


Article

Research on Tourists Perceived Value and Behavioral Intention from the Perspective of Tourists Satisfaction: A Case Study of Zhangye Global Geopark

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Abstract: Background: Tourism, as one of the fastest growing industries in the world in the 20th century, has gradually become an industry with high cultural taste, tourist satisfaction and comprehensive benefits. The analysis and study of the interrelationships among tourists' satisfaction, perceived value, and behavioral intentions are fundamental to enhance the profitability and competitive edge of tourist destinations. **Objective:** This paper aims to study the relationship between tourists' perceived value and behavioral intentions from the perspective of tourist satisfaction in Zhangye Global Geopark through empirical analysis, and provide some development suggestions for the development of Zhangye World Geological Park. **Methods:** This paper focuses on tourists' satisfaction and employs literature review, field investigation and empirical analysis. It chooses the Zhangye Global Geopark in China as a case study to conduct field research. Then it establishes an evaluation index system for the park's visitors, and empirically analyzes the relationships between tourists' satisfaction, perceived value, and behavioral intentions. **Results:** The results indicate that tourists' perceived value indirectly affects their behavioral intentions through tourists' satisfaction, which serving as a complete mediation between perceived value and behavioral intentions. **Conclusions:** Improving tourists' satisfaction is an effective way to promote sustainable and high-quality development of tourist destinations. From the perspective of tourists' satisfaction, empirical analysis and discussion of its practical application of influencing tourists' perceived value and behavioral intentions can provide reference and suggestions for practices in Zhangye Global geopark.

Keywords: Zhangye; Geopark tourism, Tourists' satisfaction, Perceived value, Behavioral intentions

1. Introduction

With rapid global economic and technological development, China's overall national strength has significantly improved in recent years. Tourism, as a crucial support for the China's economy, has achieved substantial growth. Currently, China's tourism has entered a new phase of mass tourism, with supply-side reform and high-quality development becoming new directions for the industry. During this phase, market disorder and personalized experiences for tourists are emerging as new challenges.

Tourists' satisfaction and perceived value directly impact the behaviors of tourists, the fundamental driving forces of the tourism industry, which is essential for sustainable development of tourist destinations. During the past 50 years, researchers have

conducted a number of studies on perceived value and satisfaction in the field of tourism with valuable verification. However, due to the differences in research fields, tourists' perceived value and satisfaction may be different in their focus points, and the subject of different tourist destinations may also have the differences in dimension. Geoparks, as the vital natural tourism resources, have unique aesthetic values and serve as essential sites for nature immersion, leisure, scientific education, and cultural entertainment. The establishment of global geoparks not only aids in the better preservation of geological heritage but also promotes local economic development and provides a driving force for sustainable cultural and environmental development.

This study selected the Zhangye Global Geopark, a famous historical and cultural city along the Silk Road in western China, as a case study. Through empirical analysis, it explores the relationships between tourists' satisfaction, perceived value and behavioral intentions at the Zhangye Global Geopark, offering suggestions and strategies for high-quality and sustainable development of the park.

2. Literature Review

2.1 Tourists' Perceived Value

The concept of tourists' perceived value originates from the field of marketing and is a core concept that determines the competitive advantages of enterprises in the market. Zeithaml (1988) first proposed that perceived benefits are the gains that consumers receive from products and services by perceiving quality, internal and external features, and other psychological benefits, challenging the previous assumption that value and quality had identical meanings. This concept became widely accepted in the academia and expanded to various industries, including tourism, finance, services, information, etc. in the 1990s. Scholars on tourism like Morrison (1989) defined tourists' perceived value as a psychological state formed from the cost-benefit comparison during the touring process. Steven (1992) proposed that tourist perception was the overall evaluation result of the scenery, services and feelings of the travel process after tourists conclude their travels. Bai and Ma (2005) proposed that tourist perception is a comparative analysis of tourists' own experience and the information obtained from tourist destinations. Tourists will develop their understanding and evaluations based on matters related to their tourist destinations. Jamal (2011) proposed that the perceived value of a tourist destination is tourists' perceived preference evaluation based on whether the attributes of the tourist destination satisfy their goals and intentions. Scholars have mostly focused on the analysis of the differences in tourists' perceived values before and after the trip. This study follows the definitions by Steven and Jamal, defining tourists' perceived value as a comprehensive evaluation of tourism products and services based on information obtained about the destination's landscape, facilities, and services, from a gain-loss perspective.

2.2 Tourists' Satisfaction

The concept of tourists' satisfaction originates from customer satisfaction. Cardozo (1965) proposed that customer satisfaction could lead to corresponding customer behaviors, with customers experiencing higher satisfaction when spending more on a product. As the basic theory of customer satisfaction gained influence in academia, the concept extended into the tourism sector. Researchers explored tourists' satisfaction from various perspectives. For instance, Chon (1989) suggested that tourists' satisfaction is the result of comparing personal expectations with the actual travel experience. And that if travel experience exceeds expectations, tourists will feel dissatisfied. Oliver (1980) found that expectations are an important indicator to measure tourists' satisfaction by constructing functional equations. Tourists' satisfaction is based on expectations. When expectations are met, tourists will feel satisfied. Bowen (2001) found through a long-term study of tourists from the UK to Southeast Asia that the volume of sound can express

tourists' expectations for travel agencies, and it can be used as a standard to measure satisfaction to provide suggestions for relevant departments. Masarrat (2012) took foreign tourists in Uttaranchal, India as the research object and found that the differences between tourists' service expectations and perceptions would affect tourists' satisfaction. As a representative researches based on the perspective of perceived performance, Baker and Crompton (2000) proposed that tourists' satisfaction is a comprehensive evaluation system, which can score tourist destinations according to whether tourists' needs are met in terms of services, facilities and cultural performances of tourist destinations. Fu (2005) believes that tourists' satisfaction is the difference between tourists' perceived expectations of tourist destinations in terms of scenery, facilities, services and other aspects. When perception exceeds expectations, tourists will feel satisfied. A representative research based on the perspective of social exchange explains the generating mechanism of tourists' satisfaction and the degree of satisfaction by comparing tourists' own inputs and perceptions in the tourism process. When input and output are balanced, tourists will feel satisfied (Swan & Trawick, 1987). This perspective emphasizes the important influence of tourists' inputs and outputs on satisfaction during the tourism process. As a representative researches based on the perspective of tourist experience, Bosque and Martin (2008) proposed that tourists' satisfaction is the cognitive and emotional state of tourists after travel, which depends on the difference between tourists' tourism expectations and actual experiences. In addition, the image of tourist destinations can also directly affect tourists' satisfaction (Barroso, 2007), and whether tourists' motivation is met will also have a significant impact on tourists' satisfaction (Yoon & Uysal, 2005). In summary, most scholars hold that tourists' satisfaction is the result of tourists' overall evaluation of tourism based on the comparison between tourism expectations and actual perceptions experienced during the tourism process with an emphasis on tourists' emotional state.

2.3 Behavioral Intention

Psychological and sociological research on behavioral intentions laid the foundation for the development of behavioral intention research. Fishbein (1963) first proposed that individuals' behavioral attitudes will affect their behavioral intentions, and behavioral outcomes will affect behavioral attitudes. The birth of multi-attribute attitude theory provided a source for behavioral theory. Harrison (1997) proposed that behavioral intentions are individuals' spontaneous planning intensity to conduct specific behaviors when not subject to environmental influences, and the strength of behavioral intentions is positively correlated with the probability of engaging in that behavior. Zeithaml (1996) proposed that behavioral intentions are consumers' propensities when taking certain behaviors, and behavioral attitudes, prevailing norms and intuitive behaviors are key variables that determines behavioral intentions. When behavioral intentions are positive, consumers will voluntarily recommend the company's products to other customers, and will repurchase the products continuously. Blackwell, Miniard and Engel (2001) believed that behavioral intentions are consumers' propensities towards definite activities in the future, and consumers will make subjective judgments about whether specific matters need to be completed. Engel (2006) proposed that attitudes will lead to behavioral intentions, and that behavioral intentions are consumer's potential behaviors after consumption of products and related enterprises, which are accurate indicators to measure future consumption the consumers. The definition of behavioral intentions is relatively unified, with most scholars believing that tourists' behavioral intentions refer to tourists' possible behaviors towards tourist destinations after tourism experiences including both recommendation intentions and revisit intentions.

2.4 Model and Hypotheses

According to the analysis of relevant literature, the research achievements of theories, mechanisms and path on perceived value and behavioral intentions in academia are abundant. Currently, the relationship between tourists' perceived value and behavioral intentions has been widely proved. Based on the research of different industries and product characteristics, different scholars have obtained different conclusions using different definitions, scales and models, which can be summarized in the following two aspects: 1) Perceived value directly affects behavioral intentions. Representative studies include Grisaffe and Kumar (1998) who proved through experiments that perceived value would directly affect customers' repurchase intentions and recommendation behaviors. Eggert and Ulaga (2002) found in research that customers' perception has significant positive impact on behavioral intentions. 2) Perceived value affects behavioral intentions through other mediating variables such as tourists' satisfaction. For example, Gallarza and Saura (2006) verified in their study on university students' tourism behaviors that perceived value is closely related to tourist experiences, and that satisfaction, as an mediating variable that affects perceived value and behavioral intentions. Chen and Tsai (2007) developed structural equation models and verified that tourists' perceived value affects tourists' behavioral intentions through satisfaction. Based on the results of previous studies and literature reviews, this study proposes the following hypotheses on the relationship between tourists' perceived value and behavioral intentions of Zhangye Global Geopark:

H1: Tourists' perceived value of the geopark has a significant positive impact on tourists' behavioral intentions.

H1a: Evaluations on tourist destination of the geopark has a significant positive impact on tourists' behavioral intentions.

H1b: Evaluations on facility of the geopark has a significant positive impact on tourists' behavioral intentions.

H1c: Evaluations on services of the geopark has a significant positive impact on tourists' behavioral intentions.

In the increasingly competitive international tourism market, the success of tourist destinations largely depends on the effective management of scenic spots. Tourists will develop satisfaction evaluations based on perceived value which will further affect future tourism behavioral intentions. Tourists' satisfaction, as an important factor, will have an influence on tourists' perceived value and behavioral intentions respectively. For example, Ross and Iso-Ahola (1997) were the first to discover that there were similarities between tourist behavioral intentions and tourists' satisfaction in terms of dimensions by studying the relationship between behavioral intention value and satisfaction. Yoon and Uysal (2005) examined the cause-effect relationship between tourists' perceived value, tourists' satisfaction and behavioral intentions by developing a structural equation model. Schofield and Thompson (2007) analyzed the impact of tourists' perception on tourists' satisfaction and behavioral intentions by regression analysis. Pan and Ryan (2007) studied the correlation between tourists' behavioral intentions and satisfaction of mountain tourism destinations. FU (2018) and Guo (2018) considered tourists' satisfaction and perceived value as antecedent variables, respectively to explain and predict tourists' behavioral intentions. Many scholars have the following consensus through studies on the relationship between tourists' satisfaction, perceived value and behavioral intentions: 1) Perceived value can influence tourists' behavioral intentions through tourists' satisfaction. 2) Perceived value will not directly influence tourists' behavioral intentions through tourists' satisfaction.

Based on the previous theoretical studies and empirical analyses, this study analyzes tourists' perceived value of geoparks from three aspects: tourist destination, infrastructure and service evaluations, in line with the characteristics of geopark tourism like landscape value and service value. Based on Cronin's model of tourists' perceived

value, customer satisfaction and behavioral intentions, the following hypotheses are proposed:

H2: Tourists' satisfaction plays a mediating role between tourists' perceived value and behavioral intentions.

H2a: Tourists' satisfaction plays a mediating role between geopark evaluations and tourists' behavioral intentions.

H2b: Tourists' satisfaction plays a mediating role between geopark facility evaluations and tourists' behavioral intentions.

H2c: Tourists' satisfaction plays a mediating role between geopark service evaluations and tourists' behavioral intentions.

The hypotheses and model are shown in Figure 1.

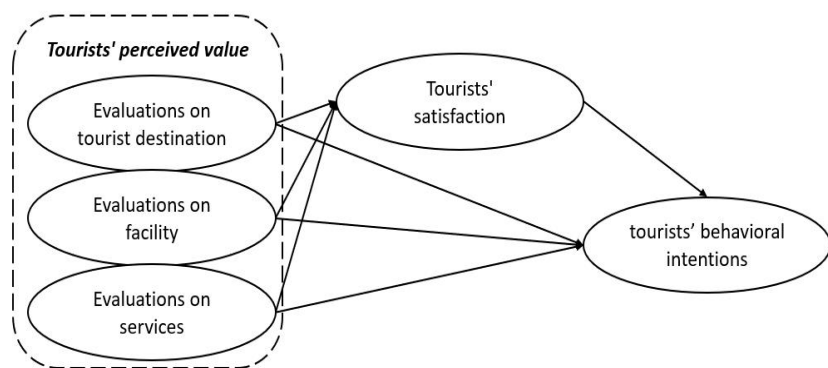


Fig.1 Model of tourists' satisfaction, perceived value and behavioral intentions

3. Methodology

SERBQUAL scale (Sanchez et al., 2006) is widely used in the field of tourism and is often used by scholars to measure tourists' perceived value, tourists' satisfaction and behavioral intentions. The scale realizes the research purpose by five steps: establishing dimensions through literature, determining measurement items of the dimensions, initial questionnaire design, refining questionnaire items and exploring relationships between the variables. Based on the previous literature review and the actual characteristics of Zhangye Global Geopark, this study selected indicators and designed three structural scales of tourists' perceived value, tourists' satisfaction and behavioral intentions. The tourists' perceived value scale refers to commonly used indicators, which are divided into three dimensions: tourist destination evaluation, facility evaluation and service evaluation with 12 related questions. The tourists' satisfaction scale refers to Baker and Crompton's (2000) study of tourists' satisfaction and Peng Wenying & Li Jun's (2008) study of overall satisfaction with 8 questions. Tourists' behavioral intentions consist of 4 questions on the basis of previous literature review of recommendation willingness and revisit willingness.

The survey questionnaire uses a 5-point Likert scale. Through literature review and scale analysis, the questionnaire is divided into five parts: The first part is the screening questions of whether tourists have visited Zhangye Global Geopark; the second, third and fourth parts are the main body of the questionnaire, mainly including the specific surveys of tourists' perceived value, satisfaction and behavioral intentions in Zhangye Global Geopark with a total of 42 questions. Numbers 1 to 5 reflect the evaluation of

tourists' perception, satisfaction and behavioral intentions towards the scenic area. The fifth part is a survey on the basic situation of tourists, mainly including gender, nationality, age, educational background, average monthly income and number of visits. The questionnaire was randomly sampled and distributed online and on-site from July to October 2023. A total of 220 questionnaires were distributed and 160 valid questionnaires were recovered, with a recovery rate of 72.7%. The samples included tourists from different source regions, genders, age groups, education levels and income levels.

4. Results and Discussion

4.1 Data and sample

The questionnaire data was imported into SPSS 24 for statistical analysis. The result of respondents' data—gender, age, education level, monthly income and travel frequency to Zhangye—are shown in Table 1. The proportion of female tourists is close to that of male, with slightly more female tourists than male. The tourists are mainly middle-aged Asians aged between 18 to 40. Most tourists have an educational background of junior college or college education. 76.2% of the tourists had a monthly income of less than 4,500 yuan, and most of them came to Zhangye twice.

Table 1 Profile of respondents

Name	Item	Frequency	Percent (%)
Gender	Male	69	43.1
	Female	91	56.9
	Sum	160	100
Age	Under 18 years	7	4.4
	18-25 years	89	55.6
	26-40 years	58	36.3
	Over 41 years	6	3.7
	Sum	160	100
Nationality	Asian Nationality	157	98.1
	Non-Asian nationality	3	1.9
	Sum	160	100
Education	Under Senior High School	26	16.3
	Senior High School	49	30.6
	Specialist	77	48.1

Name	Item	Frequency	Percent (%)
	And		
	undergraduate courses		
	Master degree or above	8	5
	Sum	160	100
Revenue	Below 2000 yuan	92	57.5
	2001 yuan-4500 yuan	30	18.7
	4501 yuan-6000 yuan	28	17.5
	Over 6000 yuan	10	6.3
	Sum	160	100
Travel frequency of Zhang ye	1	35	21.9
	2	70	43.8
	3	34	21.2
	More than 3 times	21	13.1
	Sum	160	100

4.2 Reliability and Validity of instruments

Scale reliability analysis is used to examine the authenticity of survey questionnaire data. In this study, SPSS 24 was used to analyze the reliability and validity of the 19 questions in the scale. TD1-5 represents tourism destination evaluation questions. GF1-6 represents geopark facility evaluation questions. GS1-3 represents geopark service evaluation questions. TS1-3 represents tourists' satisfaction questions. BI1-2 represents behavioral intention questions.

Table 2 Item reliability and validity (N=160)

Items	Std.loadings	Kmo
Tourists' perceived value— tourism destination evaluation ($\alpha= 0.826$)		
TD1-geopark scenic evaluation	0.734	KMO=0.947 Sig=0.000
TD2-geopark special events evaluation	0.673	
TD3-geopark cultural construction evaluation	0.689	

Items	Std.loadings	Kmo
TD4-geopark scenic appreciation value evaluation	0.692	
TD5-geopark event variety evaluation	0.652	
Tourists' perceived value—geopark facility evaluation ($\alpha=0.848$)		
GF1-geopark environment sanitation evaluation	0.707	
GF2-geopark public facility evaluation	0.683	
GF3-geopark notice information evaluation	0.794	
GF4-geopark catering evaluation	0.778	
GF5-geopark transportation evaluation	0.831	
GF6-geopark shopping convenience evaluation	0.724	
Tourists' perceived value—geopark service evaluation ($\alpha=0.783$)		
GS1-geopark tour guide evaluation	0.791	
GS2-geopark ticketing evaluation	0.727	
GS3-geopark basic service evaluation	0.711	
Tourists' satisfaction ($\alpha=0.904$)		
TS1-tour consumption evaluation	0.757	
TS2-service facility evaluation	0.734	
TS3-tour product evaluation	0.715	
Behavior intention ($\alpha=0.813$)		
BI1-revisit willingness evaluation	0.758	
BI2-recommendation willingness evaluation	0.695	

Note: α (Cronbach alpha)

As can be seen from Table 2, the overall Cronbach's alpha coefficient of the scale is greater than 0.7, indicating that the reliability of the scale items is good (Cronbach,1951; Nunnally,1978) and with good internal consistency, the next validity analysis can be

performed. The validity of the scale is mainly based on the KMO value and Bartlett's sphericity tests. If the KMO value is greater than 0.9, it means it is very suitable for factor analysis; 0.8-0.9 means high validity; 0.7-0.8 means general validity; 0.6-0.7 means validity not quite meets requirements; 0.5-0.6 means not valid. We further tested whether the variables were independent through Bartlett's sphericity test. If Sig is greater than 0.05, it is not suitable for factor analysis. The KMO in this study was 0.947 and Sig was 0.000. All item loadings were greater than 0.6, indicating the scale has high validity and meets the requirements for empirical analysis.

4.3 Correlation Analysis

Correlation analysis can indicate the strength of the linear relationship between measurement variables. The p value is the level of correlation. If p is less than 0.05, there is a correlation. We can use correlation coefficients to represent the degree of linear correlation between variables.

The value range of the correlation coefficient r is greater than or equal to -1 and less than or equal to 1. When the correlation coefficient is between 0-1, it indicates the variables are positively correlated. When the correlation coefficient is less than 0 (negative value), it indicates the variables are negatively correlated. The correlation analysis results are shown in Table 3.

Table 3 Correlation

	X1	X2	X3	X	Y
X1	1				
X2	0.831**	1			
X3	0.745**	0.867**	1		
X	0.801**	0.828**	0.798**	1	
Y	0.768**	0.864**	0.775**	0.864**	1

Note:*p<0.05 **p<0.01 ***p<0.001

X1 represents tourism destination evaluation; X2 represents geopark facility evaluation; X3 represents geopark service evaluation; M represents tourists' satisfaction; Y represents behavior intention

The results show that tourists' perceived value, satisfaction and behavioral intentions are positively correlated with each other, and the correlations are strong.

4.4 Hypothesis Testing

First, the relationship between tourists' perceived value and behavioral intentions was examined. Through regression analysis, it was found that the independent variables explained 72.6% of the variation of the dependent variable. Tourist destination evaluation ($\beta=0.238$, $p=0.002$), facility evaluation ($\beta=0.482$, $p=0.000$) and service evaluation ($\beta=0.207$, $p=0.006$) in tourists' perceived value all had significant positive impacts on tourists' behavioral intentions. Therefore, the hypothetical results of H1, H1a, H1b and H1c were valid.

To examine the role of tourists' satisfaction between perceived value and behavioral intentions, regression analysis was conducted on satisfaction, perceived value and

behavioral intentions respectively following Wen (2005) step-by-step testing method. The mediating effect of tourists' satisfaction was tested by the Bootstrap method with bias-corrected percentiles. Bootstrap method was developed by Hayes in 2013. In the actual statistical analysis, the sample size was set at 5000, representing the number of random samplings, and the confidence interval was set at 95%. If 0 is not include, it indicates that the mediating effect is established. If the direct effect is significant, it means the mediating variable plays a partial of mediating role. If the direct effect is not significant, it means the mediating variable plays a complete mediating role.

According to the analysis results in Table 4 and Table 5, along the mediating path "tourist destination evaluation → tourists' satisfaction → tourist behavioral intentions", the total effect c of tourist destination evaluation was 0.238**, and the 95% bias-corrected confidence interval based on the Bootstrap sampling test was 0.057-0.261, not including 0, indicating the existence of mediating effect. Meanwhile, the direct effect was 0.078, indicating that this mediation is complete. Along the mediating path "facility evaluation → tourists' satisfaction → tourist behavioral intentions", the total effect c of facility evaluation was 0.482**, and the 95% bias-corrected confidence interval based on Bootstrap sampling test was -0.018-0.143, including 0, indicating that the mediating effect does not exist. Meanwhile, the direct effect was 0.429**, indicating that the mediating role was not significant. Along the mediating path "service evaluation → tourists' satisfaction → tourist behavioral intentions", the total effect c of service evaluation was 0.207**, and the 95% bias-corrected confidence interval based on Bootstrap sampling test was 0.022-0.231, not including 0, indicating the existence of mediating effect. Meanwhile, the direct effect was 0.087, indicating that this mediation is complete.

Table 4 Mediating Effect Testing

	Y	M	Y
constant	0.175 (1.049)	0.235 (1.107)	0.090 (0.605)
X1	0.238** (3.090)	0.447** (4.545)	0.078 (1.060)
X2	0.482** (5.339)	0.148 (1.289)	0.429** (5.298)
X3	0.207** (2.764)	0.335** (3.510)	0.087 (1.247)
M			0.360** (6.425)
R ²	0.731	0.622	0.787
Adjust R ²	0.726	0.615	0.782

	Y	M	Y
F	F(3,156)=141.084 p=0.000	F(3,156)=85.506 p=0.000	F(4,155)=143.456 p=0.000

Note: p<0.05 ** p<0.01

X1 represents tourism destination evaluation; X2 represents geopark facility evaluation; X3 represents geopark service evaluation; M represents tourists' satisfaction; Y represents behavior intention

Table 5 Indirect effects sum

Item	Total indirect effect	Boot SE	z	p	BootLLCI	BootULCI
X1=>Y	0.161	0.052	3.075	0.002	0.057	0.261
X2=>Y	0.053	0.041	1.309	0.190	-0.018	0.143
X3=>Y	0.121	0.052	2.312	0.021	0.022	0.231
indirect effects sum	0.335	0.058	5.790	0.000	0.219	0.450

Note: bootstrap type: percentile bootstrap type

X1 represents tourism destination evaluation; X2 represents geopark facility evaluation; X3 represents geopark service evaluation; M represents tourists' satisfaction; Y represents behavior intention

Based on this table, hypotheses H2, H2a and H2c have been effectively verified and the hypothetical results are valid. However, due to objective reasons of the scenic spot, the mediating effect was not significant during data testing for H2b, so this hypothesis was not effectively verified.

The results of all hypotheses are shown in Table 6.

Table 6 Hypothesis result

No.	Hypothesis	Result
H1	Tourists' perceived value of the geopark has a significant positive impact on tourists' behavioral intentions.	Valid
H1a	Evaluations on tourist destination the geopark has a significant positive impact on tourists' behavioral intentions.	Valid
H1b	Evaluations on facility of the geopark has a significant positive impact on tourists' behavioral intentions.	Valid
H1c	Evaluations on services of the geopark has a significant positive impact on tourists' behavioral intentions.	Valid
H2	Tourists' satisfaction plays an mediating role between tourists' perceived value and behavioral intentions.	Valid

H2a	Tourists' satisfaction plays an mediating role between geopark evaluations and tourists' behavioral intentions.	Valid
H2b	Tourists' satisfaction plays an mediating role between geopark facility evaluations and tourists' behavioral intentions.	Not Valid
H2c	Tourists' satisfaction plays an mediating role between geopark service evaluations and tourists' behavioral intentions.	Valid

5. Conclusion

5.1 Conclusion

Improving tourists' satisfaction is an effective way to promote sustainable and high-quality development of tourist destinations. From the tourists' satisfaction perspective, empirical analysis and discussion of its practical application in influencing tourists' perceived value and behavioral intentions can provide reference and suggestions for relevant theories and practices. Tourism destination development practices and related theories show that tourists' perceived value and behavioral intentions are influenced by multiple factors. Therefore, this study takes Zhangye Global Geopark as the research object to explore the relationship between tourist perceived value, tourist satisfaction, and behavioral intentions, in order to verify the impact of tourist perceived value on their behavioral intention in Zhangye Global Geopark, as well as the mediating role of tourist satisfaction between tourist perceived value and behavioral intention.

The research results on the impact of Zhangye Global Geopark tourists' perceived value on their behavioral intentions show that tourists' satisfaction has a positive mediating effect on perceived value and behavioral intentions, the evaluation of facilities and services of Geoparks has a great influence on the behavior intention of tourists visiting geoparks. The empirical research results are consistent with the mainstream research conclusions of the current academic circles.

The research results on the mediating effect of tourists' satisfaction between tourists' perceived value and behavioral intentions in Zhangye Global Geopark show that the two hypothetical paths were valid: 1) Tourists' satisfaction play a mediating role between tourism destination evaluation (H2a) and behavioral intentions. 2) Tourists' satisfaction between geopark service evaluation (H2c) and behavioral intentions. The results indicate that tourists are generally satisfied with the evaluation of the tourism destination and services of Zhangye Global Geopark. Its unique natural landscapes and good services has already had a positive impact on the tourism market. It will provide good supports for Zhangye Global Geopark in the future if these two advantages can be maintained and further improved. However, interestingly, the mediating role of tourists' satisfaction between geopark facility evaluation (H2b) and behavioral intentions was not significant. Based on the data analysis, we carried out another investigation and analysis of the geopark, and found this was directly related to the geopark's infrastructure construction. The scenic spot was very poor in terms of shelters, information boards, public toilets and other facilities. Tourists often encountered problems such as sun exposure on sunny days, lacking of shelter on rainy days, long queues to use toilets during peak periods, and no place available to take a rest during the touring process. The actual inadequate facilities in the geopark weakened tourists' perceived value, resulting in the insignificant mediating role of tourists' satisfaction between geopark facility evaluation (H2b) and behavioral intentions.

5.2 Implications

The previous research results have shown the mutual influence between tourists' perceived value, satisfaction and behavioral intentions, and their improvement can

provide practical guidance for the high-quality and sustainable development of tourist destinations. Based on the development status and research results of Zhangye Global Geopark, the following suggestions are put forward in this study, hoping to provide some references for its high-quality development.

First, it shall foster the tourists-centered management and service concept. In order to solve the actual problems encountered by tourists, it is necessary to increase investment in the resource elements and tourism elements of the Zhangye Global Geopark, and improve public service facilities according to the needs of the tourists and standards of the infrastructure construction of global geoparks. By providing tourists with a comfortable travel experience, it shall enhance the impact of geopark facilities on tourists' perceived value, satisfaction and behavioral intentions. Second, it is necessary to pay attention to the impact of high-quality cultural construction on the integrated economic benefits of the tourism industry, and focus on the integrated development of excellent Chinese cultures and tourism projects, since tourism is a process of introducing culture and the soul of the tourism industry. It shall inject more excellent Chinese cultural elements into the festival activities, cultural performances and experience events at scenic spots. By creating free and positive cultural activities, it shall work to provide tourists with high-level spiritual enjoyment. Third, a single publicity and marketing strategy for the world-class geological park can no longer effectively sustain its sustainable development. It is necessary to develop a global perspective to strength its publicity on the world stage through the implementation of differentiated marketing strategies to meet the diversified needs of tourists, such as constructing diversified themes in leisure entertainment, historical culture and shopping according to tourists' nationalities, ethnic groups and cultural backgrounds. By doing so, it can enhance the international reputation of Zhangye Global Geopark with a good international tourism image. Finally, it shall increase the R&D of tourism products. It shall integrate elements of Silk Road culture and Dunhuang culture into the tourism products, and provide touring routes of different theme. At the same time, it shall promote the industrial structure transit from a sightseeing tourist destination to a comprehensive scenic area integrating leisure, vacation and health care. It can develop a new pattern of city-wide and all-season tourism based on the current touring model to ensure balanced touring experiences for tourists at different areas and under different climates.

5.3 Limitations and Prospects

This study raises question based on previous literature research, and completes data collection and subsequent analysis in line with standard research methods. However, there are still some limitations and insufficiencies that need to be improved in future research. Firstly, due to the limitations of time and other objective conditions, the sample size of the questionnaire is not enough. Therefore, more data should be collected to support the analysis and conclusions. Secondly, subject to the randomness of tourists and on-site collection of questionnaires, the overall respondents are mainly young Asian tourists. Sufficient samples from tourists other than Asians have not been collected during data collection. Thirdly, the experience at the geological park vary due to different climates and time. Tourist experiences will have significant differences in the scenic spot under different natural conditions. Accordingly, future research needs to pay attention to the climate and time differences which can affect tourists' perceived value, satisfaction and behavioral intentions. Finally, this paper focuses on the case study of Zhangye Global Geopark. Though it is typical, the research results cannot represent all geopark tourist destinations. In future research, other types of geoparks need to be selected to further validate the findings in this study.

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