Research on the construction and improvement strategy of tourist satisfaction evaluation index system

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Abstract

Tourist satisfaction is affected by multiple subjective and objective factors. In order to explore the factors that affect the satisfaction of tourists, this article uses grounded theory based on the online review text of tourists to analyze the factors that affect the satisfaction of tourists, and finally concludes perceived value, willingness to revisit, supply chain coordination, and service guarantee are the four core categories that affect tourist satisfaction. In order to evaluate the satisfaction of tourists, based on grounded theoretical research and combined with the network analytic method, this paper constructs a network level evaluation model of tourist satisfaction. In view of the unsatisfactory factors in the online reviews of tourists, this article proposes that the improvement of tourist satisfaction should be considered in terms of optimizing the supply of tourism products, enriching the connotation of tourism products, increasing the cost performance and experience value of tourism products, and strengthening the coordination of the tourism supply chain.While providing regular service guarantees, tourist attractions should continue to meet the individual demands of tourists.

Keywords

Grounded theory; Analytic Network Process; tourist satisfaction .

1. Introduction

Tourist satisfaction is a cognitive assessment of whether the expectations of tourists before the trip are consistent with the results after the trip, and it is affected by many subjective and objective factors such as tourist experience, product quality, service facilities and prices. Tourist satisfaction reflects the difference between the expected value of tourists and the actual experience value[1,2,3].With the continuous development of digital tourism, smart tourism, and technological tourism, the online and offline satisfaction evaluation of tourists with tourism products has become the focus of competition among tourist attractions. Tourist satisfaction is an emotional expression of tourist satisfaction. It has an important influence on the choice of tourist destination, tourist loyalty, and consumption of tourist products and services.Tourist satisfaction is a comprehensive index that measures the economic and social benefits of tourist attractions. It is of great significance to the development of local tourism, the image of tourist destinations, and the management and marketing of tourist destinations.

Regarding tourist satisfaction, foreign studies mostly focus on tourists' perceived value, behavioral willingness, formation mechanism, satisfaction comments, etc., such as Shahida Kanwel et al. [4] (2019) research shows that destination image, online word-of-mouth, etc. will affect tourists Loyalty and satisfaction, and thus propose to improve tourist satisfaction by improving the image of tourist destinations and building a good reputation.Petr Stumpf et al. [5] (2020) have shown that tourists' travel motivation and age will affect whether tourists will revisit, and satisfaction plays a key role in tourists' willingness to revisit. The research of Shaykh-Baygloo et al. [6] (2021) shows that the comments of tourists, the reputation of tourist destinations, the perceived quality of tourists, etc. will all affect the satisfaction of tourists, thereby further affecting the number of visits by tourists. However, domestic research on tourist satisfaction in China started relatively late, and most of them focused on research on tourism emotional experience, willingness to revisit, place attachment, satisfaction evaluation, etc. As shown by Zhou Yang et al. [7] (2016), The evaluation value of tourists on tourist destinations will have an important impact on tourist satisfaction and willingness to revisit. In order to improve the evaluation value of tourists on tourist destinations, the local area should pay attention to the experience of tourists. Zhang Xueting et al. [8] (2018) showed that tourist satisfaction will affect tourists' willingness to revisit, and attention should be paid to tourists' travel experience. The research of Miao Xiumei et al. [9] (2019) shows that the emotions of tourists and the characteristic resources of tourist destinations will have an important impact on tourist satisfaction. It can be seen that tourist satisfaction is affected by a variety of internal and external factors. Finding the factors that affect tourist satisfaction and improving tourist satisfaction is a problem that tourism destination management and marketing have to face.

In order to better improve the satisfaction of tourists and find out the root causes of tourists' dissatisfaction, this article is based on tourists' online evaluation texts of tourism products, and analyzes, sorts and summarizes the collected original data through grounded theoretical research methods. And strive to find the core categories that restrict tourist satisfaction. On this basis, combined with the network analytic method, the network level evaluation model of tourist satisfaction is rebuilt, and appropriate strategies to improve tourist satisfaction are proposed accordingly.

2. Research methods

2.1. Grounded Theory

Grounded theory originated from the field of social sciences, pioneered by Strauss and Glaser, and is a qualitative research method of "discovery logic" rather than "verification logic" [10]. Compared with general qualitative research methods, the most notable feature of grounded theory is that its research process is more traceable. Through the bottom-up exploratory sorting, induction, analysis, and integration of data, to a certain extent, it overcomes the "programmed" limitation of empirical concepts or pre-determined conditions in general qualitative research methods on the research questions.

To conduct grounded theoretical research, firstly, you need to select the case to be studied, and then analyze the selected case; secondly, proceed and in-depth according to open coding, selective coding and theoretical coding, and get Research conclusions; finally, the research

conclusions are tested for saturation. If they are saturated, the research ends here, and based on the conclusions drawn, countermeasures and suggestions are put forward on the research issues. If the theoretical saturation is not reached, the data needs to be continued. Collect and analyze data, and repeat the above content until the theory is saturated.

2.2.   Network Analytic Hierarchy Process

The Analytic Network Process (ANP) is a quantitative research method that is composed of two parts, the control layer and the network layer, which is used to solve the nonlinear complex network structure . The basic structure of ANP includes two parts: the control layer and the network layer. The control layer is mainly composed of the target layer and the criterion layer, and the network layer is composed of various interacting elements. Generally speaking, the network layer is dominated by the control layer.

When using ANP for evaluation, it is first necessary to construct a network evaluation structure, that is, to determine the target layer, criterion layer, and plan layer; secondly, calculate the judgment matrix of the control element, and calculate the ranking vector; then, construct and calculate the super matrix and The limit super matrix; finally, the comprehensive evaluation value of the tourist satisfaction index is synthesized.

3. Empirical analysis

3.1.   Case introduction

In order to study the satisfaction of tourists, this paper selects 15 5A tourist attractions in Xinjiang as the research objects, including: Tianshan Tianchi Scenic Area, Putaogou Scenic Area, Kanas Scenic Area, Nalati Scenic Area, Keketuo Scenic Area , Zepujin Huyang Scenic Area, Bosten Lake Scenic Area, Tianshan Grand Canyon Scenic Area, Kashgar Old City Scenic Area, Bayinbulak Scenic Area, Karajun Scenic Area, Baisha Lake Scenic Area, Pamir Tourist Area, World Devil City Scenic Area and Sailimu Lake Scenic Spot.

The research data in this article comes from Ctrip. In order to study whether tourists are satisfied or dissatisfied, the total number of reviews, positive reviews, and negative reviews collected by tourists are compiled into Figure 1 below. As can be seen from Figure 1 below, there is a certain correlation between the number of positive reviews, the number of negative reviews, and the total number of reviews. As the total number of reviews increases, the number of positive reviews and the number of negative reviews also increase. In general, The number of positive reviews by tourists far exceeds the number of negative reviews, but as the number of positive reviews increases, the number of negative reviews also increases to a certain extent.
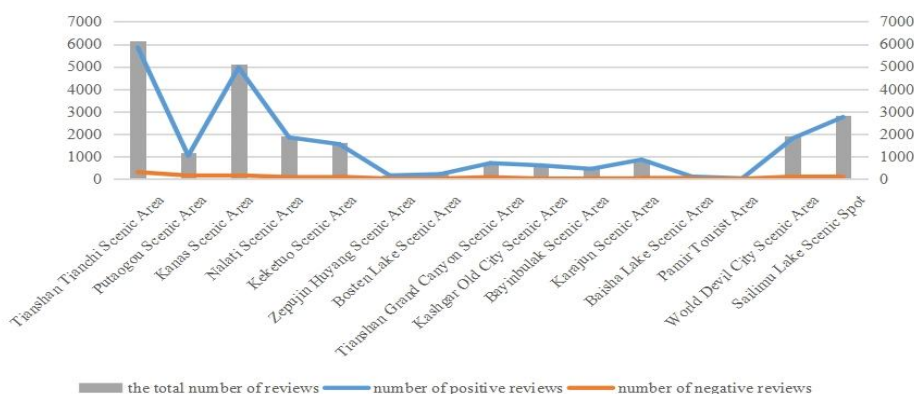
Figure 1: Number of Tourist Satisfaction Evaluations in Scenic Spots

In order to further reveal the satisfaction of tourists, this article uses the analysis method of Ctrip. First, divide the comment set, from the highest to the bottom, they are very satisfied, relatively satisfied, basically satisfied, dissatisfied, and very dissatisfied. The corresponding values are respectively 5, 4, 3, 2, 1; Secondly, the evaluation dimensions are divided. This article divides tourist satisfaction into three dimensions, namely, scenery satisfaction score, fun satisfaction score, and cost-effective satisfaction score; then, the satisfaction scores of each dimension are weighted and averaged, and finally, the overall evaluation score of satisfaction is obtained, and the specific content is shown in Figure 2 below. It can be seen from Figure 2 below that the total evaluation scores of tourists for each tourist attraction are all above 4 points. By comparing with the comment set, it can be seen that tourists are relatively satisfied with each tourist attraction.

Figure 2: Evaluation values of various dimensions of tourist satisfaction in tourist attractions

3.2. Category coding

Open coding is also called primary coding, which mainly analyzes the original data of tourists' online comments, so as to confirm the phenomenon, concept and category. From Figure 1, it can be seen that the total number of online reviews by tourists is 20,485, and the number of positive reviews and negative reviews after excluding invalid reviews are 16,527 and 761 respectively, with a positive rate of 95.6% and a negative rate of 4.4%. It can be seen from Figure 2 that tourists rated the scenery, interest, and cost-effectiveness of the scenic spots above 4 points, which means they are relatively satisfied. Through calculations, the comprehensive satisfaction of tourists with each scenic spot reaches 89.7%. It can be seen that the satisfaction of tourists is relatively high, but there are still some dissatisfaction factors for tourists. In order to find out the reasons for the dissatisfaction of tourists, this article sorts

out and analyzes the online comments of tourists, and initially analyzes the online comments of tourists. The dissatisfaction factor of the article was conceptualized and coded.

After excluding the repetitive comments, it can be seen that some tourists are not satisfied with the attractions, some are not satisfied with the fun, some are not satisfied with the cost performance, and some are not satisfied with the service. In order to further study the factors affecting tourist satisfaction, it is necessary to carry out axial coding, which is also called secondary coding. The purpose of distinguishing between categories and subcategories.The axial coding is formed on the basis of open coding. Since the axial coding involves relatively more content, in order to further condense and refine the axial coding, it enters the three-level coding, which is usually referred to as selective coding.Through the screening and analysis of open coding,   axial coding and selective coding, it is found that the dissatisfaction factors in tourists' online reviews have all been included in the main categories, and no other new categories affecting tourists' satisfaction have been found. It can be seen that the research has reached theoretical saturation.

Through the preliminary processing of 761 items that affect tourist satisfaction, this paper obtains 72 factors that affect tourist satisfaction, thus forming an open code. By comparing, analyzing and classifying these 72 factors that affect tourist satisfaction, 14 categories such as tourism cost performance, tourism playability, tourism interest, and tourism experience value are formed.In order to further condense and refine the influencing factors of tourist satisfaction, find out the core categories that affect tourist satisfaction, and then enter the selective coding, and finally get the following: perceived value, revisit willingness, supply chain coordination, Service guarantee is the core category that affects tourist satisfaction.

3.3. Model Construction

On the basis of grounded theoretical research, through layer-by-layer coding, this paper finally extracts that perceived value, revisit willingness, supply chain collaboration, and service guarantee are the selective codes that affect tourist satisfaction.And these selective codes contain several axial codes respectively, in which the perceived value includes tourism cost performance, tourism playability, tourism interest, and tourism experience value; revisit intention includes the environment of tourist attractions, tourist traffic environment, and image of tourist attractions; Supply chain collaboration includes inter-vehicle collaboration capabilities, information technology collaboration capabilities, and innovation management capabilities; service guarantees include reception service capabilities, scenic service capabilities, public service capabilities, and personalized service capabilities, and all these axial codes also include several open codes. It can be seen that the open coding, axial coding and selective coding do not exist in isolation, but influence and restrict each other.

The elements of tourist satisfaction evaluation are very extensive, and each element also affects and correlates with each other. Considering that the AHP can not only reflect the relationship between the control layer and the network layer, but also express the mutual influence and relationship between the elements of the network layer. Therefore, this paper adopts the network analysis hierarchy process and combines the conclusions drawn from the grounded theory to build a model of tourist satisfaction. The model constructed is shown in Figure 3 below.
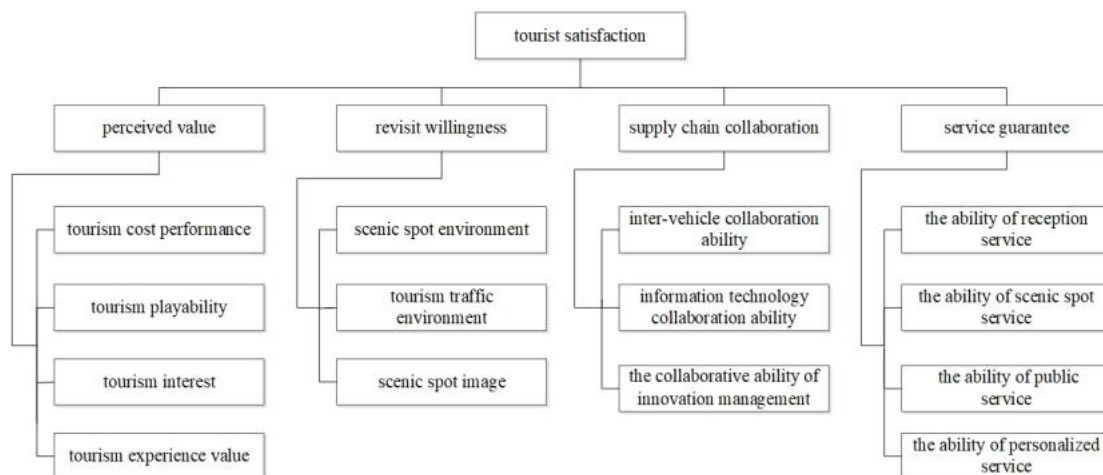
Figure 3: Network-level evaluation model of tourist satisfaction

Through the network level evaluation model of tourist satisfaction, it can be seen that the goal layer corresponds to tourist satisfaction, the criterion layer corresponds to selective codes, which are perceived value, revisit willingness, supply chain collaboration and service guarantee, and the scheme layer corresponds to axial code, which are tourism cost performance, tourism playability, tourism interest, tourism experience value, scenic spot environment, tourism traffic environment, scenic spot image, inter-vehicle collaboration ability, information technology collaboration ability , the collaborative ability of innovation management, the ability of reception service, the ability of scenic spot service, the ability of public service, and the ability of personalized service, which constitute a complete network level evaluation model of tourist satisfaction.

4. Conclusion and discussion

By analyzing the online reviews of tourists on the 16 5A-level tourist attractions mentioned above, the main factors affecting tourist satisfaction were found out. In order to promote the development of local tourism, create a good image of tourist destinations, enhance the word-of-mouth effect of online tourism reviews, and improve tourists' satisfaction, this paper, based on grounded theoretical research, combined with the network analytic hierarchy process, constructs a tourist satisfaction model.

4.1. Enhance the perceived value of tourists

Perceived value is the overall evaluation of the utility of tourism products by tourists, which reflects the subjective feelings of tourists on scenic products after weighing the "pros and cons". In response to the problems of high ticket prices, many charging items, and low cost performance reported by tourists, tourist attractions should enrich their product connotations, actively explore technological tourism, smart tourism, promote the integration of culture and tourism, and improve the cost performance of tourism. In view of the lack of characteristics of tourist attractions reflected by tourists and the contrast between expectations and reality, tourist attractions should add more local elements to avoid excessive commercialization. In response to problems such as too many people in the scenic spots and poor experience reported by tourists, tourist attractions should be tourists-centered, pay attention to the feelings of tourists, and meet the legitimate demands of tourists.

4.2. Improve tourists' willingness to revisit

Revisit intention is an important factor affecting tourist satisfaction. Higher satisfaction does not necessarily lead to higher revisit intention, but higher revisit intention means higher satisfaction. In view of the long queue time for entering the scenic spot, the reputation does not match the reality, and the commercialization is serious, the tourist attractions should improve the service quality, improve the scenic spot environment, and reshape the image of the scenic spot. In response to the problems of inconvenient transportation and poor roads reported by tourists, tourist attractions should pay attention to the role of transportation in promoting tourism, and continuously improve the experience value of tourists. At the same time, in order to exert the marketing effect of online word-of-mouth, tourist attractions should pay attention to tourists' online evaluation of scenic spots, constantly solve the problems reflected by tourists, create a good image of tourist destinations, and stimulate the motivation of potential tourists.

4.3. Strengthen the supply chain collaboration of tourism

To strengthen the collaboration of the tourism supply chain, the first thing to do is to strengthen the collaboration of the internal supply chain of tourism enterprises. In response to the problems reported by tourists, such as long waiting times for cars and queuing in tourist attractions, few cars and many people, and tourists rushing to seats, tourist attractions should adjust transportation strategies, optimize site layout, and strengthen inter-vehicle scheduling. Secondly, it is necessary to strengthen the collaboration of the external supply chain of tourism enterprises. In response to the problems reported by tourists about the scheduling of tourist shuttles, the high price of black cars, and the problem that private cars are not allowed to enter scenic spots, tourist attractions should strengthen the collaboration with travel agencies and transportation enterprises, and strengthen the application of information technology , and inform tourists of the information of the scenic spot on the company's official website or tourism website in advance. Finally, the coordination between various aspects of the enterprise should be strengthened. In response to the problems reported by tourists, such as high fees, poor management, and poor experience, tourist attractions should strengthen coordination with catering, accommodation, entertainment, shopping, transportation, travel agencies and other enterprises.

4.4. Do a good job in tourism service guarantee

Service guarantee is an important factor affecting tourist satisfaction. In view of the low service quality of scenic spot personnel, long dining queues, and poor accommodation environment reported by tourists, tourist attractions should strengthen business training for relevant personnel and promote off-peak dining. Continuously optimize the accommodation environment and improve the service level and quality. In response to the problems reported by tourists that the indication signs of the scenic spots are not clear and the toilets are unsanitary, the tourist attractions should set up the indication signs correctly, improve the sanitary conditions of the scenic spots, promote the "toilet revolution", pay attention to the carrying capacity of the tourism environment, and avoid excessive development. In response to the problems reported by tourists, such as boring explanations and too many standardized content, tourist attractions should pay attention to the individual needs of tourists, increase the application of information and intelligent facilities and equipment, improve the ability of

personalized service, and continuously improve the satisfaction of tourists.

References

[1] Gao Jing, Xu Changle, Liu Chunji. A study on the influence of familiarity on tourist satisfaction evaluation of tourist destinations: Based on the comparison of Chinese and Western tourists visiting Xi'an [J]. East China Economic Management, 2015, 29(02): 111-116.

[2] Shang Xiaoli, Luo Fen, Shi Dunbing. Research on the influence of forest park-type tourism image on tourists' behavioral intention based on tourists' satisfaction: Taking Zhangjiajie National Forest Park as an example [J]. Journal of Central South University of Forestry Science and Technology (Social Science Edition)), 2017, 11(05):58-62.

[3] Zhao Zhongjun, Sun Xia. A Study on the Influencing Factors of Outbound Tourists' Satisfaction Based on Grounded Theory——Taking the Tourist Reviews of Tuniu as an Example [J]. Journal of Xiangtan University (Philosophy and Social Sciences Edition), 2015,39(05): 87-91.

[4] Shahida Kanwel, Zhou Lingqiang, Muhammad Asif, et al. The influence of destination image on tourist loyalty and intention to visit: Testing a multiple mediation approach[J].Sustainability,2019, 11(22):198-206.

[5] Petr Stumpf, Viktor Vojtko, Petr Janecek. Do European tourists intend to revisit the same countries? Effect of satisfaction in European Union destinations[J].Scandinavian Journal of Hospitality and Tourism,2020, 20(4):398-417.

[6] Shaykh-Baygloo Raana. Foreign tourists' experience: The tri-partite relationships among sense of place toward destination city, tourism attractions and tourists' overall satisfaction - Evidence from Shiraz, Iran[J].Journal of Destination Marketing & Management,2021, 22(1):1-25.

[7] Zhou Yang, He Junhong, Rong Hao. Tourist Satisfaction Evaluation and Influencing Factor Analysis in my country's Rural Tourism [J]. Economic Management, 2016,38(07):156-166.

[8] Zhang Xueting, Li Yongquan. Research on the influence of tourists' creative experience on revisit intention in cultural and creative tourism blocks: Based on a moderated mediation model [J]. Resource Development and Market, 2018, 34(08): 1173-1178.

[9] Miao Xiumei, Chen Yetian, Mi Chuanmin. Research on customer satisfaction of Tangshan Hot Spring based on ISM and online reviews [J]. China Management Science, 2019, 27(07): 186-194.

[10] Li Yan, Jin Huizhen, Li Dongjin. Influencing factor model of consumer word-of-mouth in the context of social network: A grounded study based on real word-of-mouth texts [J]. Nankai Management Review, 2018, 21(06): 83-94.