

# *Research on the Agritourism Satisfaction of College Student Tourists Based on Ipa*

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**Keywords:** Agritourism, Tourism satisfaction, College students, Ipa analysis

**Abstract:** With the further segmentation and development of the tourism market, college students have become a source of tourists that cannot be ignored. In the era when China vigorously advocates the development of agritourism, the research selected college students as the research object, through combing the literature, extracted 7 aspects that affect the satisfaction of college student tourists in agritourism, and subdivided them into 14 key elements. A questionnaire survey on agritourism satisfaction and importance evaluation was conducted on 315 college students. According to the results of the questionnaire, 14 key elements were located in the IPA map. Through the analysis of the IPA image, the satisfaction of the college students and tourists with each element was discussed. In the end, the research also provided basis and suggestions for improving agritourism satisfaction of college student tourists.

## **1. Introduction**

If a nation is to rejuvenate, villages must be rejuvenated. Agritourism can organically integrate eco-agriculture and eco-tourism [1], and then promote rural economic and cultural development. It is an important part of the process of rural revitalization. The development of agritourism industry is an important part to enhance farmers' income and prosperity and keep rural prosperity and stability [2]. How to develop the agritourism industry and make rural tourist spots competitive have become a hot topic in all walks of life.

Tourist satisfaction in agritourism has been a topic of great concern in the academic circles in recent years. Tourist satisfaction is the feeling state of pleasure or disappointment formed by tourists comparing the destination's expectations with the actual perception [3]. It is the fundamental driving force of the tourist flow [4], and an important indicator to measure the comprehensive competitiveness of rural tourist spots [5]. College students are one of the important sources of agritourism market [6]. The agritourism satisfaction should be valued and discussed.

Therefore, the research took the college student customer group as the research object. According to the literature and existing research content, combined with the characteristics of college student tourists, it designed a questionnaire for college students' agritourism satisfaction, and then issued and recovered the questionnaire. After that, it used SPSS 26.0 software to process and test the reliability of the data of the questionnaire. The results were presented in the IPA chart. The importance-performance model was used to analyze the data, and the university students' agritourism satisfaction and its influencing factors were discussed. The key elements need to be

improved were analyzed in order to get some suggestions on promoting college student tourists' satisfaction on agritourism and developing agritourism.

## 2. Research Overview

### 2.1 Agritourism

“Agritourism” means Agritourisme in French, which is a tourism activity that uses agricultural cultural landscape, agricultural ecological environment, agricultural production activities and traditional ethnic customs as resources, and integrates viewing, inspection, learning, visiting, entertainment, shopping, and vacation [7]. In terms of the types of agritourism, He Jingming and Li Lihua believe that there are three types of agritourism, namely, rural natural scenery tourism, farm tourism, rural folklore tourism and ethnic customs tourism [8]. Based on the development type, Wang Ya'ni et. al. classified agritourism into five types, namely, rural landscape type, red tourism type, modern new countryside type, agricultural resource type and natural scenery type [9]. In terms of tourism motivation, Du Jiang and Xiang Ping, from the perspective of tourism demand, divided agritourism motivation into four types: yearning for pastoral scenery, expanding knowledge horizons, revisiting old places, and compound tourism needs [10]. Zhang Huanhuan divided it into rural entertainment projects, rural experience projects, rural folk customs, rural culture and rural landscape from the dimension of agritourism pull motivation [11].

Under the background that the development of the Internet and smart technology has made tourism industry information more open and transparent, college students are not only the most important netizens, but also an important group of tourists [12]. Ding Chunwen pointed out four reasons why the college student tourism market has potential: a large number of college students, much leisure time, increasing discretionary expenses, and strong travel motives [13]. In addition, Zhang Sijia et. al. believe that college students also have strong information dissemination capabilities [6]. The above factors make college students bring economic benefits to the agritourism industry. They can also promote and disseminate agritourism activities and rural culture. In summary, college students are an important source of agritourism.

### 2.2 Tourist Satisfaction

Tourist satisfaction is a psychological state produced by tourists comparing the expectations of tourist destinations with experience results, the process and result of psychological comparison [14], and the ultimate indicator of tourist experience [15]. In the research on the measurement of tourist satisfaction, the influencing factors (measurement indicators) selected by scholars from different angles are different. Dong Guanzhi and Yang Fengying earlier proposed the evaluation of tourist satisfaction from nine aspects: tourism landscape, catering, transportation, accommodation, entertainment, shopping, scenic spot image, infrastructure, management and service [4]. Based on this, Li Ying added environmental and atmosphere indicators to measure the satisfaction degree of urban style, cleanliness, air quality, and climate comfort [3]. In terms of tourist satisfaction research on agritourism, Zhou Yang et. al. measured tourist satisfaction from five aspects: agritourism environment, agritourism support system, agritourism attraction, agritourism service, and complaint convenience. However, the above indicators are not closely related to the characteristics of agritourism [5]. Zhang Liang et. al. put forward quality indicators of tourism activities, which use the characteristics of folk activities are to highlight the types of experience activities, the degree of participation, and the quality of tourism of characteristic residents. He pointed out the differences of the characteristics of agritourism with other types of tourism [16].

At present, the academic circle has conducted research on the satisfaction of tourists in different

rural tourist attractions from various angles. Zhou Yang et. al. conducted a research on the tourist satisfaction of each component of agritourism in China and their willingness to revisit [5]. Zhang Chunlin focused the research on the thousands of Miao villages in Xijiang, Guizhou, and proposed the basis of the original tourist satisfaction measurement factors. He insisted adding the perspective of ethnic characteristics and terroir culture on the basis of the original factors of tourist satisfaction measurement [17]. Bai Ling et.al. introduced the perspective of tourism shopping and smart tourism in the study of agritourism satisfaction in Changtai of Fujian province [18]. However, there are few researches on the satisfaction of agritourism that subdivide the types of tourists, and the researches on college student tourists as the research object are even rarer.

### **2.3 Ipa (Importance-Performance Analysis)**

IPA (Importance-Performance Analysis) regards consumer satisfaction as a function of product expectations and product performance, and obtains customer satisfaction through the comparison of importance-performance [19]. IPA analysis can reflect the difference between the actual situation (satisfaction) and the ideal situation (importance) of a tourist destination [20]. While dynamically evaluating the factors that affect tourist satisfaction, it accurately reflects the needs of tourists [16]. In turn, it provides a basis for proposing response suggestions.

At present, the research on IPA in the domestic tourism academia mainly focuses on the image of tourist destinations and tourist satisfaction. In the study of tourism destination image, Zhou Yongbo et.al. used IPA analysis method to explore the theory and method of integrated marketing communication of destination image of ancient water towns in the south of the Yangtze River [21]. Zhang Rui and Zhang Jianguo used IPA analysis method to analyze Shanghai Chenshan Botanical Garden's tourism image perception, and suggestions for improvement were put forward to provide tourists with a high-quality tour experience [22]. In terms of tourist satisfaction, Sang Zunan et.al. discussed the importance, satisfaction and differences in the perception of tourist homestays in Enshi of Hubei province based on the IPA theory [23]. Liu Jianguo and Jin Mengyu used IPA analysis charts to analyze the tourist satisfaction evaluation of Beijing's historical sites and scenic spots and extracted the factors that tourists expect the most and pay the most attention [24].

## **3. Research Methods**

### **3.1 Questionnaire Design**

Based on the current academic literature on tourism satisfaction, this research designed a questionnaire for college students' agritourism satisfaction based on the characteristics of college students' pursuit of economy, experience and harvest in the travel process. The questionnaire mainly asked about satisfaction and importance from 7 aspects and 14 key elements, namely transportation (convenience of internal and external transportation), accommodation (comfort and economy), catering (characteristic and hygienic), service (comprehensiveness and enthusiasm), facilities (safety and cleanliness), culture (uniqueness and ruralness), experience (immersion and harvest). In this questionnaire, all items used the Likert 5-level scale, "1" means "strongly disagree (pay attention)", and "5" means "strongly agree (pay attention)".

### **3.2 Data Sources, Characteristics and Inspections**

The research released online questionnaires through Wenjuanxing (a platform providing functions equivalent to Amazon Mechanical Turk) from March 29 to April 1, 2021. 330 questionnaires were distributed and collected from the college student group channel. The

questionnaire was sorted out (the answer time was less than 30 seconds or all questions were answered). A total of 315 valid questionnaires meeting the research needs and statistical analysis requirements were finally recovered, and the effective rate was 95.45%. The male sample accounted for 34.29% and the female sample accounted for 65.71%. The freshman sample was the largest, accounting for 43.81%, and the senior and graduate samples were the smallest, accounting for 5.40%.

To ensure the reliability of the data, this study used SPSS 26.0 to test the data results of the satisfaction and importance questionnaire. As a result, the Cronbach Reliability Alpha of the satisfaction questionnaire data reached 0.93, and the Cronbach Reliability Alpha of the importance questionnaire data reached 0.95. According to Nunnally and Bernstein (1994), that the Alpha value of the reliability coefficient is greater than 0.70 to meet the reliability requirements of the research, the satisfaction and importance questionnaire data results of this research are reliable.

### 3.3 Analysis Methods

#### 3.3.1 Overview

The research used SPSS 26.0 software to process the data results of the questionnaire and conducted reliability tests to ensure the credibility of the research data. According to the actual needs of the research goals, the results were presented in the IPA chart, and the importance-performance model was used for analysis.

#### 3.3.2 Operation Steps of Ipa Analysis

After using SPSS 26.0 software to process the questionnaire data, and determining the observed variables (key elements) and the evaluation score range (importance and satisfaction scoring range) to be evaluated, the importance and satisfaction of each sub-key element and the average number of degree scores was calculated, the exact intersection of the above two averages in the IPA chart was found. Then, drawing a cross based on the intersection, there were the horizontal axis (satisfaction), and the vertical axis (importance), so the four quadrants of the IPA chart were formed, as shown in Figure 4-1. According to the actual scores of the importance and satisfaction of each sub-construct, they were located in the four quadrants of the IPA chart one by one. Among them, the first quadrant indicates the variable satisfaction is high and the importance is high. The second quadrant indicates the variable satisfaction is low but the importance is high. The third quadrant indicates the variable satisfaction is low and the importance is low. The fourth quadrant indicates the variable satisfaction is high, but the importance is low.

### 4. Ipa Overall Positioning Results

The data shows that the total average I of the importance of the 14 variables of college students is equal to 4.15, and the total average P of the satisfaction (effect) of the 14 variables corresponding to the importance is equal to 3.51. Therefore, the vertical intersection of the importance axis (I axis) and the satisfaction axis (P axis) is correspondingly located at the point where  $I=4.15$  and  $P=3.51$ . Draw the I-axis and P-axis that intersect perpendicularly based on the intersection point, and the four quadrants of the IP map are clearly displayed, as shown in Figure 4-1.

Based on the viewpoints of Baloglu and Love [25], The research interpreted the observed variables (key elements) in the four quadrants respectively.

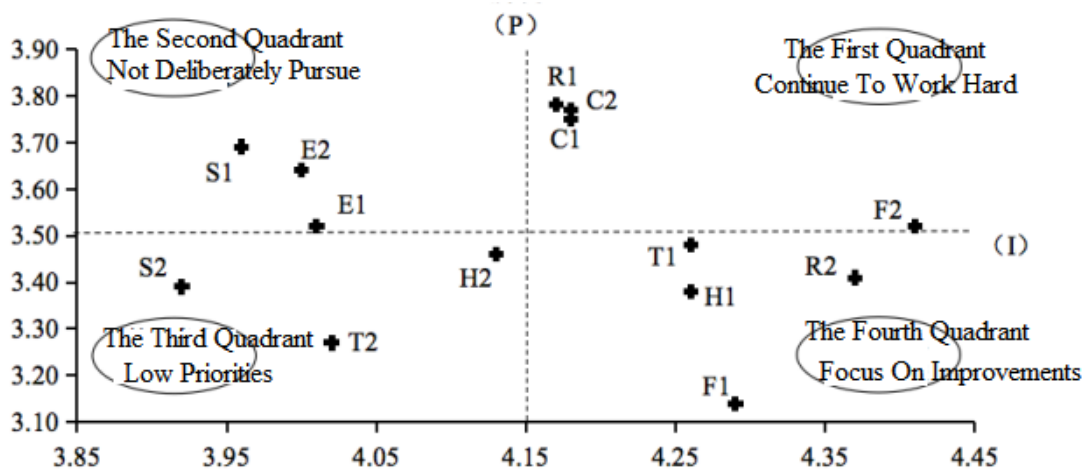


Fig.4 -1 Ipa Positioning Map of College Students' Agritourism Satisfaction

满意度 satisfaction

Interpretation

1) Variables located in the first quadrant: R1 (catering characteristics), F2 (facility safety), C1 (cultural uniqueness), C2 (cultural value);

2) Variables in the second quadrant: S1 (service comprehensiveness), E1 (experience immersion), E2 (experience harvest);

3) Variables located in the third quadrant: T2 (internal traffic convenience), H2 (accommodation economy), S2 (service enthusiasm);

4) Variables in the fourth quadrant: T1 (convenience of external transportation), H1 (comfort of accommodation), R2 (sanitation of catering), F1 (cleanliness of facilities).

## 5. Conclusion and Suggestions

### 5.1 On the Whole, College Student Tourists Are Satisfied with Agritourism, But There is Still Room for Improvement.

Among the 14 elements selected in the study, college students and tourists are highly satisfied with the characteristics of catering, cultural uniqueness, and cultural value in agritourism. However, the satisfaction scores of cleanliness of facilities, the convenience of internal transportation and the comfort of accommodation are low. The difference in satisfaction scores between key elements is obvious. Generally speaking, the agritourism satisfaction of college students is relatively high, but there is still room for further improvement, such as improving the cleanliness of tourism facilities.

### 5.2 Continue to Attach Importance to the Safety of Agritourism Facilities and Appropriately Adjust Investment in Them.

The elements in the first quadrant are agritourism elements that are valued by college students and have high satisfaction ratings, and attention and investment should be maintained. Compared with the other three factors, the safety of tourist facilities is located closer to the lower right in the IPA map, which means that it is highly valued but its satisfaction score is lower. Therefore, while maintaining investment in the elements in the first quadrant, rural tourist attractions or industry practitioners should continue to pay attention to the safety of tourist facilities and appropriately adjust (increase) their investment, such as regular inspections of facility safety and timely renew the

old facilities and equipment to improve the satisfaction evaluation of college student tourists.

### **5.3 Pay Close Attention to the Evaluation of the Immersive Experience of College Student Tourists on Rural Tour**

The elements located in the second quadrant are the elements that university student tourists do not pay much attention to in the process of rural tourism but have high satisfaction scores, and should continue to pay attention to the changes in their satisfaction. Compared with the comprehensiveness of services and experience gains in the same quadrant II, college students have a lower evaluation of the immersion of agritourism experience, which is close to the average satisfaction of 14 factors. Therefore, rural tourist attractions or industry practitioners should pay close attention to experience immersion satisfaction, such as conducting a questionnaire survey after college students complete their travel experience, and collecting their satisfaction evaluation and feedback information in a timely and large amount in order to flexibly adjust the way of tourism experience, and then improve its satisfaction score.

### **5.4 Take Appropriate Measures to Appropriately Improve the Internal Traffic Convenience of Rural Tourist Attractions.**

The three elements in the third quadrant are the elements that university student tourists pay less attention to and satisfaction in rural tourism, and should be appropriately and moderately improved. Among them, rural tourist attractions have the lowest satisfaction score for traffic convenience, so they should be considered first. Even if college students do not pay much attention to it, scenic spots should also be moderately improved to meet the overall expectations of college student tourists. For example, according to the characteristics of college students' tendency to obtain information online, online internal transportation reservation services are provided, and relevant transportation information is published online to provide convenience for college student tourists.

### **5.5 Emphasize and Attach Importance to the Cleanliness of Rural Tourism Facilities, and Increase Investment in Them.**

The four elements that are positioned in the fourth quadrant are the elements that college students pay more attention to on tour, but their satisfaction is low. They are the key elements that are highly valued by scenic spots or industry practitioners and can improve the satisfaction of college students in rural tourist attractions. Among the four key elements, the cleanliness of rural tourism facilities has the lowest satisfaction score, and it is significantly lower than all other elements. It is the top priority to improve the satisfaction of scenic spots. By increasing investment in agritourism facilities and improving their cleanliness, the agritourism satisfaction of college student tourists will be greatly improved, such as increasing investment to maintain the cleanliness of tourist toilets and public rest areas.

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