

Evaluation and Development Countermeasures of Sports Tourism Resources Based on AHP

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Abstract: With the continuous development of the national economy, people's demand for spiritual culture is also increasing, and the proportion of tourism industry in the tourism industry is increasing. Sports tourism is a new and attractive way. The purpose of this paper is to analyze the development countermeasures of sports tourism resources (STR) by using the analytic hierarchy process(AHP) to promote the development of tourism. This paper mainly uses the AHP and survey method to carry out statistical analysis on the relevant evaluation and development level data of STR. The data results show that the highest weight value is the development benefit of STR, which is 0.49. Therefore, in the development of STR, we should reasonably consider the profit and expenditure, and strive to obtain a win-win situation of economic benefits and environmental and social benefits.

1. Introduction

At the present stage, China's STR are mainly practical, and its development is not paid enough attention, resulting in the slow development of tourism. In this case, how to make full use of existing resources to promote the better development of tourism is the theme of this paper. This paper will combine the AHP and fuzzy comprehensive evaluation method to study the STR. The final result is obtained by constructing the index system and using the AHP to establish the weight matrix and expert scoring.

In the development of tourism, sports industry has great potential as an emerging industry. Many scholars have carried out relevant research on AHP and STR. For example, some experts systematically discussed the meaning of the development of STR, the basis of the construction of the development model and the theoretical system supporting the development of STR [1-2]. Other experts believe that health tourism is one of the most important directions of tourism development under the new standard [3-4]. In addition, some experts will use SWOT analysis to study the development of sports tourism [5-6]. This paper constructs the evaluation index system (EIS) of STR, analyzes and calculates the index weights of each level, and finally obtains the development countermeasures for different target tourist markets and tourists.

This paper first studies the relevant theories and trends of sports tourism. Secondly, it briefly

discusses the relevant principles of the construction of the EIS. Then the principles and evaluation factors of the development of STR are analyzed by using the AHP. Finally, relevant conclusions are drawn through data calculation.

2. Hierarchical Analysis of Sports Tourism Resources Development

2.1 Sports Tourism

Physical education tourism is a form of tourism divided according to different destinations of tourists. Its biggest feature is that it is different from traditional tourism and pays more attention to the deep quality of tourism activities, tourists' feelings and personal values. It is to infiltrate and promote sports concepts and experience economy in tourism and tourism activities [7]. Participation refers to the process of utilizing local STR to develop sports tourism products that meet the needs of tourists. Through the active participation of tourists, tourists can collect their emotional experience. Sports tourism is a happy and relaxing sport. People return to nature, cultivate their body and mind, gain new cultural connotation and improve their health during the journey. Some sports tourism projects with high technical content, such as sailing, windsurfing, beach volleyball and golf, need professional training for organizers and participants. At the same time, because of its technical difficulty, exciting artistic style and tacit cooperation, sports provide a noble spiritual enjoyment. The biggest difference between sports tourism and ordinary tourism is that sports tourism often experiences emotional experience, such as success, exploring the unknown and trying to stimulate. Sports tourism activities play a role in social education [8]. In tourism activities, they can learn and improve tourism. In sports tourism, you can also learn some simple sports skills, develop fitness, acquire relevant professional knowledge, and cultivate team spirit and competitive awareness.

Sports tourism and general tourism are tourism and tourism activities. However, sports tourism is a kind of tourism and tourism activities, including enjoying, observing or participating in sports activities. This is a sports tourism designed to meet the needs of many consumers, such as stimulation and relaxation. In modern tourism activities, STR are inseparable from a large number of sports tourists as the object, which is proved by the attraction of STR to sports tourists [9].

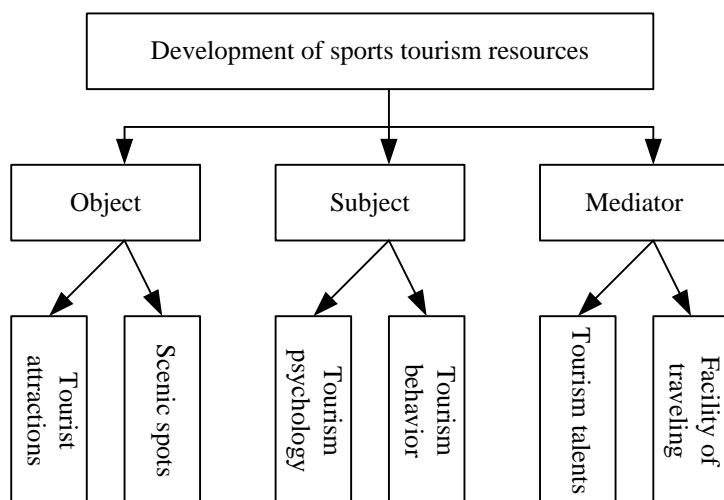


Figure 1: Development of sports tourism resources

The development of STR is aimed at the development and construction of STR. The purpose of this activity is to exercise, strengthen and increase the attraction of STR to tourists [10]. The development of STR includes the regeneration of material resources and the initial development of

potential resources. The development of STR is a comprehensive work. The specific development content is shown in Figure 1:

The development of STR can stimulate economic development and promote the restructuring of sports tourism. In addition, the development of STR also has many impacts on social development [11]. It can improve the constitution and quality of the country and provide sports tourism products suitable for different groups of people. The impact of the development of STR on the environment is particularly obvious in terms of air pollution. In addition, water tourism projects pollute water resources [12]. Some sports tourism infrastructure may pollute and destroy geological landforms.

2.2 Construction of Evaluation Index System

The construction of the EIS of STR is carried out under the guidance of scientific theory and according to the characteristics of the evaluation object. The review and determination of STR indicators should follow certain design principles to ensure the high quality of the indicator system [13]. Based on the characteristics of the development and utilization of STR, this paper believes that the establishment of sports tourism rating index system should follow the following principles:

When formulating the EIS of sports tourism, scientific and theoretical criteria must be followed. The EIS of STR is derived from scientific analysis and helps to reflect the basic characteristics of STR. When selecting evaluation indicators, we should monitor the characteristics of STR and make wise choices according to the evaluation objectives [14]. The content and value of STR involve different perspectives, widths, levels, aspects, forms and connotations. When selecting indicators, we must strive to maintain objectivity and comprehensiveness, and take full account of the integrity of indicators. At the same time, the selected indicators must be representative in order to evaluate STR. STR change dynamically with time and environment, so the selected evaluation indicators must be able to play an effective evaluation role at present and have a certain future direction [15]. When determining indicators, full consideration should be given to data and information sources, and the use of indicators with unclear measurement standards should be avoided as far as possible, so as to facilitate actual and comparable, and promote the implementation of evaluation.

3. Sports Tourism Resources Based on AHP

3.1 General Idea of Sports Tourism Resources Development

The countermeasures for the development of STR refer to the corresponding solutions to the problems in the development of tourism, so as to promote the sustainable and healthy development of tourism. In view of the problems existing in the development of STR, combined with the AHP, the following suggestions are put forward. Strengthen the leading role of the government. At the national and local levels, we will increase policy support for the development of tourism-related industries. Under the basic work of improving infrastructure and service quality, gradually establish and improve the supporting system. At the same time, it is also necessary to improve the environmental sanitation of the scenic spot and its surrounding areas. Actively carry out publicity and promotion activities of tourism and cultural activities, so that tourists can really feel the comfortable experience and unique charm brought by "green travel".

3.2 Application of AHP

The establishment of the evaluation system of STR is to comprehensively analyze various types and indicators according to its own characteristics, and then select appropriate methods to build a system. In this paper, the AHP is used to construct the evaluation system of STR, which is mainly

divided into three parts: the basic level, the index level and the decision-making matrix. When evaluating STR, we should first establish the index system, and then determine the weight of each level. This paper divides sports tourism into three levels, that is, the first level: the attraction conditions, the occurrence conditions, the social resources conditions and the feasibility conditions of tourism resources (Z1-Z4 in turn). The second layer: STR are ornamental, participatory, plastic, natural conditions, cultural conditions, endowment conditions, financial resources, human resources, management services, information publicity conditions, developed market, location, engineering conditions and development benefits. The third layer is a more detailed aspect, which will not be shown one by one. The process of calculating the index weight value is as follows:

The element product is calculated first N_i :

$$N_i = \prod_{k=1}^m v_{ik} \quad (1)$$

Then calculate square root of N_i :

$$\bar{Q}_i = \sqrt[m]{N_i} \quad (2)$$

It was then normalized to obtain the weight vector values Q_i :

$$Q_i = \frac{\bar{q}_i}{\sum_k^m q_k} \quad (3)$$

Survey data have some complexity and subjectivity. Sports tourism is an interdisciplinary subject. The decision-making group composed of 10 experts made a pairwise comparison of the evaluation of STR. The specific situation of the first layer project evaluation is shown in Table 1:

Table 1: Judgment matrix of ownership relationship

	Z1	Z2	Z3	Z4
Z1	1	1.97	1.97	1.73
Z2	0.51	1	1.64	0.88
Z3	0.52	1.02	1	0.58
Z4	0.58	1.14	1.72	1

3.3 Safeguard Measures for the Development of Sports Tourism Resources

In order to improve the satisfaction of tourists, it is necessary to establish and improve the development and protection mechanism of STR. Strengthen the construction of scenic spot management and safety facilities. We will strengthen infrastructure construction and improve the quality of tourism services. The government should strengthen supervision and policy support. We should also improve the service level and quality of the staff in the scenic spot and enhance the participation of tourists. Increase publicity and marketing means to ensure the sustainable development goal of sports tourism.

4. Analysis of Data Results

4.1 Relative Weight Results

This paper selects the STR in the evaluation project level as the key points of this analysis, including the viewing, participation, plasticity, natural conditions, cultural conditions, endowment

conditions, financial resources, human resources conditions, management services, information publicity conditions, developed markets, locations, engineering conditions and development benefits, and sets them as X1-X14 in turn.

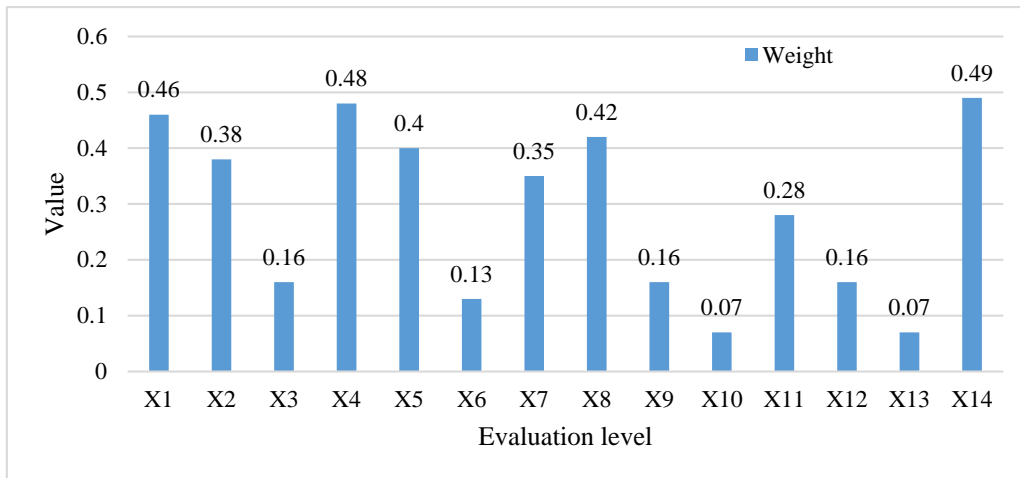


Figure 2: Results of the relative weight values of the item evaluation layer

As shown in Figure 2, we can see that the relative weight value of STR in terms of viewing, natural environmental conditions, human resources conditions and development benefits exceeds 0.4. The relative weight between the experience of STR and its financial resources conditions also exceeds 0.3. The relative weight value of sports tourism information publicity conditions and development engineering conditions is 0.07. From these data, we can judge that the attractive conditions in the development of STR are the most critical.

4.2 Comprehensive Results of Quantitative Evaluation of Evaluation Factor Layer

Based on the factor analysis of X layer, the relevant data of expansion factors are analyzed. In this paper, the first 30 factors (set as Y1-Y30) are selected for data graphic analysis.

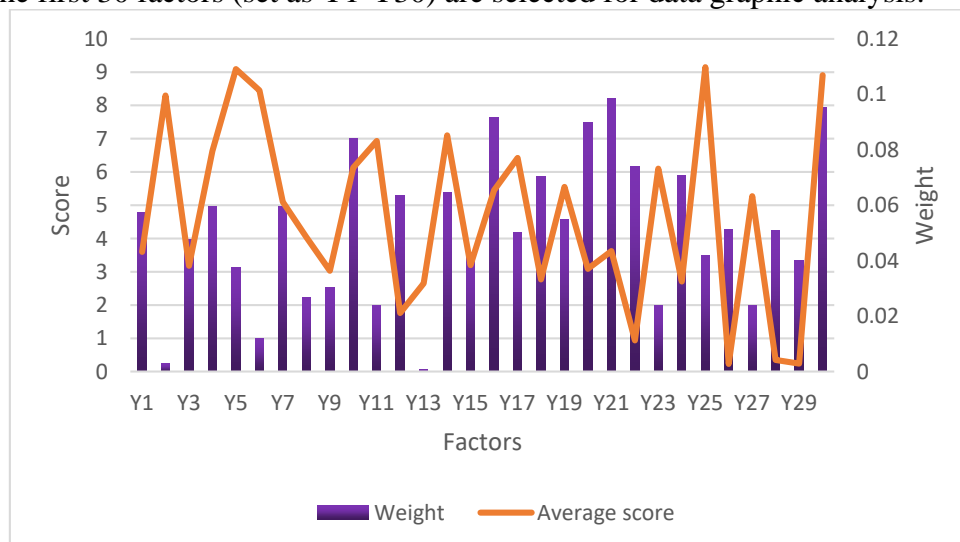


Figure 3: Comprehensive results of quantitative evaluation of evaluation factor layer

As shown in Figure 3, we can see that in the factor evaluation layer, the maximum weight value is 0.0951 and the minimum value is 0.0001. The mean score had a maximum of 9.15 and a minimum of 0.24. The score value of ethnic traditional sports culture conditions of STR is 9.15, and

the evaluation grade is extremely high. The score value of the tour period of STR is 5.45 points, and the evaluation level is general. The value in the subdivision factors of each main aspects is unstable, which means that there are some improvements in the attraction conditions, occurrence conditions, social resource conditions and feasibility conditions of STR.

5. Conclusion

The tourism industry is a very important economic development project. Sports culture resources have become one of the most important factors for tourists to choose their destination and carry out consumption activities. This paper studies the current situation of the development of STR in China, and puts forward the corresponding suggestions. The development of STR is evaluated, and the existing problems are pointed out. This paper puts forward the countermeasures and suggestions to promote the better and faster development of the urban tourism industry. First, we should strengthen the construction of scenic spot management system and improve the construction of infrastructure. Second, strengthen the publicity to improve the quality of tourists to realize the sustainable utilization of regional STR, So as to promote the healthy, orderly and rapid development of the city tourism.

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