THE CONSTRUCTION OF A COMPREHENSIVE EVALUATION SYSTEM OF REGIONAL PUBLIC SPORTS SERVICE SUPPLY IN CHINA BASED ON RECIPIENT SATISFACTION INDEX MODEL



A CONSTRUÇÃO DO SISTEMA DE AVALIAÇÃO ABRANGENTE DA OFERTA REGIONAL DE SERVIÇO PÚBLICOS DE ESPORTES NA CHINA COM BASE NO ÍNDICE DE SATISFAÇÃO DE BENEFICIÁRIOS

CONSTRUCCIÓN DE UN SISTEMA DE EVALUACIÓN INTEGRAL DEL DESEMPEÑO DE LA OFERTA DE SERVICIOS DEPORTIVOS PÚBLICOS REGIONALES EN CHINA BASADO EN EL MODELO DE ÍNDICE DE SATISFACCIÓN DE LA AUDIENCIA

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ABSTRACT

The comprehensive performance evaluation system of public sports service is an important part of public sports service system in China. How to objectively and comprehensively evaluate the present situation of public sports service performance in our country has always been a difficult problem in the development of public sports service. Based on the five principles of constructing the recipient satisfaction index, the PCSSI model of the comprehensive evaluation system of public sports service supply was constructed using scale design. Large-scale stadiums in seven districts of Shenyang were selected for investigation. The recipient satisfaction index model was established to compare the satisfaction index of the 7 regions, and analyze the influencing factors of the satisfaction index of public sports service supply, and put forward some suggestions for improving the service level of large stadiums and gymnasiums in Shenyang. Practice has proved that the application of the PCSSI model has a positive effect on improving the performance level of public sports service supply in China.

Keywords: Public sports service supply; satisfaction index; PCSSI model.

RESUMO

O sistema abrangente de avaliação do desempenho dos serviços públicos de esportes é uma parte importante do sistema de serviço público de esportes na China. Como avaliar objetivamente e exaustivamente a situação atual do desempenho do serviço público de esportes em nosso país sempre foi um problema difícil no desenvolvimento do serviço público de esportes. Com base nos Cinco princípios de construção do índice de satisfação dos beneficiários, o modelo PCSSI do sistema de avaliação global do desempenho dos serviços públicos desportivos foi construído pelo projeto de escala. Os estádios de grande porte de sete distritos de Shenyang foram selecionados para investigação. O modelo do índice de satisfação dos beneficiários foi estabelecido para comparar o índice de satisfação das 7 regiões, e analisar os fatores que influenciam o índice de satisfação com os serviços públicos de esportes, e apresentar algumas sugestões para melhorar o nível de serviço dos grandes estádios e ginásios em Shenyang. A prática provou que a aplicação do modelo PCSSI tem efeito positivo na melhoria do nível de desempenho dos serviços públicos esportivos na China.

Descritores: Oferta de servicios deportivos públicos; índice de satisfacción; modelo de PCSi.

RESUMEN

El sistema integral de evaluación del rendimiento del servicio público de deportes es una parte importante de ese sistema en China. Cómo evaluar de manera objetiva e integral la situación actual del desempeño del servicio público deportivo en nuestro país siempre ha sido un problema difícil. Sobre la base de los cinco principios para la construcción del índice de satisfacción del receptor, se construyó el modelo PCSSI del sistema de evaluación integral de la oferta de servicios deportivos públicos utilizando un diseño a escala. Se seleccionaron estadios a gran escala en siete distritos de Shenyang para su investigación. El modelo de índice de satisfacción del receptor se estableció para comparar el índice de satisfacción de las 7 regiones, analizar los factores que influyen en el índice de satisfacción de la oferta de servicios deportivos públicos y presentar algunas sugerencias para mejorar el nivel de servicio de los grandes estadios y gimnasios en Shenyang. La práctica ha demostrado que la aplicación del modelo PCSSI tiene un efecto positivo en la mejora del nivel de rendimiento de la oferta de servicios deportivos públicos en China.



Descriptores: Fornecimento público de serviços desportivos; índice de satisfação; modelo PCSSI.

INTRODUCTION

Receiver satisfaction index is a new kind of measurement system based on customer, which is used to evaluate and improve organizational performance. Compared with the western developed countries, research practice and theoretical research of China's public satisfaction are very weak. However, with the continuous development of society, the study of service satisfaction evaluation is already in the ascendant. In order to achieve the strategic goal of building a service-oriented society, some service departments organize the public to evaluate the service performance of service sites and use public satisfaction as the basis for assessing government performance. But how to apply the results of these theoretical research to the practice of regional public sports service in China, how to construct the evaluation system of regional public sports service supply satisfaction and how to standardize and institutionalize the system to guide and promote the development of practice should be further strengthened.

Public sports service performance evaluation is that after the implementation of public sports services, the evaluation of the main body evaluation uses certain evaluation methods, evaluation indicators and evaluation criteria to measure the level of benefits of the project or service. The provision of quality public sports services is better served to meet the needs of citizens for public sports development, which is the starting point and destination for the development of public sports services. The nature of public sports service supply is "supply", so the performance evaluation of public sports service supply can't simply pursue high efficiency and input--output ratio, but should also focus on providing more, better and more fair sports service for the public. The performance evaluation of public sports service supply should be guided by scientific outlook on development, people-oriented, results oriented, and taking into account the process to target. The research time of public sports service in our country is short and the foundation is weak.⁴ After the rapid expansion of public demand for public sports, the government's supply capacity is limited and lack of flexibility, and the "government supply" model exposes many drawbacks. The government can't adapt to the changes in public sport's needs, which leads to the contradiction between the supply of public sports services and public sports. The performance evaluation activities of public sports services can reflect the development of public sports service, propose solutions, improve the efficiency of public sports service supply, and to a certain extent, ease the contradiction between public sports service supply and demand. Therefore, the study of public sports service performance evaluation activities has an important practical significance.⁵

RESULTS ANALYSIS AND DISCUSSION

From the point of view of stadiums and gymnasiums, the mean and standard deviation of the latent variables and marking variables of 7 stadiums and gymnasiums in Shenyang were compared. As can be seen from the table, in the 7 areas, the maximum expected mean of the latent variables was 6.78 points in Shenhe, standard deviation was 1.54, the lowest score was peace zone of 6 points, and the standard deviation was 1.81. Overall, the mean of the 7 regions of the recipient's expectations was low; both within the scope of the 6-7, which meant that most of the public service supply expectations weren't high. There were two identified variables in the latent variable receiver's expectation of accumulation and the overall expectation, and the mean and standard deviation of cumulative expectation were 6.53 and 1.855 respectively, the mean and standard deviation of the overall expectation were 6.17 and 1.624 respectively. It can be seen that the expected quality of the overall service supply of the venues is low, which is related to the long-term implementation of the control system in our country. Therefore, the overall quality of the public service to the stadium isn't high; expectations for the quality of service providers aren't high.⁶ (Table 1 and 4).

Table 1. The mean and standard deviation of latent variables in seven districts.

	Dongling District		Shenhe Disrict		Yuhong District		Tiexi District	
						Standard deviation		
Recipient expectation	6.4	1.56	6.78	1.54	6.13	1.55	6.23	1.45
Recipient quality	7.77	1.32	7.68	1.23	7.85	0.87	7.22	1.47
Recipient satisfaction	6.90	1.56	6.63	1.64	6.63	1.71	6.42	1.82
Recipient complaint	8.03	1.51	7.81	1.89	7.88	1.48	7.83	1.82
Recipient trust	7.98	1.37	7.49	1.86	7.77	1.55	7.13	1.89
Personnel	7.74	1.87	7.87	1.73	8.18	1.14	7.41	1.69
Standardization	7.38	1.89	7.21	1.70	7.61	1.32	6.73	1.82
Environment	8.14	1.14	8.14	1.25	7.99	1.16	7.63	1.59

Table 2. The mean and standard deviation of latent variables in seven distracts.

	Huang	gu District	Dadon	g District	Heping District		
	Mean value	Standard deviation	Mean value	Standard deviation	Mean value	Standard deviation	
Recipient expectation	6.28	1.98	6.56	1.69	6.00	1.81	
Recipient quality	7.29	1.48	7.55	1.25	7.24	1.20	
Recipient satisfaction	6.29	2.17	6.26	1.89	5.79	1.31	
Recipient complaint	8.13	1.57	7.90	1.73	7.26	1.99	
Recipient trust	7.14	2.16	7.21	2.17	6.65	1.99	
Personnel	7.40	2.07	7.83	1.69	7.64	1.55	
Standardization	7.10	1.88	7.04	1.98	6.95	1.67	
Environment	7.52	1.42	7.99	1.06	7.58	1.25	

Table 3. The mean and standard deviation of identification variables.

Number	ldentifier variable		Standard deviation	Number	Identifier variable		Standard deviation
1	Cumulative expectation	6.53	1.855	10	Prospective comparison	6.14	1.987
2	Overall expectation	6.17	1.624	11	ldeal comparison	5.95	2.124
3	attitude	7.66	1.834	12	Satisfactory situation	7.18	2.005
4	Specialized	7.78	1.838	13	Complaint idea	7.74	2.146
5	Convenience	7.88	1.719	14	Complain to acquaintances	7.58	2.257
6	Standard	7.46	1.959	15	Complain to strangers	8.20	1.684
7	procedures	6.82	2.234	16	Service intention	7.54	1.901
8	Service environment	7.84	1.610	17	loyalty	7.14	2.305
9	Service quality	7.15	1.727	18			

Table 4. Service satisfaction index score of 7 major sports venues in Shenyang.

	Dongling	Shenhe	Yuhong	Tiexi	Huanggu	Dadong	Heping	The total
	District	Disrict	District	District	District	District	District	score
Score	73.81	70.42	70.38	67.80	66.16	65.73	59.87	67.79
Ranking	1	2	3	4	5	6	7	

Based on the description of the satisfaction index of the latent variable in other studies, the satisfaction index of service facilities of various large stadiums in Shenyang was graded. The range of 0-100 points was used to describe the receiver satisfaction index, from low to high with 0-100 in a real number to express satisfaction.

$$CSI = \frac{E(\varepsilon) - \min(\varepsilon)}{\max(\varepsilon) - \min(\varepsilon)} \times 100$$

In formula:

$$\max(\varepsilon) = \sum_{t=1}^{n} \omega_{t} \max(\chi_{t})$$

$$\min(\varepsilon) = \sum_{t=1}^{n} \omega_{t} \min(\chi_{t})$$

The satisfaction index and ranking of the 7 districts of Shenyang administrative service center were calculated by the above formula, the highest score was the Dongling District, later followed by Shenhe, Tiexi, Huanggu, Dadong, ranked the last one was the area of peace. The last column in the form was the average level of service supply of sports venues in Shenyang, 67.79 points. Dongling District, Shenhe District, Yuhong District and Tiexi District were higher than the average level of sports service supply in Shenyang. Huanggu District, Dadong District and Heping District were all under the average level, among which recipient satisfaction index of peace zone was the lowest 59.87 (Table 3 and 4).

Through the analysis of the data, we could see that although the peace zone sports venues were the earliest established in all the stadiums, the satisfaction index of the recipient was the lowest, the recipient satisfaction index of the city of Dongling, Yuhong two areas which didn't belong to the central area were very high, respectively 73.81, 70.38, ranked the first and the third (Table 4). There may be the following reasons: firstly, the peace zone as the city's cultural, economic, political center, so the stadium acceptance number was more than Dongling and Yuhong district. The increase in the number of services would affect the efficiency and quality of services and public satisfaction. The two prospective variables of the recipient of the peace zone were: the mean value and the standard deviation of the recipient expectation were 6.00, 1.81 respectively. The mean and standard deviation of expectation and perceived quality of recipient, the average expectation of the recipient, and the standard deviations in Dongling were 6.40, 1.56 and 7.77 and 1.32 respectively. After comparison of the two sets of data, it could be found that, before receiving the service, the public recipients of the peace zone were expected to be lower than the Dongling district, in the course of service, the quality of the public perception of the peace zone was also lower than that of the Dongling district. It can be seen

that in the future process of public sports service, the peace zone should improve the quality of service to improve the public's satisfaction with it. Secondly, because of the different conditions of each district residents, such as different occupations, age, education level, so their requirements for public service quality are also different. The survey showed that compared to the older residents with low academic qualifications, the younger residents with high academic qualifications were less likely to meet their requirments. According to the data we had obtained, one of the reasons for the high satisfaction index of the Dongling district was higher than that of Heping district, which may be that the education of respondents in Peace zone was higher than that of the Dongling district, and the age of the respondents in Peace zone was less than that of the Dongling district. Thirdly, in the analysis of the mean of the variables, the recipient satisfaction score of the three areas was lower than the average; we could find that these 3 areas needed to be improved in terms of facilities, attitudes and norms. Fourthly, through the analysis of the mean and standard deviation of the latent variables in the 7 areas, it could be found that the mean of latent variables of the recipients of the latter 3 areas was lower than the average, which showed that this part of the public expectations of the stadium wasn't high, which also affected the satisfaction score.

CONCLUSIONS

The performance evaluation of public sports service supply is to comprehensively and truly understand the actual situation, find the problems, propose solutions, better, faster and more widely to provide services to the public. Due to the complexity of the supply of public sports service and the difference of the actual situation in each region, it is very difficult to establish a suitable performance evaluation index system for public sports service. Based on the analysis of PCSSI model and the design of scale, the satisfaction index model of the comprehensive evaluation system of regional public sports service supply performance was constructed. After studying and investigating the seven large-scale stadiums in Shenyang, the practicability of the model was validated; this was only a beginning and needed to keep track of the investigation on the satisfaction index model of the regional public sports service providers in China. After repeated verification and modification, a perfect localization of the index measurement system was established. Practice has proved that the construction of the model is conducive to a comprehensive understanding of the performance of public sports service supply, can monitor the development of public sports service supply scientifically, at the same time, the system of public sports service supply is compared with it, and its development trend is predicted in advance.

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