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## The use of eisenhower matrix method in the sunlight sports activities in effect assessment

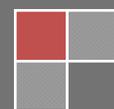
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### ABSTRACT

Eisenhower matrix method for the effective development of sunshine sports movement of primary and middle school students can have a positive effect, from the point of the students' own development, sunshine sports movement to change traditional ideas. Enabling students to have a positive impact in the all-round development of body and mind quality. However in the sunlight sports activities in the process of primary and middle school students, the effect of the assessment process is hard to get to. That is why its in the aspects of the research and discusses process is less, for in effect of the assessment process does not provide the corresponding theoretical basis. In this paper, combining the current situation of the corresponding research and discussion, hope to be able to in the future to evaluate its effect in the process of the application of idealized provide effective support and rationalization.

### KEYWORDS

Eisenhower matrix method; Sunshine sports; Effect evaluation; Application research.



## INTRODUCTION

From the point of the development, the development of sunshine sports aims at to qualitative change the primary and middle school students' physical quality. And its effect is good or bad is no specific evaluation criteria, so that it can lead to the development of sunshine sports activities to carry out the process and direction is not able to maintain a high level of clear. Combining with Eisenhower matrix method to evaluate the effect of the corresponding research, through Shanghai sunshine sports in this league as an object, and study its corresponding process. This paper studied and discussed, first of all, combined with the research purpose of the study of the related design process, thus to effectively determine the research methods. The second is that according to the corresponding questionnaire for further data processing, combined with the sunlight sports in Shanghai big league four potential variable process of exploratory factor analysis was carried out on the specific relationship between the variables is clear, will eventually effect factors of Shanghai sunshine sports league to carry out effective analysis<sup>[1]</sup>. In the process can fully reflect the systematic and scientific research and discussed, which will be Eisenhower matrix method application in the sunlight sports activities to carry out the evaluation value enhances unceasingly.

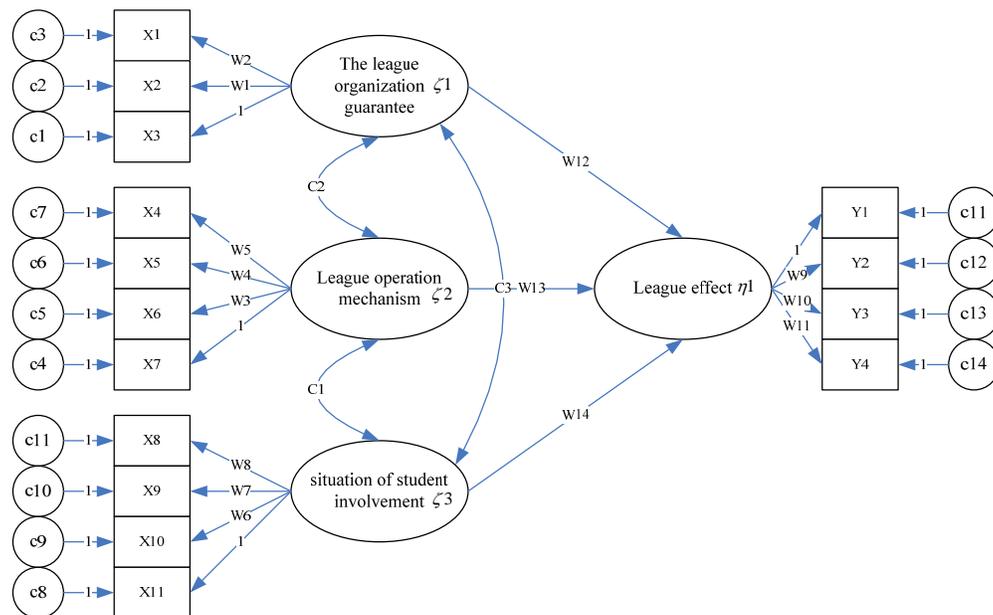
## RESEARCH APPROACHES

### Research design

In the process of this paper studied and discussed, first for primary and middle school students in Shanghai as the research object of this article, through its sunshine sports league to carry out the corresponding effect assessment. As well as Eisenhower matrix method in the process as the important model is studied in this paper, its associated variables for further study, in order to make the Eisenhower matrix method in the sunlight sports activities that can produce a positive role in the process. From the associated factors and variables for the sunlight sports activities are analyzed, the effects of degree of improving in this paper, the research process.

In the study of Eisenhower matrix, through primary and secondary school students in Shanghai sunshine sports league organization process accordingly, which effectively established for structural variables. And use it as the sunlight sports activities to carry out the important factors.

And in the structure factors of composition, sunshine sports to carry out the operation mechanism, the condition of students to participate in and sun protection factor of the sports activities and the implementation effect is the structure of the important factors. However, the hypothesis that need to be solve in this path basically has the following several aspects (as shown in figure 1):



**Figure 1 : Effect induced factors of Shanghai municipality on implementing the sunlight sports playing league structure model**

First, the sunlight sports activities in the process of conducting the positive influence on its operation process. The second is the sunlight sports activities for students to participate in the positive impact of formation, the third is the security

factors for the sunlight sports activities carried out can form the positive impact. Fourth, is the mechanism is for students to participate in conditions to produce positive effect. Fifth, activity is the operation system for the entire campaign effects generated by the role. In the end, it is the student prior to the sunlight sports for its overall activities can produce effect.

### **The research methods**

In the process of research of this paper, the main research method is questionnaire survey. In the process of design of this questionnaire, covering research related topic 44 which involved four observed variables related issues. There are 12 in this specific tests for primary and secondary school physical education teachers and experts, to its validity and pertinence can improve according to this. In this questionnaire design process effectiveness can reach 91.21%. This questionnaire first in Shanghai yangpu district and hongkou district first conducted a small-scale testing process. And the test process after reliability test, cronbach test only can get effective guarantee, test value of 0.912. In the questionnaire can be seen in the process of finishing, there are 7 observation variable item values are less than 0.5. Value again weeks for the remaining 37 observation variable factor analysis process effectively, and principal component analysis for relevant observed variables. However, from the test data of questionnaire on its structure validity can be fully reflected<sup>[2]</sup>. In four of the cumulative variance contribution ratio of the latent variables of calculation, its contribution rate is 8.17. A questionnaire can fully show time has strong convergence disinfectant distinction validity. At the same time, all the factors of load has reached 0, 5 above. It can fully reflect that all the effectiveness of the observed variables are strong, eventually determine four scales of questionnaire and 37 test project. In this paper, according to the unified arrangement of Shanghai municipal education commission in 685 primary school physical education teachers to participate in the research process after unified training issued by questionnaire, and distribution of the total number of 685, and the actual number of recycling is 659, questionnaire recovery rate was 96.2%, the number of valid questionnaires is 632, including effective questionnaire recovery was 92.3%.

## **THE DATA AND RESULTS**

### **The basic situation of the investigation**

During the process of the investigation, a total of 632 number of questionnaires, the survey coverage is relatively broad which involves the jurisdiction of 17 counties and districts of primary and secondary school physical education teachers. And in this process to participated in 06 years Shanghai primary and middle school sunlight sports league work rooms a total of 292 people, accounting for as much as 46.2% of the total number of investigation. And every year to participate in this league two or more times a teacher a total of 505 people, accounting for survey 79.9% of the total. And in the process of investigation, classroom, teaching time in more than 10 years of teacher has 382 people, teachers of the total proportion of 60.5%. In accept the questionnaire survey of the physical education teachers. There are 592 teachers in the bachelor's degree, which accounts for 93.7% of total survey. From this a series of data, we can see that it is not hard to research is not only rich teaching experience, for its Shanghai sunshine sports league work experience is more rich, familiar with the work of the high degree.

### **Four latent variables exploratory factor analysis of Shanghai sunshine sports league**

In the sunlight sports in Shanghai big league observed variables in the process of the specific analysis (as shown in TABLE 1), we can through its convergence results of the corresponding conclusions. In factor 1 is mainly expressed in the big league in the obstacles existing in organized process. The concept and the factor 2 is the implementation of the general effect of the big league, the factor of is embodied by three big league during the operation and management. Big factor 4 is a reflection of the students during the period of the league to participate in the situation.

On every factor of 4 after the corresponding explanation, questionnaire can reflect variance contribution rate has reached 79.235%. It embodies the questionnaire survey quality obtained the full affirmation<sup>[3]</sup>. At the same time, through the observation variable VAR0005 correlation factor analysis, having previous big league organization management gradually to the present state of the students to participate in. But according to the process factors indicators, this research process and related defines four latent variables, including three external variables and an internal potential, they are contest organization guarantee, competition operation management, student participation and competition effect.

### **Shanghai sunshine sports league four factor score condition and correlation analysis**

In the process of the reliability of the inspection, we can see that it is not difficult to its reliability value can reach more than 0.9, from this intuitive reflect effectively shows the reliability of each scale between higher. And each scale between the value of the test statistics are greater than 0.9, it does make a statement for each factor index correlation exists between more closely, more suitable for factor analysis. By the principle of principal component is greater than 1, the scale can be convergent factor and factor variance contribution as shown in TABLE 2.

**TABLE 1 : The sunlight sports in Shanghai after the big league overall observation variable rotation factor**

observed variable	Factor			
	1	2	3	4
The operational level of College Students Organization	.777			
Big league administrative personnel service satisfaction	.776			
Big league all the logistics in place	.776			
Big league services security in place	.772			
Big league sound of the supervision evaluation of sports	.758			
In the big league is the content and forms of students to exercise an hour every day side effect	.751			
Big league administrative personnel's professional degree		.749		
Big league venues, equipment, facilities and other hardware security situation		.739		
Big league organization of sound		.735		
Big league safety management measures		.670		
Big league propaganda work boot		.626		
Big league organization form		.594		
All big league policy			.770	
To strengthen the school sports work big league			.749	
Big league effect to improve students' physical health level			.746	
Big league promote students actively participate in physical exercise			.732	
Big league project Settings conform to cultivate students' interest in physical exercise and habits			.724	
Big league project conforms to the students' physical and mental development			.710	
Your school students focus on big league				.702
Your university student to the big league, photography, and other sports culture activities through participation				.677
University student's knowledge in the big league				.657
The participation degree of the university student to the big league game				.652
The degree of your university students indirectly participate in the big league				.762
University student's love in the big league				.756
Your school leadership's emphasis on big league				.739

**TABLE 2 : Tables and total four factor scale cronbach reliability test and statistic test**

Name of scale	Krumbach $\alpha$ composite reliability	Contains the entry number	KMO value	Can collect factor	Factor variance contribution rate
total scale	.985	37	.981	4	79.325
league organization guarantee	.968	12	.954	1	74.218
League operation mechanism	.965	8	.951	1	80.601
situation of student involvement	.937	7	.920	1	73.656
League effect	.980	10	.963	1	84.469

We can clearly from the table, four potential variable scale can only be collected into a number of factors, the variance contribution rate can reach more than 70%. In this process, we in each factor of the load weight and the index's multiplication, the score of comprehensive weighted average again, can get the final score of the factors, and then to final score into the relevant comparison<sup>[4]</sup>.The specific formula is :

$$\bar{X} = \sum_{i=1}^n X_i W_i / n$$

From the above formula, we defined the  $X_{i1-n}$  scores in the process of evaluation index to the evaluation index, and the meaning of the representative  $W_i$  is 1 - n weights of evaluation indexes. Through the discussion of the above formula process can be effectively and calculate the average scores of each factor.

**TABLE 3 : Shanghai sunshine sports contest four variables score and the sorting of the structure**

Structure variable	Frequency statistics	All from the statistics	The minimum statistics	The maximum statistic	mean value		The standard is on the high side	Converted to 0 -
					statistics	standard error		
operations management	632	5.39	.90	6.28	4.7203	.04436	1.11529	67.43
-Effect of league	632	5.51	.92	6.43	4.6999	.04764	1.19759	67.14
organizational guarantee	632	4.98	1.06	6.03	4.2913	.04129	1.03805	61.30
student involvement	632	5.14	.86	6.00	4.2749	.04587	1.15315	61.07

From TABLE 3 data statistics and calculation results it is easy to see four structure variable evaluation scores. Its operation management in the average score ranked first, the average score was 4.7203 + / - 1.1529 points, second is the league effect variables score, the average score was 4.999 + / - 1.9759. And the average scores of organization management situation in third, the average score was 4.913 + / - 1.3805. And the scores of students to participate in the variable was fourth, the average score of 4.7494-1.1315. However, to turn the percentage of here is not to the corresponding transformation process, is a transformation result can be obvious. However in the longitudinal than run, related research of Shanghai teachers' satisfaction with the degree of the contest is higher, its overall evaluation is good, but from the point of transverse than, the league, league effect relative to the organization and management and students participate in<sup>[5]</sup>.

**TABLE 4 : Shanghai sunshine sports competition structure of four variables of Pearson correlation analysis**

	The league organization and management	League operation mechanism	student involvement	League effect
The league organization guarantee	1			③
League operation mechanism	.792**	1		①
student involvement	.738**	.730**	1	②
League effect	.758**	.854**	.797**	1

From TABLE 4 reflects the three variables associated with league effect is involved, the relative relationship between numerical compare effective. Because in this league operation mechanism between closely linked, the relationship value maximum, and comes in second place is the student participate in the variable, and event organization variable numerical minimum relative relations. Yet despite the three potential variables for league effect are more closely, it can also from another Angle shows three potential for league effect between variables are huge. But not to be summed up as specific causal relationship, this needs to be further structural equation based on the validation process.

### Shanghai sunshine sports league potential path variable structure model

In the process of research of this paper, the ultimate woven label is through Eisenhower matrix method to sunlight sports activities to carry out effective assessment. In the need for its causal relationship between latent variables for effective research process, and in this section is on the one hand to this accordingly. From which we have to be effectively solve the presumption that the path, that cause the sunlight sports activities to carry out the formation process of the specific reasons for effective verification<sup>[6]</sup>. This can be implemented finally conclusions. In the process of potential between variables and to observe the factors relating to become more widely, the demand, according to research this paper selected the load quantity, and can illustrate potential variable number of observed variables choice. The size of the standardized regression coefficients can be expressed the relative influence of potential causal relationship between variables q path (as shown in TABLE 5).

**TABLE 5 : Hypothesis model standardization coefficient of attribution**

Return Path			Estimates	Return Path			Estimates
League effect	< - -	The league organization guarantee	.203	VAR0015Control Technical Ability	<--	League operation mechanism	.908
League effect	< - -	League operation mechanism	.392	VAR0014 physical and mental development	<--	League operation mechanism	.887
League effect	< - -	Students participate in case	.353	VAR0026 culture of engagement	<--	Students participate in case	.746
Students participate in case	<- >	League operation mechanism	.710	VAR0025 Games to participate in	<--	Students participate in case	.840
The league organization guarantee	<- >	League operation mechanism	.763	VAR0023 concern extent	<--	Students participate in case	.943
Students participate in case	<- >	The league organization guarantee	.712	VAR0022 The degree of knowledge	<--	Students participate in case	.895
VAR0012 Logistical support	<--	The league organization guarantee	.911	VAR0032 Activity effect	<--	League effect	.929
VAR0008 Service Provider	<--	The league organization guarantee	.908	VAR0033 Effect of the content	<--	League effect	.896
VAR0004 Agency operation	<--	The league organization guarantee	.812	VAR0034 Effect of culture	<--	League effect	.936
VAR0017 Enrichment activities	<--	League operation mechanism	.910	VAR0035 Mechanism of the effect	<--	League effect	.914
VAR0016 Cultivate an interest	<--	League operation mechanism	.946				

After by professional software analysis, each adaptation index of research model We can find that, the model in after 11 iterations and variable VAR0025 and VAR0026 after two error coefficient of correlation, the indicators of the model with moderate better model achieved ideal fitting effect (as shown in TABLE 6.)

**TABLE 6 : The sunlight sports in Shanghai big league effect model adaptation degree of each index**

Default model	CMIN	DF	CMIN/DF	P	RMR	GFI	AGFI	NFI	IFI	RMSEA
Sunshine Sports	79.72	83	0.87	0.21	0.03	0.98	0.97	0.98	0.99	0.04

**The sunlight sports league and sunshine sports activities is what relation**

Logistics "big league", "league project Settings in cultivating students' interest in physical exercise habit and", "the student to the big league attention" and "league effect" in terms of creating the atmosphere of campus sports culture in the observed variables respectively in their own potential, such as the highest relative influence. It also reflects the sunlight sports leagues as gripper of sunlight sports activities in Shanghai, is gradually revealed to primary and middle school students sports into their influence.

**What specific factors influence big league implementation effect**

Our path through the copulation equation model for effectively verify correlation coefficient, we can find that the league effect in the point of the path coefficient relative to the other three variables causal relationship between more closely. From the perspective of straightforward narrative is the league to carry out the purpose and degree and the corresponding ways to encourage students to participate in for the league to carry out the appropriate evaluation of the effects of the effect of, however it also makes the whole process of the league of priority, to develop direction for league can generate the corresponding decision. We will reverse thinking, through the league to carry out the effect and significance of the

corresponding data research, student participation condition is the first element of the league to carry out the process to give you<sup>[7]</sup>. And feedback structure model of the path, the effect of this factor is far less than the operation management of league this variable. It is fully reflected in the league to carry out the process, through the corresponding management means to mobilize the initiative of students do not have a decisive role. But in a way and perspective, time league development also need to face more uncertainties, it can also reflect the league for the importance of students' physical quality development penetration process is not strong, the student's own emphasis did not reach the expected effect. Science ministry of education in the United States after countless times of scientific validation, proposed the teenagers to participate in sports activities can improve the central nervous system's ability to control, coordinate and deal with the internal and external information. And the youth participation in sports activities is the student to obtain knowledge and the important way to improve academic performance in the American values of science education.

## CONCLUSION

This article is really to Eisenhower matrix method in the sunlight sports activities in effect assessment, the application of the subject's related research process. Combined in this questionnaire for its potential variables and optical difference exists between the specific relationship between clear, from the analysis of the variable factors for further process. Through professional software for the data to carry out specific analysis process, affecting the sunlight sports in Shanghai big league to carry out the main factors of effect. Path analysis and combined with variable structure model, made in this paper, the research data is more persuasive, discourse is scientific will be able to get the corresponding guarantee.

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