon_7 = (0.50006, 0.66672, 0.50006, 0.40005, 0.40005)$$

$$\varepsilon_8 = (0.66672, 0.50006, 0.66672, 0.50006, 0.66672)$$

$$\varepsilon_9 = (0.50006, 1, 1, 0.66672, 0.66672)$$

Solve the gray correlation degree:

$$r_i = \frac{1}{N}\sum_{k=1}^{N} \varepsilon_i(k)$$

$r_1$ = 1NΣNk = 1ε1(k), sort the data and get $r_1 = 0.8334$, $r_2 = 0.7667$, $r_3 = 0.5267$, $r_4 = 0.4467$, $r_5 = 0.5467$, $r_6 = 0.4934$, $r_7 = 0.8334$, $r_8 = 0.6001$, $r_9 = 0.7667$. Therefore $r_4 < r_6 < r_3 < r_5 < r_8 < r_2 = r_9 < r_1 = r_7$.

## CONCLUSION

The following conclusions can be drawn from the analysis of the horizontal and vertical results of gray theory: the differences in the quality of the training of sports industry professionals; undesirable quality structure of sports industry professional training; differences in resources of sports talents; less satisfactory management team of sports marketing.

In order to change as soon as possible the current situation of shortage in sports industry talents in China and imbalance in structure and regional distribution, it is necessary to develop the training model of sports industry talents with Chinese characteristics. This article gives the following advice: attach great importance to creating high-quality sports industry talent training with innovative mechanisms; recruit a group of sports industry talents with multi-level knowledge and proper structure through open selection and recruitment from the society, enriching the sports industry team. Train and select talents from a variety of channels and give importance to the reasonable and effective flow of talents; focus on the long-term development of sports industry.

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