*Retraction*

# Retracted: Research and Analysis of Combination Forecasting Model in Sports Competition

## Journal of Sensors

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope

(2) Discrepancies in the description of the research reported

(3) Discrepancies between the availability of data and the research described

(4) Inappropriate citations

(5) Incoherent, meaningless and/or irrelevant content included in the article

(6) Manipulated or compromised peer review

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

In addition, our investigation has also shown that one or more of the following human-subject reporting requirements has not been met in this article: ethical approval by an Institutional Review Board (IRB) committee or equivalent, patient/participant consent to participate, and/or agreement to publish patient/participant details (where relevant).

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

## References

[1] Z. Miao and Y. Hu, "Research and Analysis of Combination Forecasting Model in Sports Competition," *Journal of Sensors*, vol. 2022, Article ID 5945599, 10 pages, 2022.

*Research Article*

# Research and Analysis of Combination Forecasting Model in Sports Competition

## Zhongli Miao and Youhong Hu

*Department of Physical Education, Gansu Agricultural University, Lanzhou 730070, China*

Correspondence should be addressed to Zhongli Miao; miaozl@gsau.edu.cn

With the increase of sports industry and various sports events, forecasting methods play an irreplaceable role in the competition system. At the same time of prediction, the selected calculation method, implementation scheme, model establishment, and other key implementation aspects have high technical requirements. In the whole prediction model, how to solve the problem of competition development is predicted and analyzed, and the best solution is selected for screening and evaluation, so as to significantly improve the prediction accuracy of the whole model. Understand the cause of the problem and solve it. Second, in the process of solving the problem, use the relevant forecasting technology theory to determine the weighted weight coefficient method of the combination forecasting model. In this paper, before the competition, select the best combination of forecasting model to sports-related personnel simulation cases and form a comparative analysis. Finally, through the combination of prediction experimental methods for the effective results of the problem, and in the later development process to get a new prediction model. In the actual process of forecasting, facing the complex combination of forecasting systems, the selected evaluation theme and the uncertainty of objects will produce great forecasting errors. Through excellent improvement, the defects of the combined forecasting model have been overcome, and the forecasting accuracy has been improved, which will greatly enhance the good development of physical education. The coordination mechanism, guarantee mechanism, and competition organization mechanism of sports competition alliance should be analyzed through prediction model. Spread Chinese sports culture, improve the level of sports competition, and carry out research and analysis on the prediction model of sports competition. The experimental results in this paper show that (1) the prediction process is generally tested in extremely unstable environment, so it will have a certain impact on the prediction accuracy, that is, there are data with the highest measurement accuracy of 0.99 and the lowest measurement accuracy of 0.92. (2) Different calculation methods will be selected for different prediction models of competitions. For example, the error coefficients of SSE are 1.6859, 1.8338, and 1.6161, respectively, which proves that different models have different contents in prediction. (3) The comprehensive promotion of sports competition will need more prediction models to select and promote. In the progress of the times, the prediction value shows an increasing trend, from 2.4 billion cubic meters to 3.3 billion cubic meters, which is the perfect realization of the prediction model. (4) In the structure of the forecasting model, the weighted geometric combination forecasting model is obtained by the statistical investigation and analysis of relevant personnel, which is the best combination forecasting model of sports competition with the optimal weight coefficient of 1.9, the forecasting value of 33.95, and the forecasting accuracy of 0.9996.

## 1. Introduction

With the advent of the new era and the rapid progress of human concepts, sports competition has become the achievement of the times in the era of science and technology. In today's sports competitions, it endows Li with exten-sive knowledge and rich interest. On the one hand, it analyzes the physical talent of athletes in sports; on the other hand, it inherits personal moral norms and national glorious beliefs in sports competitions. Under the strict competition rules, the physical collision and the game of ways and strat-egies greatly improve the enjoyment of the competition and

show the manpower, material resources, and financial resources paid by a country to train sports talents. Under the common restriction of referees and rules, sports competitions carry out competitive contests between events and athletes in an orderly manner, which is a competition form that we try our best to own for glory. The successful development of sports competition reflects the country's high attention to the cultivation of athletes, and it is also an effective way to show the national sports achievements to the world. By using the methods of literature review, Delphi method, questionnaire survey, and statistical analysis, this paper puts forward the implementation strategy of sports league [1]. This paper probes into the internal conditions for maintaining the overall benefits and development of sports professional league and further analyzes the external factors such as politics, economy, legal system, and culture needed for the development of the league [2]. It is analyzed that strengthening the construction and development of campus sports competition is an important work of campus culture construction [3]. This paper analyzes the influence of college sports competition on campus culture, and sports competition is an indispensable and important part of campus culture [4]. High-level sports events rely on a strong university alliance system, which innovates the competition management system and business operation mode [5]. By using the methods of literature review and interview, this paper studies the main application and future development of information technology in competitive sports [6]. Sort out the related aspects of sports event management literature and research and comprehensive description of the data [7]. This paper analyzes the resource conditions of sports events and determines the index system of the resource conditions of sports events [8]. This paper analyzes the structure and characteristics of American middle school sports competition system and concludes that American middle school sports competition mainly adopts hierarchical competition, hierarchical competition, and season competition system [9]. This paper analyzes the current situation of student orientation competition organization in China and puts forward some suggestions on further standardizing and perfecting the competition organization of student orientation competition in China [10]. This paper probes into the environmental mechanism of the formation of sports competition organization and the comprehensive cognitive logic of creating the formation mechanism of sports competition organization [11]. By exploring the concept and goal, organizational structure, competition system, development effect and evaluation of American middle school sports competition, a complete competition system has been formed [12]. Twelve task modules of competition organization and management, such as the establishment of competition organization and the closing of competition work, are compiled, and the conclusion that competition is the core of large-scale sports events [13] is drawn. This paper analyzes the management and operation mechanism of sports organization, excavates the advantages of local sports resources, and offers characteristic physical education courses [14]. It reveals the inherent laws of the organization and management elements of ball games and produces a series of specialized operation skills [15].

## 2. Theory of Combined Prediction Model of Sports Competition

### 2.1. Basic Idea of Combination Forecasting Model.
From the prediction information of individual items, the effective combination of sports competition models is known, and the corresponding weight coefficients are weighted.

Standard combination forecasting model [16], as shown in the following formula:

$$y = \sum_{i=1}^{k} w_i y_i. \tag{1}$$

Wi expresses the weight of $y_i$ in $k$ prediction models.

### 2.2. Classification of Combination Forecasting Models.
Classify according to different competition events and different combination forms.

Linear combination forecasting [17].

$$f = l_1 f_1 + l_2 f_2 + \cdots + l_m f_m, \tag{2}$$

where $L$ is the weighting coefficient of the prediction method.

Nonlinear combination forecasting [18].

$$f = g(f_1, f_2, \cdots, f_m). \tag{3}$$

Optimal and nonoptimal combination forecasting [19].

$$\max (\min)\phi = \phi(l_1, l_2, \cdots, l_m), \tag{4}$$

$$\text{s.t.} \left\{ \begin{array}{l} \sum_{i=1}^{m} l_i = 1 \\ l_i \geq 0, i = 1, 2, \cdots m \end{array} \right\}. \tag{5}$$

When solving the optimal combination forecasting model, the nonoptimal combination forecasting model is carried out when negative numbers appear.

Find the weight of positive weight combination forecasting model for nonoptimal solution.

Arithmetic average method [20].

$$w_j = \frac{1}{J}, j = 1, 2, \cdots J. \tag{6}$$

Arithmetic average method is also called equal weight average method. The advantages are simple calculation and equal weights, the disadvantages are no primary or secondary, and the prediction effect is poor.

Reciprocal variance method [21].

$$\omega_j = \frac{D_j^{-1}}{\sum_{j=1}^{j} D_j^{-1}}, j = 1, 2, \cdots, J, \tag{7}$$

where $D_j$ represents the sum of squares of errors. The calculation method is shown in the following formula:

$$D_j = \sum_{i=1}^{N} (x_i - \widehat{x}_i)^2. \tag{8}$$

Mean square reciprocal method [22].

$$\omega_j = \frac{D_j^{-1/2}}{\sum_{j=1}^{J} D_j^{-1/2}}, j = 1, 2, \cdots, J. \tag{9}$$

Standard deviation method [23].

$$\omega_j = \frac{1}{J-1} \left( 1 - \frac{S_j}{\sum_{i=1}^{J} S_j} \right), j = 1, 2, \cdots, J. \tag{10}$$

$S_j$ is the standard deviation of the model [24]. Its calculation formula is

$$S_j = \left( \frac{1}{N-1} \sum_{j=1}^{J} (x_i - \widehat{x}_i) \right)^{1/2}. \tag{11}$$

### 2.3. Weighted Geometric Average Combination Forecasting Model.
Predict the single prediction model and calculate the fitting value of the single prediction model at $T$ time. The calculation formula is shown in the following formula:

$$\widehat{Q}_t = \prod_{i=1}^{m} Q_{it}^{l_i}. \tag{12}$$

$l_i$ satisfies

$$l_1 + l_2 + \cdots + l_m = 1, (l_i > 0, i = 1, 2, \cdots, m). \tag{13}$$

Calculate logarithmic values [25].

$$\ln \widehat{Q}_t = \sum_{i=1}^{m} l_i \ln Q_{it}, \tag{14}$$

$$f = \sum_{t=1}^{N} |e_t| = \sum_{t=1}^{N} \left| \sum_{i=1}^{m} l_i e_{it} \right|. \tag{15}$$

The $e_{it}$ calculation formula is

$$e_{it} = \ln Q_t - \ln Q_{it}. \tag{16}$$

Calculate the minimum error and carry out weighted geometric average combination forecasting model for the objective function.

$$\min f(L) = \sum_{t=1}^{N} \left| \sum_{i=1}^{m} l_i e_{it} \right|, \tag{17}$$

$$\sum_{i=1}^{m} l_i = 1, l_i \geq 0, i = 1, 2, \cdots, m. \tag{18}$$

### 2.4. Combination Forecasting Model with Optimal Weighted Coefficients.
The combination forecasting model with variable weighting coefficient is used to calculate, which improves the accuracy and stability of the model and facilitates the simulation and analysis of weights. The calculation formula of the weighted combination forecasting model is

$$\widehat{Q}_t = \sum_{i=1}^{m} l_{it} Q_{it}. \tag{19}$$

The weighting coefficient at time $t$.

$$\sum_{i=1}^{m} l_{it} = 1, t = 1, 2, \cdots N, \\ l_{it} \geq 0, 1 = 1, 2, \cdots, m, t = 1, 2, \cdots, N. \tag{20}$$

Calculate the prediction error when the combined prediction value of et is $t$. The formula is shown in the following formula:

$$e_t = Q_t - \widehat{Q}_t = Q_t - \sum_{i=1}^{m} l_{it} Q_{it} = \sum_{i=1}^{m} l_{it}(Q_t - Q_{it}). \tag{21}$$

Let $f$ be the sum of squares of the combined forecasting errors of the optimal nonnegative variable weighting coefficients, then, the variable weighting model of the minimum objective function is

$$\min f = \sum_{t=1}^{N} \sum_{i=1}^{m} \sum_{j=1}^{m} l_{it} l_{jt} e_{it} e_{jt}, \tag{22}$$

$$\text{s.t.} \begin{cases} \sum_{i=1}^{m} l_{it} = 1, t = 1, 2, \cdots, N, \\ l_{it} \geq 0, i = 1, 2, \cdots, N. \end{cases} \tag{23}$$

$l_{jt}$ is the $T$-time weighting coefficient of the $J$-th prediction model, and $e_{jt}$ represents the prediction error at $T$-time.

One

$$L_t = (l_{1t}, l_{2t}, \cdots l_{mt})^T, \\ E_t = (e_{1t}, , e_{2t}, \cdots e_{mt})^T. \tag{24}$$

Then

$$e_t = L_t^T E_t, e_t^2 = L_t^T E_t E_t^T L_t, \tag{25}$$

where $L_t$ represents the weighting coefficient column vector; $E_t$ represents the prediction error column vector; $E$ $Tt$ represents the covariance matrix.

Second

$$L = \left( L_1^T, L_2^T, \cdots, L_N^T \right)^T. \tag{26}$$

$L$ is a dimensional column vector, which can show non-negative weighted coefficient column vector.

That is, the sum of squares of prediction errors $f$ of combined prediction is expressed as

$$f = L^T EL. \tag{27}$$

The prediction model matrix of the minimum sum of squares of errors criterion is

$$\text{s.t.} \begin{cases} \min f = L^T ET, \\ R_t L = 1, t = 1, 2, \cdots, N, \\ L \geq 0. \end{cases} \tag{28}$$

The effective development of variable weight combination forecasting model is to adapt and change with the passage of time, find the corresponding weights, and align the corresponding forecasting stages.

## 3. Experimental Analysis of Combined Prediction Model of Sports Competition

*3.1. Basic Steps of Competition Combination Prediction.* In order to achieve accurate, reasonable, and efficient prediction, we must have a special person to arrange the work and carry out the work in a planned way, so as to achieve the maximum realization of the prediction effect. Realize the advantages of sports competition combination projects and analyze them quickly. The basic steps are as follows.

(1) Determine the purpose of the forecast

Before forecasting, we should know the problems to be solved this time and what purpose and significance should be achieved. After finding the prediction purpose and starting the prediction work, first collect materials and data. In the prediction work, it is inevitable that there will be deviations and misjudgments. Each competitor who is the object of prediction has his own characteristics, so the work is complicated. Forecasters will adopt different methods and collect different data, that is, when carrying out forecasting, they should make careful and targeted forecasting according to the actual situation.

(2) Investigate, collect, collate, and review data

Prediction work will need to be prepared in advance to identify, but the data collected to ensure high accuracy and comprehensive, otherwise, will have a huge impact on the prediction results. Before predicting, make sure to predict the personal situation of the participants, corresponding technical characteristics, competition situation, competition events, historical awards, and recent status, etc. Checking and processing the collected data to obtain the optimized data will greatly improve the prediction accuracy. The purpose of this is to have data for reference when choosing the prediction model, which greatly saves the prediction time.

(3) Selecting relevant prediction algorithms and constructing prediction models

After the effective collation, audit, and adjustment of the previous data, the appropriate prediction method is selected according to the data analysis results to establish a prediction model and start calculation and analysis. The rationalization of data and the high efficiency of prediction methods greatly improve the level accuracy of the model. With quantitative and qualitative prediction methods, athletes will know the next preparation and training intensity in advance.

(4) Analyze the prediction error

Errors in prediction are inevitable, but they are controllable. In the prediction work, the prediction error needs to be minimized and controlled at the same time, and then the causes are analyzed and the improvement methods are put forward. Analyze the prediction results obtained by different prediction algorithms, and seek the opinions of relevant experts to analyze and identify when analyzing and judging errors. Make further investigation on the prediction results, make deeper inspection and discrimination, and strive to minimize errors.

(5) Prediction conclusion and experimental analysis report are obtained

The conclusion will be written into an experimental analysis report and report to the corresponding prediction object, the first realization of the experimental conclusion will be the greatest significance of the experiment. Conclusion of the report will greatly improve the confidence of competitors and professional training and lay a solid foundation for improving competition results.

*3.2. Combination Prediction Model of Sports Competition.* In the process of abstract competition, the number of competitions is calculated and executed automatically, which can simulate the final results obtained by different players in the number of competitions. Every athlete has his own competition level. Some athletes can give full play to their advantages in some competitions, but there are also competitions that they are not good at. Through the measurable, evaluable, and usable results of sports competition, combined with the number of competitions, we can analyze and predict the achievements of the athlete in this sports meeting. Its prediction model is shown in Figure 1.

The data acquisition of competition times becomes the preprepration stage, which is transmitted to the feature engineering, and the parameters are adjusted by machine learning algorithm. To achieve modeling training, in which feature engineering and model training are coordinated with each other. After completing the training stage, the integration of models is realized, and the performance prediction model is obtained. Through the abovementioned results and analysis and improvement, the athletes can achieve the key training specialty competition.
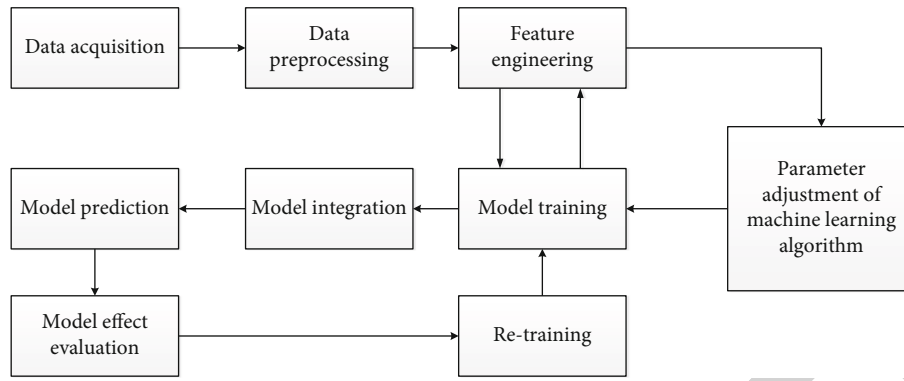
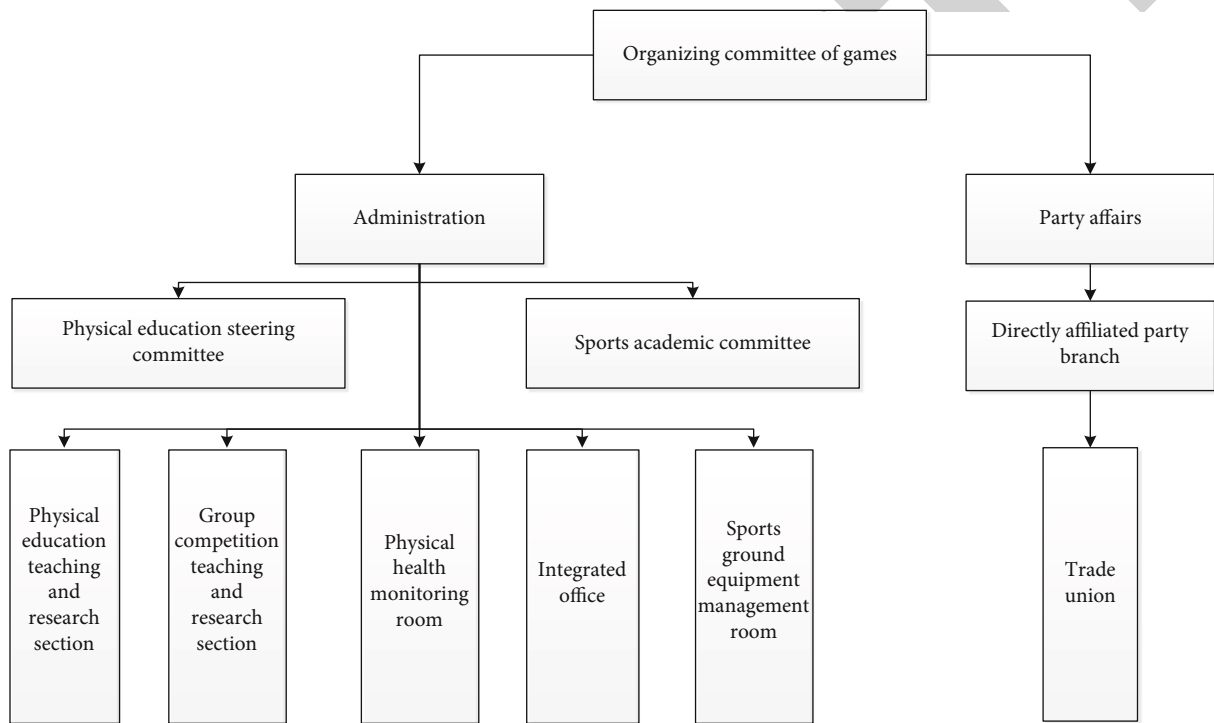FIGURE 1: Sports competition prediction model diagram.



FIGURE 2: Flow chart of competition organization structure of sports meeting.

### 3.3. Based on the Analysis of Sports Competition Organization Structure.

The development of modern competition system is the product of continuous optimization and the result of organizational prediction. As the management and punctual development of sports competitions, the preparatory work before is extremely important and the guarantee of the successful development of competitions. Constructing relevant departments with clear division of labor, simplifying competition organization system, improving work efficiency, establishing distinctive modern sports events, and carrying forward the fighting spirit of athletes are all the achievements of competition organization system construction. The following is an analysis of the organizational structure of sports competitions.

It can be seen from Figure 2 that in the management organization structure of the Sports Committee, administration and party affairs are mainly responsible, and other relevant personnel cooperate in their work. In view of the development of sports events and the cultivation of athletes, the development of physical education is conducive to the cultivation of excellent athletes. The hierarchical management of each management level and teaching and research office puts forward the operation mechanism with high quality and high requirements and forms a professional information and data processing center.

### 3.4. Analysis of Prediction Model of Sports Competition Operation.

Sports events change dynamically with scale, goal, and environment, which belong to dynamic model. This requires the establishment of a complex information management system to maintain and operate. Therefore, on the basis of establishing the model, the model can be realized and operated by effective and reasonable calculation and design methods. The purpose of this is to standardize the model according to the factors of dynamic environment, diversification goal, and scale increase.
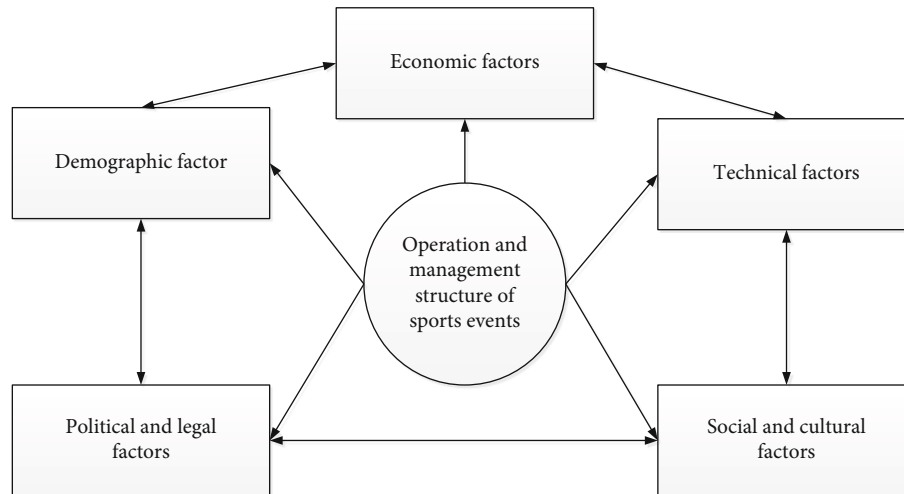
FIGURE 3: Influencing factors of internal and external environment of sports event operation institutions.

According to the essential characteristics of sports competition and management operation, the sports operation model should analyze and study each competition node and summarize the essential goal of the activity. Summarize the analysis contents involved in the establishment of sports event model as follows:

(1) Analysis of the operating environment of sports competition

The operation model of sports competition is a kind of behavior standard made according to the change of competition environment, and the analysis of operation environment is the first condition. A thorough analysis of the dynamic environment will help managers to effectively make temporary changes to the event and greatly improve the overall running progress of the event. The development of sports events will promote the politics, economy, and culture of all parts of the country rapidly, so it is necessary to consider these factors and make relevant analysis. Sports competition and internal and external environmental factors are an interactive relationship, which is a situation of mutual influence and mutual promotion. The relationship is shown in Figure 3.

(2) Operation of sports event management elements

Event management refers to the use of relevant functions and techniques in the process of competition, in accordance with the rules of the overall system of the overall analysis and control of the competition. Plan, organize, coordinate, control, and manage all stages of the competition to achieve efficient competition operation conditions. It is purposeful, organized, and innovative. It manages all aspects of event planning, on-site management and facilities and equipment, and shapes a good competition environment.

(3) Construction of sports event operation model

In view of the abovementioned competition working environment and the function analysis of managers, financial resources, material resources, and manpower, the detailed and systematic construction will be made, and the operation model of sports events will be constructed, which is expressed as follows in Figure 4.

## 4. Feedback Analysis of Competitive Sports Prediction Model

*4.1. Analysis on the Problems Existing in the Structure of Competition Combination Forecasting Model.* In the competition organization and management structure, we should not only consider the factors of national policies but also consider the influence of human factors. Athletes and coaches have certain views on the competition organization structure, and they all deal with problems according to the structural criteria. Under the condition of ensuring the smooth development of the competition, we should do our own basic principles and take basic responsibility in the face of mistakes, so as to be in line with the spirit of sports struggle. By investigating the feedback of athletes and coaches on the organizational structure, the following Figure 5 shows.

Both coaches and athletes have a certain understanding of organizational structure, and both think that organizational structure is an indispensable part of the whole competition. As can be seen from the figure, most coaches and athletes think that the competition organization structure is incomplete, among which there are 24 people in total. Athletes are more willing to express their views than coaches, while coaches are clearer in distinguishing things. Compared with the unclear division of labor among departments, there are 15 athletes, which is much more than 4 coaches. A competition team should communicate with each other while analyzing problems.

*4.2. Overall Correlation Evaluation of Combined Forecasting Model.* Obtaining excellent results from competition results for many times is conducive to enhancing athletes' training confidence. Data analysis of the current situation of the evaluation methods of competition excellence in the National Games can effectively reflect the performance of the
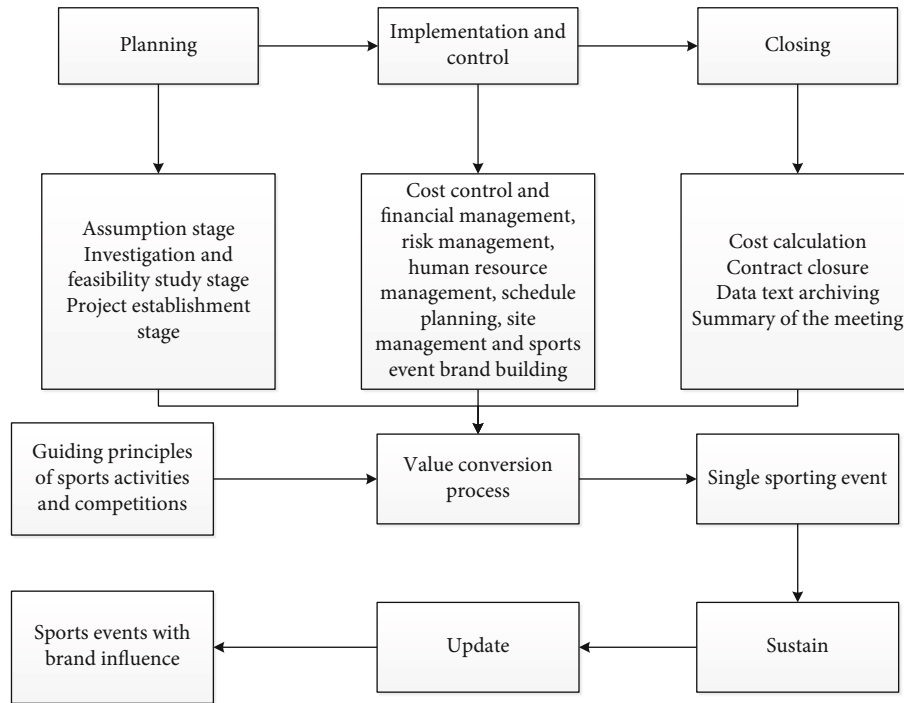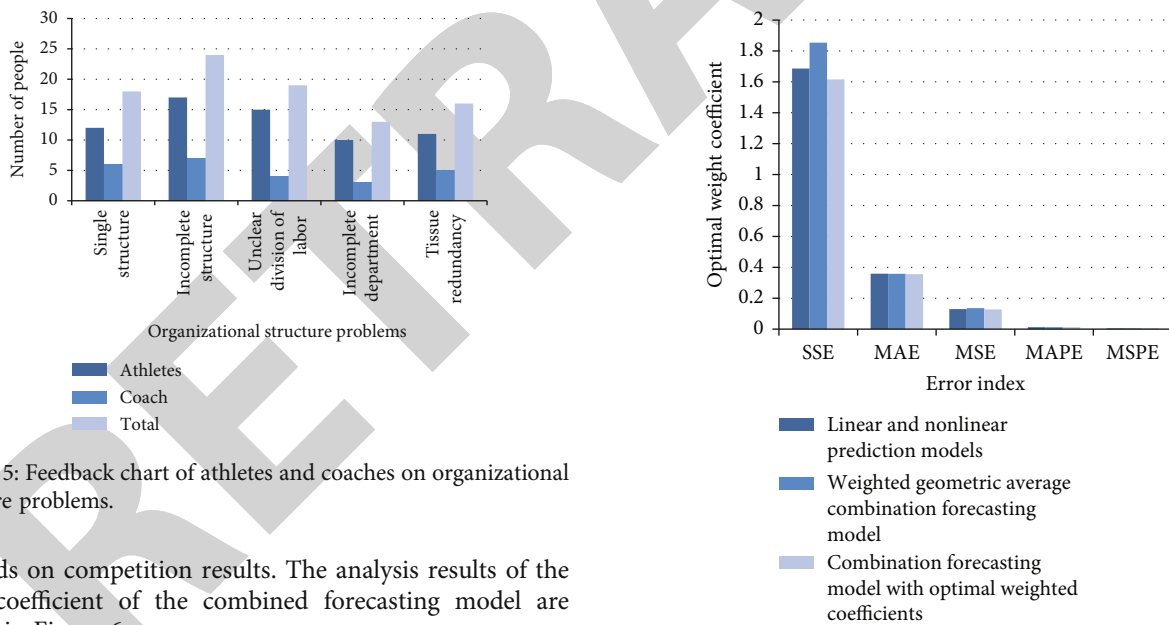
Figure 4: Expression of sports event model.



Figure 5: Feedback chart of athletes and coaches on organizational structure problems.



Figure 6: Evaluation results of combined forecasting model.

methods on competition results. The analysis results of the error coefficient of the combined forecasting model are shown in Figure 6.

It can be seen from the figure that the error coefficients of linear and nonlinear forecasting models, weighted geometric average combination forecasting model, and optimal weighted coefficient combination forecasting model are (1.6859, 0.3585, 0.1298, 0.0123, and 0.0044), respectively; (1.8538, 0.3578, 0.136, 0.0122, and 0.0045); (1.6161, 0.3555, 0.1271, 0.0122, and 0.0045). For the three forecasting models, in terms of overall effect and performance, the weighted geometric average combination forecasting model is more accurate and standard in calculating errors. The selection of sports competition model is also practical and efficient.

### 4.3. Analysis of Forecast Value of Various Combination Forecast Models.
In order to promote the development of sports competitions and implement the strategic development of national fitness, it is proposed to add mass events in the development strategy to enrich the competition forms and promote the coordinated development of competitive sports and mass fitness. The result of prediction is to analyze the relevant evaluation of the model through the prediction accuracy of the prediction model, and whether it can guide
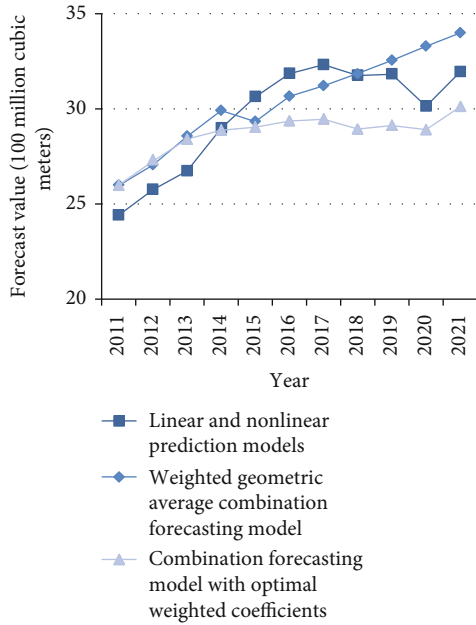
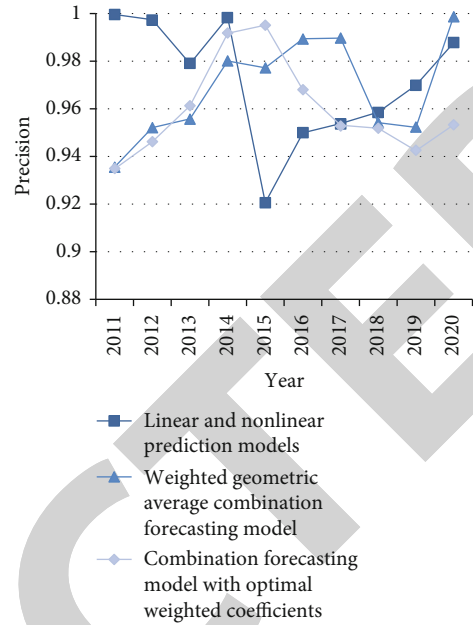Figure 7: Predicted value data diagram of various prediction models.



Figure 8: Accuracy data table of single prediction model.

the evaluation standard of sports competition level. Selecting the prediction results of sports competition results from 2011 to 2021, the prediction accuracy and prediction value data of three prediction models for sports event evaluation are as follows in Figure 7.

By arranging the measured competition prediction values, it is obvious that the height measurement and prediction values of the prediction model show an increasing trend in recent years. Among them, the weighted prediction model is close to the satisfactory prediction value of 3.5 billion cubic meters with the prediction value of 3.3 billion cubic meters. Efficient measurement and almost optimal prediction will effectively play the role of prediction model.

### 4.4. Prediction Accuracy of Single Prediction Model.

When forecasting, it is inevitable that due to the influence of environment and other factors, the prediction will have certain deviation, which will lead to the fluctuation of prediction accuracy. Every year, the level of athletes' performance will be different, and some even decline because of their age. According to the competition prediction accuracy of different combination prediction models in recent years, the effectiveness of the models is analyzed. The relevant data are shown in the following Figure 8.

In the experimental measurement, a new effective combination forecasting model will be calculated based on the order of measurement. In 2011, the accuracy of linear and nonlinear prediction models was 0.99, while the other two prediction models were only 0.93, which could not reach the prediction value. The accuracy is not high enough to meet the effective establishment of the model, and the high accuracy of the prediction model will be realized with the birth of the improved model.
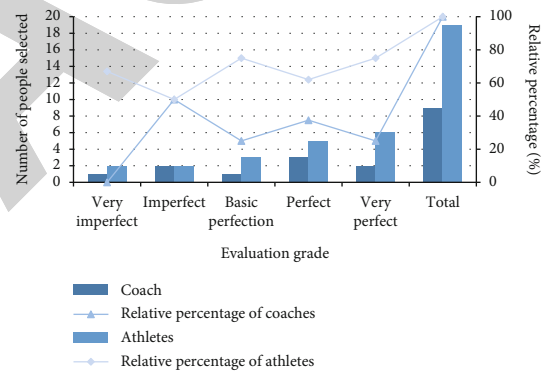


Figure 9: Validity test chart of evaluation design.

### 4.5. Evaluation Results of Organization Prediction Model Operation.

In order to ensure the normalization and rationalization of sports competition organization and operation, the results of organization and operation will be evaluated. Among them, the evaluation level is effectively analyzed, which will explain whether the competition is a complete success. If there are dissatisfaction, make corresponding improvements through the result analysis.

### 4.5.1. Test of Related Contents of Competition Prediction Model Evaluation.

From the coaches and athletes to the situation of this competition questionnaire analysis, get the situation of this activity. Make a reasonable analysis of the evaluation of this competition, look at the competition rationally, and keep the concept of "friendship first, competition second." The organizational evaluation results are shown in Figures 9–11.

From the design validity, content validity, and structure validity of competition evaluation, the evaluation analysis is carried out, and the number of people is selected for
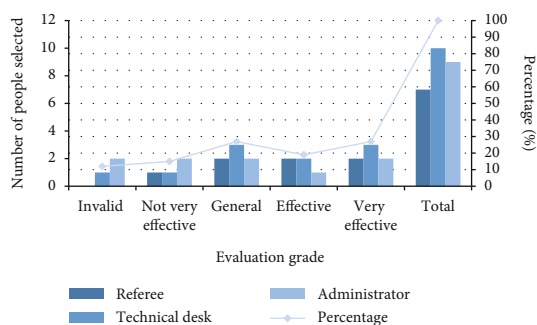
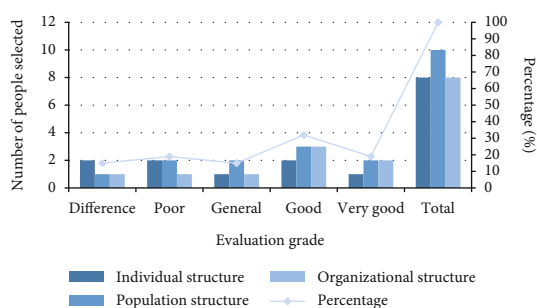Figure 10: Validity test chart of evaluation content.



Figure 11: Validity test diagram of evaluation structure.

statistical investigation. There are some problems in the whole evaluation system. Among them, 50% of athletes and coaches think that the evaluation design is imperfect. In the evaluation content, 28% of people think that the content is general, which is not enough to evaluate and cannot meet the evaluation requirements; 32% of structural personnel think that the evaluation grade is good and can be used to sort the results in sports competitions, but it lacks a certain degree of completeness. According to the analysis of organizational evaluation, the shortcomings of the whole organization will be found, and better experiences and lessons will be extracted in the next development.

## 5. Conclusion

Competition is the main achievement of sports training, and the main purpose of sports competition is to win by striving for excellence and defeat other players. According to the rules of the competition, the competition shows the athletes' physical strength, skills, and psychological endurance, as well as the coach's tactical system. With the expansion of the scale of sports events, competition will be carried out and competed more widely all over the world. It reflects the professionalism and skill of sports industry in various countries, which is the display process in the arena. "A few minutes on stage, ten years off stage" describes the hardship of athletes in training, and it is also the great spirit of striving for the honor of the country and itself. The development of sports competitions will promote the popularization and promotion of sports, and the established competition system will be continuously improved, from grass-roots attention to high-level embodiment. According to the experimental con-

tents of this paper, the summary is put forward: (1) predicting and analyzing the future in sports competition will greatly increase the effect of athletes getting high results in the competition, and facilitate coaches to arrange guiding tactics. (2) Competitive culture is often spread and cultivated through the window of sports competition, which is not only limited to keeping fit but also promotes the development of human society. (3) With the increase of modern sports, the value and significance will be more extensive, which is a long-term realization from promoting economic level to enriching national culture. (4) At the same time of sports competition, the evaluation and analysis of the results after the competition are beneficial to the technical reinforcement of many athletes, the results are obviously improved, and the championship is one step closer.

This paper studies the lack of content and analysis: (1) lack of subjective judgment awareness of athletes, more training according to the requirements of coaches, resulting in individual cannot play out the characteristics and advantages of performance. (2) In the statistical analysis of the number of people selected, the evaluation only based on the selection of internal personnel and did not conduct a sample survey on outsiders, resulting in the lack of data. (3) The combination model is the calculation and prediction of the highest level of sports competition, but now it is limited to the implementation of development and popularization. (4) The competition organization structure is not complete, but it does not complete the organization. The next research content will be to put forward the corresponding solutions through the integrity of the competition organization and carry out in-depth experimental analysis.

## Data Availability

The experimental data used to support the findings of this study are available from the corresponding author upon request.

## Conflicts of Interest

The authors declared that they have no conflicts of interest regarding this work.

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