forests

MDPI

Article

The Impact of Aesthetic Expectations and Aesthetic Experiential Qualities on Tourist Satisfaction: A Case Study of the Zhangjiajie National Forest Park

Ying Wen [1,2], Fen Luo [1,*] and Hao Li [3]

[1] College of Tourism, Central South University of Forestry & Technology, Changsha 410004, China; yingwen@csust.edu.cn
[2] School of Design Art, Changsha University of Science & Technology, Changsha 410114, China
[3] China Mobile Communications Group Design Institute Co., Ltd., Changsha 410003, China; lihao3@cmdi.chinamobile.com
* Correspondence: fen.l@csuft.edu.cn; Tel.: +86-180-0842-1922

Abstract: Aesthetic expectations often constitute the primary focus in marketing nature-based tourist destinations. However, academic research has insufficiently explored the disparity between tourists' aesthetic expectations and the actual aesthetic quality maintenance in shaping satisfaction. Employing the Expectation Confirmation Theory, this study utilized structural equation modeling techniques to analyze survey data (n = 446). It proposed and tested an Aesthetic Expectation Confirmation Model to examine the relationship between aesthetic expectations, experiential qualities, and tourist satisfaction in the Zhangjiajie National Forest Park. The empirical findings show that aesthetic expectations have a direct, negative impact on satisfaction, while aesthetic expectation confirmation has a positive direct impact on satisfaction. Moreover, aesthetic expectation confirmation also plays a mediating role in the influence of aesthetic expectations and experiential quality on satisfaction. Specifically, aesthetic expectations indirectly impact satisfaction negatively through aesthetic expectation confirmation, whereas aesthetic experiential qualities have a positive, indirect impact on satisfaction through the same process. These findings offer theoretical contributions to the literature on forest recreation aesthetics and hold practical significance for the planning and management of destination aesthetics.

Keywords: aesthetic expectations; aesthetic experiential qualities; aesthetic expectation confirmation; satisfaction

Citation: Wen, Y.; Luo, F.; Li, H. The Impact of Aesthetic Expectations and Aesthetic Experiential Qualities on Tourist Satisfaction: A Case Study of the Zhangjiajie National Forest Park. *Forests* **2024**, *15*, 378. https://doi.org/10.3390/f15020378

Academic Editor: Taylor V. Stein

Received: 28 December 2023
Revised: 10 February 2024
Accepted: 16 February 2024
Published: 18 February 2024

1. Introduction

Tourists' expectations significantly influence their destination choice [1], perception of the tourism experience, and overall satisfaction [2]. During the post-pandemic era, research focus on travelers' expectations, perceptions, and attitudes in marketing has intensified [3]. For example, aspects such as travelers' willingness to travel, risk perception, consumer characteristics, suppressed tourism demand, and long-term psychological stress impacting travelers have been scrutinized [4–6]. Studies show that the post-pandemic period has seen a rise in tourists choosing nature-based tourism. Many tourists now prioritize closeness to nature and the appreciation of its beauty.

This manuscript explores "nature-based tourism", which is characterized as tourism activities centered around natural sites and interactions within natural settings [7]. This form of tourism distinctively prioritizes the appreciation of and engagement with natural environments [8], setting it apart from other tourism types. Within this framework, "aesthetic expectations" emerge as a pivotal driving force [9,10]. It is pertinent to clarify that the term "aesthetics" is interpreted here as encompassing a holistic sensory perception rather than adhering to Kant's classical philosophical notion of disinterestedness. While the aesthetics of tourism indeed embrace an extensive array of sensory experiences [11,12],

the present study predominantly concentrates on the visual aspects, recognizing that visual interactions frequently stand out most prominently in tourists' engagements with the natural world.

Tourists' predilections for natural landscapes and the aesthetic attributes of destinations play a crucial role in their choice of nature-based tourism [13,14]. The intangible nature of tourism services compels visitors to seek comprehensive information about destinations, thereby shaping impressions that significantly influence their decision-making processes [1,15]. In an era marked by rapid technological advancements and the seamless flow of information, tourism marketers are crafting strategies that ensure prospective travelers can effortlessly access detailed insights into destinations [16,17]. As a result, aesthetic expectations are conceptualized as tourists gathering information from various channels before their trip, thereby forming a comprehensive perception of a destination's aesthetic aspects and shaping their expectations about the quality of the aesthetic experience.

Research on aesthetic themes in nature-based tourism primarily includes exploring preferences for natural landscapes [7,18,19], aesthetic judgments in tourism [9,20], aesthetic experiences [21–23], and destination aesthetic marketing [10,24]. Studies also focus on how marketing strategies enhancing aesthetic expectations influence tourists' destination choices [25] as well as their correlation with tourists' aesthetic experience quality, destination loyalty, and behavioral intentions [26–28]. Despite these scholarly advancements, the nexus between aesthetic expectations, the quality of aesthetic experiences, and overall satisfaction is not thoroughly examined. Moreover, the exploration of strategies aimed at enhancing the quality of aesthetic experiences to align with these expectations remains relatively sparse [29].

Within the realm of exploring nature-based tourism, forest recreation has garnered our special attention as a key area. This study employs structural equation modeling and survey questionnaires to investigate the intricate relationship between tourists' aesthetic expectations, the quality of their aesthetic experiences, and overall satisfaction within the context of forest recreation. Centered on the Zhangjiajie National Forest Park, China's inaugural national forest park, this research applies the Expectation Confirmation Theory (ECT) to dissect the intricate dynamics between tourists' aesthetic expectations, the quality of their aesthetic experiences, and their overall satisfaction, offering insights into the nuanced interplay of these elements.

The Expectation Confirmation Theory (ECT) plays a pivotal role in understanding consumer satisfaction, especially in assessing perceptions of convenience and utility. This theory highlights the crucial link between consumers' expectations and their actual experiences, noting its significant impact on satisfaction [30–32]. The ECT primarily involves consumers forming expectations about the performance of a product or service, experiencing the actual performance, and perceiving a performance disparity [33], which, whether positive or negative, influences satisfaction levels. Traditionally used to evaluate consumer satisfaction and repurchase intentions in product-based sectors [32,34], the ECT's applicability has extended to diverse service environments, including marketing and consumer behavior analysis [35], and is recognized in the tourism sector, particularly in medical and sports tourism [36].

In service economics, the principle of expectation confirmation is paramount, revolving around the alignment between customers' perceived performance of a service and their initial expectations [37]. In resonance with Bhattacherjee's interpretation, expectation confirmation is perceived as the congruence between antecedent expectations and subsequent perceptions within information systems [38]. This study tailors this principle to the sphere of tourism aesthetics. It conceptualizes "Aesthetic Expectation Confirmation" as the evaluative process wherein tourists juxtapose the real quality of the aesthetic experience with their pre-visit expectations. This juxtaposition fosters an awareness of any variances in aesthetic perception, thus offering a robust framework to appraise how tourists' aesthetic expectations and their ensuing experiences shape their overall contentment with the destination. Emphasizing aesthetic expectation confirmation is pivotal for enhancing

our comprehension of tourist behavior and satisfaction, particularly within the milieu of forest recreation.

Furthermore, the visiting environment plays a crucial role in tourism. It encompasses the holistic ambiance perceived by tourists, while satisfaction is deemed the comparative result derived from aligning pre-travel expectations with the factual overall experiential ambiance [26]. Research indicates that tourists' aesthetic experiences are influenced not only by the natural environment but also by artificial elements and tourism infrastructure [21,23,39]. For instance, a study on island tourism identified three core environmental categories as follows: natural, humanistic, and economic [40]. These categories were found to significantly influence tourists' satisfaction, revealing that the satisfaction of tourists is notably affected by the natural, humanistic, and economic environments of islands. Building on this, our study categorizes the visiting environment of the Zhangjiajie National Forest Park into similar segments, examining the impact of tourists' pre-travel aesthetic expectations and the aesthetic experiential qualities they encounter on their satisfaction.

By pursuing the following two objectives, this study aims to contribute to the understanding of forest recreation, offering insights into how aesthetic factors influence tourists' satisfaction as follows:

- Investigate the dynamic relationship between aesthetic expectations, aesthetic experiential qualities, and satisfaction in forest recreation.
- Define and explore the role of the visiting environment in shaping tourists' aesthetic experiences and satisfaction within forest recreation.

The organization of the rest of this paper is as follows: Section 2 presents the conceptual model and hypothesis development, and it provides an overview of the questionnaire design and data collection process. Section 3 introduces the results, Section 4 presents the conclusions, Section 5 engages in discussion, and summarizes the research contributions, significance, and limitations of the study.

2. Study Area and Methods

2.1. Conceptual Model and Hypotheses Development

This study focuses on the Zhangjiajie National Forest Park, China's first national forest park, and explores the concept of "aesthetic expectation confirmation", emphasizing the comparison between the anticipated and actual quality of aesthetic experiences. Drawing upon the Expectation Confirmation Theory (ECT) introduced by Oliver in 1980 [30], this study applies the theory within the realm of tourism aesthetics. The ECT is instrumental in dissecting consumer satisfaction, particularly the perception of service performance in relation to expectations. By employing the ECT, this research aims to conduct an in-depth analysis of the interrelations between tourists' aesthetic expectations, the quality of their aesthetic experiences, and their overall satisfaction. We theorize that tourists harbor initial aesthetic expectations (AEs) about Zhangjiajie before visiting. They assess their actual aesthetic experiences against these expectations, leading to a confirmation or disconfirmation (AEC), which influences their overall satisfaction (SA) (Figure 1).

Satisfaction in tourism is often derived from juxtaposing pre-visit expectations with actual experiences at the destination [41], highlighting the critical role of accurate marketing in setting realistic expectations [42]. Similarly, in service industries, customer satisfaction hinges on the alignment between pre-service expectations and post-service perceptions [13]. The Expectation Confirmation Paradigm underscores this alignment, with satisfaction being a function of how well initial expectations resonate with the actual service delivery [14]. Expectations are instrumental in framing customers' perceptions of service quality and their subsequent satisfaction or dissatisfaction [43,44]. Research underscores a direct correlation between expectations and satisfaction [14,44]. Consequently, we propose the following:

H1. *Aesthetic expectations significantly influence satisfaction.*

H1a. *Aesthetic expectations of the natural environment significantly influence satisfaction.*

H1b. *Aesthetic expectations of the humanistic environment significantly influence satisfaction.*

H1c. *Aesthetic expectations of the economic environment significantly influence satisfaction.*

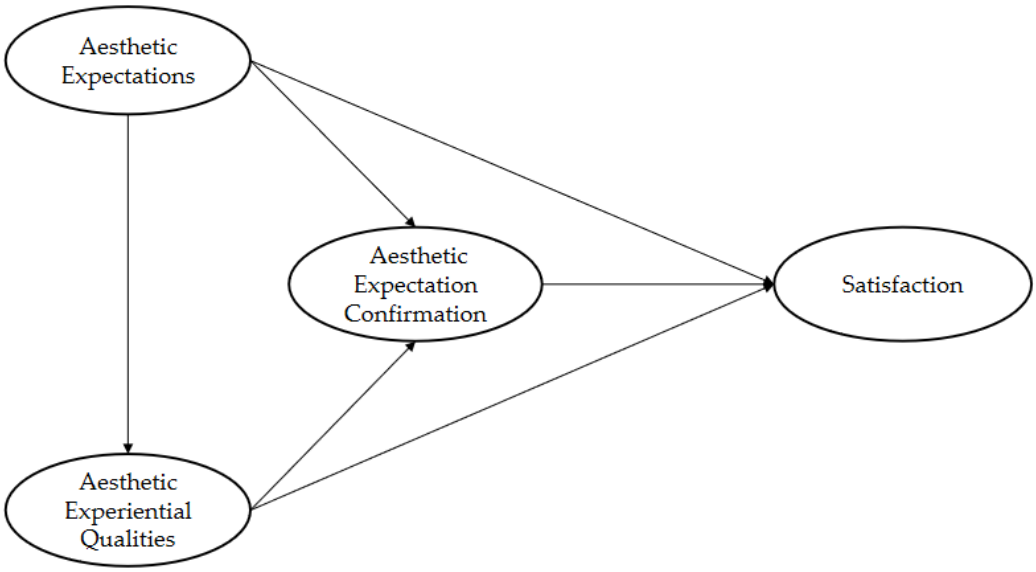

Figure 1. Aesthetic Expectation Confirmation Model.

Empirical studies reveal that tourists with heightened expectations, particularly regarding services like accommodation, are more sensitive to their service quality experiences [45]. This is evident across various tourism contexts, from medical [46] to bicycle tourism [47], emphasizing the pivotal role of expectations in defining the perceived quality of tourism experiences. Likewise, discrepancies between expected and actual experiences can markedly affect satisfaction levels, as seen in studies focusing on tourism in forest parks [48] and through analyses of expectation–experience gaps [49]. This underlines the significant impact of expectations on the perceived quality of tourism experiences. Thus, we hypothesize the following:

H2. *Aesthetic expectations significantly influence aesthetic experiential qualities.*

H2a. *Aesthetic expectations of the natural environment significantly influence aesthetic experiential qualities of the natural environment.*

H2b. *Aesthetic expectations of the humanistic environment significantly influence aesthetic experiential qualities of the humanistic environment.*

H2c. *Aesthetic expectations of the economic environment significantly influence aesthetic experiential qualities of the economic environment.*

The impact of aesthetic experiences on overall satisfaction is profound, with studies indicating that aesthetic qualities of a destination significantly shape tourists' satisfaction [8,27]. Aesthetic experiences, be they in nature-based tourism [8], at UNESCO heritage sites, or in various experiential environments like cultural sites or guesthouses, are integral in forming overall satisfaction [50]. This is mirrored in the medical tourism sector, where the perception of services significantly influences both expectations and satisfaction [46]. Accordingly, we hypothesize the following:

H3. *Tourists' aesthetic experience quality significantly influences satisfaction.*

H3a. *Aesthetic experiential qualities of the natural environment significantly influence satisfaction.*

H3b. *Aesthetic experiential qualities of the humanistic environment significantly influence satisfaction.*

H3c. *Aesthetic experiential qualities of the economic environment significantly influence satisfaction.*

Following Oliver's proposition, the relationship between actual experiences and initial expectations is crucial in shaping satisfaction [30,35]. A positive confirmation arises when experiences surpass expectations, whereas a negative confirmation, often leading to dissatisfaction, occurs when experiences fall short of expectations. This principle is echoed by researchers like R. D. Keyser, who emphasize the foundational role of expectations and actual experiences in confirming the quality of tourism experiences [51]. Hence, we hypothesize the following:

H4. *Aesthetic expectations significantly influence aesthetic expectation confirmation.*

H4a. *Expectations of the natural environment significantly influence expectation confirmation.*

H4b. *Expectations of the humanistic environment significantly influence expectation confirmation.*

H4c. *Expectations of the economic environment significantly influence expectation confirmation.*

H5. *Aesthetic experiential quality significantly influences aesthetic expectation confirmation.*

H5a. *The experiential quality of the natural environment significantly influences expectation confirmation.*

H5b. *The experiential quality of the humanistic environment significantly influences expectation confirmation.*

H5c. *The experiential quality of the economic environment significantly influences expectation confirmation.*

Lastly, the degree of expectation confirmation is a decisive factor in shaping overall satisfaction, underscoring the intricate interplay between expectations, experiences, and satisfaction [45]. Consequently, we hypothesize the following:

H6. *Aesthetic expectation confirmation significantly influences satisfaction.*

2.2. Study Area

The chosen case for this study is the Zhangjiajie National Forest Park established in 1982. It is situated in the northwestern part of Zhangjiajie City, Hunan Province, China (Figure 2), spanning from 110°24′ to 110°28′ E and 29°17′ to 29°21′ N and covering a total area of 48 square kilometers. The park features the rare quartz sandstone peak forest landform, abounding in wildlife and plant resources, with a forest coverage rate of 98%. It experiences an average annual temperature of 12.8 °C and an average annual precipitation of 1228.5 mm, falling under the climatic zone of the northern subtropical region. By 2023, the park had developed six natural scenic routes for visitors (Figure 3).

The aim of this study is to investigate the relationships and impacts between tourists' aesthetic expectations, the quality of aesthetic experiences, and satisfaction within the forest park. The empirical background selection is connected to the destination's natural, humanistic, and economic environments. The selection of the Zhangjiajie National Forest Park is based on the following reasons: (1) Being China's first national forest park, it acts as a central scenic area within the Wulingyuan Scenic Area, a UNESCO World Heritage Site and a designated World Geopark. Its tourism development history is the most extensive among similar cases in China, having significant impacts, whether positive or negative, due to the tourism industry. Yuanjiajie, a major attraction along its routes, has garnered

attention for the construction of the "Bailong Elevator", attracting interest from local governments, tourism-related organizations, and society. (2) This route demonstrates exceptional collaboration between various public and private entities in marketing and innovation processes, which is seen in initiatives like the "Aerial Fields" at the Tianzi Mountain scenic area. (3) As one of China's most popular natural tourist attractions, it attracts over seventy million visitors annually, including both international and domestic tourists, segmented into independent travelers, organized group tours, and outdoor sports teams.

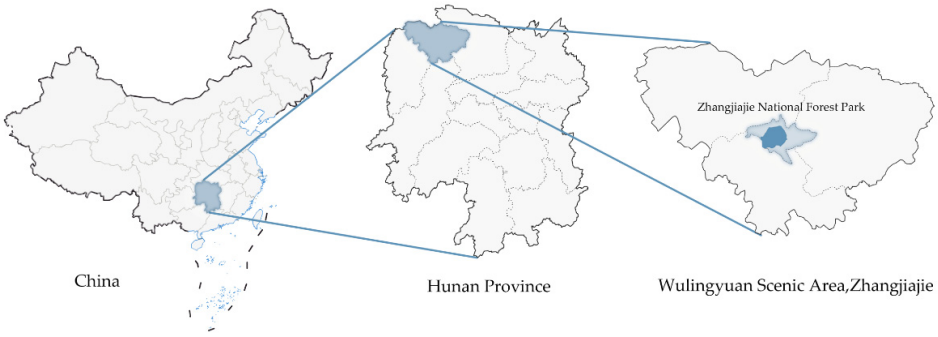

Figure 2. Location of the Zhangjiajie National Forest Park.

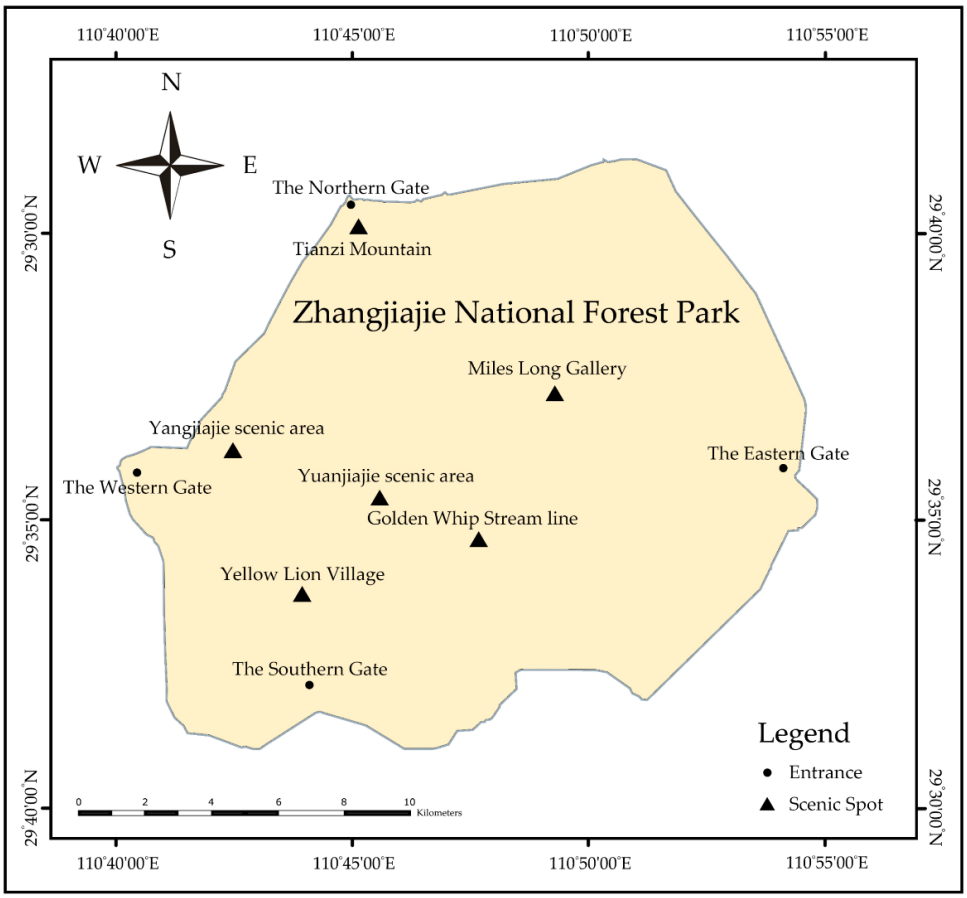

Figure 3. Overview of the area of the Zhangjiajie National Forest Park.

We categorize the comprehensive touristic setting of the Zhangjiajie National Forest Park into three types as follows: "natural environment", "humanistic environment", and "economic environment" (Table 1).

Table 1. Touring Environments of the Zhangjiajie National Forest Park.

Tour Environment Classification	Items
Natural Environment	Rock formations, wildlife, waterfalls, streams, fresh air, etc.
Humanistic Environment	Humanistic landscapes such as Sky Fields, Helong Park, Tianzi Pavilion, Wulong Stockade, etc.
Economic Environment	Scenic facilities (including the Bailong Elevator, Ten-Mile Gallery Mini-Train, cable cars, hiking trails, viewing platforms, signposts, visitor centers, souvenir shops, restrooms, etc.), surrounding unique eateries, characteristic accommodations, convenient dining options, and business hotels.

2.3. Data Collection

The survey specifically targeted travelers who explored the tour routes of the Zhangjiajie National Forest Park, encompassing both individual travelers and those in organized tour groups. In August 2023, the research team executed a rigorously designed questionnaire distribution campaign, deploying a total of 480 questionnaires to intricately capture the aesthetic experiences of visitors within the park. This endeavor specifically concentrated on garnering insights into the experiences associated with several tourism facilities that warranted comprehensive investigation within the scope of the study. To ensure authenticity and reliability, our comprehensive approach included surveys at key park entrances and exits, collaboration with tour guides, and partnerships with hotel staff, thereby addressing the varied experiences of visitors. Key strategies included the following: (1) Visitor confirmation screening: a filtering question at the start of each survey confirmed that respondents had visited specific park sites, ensuring direct relevance to the service infrastructure of Zhangjiajie National Forest Park and enhancing data accuracy. (2) Validation at park entrances and exits: Considering the unique layout of the Park, where different recreational routes guide visitors through specific gates, researchers strategically positioned survey teams at the exits and entrances of the park's east and west gates and distributed 160 questionnaires. This placement allowed the teams to interact with visitors at pivotal moments of their visit, ensuring the inclusion of only those who had genuinely experienced these primary park routes in the survey. (3) Tour guide collaboration: A total of 160 questionnaires were disseminated through tour guides who facilitated the survey process with tourists in their groups. This collaboration not only ensured that the respondents were part of an organized visit but also allowed for a guided reflection on their experiences, contributing to the authenticity of the feedback received. (4) Partnership with hotels: An additional 160 questionnaires were disseminated across three hotels, capturing diverse consumer perspectives. Hotel staff ensured that respondents were genuine guests, covering a broad spectrum of park services. (5) Language accessibility: Considering the international appeal of the park, the survey questionnaires were provided in both Chinese and English versions, eliminating language barriers and inviting a wider audience to share their experiences. After a week of data collection, we accumulated 446 valid questionnaire responses, achieving a 93% response rate, the following are the descriptive statistical results (Table 2). This comprehensive approach ensured the validity of the respondents' visits to the park's service infrastructure and the quality and reliability of the data collected.

Table 2. Descriptive statistical results.

Indicator	Item	Frequency	%
Gender	Male	239	53.5
	Female	207	46.5
Age	Under 20	25	5.7
	21–30	70	15.8
	31–40	252	56.4
	41 and above	99	22.1

Table 2. *Cont.*

Indicator	Item	Frequency	%
Education	High school and below	53	34.4
	College and undergraduate	242	54.2
	Postgraduate and above	51	11.4
Household monthly income	Under 1500	50	11.1
	1501–3000	76	17.1
	3001–5000	151	33.9
	5001–8000	87	19.4
	8000 above	82	18.5
Frequency	1	397	89
	2–3	37	8.4
	>3	12	2.6
Nationality	National	423	94.8
	International	23	5.2

2.4. Questionnaire Design

In this study, data collection was facilitated through a carefully designed survey questionnaire aimed at capturing the aesthetic leisure experiences of visitors to the Zhangjiajie National Forest Park. The questionnaire was systematically divided into five distinct sections (for detailed information, refer to Appendix A). The first section was dedicated to collecting essential demographic information from the participants, ensuring an understanding of the respondent profile. The second section was specifically designed to gain a deeper understanding of the participants' aesthetic expectations, which are conceptualized as their anticipation of the aesthetic quality experienced in the overall tour environment. Consequently, this section was meticulously adapted from the mature scale developed by Breiby and Slåtten, which measures the aesthetic experience quality of destinations, encompassing 19 items [21]. The research team reorganized the order of the questions to align with the context of aesthetic expectations and correspond with the categorization of the park's natural, cultural, and commercial environments. The third section paralleled the second and focused on assessing the actual aesthetic experiential quality post-visit, utilizing a rephrased version of the same 19 items to capture the evolution in perceptions. The fourth section based on Bhattacherjee's three-item tool [38] was customized to evaluate the confirmation of aesthetic expectations within the context of the park. The fifth section measured tourist satisfaction using a scale derived from Yuksel, Yuksel, and Bilim's study to understand visitors' satisfaction levels [52].

Prior to data collection, the research team conducted a pilot test to refine and validate the survey questionnaire. At the end of July 2023, a cohort of 20 individuals participated in the pilot test (comprising 2 international tourists and 18 domestic tourists). Based on the results of this test, adjustments were made to the survey questionnaire, which was subsequently confirmed. The final items are listed in Appendix A. With the exception of the first section, participants were asked to express their level of agreement using a 5-point Likert scale (1 = strongly disagree/very poor and 5 = strongly agree/very good). Due to the difficulty in maintaining contact with the respondents before and after their travels, this tool was only used once after the trip concluded.

2.5. Data Analysis Methods

The empirical testing of the theoretical model in this study was performed using statistical software such as SPSS 19.0, SPSSAU23.0, and AMOS 24.0. Firstly, this study conducted an analysis of the validated questionnaire data to verify the internal consistency and reliability of the scales, which was followed by an application of exploratory factor analysis (EFA) to assess construct validity. Next, this study conducted confirmatory factor analysis (CFA) to evaluate the reliability and validity of the overall measurement model encompassing the eight key variables. Lastly, structural equation modeling (SEM) was

utilized to test the structural relationships between aesthetic expectations, aesthetic experience quality, expectation confirmation, and satisfaction, exploring the mechanism of the impact of tourism aesthetics on satisfaction within the framework of the Expectation Confirmation Theory.

3. Results

3.1. Data Analysis

The Cronbach's α coefficient for the entire scale is 0.913, indicating high reliability, thereby enabling further data analysis. The scale's KMO value is 0.842, meeting the recommended threshold of 0.8 or above [53]. The Bartlett's sphericity test resulted in a significant level, thereby suggesting the suitability of the sample data for factor analysis. Detailed data can be found in Table 3.

Table 3. Reliability and validity test.

Cronbach's Alpha	KMO	Bartlett's Sphericity Test	Df	Sig.
0.913	0.842	12,385.67	946	0.000

For further validation of the overall construct validity of the measurement data, this study employed principal component factor analysis. The factor matrix, determined by orthogonal rotation using the maximum variance method, identified the factor attribution for each scale. Please refer to Tables 4–6 for further information. According to the table below, all factor loadings corresponding to each latent variable are above 0.7. This suggests that each item associated with the latent variables adequately represents the content of the research.

Table 4. Rotating component matrix of the aesthetic expectations.

Items	Factor Loading		
	Aesthetic Expectations of the Natural Environment	Aesthetic Expectations of the Humanistic Environment	Aesthetic Expectations of the Economic Environment
AEN1	0.746		
AEN2	0.813		
AEN3	0.678		
AEN4	0.779		
AEN5	0.723		
AEN6	0.785		
AEH1		0.734	
AEH2		0.687	
AEH3		0.774	
AEH4		0.719	
AEE1			0.798
AEE2			0.732
AEE3			0.857
AEE4			0.809
AEE5			0.692
AEE6			0.787
AEE7			0.679
AEE8			0.739
AEE9			0.731

Table 5. Rotating component matrix of the aesthetic experiential qualities.

Items	Factor Loading		
	Aesthetic Experiential Qualities of the Natural Environment	Aesthetic Experiential Qualities of the Humanistic Environment	Aesthetic Experiential Qualities of the Economic Environment
AEQN1	0.749		
AEQN2	0.824		
AEQN3	0.688		
AEQN4	0.767		
AEQN5	0.731		
AEQN6	0.776		
AEQH1		0.739	
AEQH2		0.691	
AEQH3		0.776	
AEQH4		0.713	
AEQE1			0.792
AEQE2			0.736
AEQE3			0.843
AEQE4			0.811
AEQE5			0.687
AEQE6			0.792
AEQE7			0.674
AEQE8			0.738
AEQE9			0.729

Table 6. Rotating component matrix of the aesthetic expectation confirmation and satisfaction.

Items	Factor Loading	
	Aesthetic Expectation Confirmation	Satisfaction
AEC1	0.764	
AEC2	0.725	
AEC3	0.747	
SA1		0.789
SA2		0.806
SA3		0.796

3.2. Common Method Bias Test

Because the data for questionnaire items originated from the same individual respondent, there may be instances of blind filling out or difficulties in distinguishing between different questions. This situation might lead to spurious correlations between research constructs and internal consistency, constituting the common method bias problem. To effectively mitigate this issue, the questionnaire design should utilize clear and straightforward language, ensuring that respondents can easily comprehend all the questionnaire items and provide clear, rational responses. Additionally, using a paginated layout in the questionnaire design allow respondents to have buffering time while answering, which can help create psychological separation during the response process. Moreover, to ensure the questionnaire's confidentiality, using a strictly anonymous format where the data collected are solely used for research purposes and remain confidential ensures that respondents feel comfortable providing their responses. Implementing these strategies is fundamental for addressing the issue of the common method bias. Additionally, after the completion of questionnaire data collection, Harman's single-factor test was utilized for empirically detecting the common method bias. The largest factor explained 30.87% of the variance, which falls below the threshold of 40% and is thus deemed acceptable.

3.3. Overall Measurement Model

Prior to hypothesis testing, a confirmatory factor analysis (CFA) was conducted utilizing the Maximum Likelihood Method (MLM) to examine the structural validity of the overall measurement model [54]. The proposed CFA achieved a good fit as follows: χ^2 = 2619.474, df = 946, CFI = 0.915, TLI = 0.934, RMSEA = 0.045, IFI = 0.923, and NFI = 0.902. Hence, according to the CFA results in Table 7, the overall fit indices of the factor measurement model meet the requirements for model adequacy, demonstrating a good fit of the measurement model.

Table 7. Test of the degree of fit of the structural equation model.

MIN/DF	RMSEA	CFI	IFI	TLI	NFI
2.769	0.045	0.915	0.923	0.934	0.902

The evaluation of convergence validity involved using the standardized loadings of individual latent variable measurements along with their average extracted variance (EA) [55]. As shown in Table 8, all factor loadings are higher than the minimum threshold of 0.5 [56], and the majority are above 0.7. The CR (Composite Reliability) values of the constructs exceed the recommended threshold of 0.7, and all the AVE (average variance extracted) values are notably higher than 0.5 [57]. Therefore, these results suggest the establishment of convergent validity for the measurement model. Regarding measurement reliability, all the constructs exhibit Cronbach's α values above 0.7, demonstrating sufficient internal consistency [58].

Table 8. Results of the validation factor analysis.

Factor	Items	Estimate	α	CR	AVE
Aesthetic Expectations of the Natural Environment	AEN1	0.746	0.856	0.910	0.629
	AEN2	0.813			
	AEN3	0.792			
	AEN4	0.812			
	AEN5	0.789			
	AEN6	0.805			
Aesthetic Expectations of the Humanistic Environment	AEH1	0.794	0.879	0.857	0.600
	AEH2	0.714			
	AEH3	0.802			
	AEH4	0.786			
Aesthetic Expectations of the Economic Environment	AEE1	0.835	0.903	0.926	0.581
	AEE2	0.754			
	AEE3	0.747			
	AEE4	0.816			
	AEE5	0.732			
	AEE6	0.796			
	AEE7	0.698			
	AEE8	0.728			
	AEE9	0.746			
Aesthetic Experiential Qualities of the Natural Environment	AEQN1	0.785	0.847	0.907	0.618
	AEQN2	0.839			
	AEQN3	0.734			
	AEQN4	0.796			
	AEQN5	0.743			
	AEQN6	0.816			
Aesthetic Experiential Qualities of the Humanistic Environment	AEQH1	0.775	0.871	0.848	0.583
	AEQH2	0.733			
	AEQH3	0.804			
	AEQH4	0.739			

Table 8. *Cont.*

Factor	Items	Estimate	α	CR	AVE
Aesthetic Experiential Qualities of the Economic Environment	AEQE1	0.867	0.901	0.925	0.581
	AEQE2	0.707			
	AEQE3	0.746			
	AEQE4	0.823			
	AEQE5	0.705			
	AEQE6	0.784			
	AEQE7	0.698			
	AEQE8	0.745			
	AEQE9	0.765			
Aesthetic Expectation Confirmation	AEC1	0.812	0.825	0.847	0.648
	AEC2	0.798			
	AEC3	0.805			
Satisfaction	SA1	0.832	0.817	0.877	0.705
	SA2	0.867			
	SA3	0.819			

Discriminant validity is determined by comparing the square root of the average variance extracted from the latent variables with the absolute values of the correlation coefficients among the variables. If the square root of the average variance extracted from latent variables exceeds the latter, it indicates good discriminant validity among the variables. The results in Table 9 indicate significant associations among all the variables, with absolute correlation coefficients lower than 0.5. Moreover, the finding that the standardized correlation coefficients are lower than the square root of the corresponding dimension's AVE value implies a certain degree of both correlation and discriminant validity among the latent variables. The results of this correlation analysis also provide evidence for the proposed path model in this study.

Table 9. Results of correlation analysis.

Items	1	2	3	4	5	6	7	8
1 AEN	0.793							
2 AEH	0.312	0.767						
3 AEE	0.309	0.377	0.766					
4 AEQN	0.196	0.144	0.158	0.786				
5 AEQH	0.178	0.181	0.166	0.294	0.751			
6 AEQE	0.169	0.182	0.191	0.311	0.352	0.771		
7 AEC	−0.326	−0.287	−0.405	0.317	0.265	0.409	0.805	
8 SA	−0.425	−0.378	−0.439	0.427	0.364	0.445	0.794	0.840

3.4. Structural Equation Modeling (SEM) Analysis

The proposed hypotheses were tested using the structural equation modeling (SEM) method with the MLM in AMOS 24.0. The results (Table 10) supported 11 out of the 16 direct relationships proposed. Specifically, the aesthetic expectations of the natural environment ($\beta = -0.319$, $p < 0.05$), humanistic environment ($\beta = -0.224$, $p < 0.01$), and economic environment ($\beta = -0.195$, $p < 0.05$) have significant negative impacts on satisfaction, supporting H1a, H1b, and H1c. Aesthetic experiential qualities of the natural environment ($\beta = 0.327$, $p < 0.01$), humanistic environment ($\beta = 0.194$, $p < 0.01$), and economic environment ($\beta = 0.377$, $p < 0.05$) have significant positive effects on satisfaction, supporting H3a, H3b, and H3c. Aesthetic expectations of the natural environment ($\beta = -0.212$, $p < 0.01$), humanistic environment ($\beta = -0.158$, $p < 0.01$), and economic environment ($\beta = -0.277$, $p < 0.05$) significantly negatively impact aesthetic expectation confirmation, supporting H4a, H4b, and H4c. Aesthetic experiential qualities of the natural environment ($\beta = 0.275$, $p < 0.001$), humanistic environment ($\beta = 0.178$, $p < 0.01$), and economic environment

(β = 0.394, $p < 0.001$) significantly positively influence aesthetic expectation confirmation, supporting H5a, H5b, and H5c. Finally, aesthetic expectation confirmation (β = 0.624, $p < 0.001$) has a significant positive effect on satisfaction, supporting H6.

Table 10. Hypotheses tests.

Hypotheses	Path	Estimate	S.E.	C.R.	*p*	Result
H1a	AEN → SA	−0.319	0.062	−5.145	*	Y
H1b	AEH → SA	−0.224	0.038	−5.895	**	Y
H1c	AEE → SA	−0.195	0.041	−4.318	*	Y
H2a	AEN → AEQN	0.029	0.044	0.657	0.409	N
H2b	AEH → AEQH	0.031	0.064	0.481	0.503	N
H2c	AEE → AEQE	0.026	0.075	0.344	0.427	N
H3a	AEQN → SA	0.327	0.042	7.788	**	Y
H3b	AEQH → SA	0.194	0.037	5.248	**	Y
H3c	AEQE → SA	0.377	0.051	7.398	*	Y
H4a	AEN → AEC	−0.212	0.038	−5.597	**	Y
H4b	AEH → AEC	−0.158	0.050	−3.161	**	Y
H4c	AEE → AEC	−0.277	0.063	−4.397	**	Y
H5a	AEQN → AEC	0.275	0.072	3.819	***	Y
H5b	AEQH → AEC	0.178	0.053	5.084	**	Y
H5c	AEQE → AEC	0.394	0.071	5.547	***	Y
H6	AEC → SA	0.624	0.051	12.234	***	Y

Note: *, **, *** means the following: $p < 0.05$, $p < 0.01$, $p < 0.001$

The aesthetic expectations of the natural environment (β = 0.029, $p = 0.409$), humanistic environment (β = 0.031, $p = 0.503$), and economic environment (β = 0.026, $p = 0.427$) do not significantly influence aesthetic experience quality, rejecting H2a, H2b, and H2c (Figure 4).

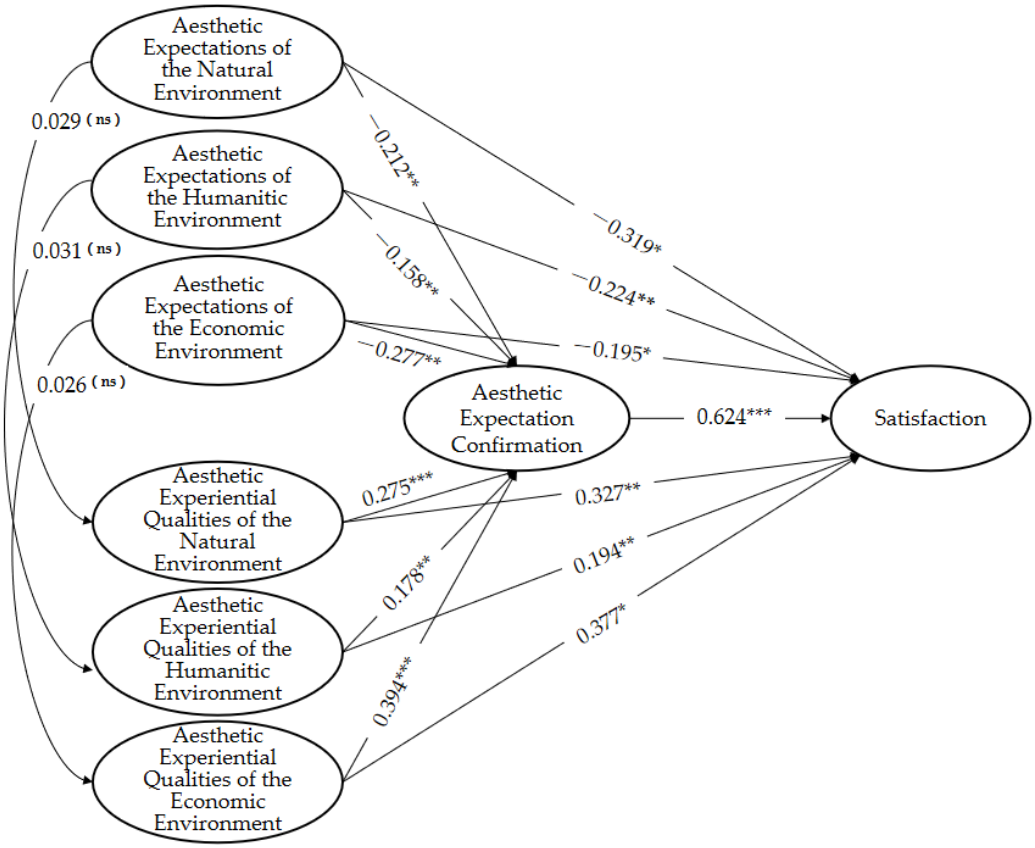

Figure 4. Path analysis results. Note 1: ns means non-significant; * means $p < 0.05$; ** means $p < 0.01$; and *** means $p < 0.001$.

3.5. Indirect Effect Analysis

As depicted in the figure above, satisfaction is directly influenced by aesthetic expectation confirmation, which is, in turn, directly influenced by both aesthetic expectations and aesthetic experiential qualities. Additionally, aesthetic expectations and aesthetic experiential qualities have direct impacts on satisfaction. In this model, aesthetic expectations and aesthetic experiential qualities serve as mediators of satisfaction. To test the mediation effects, bootstrap sampling and analysis were conducted to obtain indirect effect values. The results, which are shown in Table 11, indicate that the natural environment's aesthetic experiential qualities indirectly influence satisfaction through aesthetic expectation confirmation (95% CI: 0.0043–0.077). Similarly, the humanistic environment's aesthetic experiential qualities indirectly affect satisfaction through aesthetic expectation confirmation (95% CI: 0.002–0.031). Furthermore, the commercial environment's aesthetic experiential qualities indirectly impact satisfaction through aesthetic expectation confirmation (95% CI: 0.015–0.102).

Table 11. Results of indirect effect analysis.

Path	Indirect Effect	Boot S.E	Boot LLCI	Boot ULCI	*p*
AEN → AEC → SA	−0.074	0.019	−0.130	−0.057	0.000
AEH → AEC → SA	−0.050	0.016	−0.096	−0.034	0.002
AEE → AEC → SA	−0.033	0.011	−0.067	−0.013	0.000
AEQN → AEC → SA	0.029	0.009	0.004	0.077	0.000
AEQH → AEC → SA	0.011	0.005	0.002	0.031	0.003
AEQE → AEC → SA	0.047	0.018	0.015	0.102	0.000

According to the analysis of the direct and indirect effects mentioned above, the overall impact of aesthetic expectations and aesthetic experiential qualities on tourist satisfaction is summarized separately in Tables 12 and 13.

Table 12. Direct, indirect, and total effects of the relationship between aesthetic expectations and satisfaction.

Path	Direct Effect	Indirect Effect	Total Effect	Sort
AEN → SA	−0.319	−0.074	−0.393	1
AEH → SA	−0.224	−0.050	−0.274	2
AEE → SA	−0.195	−0.033	−0.228	3

Table 13. Direct, indirect, and total effects of the relationship between aesthetic quality perception and satisfaction.

Path	Direct Effect	Indirect Effect	Total Effect	Sort
AEQN → SA	0.327	0.029	0.356	2
AEQH → SA	0.194	0.011	0.205	3
AEQE → SA	0.377	0.047	0.424	1

Based on the table provided, the order of impact from highest to lowest regarding the factors influencing tourist satisfaction through aesthetic expectations is as follows: aesthetic expectation of the natural environment −0.393, aesthetic expectation of the humanistic environment −0.274, and aesthetic expectation of the commercial environment −0.228.

Based on the provided table, the order of impact from highest to lowest regarding the factors influencing tourist satisfaction through aesthetic experience quality is as follows: aesthetic experiential qualities of the commercial environment 0.424, aesthetic experiential qualities of the natural environment 0.356, and aesthetic experiential qualities of the humanistic environment 0.205.

4. Discussion

This manuscript, grounded in the Expectation Confirmation Theory (ECT), develops and validates a conceptual model for confirming aesthetic expectations. It examines tourists' pre-visit aesthetic expectations of the Zhangjiajie National Forest Park, their in-visit aesthetic experience quality, and their post-visit confirmation of these expectations. Additionally, the study explores the interconnectedness of these factors and their combined effect on overall satisfaction.

This study found that aesthetic expectations have a direct negative impact on satisfaction. This could be attributed to the possibility that tourists' high anticipations, particularly regarding the park's natural beauty, may not always be met, leading to a sense of disappointment. In contrast, the quality of aesthetic experiences exerts a direct positive influence on satisfaction. This highlights the crucial role of actual experiential qualities in shaping tourists' overall contentment. Furthermore, the study illuminates the key role of aesthetic expectation confirmation as a mediator in this relationship. Aesthetic expectations indirectly diminish satisfaction when they are not met as per the principles of the ECT. This is evident when tourists compare their anticipated aesthetic levels with the actual experience at the destination, forming a benchmark that significantly influences their satisfaction. Conversely, when the aesthetic experiences exceed their initial expectations, a positive confirmation occurs, thereby enhancing their satisfaction. This dynamic interplay between expectations, actual experiences, and their confirmation not only corroborates Oliver and Linda's perspective on expectations mirroring the anticipated service levels [47] but also aligns with Keyser et al.'s findings on the impact of expectation–performance gaps [51]. Our study thus emphasizes the relevance of the ECT in comprehending the complexities of aesthetic perception and its profound impact on tourists' evaluations and experiences.

This study also unveils a series of notable findings. To further interpret these results, we conducted semi-structured interviews with a range of industry insiders, including local B&B hotel operators, hotel managers, park administrators, and experienced tour guides, who have profound insights into the park's infrastructure, visitor behavioral dynamics, and aesthetic elements. The interviews predominantly focused on exploring tourists' pre-visit aesthetic expectations, the actual quality of their aesthetic experiences during the visit, and their resultant overall satisfaction, providing a comprehensive understanding of the interplay between these elements.

The first discovery contradicted our initial hypotheses and diverged from previous research, revealing that aesthetic expectations do not markedly influence the quality of aesthetic experiences. Insights gleaned from the interviews illuminated two key points as follows: (1) the renowned natural environment of the Zhangjiajie National Forest Park eclipses the less developed aesthetic facets of its cultural and economic environments; (2) in the realm of the economic environment, aesthetic planning and governance are comparatively nascent, lacking distinctive merits when juxtaposed with other destinations. As a result, local marketing initiatives predominantly accentuate the natural environment. This developmental disparity and the consequent pivot in marketing emphasis might elucidate why visitors' aesthetic expectations, which are primarily molded by the park's natural charm, do not substantially alter their perception of the park's overarching aesthetic quality.

The second significant finding of this study is the existence of a pronounced hierarchy in the impact of tourists' aesthetic expectations of the natural, cultural, and economic environments on their overall satisfaction. Specifically, the natural environment exerts the most substantial influence on tourist satisfaction, which was followed by the cultural environment, while the economic environment has a comparatively lesser impact. Interviews elucidated that the uniqueness of the natural environment coupled with focused marketing strategies substantially mold the stratified influence of the aesthetic expectations on overall tourist satisfaction, highlighting the intricate interplay between environmental attributes and marketing efforts.

The third discovery relates to the distinct impact of tourists' aesthetic experience quality on their satisfaction. It emerged that the quality of aesthetic experiences within the

economic environment serves as the most influential factor, surpassing that of the natural environment, while the cultural environment exerts a relatively minor impact. Interview findings indicate that the significant role of aesthetic experience quality in the economic environment reflects how tourists' aesthetic standards for the economic environment are profoundly influenced by their prior travel experiences, which largely determine their appraisal of the aesthetic experience quality of the current trip.

This study enhances the comprehension of the interplay between aesthetic expectations and the quality of aesthetic experiences within forest park recreation and how these elements collectively contribute to shaping the overall satisfaction of visitors. It provides a deeper insight into the relationship between the aesthetic experiential quality of a forest park's visiting environment and tourists' satisfaction. This research underlines the role of aesthetic quality as a key factor in destination competitiveness and value creation in the tourism industry. Importantly, research findings have practical implications for destination marketers and managers. They can utilize this knowledge to devise strategies that enhance the aesthetic experiential quality of tourists in forest parks, thereby boosting overall satisfaction. Additionally, by exploring these dynamics, this study contributes to the theoretical framework of tourism research specifically in understanding the interplay of aesthetic elements in shaping tourist experiences and satisfaction. Such insights are relevant for both academic research and practical applications in the evolving field of nature-based tourism.

5. Conclusions, Contributions, and Study Limitations

5.1. Conclusions

This manuscript delves into the dynamics between aesthetic expectations, the quality of aesthetic experiences, and their combined effect on tourist satisfaction within the context of the Zhangjiajie National Forest Park. The study validates the measurement model, ensuring the research sample's adequacy for factor analysis and affirming the structural integrity of the investigation. The findings indicate that although aesthetic expectations related to the natural, humanistic, and economic dimensions might impinge negatively on satisfaction, the caliber of aesthetic experiences encountered during forest recreation exerts a positive impact on both the confirmation of aesthetic expectations and, subsequently, on overall satisfaction. This highlights the complex interplay and significant influence of both expectations and experiences in shaping tourist satisfaction. Furthermore, the mediation analysis illuminates the subtle, indirect routes through which the quality of aesthetic experiences contributes to satisfaction, which is mediated by the confirmation of aesthetic expectations, thus unraveling the intricate relationships between these pivotal constructs.

5.2. Contributions

This manuscript extends the research scope of forest recreation aesthetics to some extent. It pioneers the integration of "aesthetic expectations" into this field, moving beyond the traditional confines of marketing and delving into its relationship with aesthetic experience quality and satisfaction. By empirically testing a model of aesthetic expectation confirmation, our research illuminates the intricate dynamics between these variables, thus enriching our comprehension and strategic management of aesthetic elements in forest recreation. This innovative approach not only lays the groundwork for future research in forest recreation aesthetics but also paves the way for exploring aesthetic expectations in broader tourism and leisure contexts.

The second contribution of this manuscript involves clarifying the mediating roles between aesthetic expectations and satisfaction as well as between aesthetic experience quality and satisfaction. By conducting an in-depth analysis, this study discovered that aesthetic expectation confirmation acts as a pivotal mediator. Aesthetic expectation confirmation is based on comparing tourists' expected aesthetic standards with the actual aesthetic experience quality. When tourists perceive that their actual aesthetic experiences surpass their initial expectations, this leads to positive aesthetic expectation confirmation, thereby enhancing satisfaction. Conversely, experiences that fall short of expectations

result in negative confirmation, potentially leading to dissatisfaction. However, the existing literature has paid little attention to managing the differences in aesthetic perceptual performance and the mediating role of aesthetic expectation confirmation between aesthetic expectations and satisfaction as well as between aesthetic experience quality and satisfaction. This study supplemented this examination by investigating the mediating role of aesthetic expectation confirmation. The understanding of the mediating role of aesthetic expectation confirmation not only provides insights into the dynamics of these relationships but also extends the explanatory power of the ECT into the field of tourism aesthetics. This expansion of the theory underscores its relevance and practicality in understanding and managing aesthetic perceptions and experiences in the domain of forest recreation and beyond, paving the way for future research to further explore and validate these relationships in diverse tourism contexts.

In addition to its theoretical significance, this study also provides valuable insights for local tourism businesses and park managers. The findings underscore the pivotal role of aesthetic quality in shaping tourist satisfaction, prompting a strategic shift in park management practices. Specifically, there is a pressing need to enhance the quality of visitors' aesthetic experiences with a particular emphasis on economic and cultural dimensions. This strategic realignment is crucial in boosting overall satisfaction and solidifying the park's status as a top-tier destination, thereby aligning operational strategies with visitor expectations and experiences as follows: (1) Formulate and execute all-encompassing aesthetic enhancement initiatives that extend beyond the natural landscape to encompass the economic and cultural facets of the park. This strategy should include the modernization of infrastructure and the enhancement of aesthetic quality for hotels, restaurants, and additional amenities within the park's precincts. (2) Refine marketing strategies to convey a realistic yet compelling portrayal of the park's offerings. Ensure that promotional materials accurately reflect the aesthetic experience tourists can expect, thereby aligning their pre-visit expectations with the actual in-park experience and reducing the likelihood of disappointment. (3) Establish robust mechanisms for collecting and analyzing feedback from tourists regarding their aesthetic experiences. Use this feedback to inform continuous improvements in the park's aesthetic offerings, ensuring that the park remains responsive to the changing needs and expectations of its visitors.

5.3. Study Limitations

Limitations of this study include the following: (1) The use of cross-sectional data may introduce retrospective bias when recalling past experiences. Future longitudinal studies may help to mitigate such biases in investigating the process of aesthetic expectation confirmation and overall satisfaction. (2) The study's focus on specific tourist routes might limit its applicability to other forest parks and nature tourism sites. To enhance generalizability, future research could extend the research tools to diverse environments for robust construct validation. (3) Uncertainty remains regarding the universal applicability of aesthetic quality perception, expectation confirmation, and satisfaction across various contexts (e.g., cross-cultural settings and different management areas). Therefore, further research exploring these areas may extend the study's scope. (4) Both variability in the weather and the quality of guide services can significantly shape perceptions of natural beauty and overall satisfaction. Future research should incorporate these factors to fully understand their contribution to enriching the aesthetic experience in forest recreation settings. (5) Although this research introduced the notion of aesthetic expectation confirmation in the context of forest recreation experiences, the examination of this multifaceted concept was not comprehensive. The mechanisms through which aesthetic expectations are validated or refuted during such experiences demand deeper investigation. Future studies should delve into these intricate interactions, thoroughly exploring the genesis and validation of expectations and their consequential effects on overall satisfaction.

Author Contributions: Conceptualization, Y.W.; methodology, Y.W.; software, H.L.; validation, Y.W.; formal analysis, Y.W.; investigation, Y.W. and H.L.; resources, F.L.; data curation, H.L.; writing—original draft preparation, Y.W.; writing—review and editing, Y.W. and F.L.; visualization, Y.W.; supervision, F.L.; project administration, F.L. All authors have read and agreed to the published version of the manuscript.

Funding: This research was supported by the National Social Science Foundation (No. 21BGL154), National Education Ministry New Liberal Arts Research and Reform Practice Project (No. 2021090068), Department of Science and Technology of Hunan Province Foundation (No. 2021NK4262), Hunan Forestry Science and Technology Innovation Fund Project (No. XLKY202219), and Hunan Province Social Science Achievement Review Committee's Research Project (No. XSP2023YSZ023).

Data Availability Statement: Appendix A contains the data presented in this study. All subjects involved in the study have given their informed consent.

Acknowledgments: We thank all the experts and friends who participated in the interviews and surveys, which are highly appreciated.

Conflicts of Interest: Hao Li is employed by China Mobile Communications Group Design Institute Co., Ltd., but he participated in this research solely due to his personal interest in tourism. His employer's company was not involved in this study, and there is no relevance between this research and their company.

Appendix A

An investigation of the impact of aesthetic expectations and aesthetic Experiential Qualities on Satisfaction among Visitors to Zhangjiajie National Forest Park.

Dear Friends:

Hello!

This is a questionnaire about the impact of visitors' aesthetic expectations and aesthetic experiential qualities on their personal satisfaction during recreational activities in a forest park. Using the Zhangjiajie National Forest Park as the survey site, this questionnaire has 4 sides and consists of 5 parts: demographic background, Aesthetic Expectations, Aesthetic Experiential Qualities, Aesthetic Expectation Confirmation, and Satisfaction. Please mark the boxes that correspond to the relevant information in the questionnaire as appropriate. All information you provide will be kept confidential and will only be used for academic research purposes. We appreciate your active support and patient participation, and we anticipate that this will take 10 min of your time. Thank you!

Part I: Demographic context (please check the relevant box)

1. What is your gender? ☐ Female ☐ Male

2. Your age? ☐ Under 18 ☐ 18–30 ☐ 31–39 ☐ 40+

3. What is your educational level? ☐ High school and secondary school ☐ College and undergraduate ☐ Postgraduate and above

4. What is your profession? ☐ Student ☐ Civil servant ☐ Freelance ☐ Teacher ☐ Company employee ☐ Private owner ☐ Retired ☐ Others

5. What is your monthly earnings per capita? (Unit: CNY) ☐ 1500 and below ☐ 1501–3000 ☐ 3001–5000 ☐ 5001–8000 ☐ 8000 and above

6. How many times has this been your visit to Zhangjiajie? ☐ First time ☐ Second time ☐ Third time and more

7. Where are you from? ☐ China ☐ Other country

Part II: Aesthetic Expectations, Aesthetic Experiential Qualities, Aesthetic Expectation Confirmation, and Satisfaction measurement project. Every option is divided into Strongly Disagree, Disagree, Medium, Agree, Strongly Agree. Please underline "√" in the corresponding ones.

Scale			Question
Aesthetic Expectations	Aesthetic Expectations of the Natural Environment		Please recall the moment before you first intended to go to the Zhangjiajie National Forest Park. . .
		AEN1	I expected the experience at the forest park to be silence and calm.
		AEN2	I expected the natural landscape of the forest park to be good.
		AEN3	I expected good opportunities to observe wildlife at the forest park.
		AEN4	I expected the natural environment along the forest park trails to be pure.
		AEN5	I expected the natural environment of the forest park to be unspoiled. (e.g., unpolluted water and air)
		AEN6	I expected to encounter flora in the natural surroundings of the forest park.
	Aesthetic Expectations of the Human Environment	AEH1	I expected the arranged viewpoints along the forest park route to provide excellent scenic views.
		AEH2	I expected to have good views of the cultural landscape of the forest park.
		AEH3	I expected to indulge in the local dishes during the trip.
		AEH4	I expected minimum of litter along the forest park route.
	Aesthetic Expectations of the Economic Environment	AEE1	I expected the interior of the shopping stores to harmonize with the outdoor surroundings.
		AEE2	I expected to have accommodations close to nature during the trip.
		AEE3	I expected to experience businesses' architecture harmonized with landscape during the trip.
		AEE4	I expected businesses to reflect traditions during the trip.
		AEE5	I expected the businesses of the forest park to be clean.
		AEE6	I expected the facilities at viewpoints to enhance the experience of nature.
		AEE7	I expected the signage in the forest park to be artistic.
		AEE8	I expected the shopping stores to feature local characteristics and artistic elements.
		AEE9	I expected businesses to be artistically conscious.
Aesthetic Experiential Qualities	Aesthetic Experiential Qualities of the Natural Environment	AEQN1	I experienced the silence and calm of nature at Zhangjiajie National Forest Park.
		AEQN2	I experienced a good natural landscape at Zhangjiajie National Forest Park.
		AEQN3	I experienced good opportunities to observe wildlife at the forest park.
		AEQN4	I experienced the natural environment along the forest park trails to be pure.
		AEQN5	I experienced the natural environment of the forest park to be unspoiled. (e.g., unpolluted water and air)
		AEQN6	I encountered flora in the natural surroundings of the forest park.
	Aesthetic Experiential Qualities of the Humanistic Environment	AEQH1	I experienced the arranged viewpoints along the forest park route to provide excellent scenic views.
		AEQH2	I enjoyed the good views of the cultural landscape of the forest park during the trip.
		AEQH3	I indulged in the local dishes during the trip.
		AEQH4	I experienced a minimal amount of litter along the forest park route.
	Aesthetic Experiential Qualities of the Economic Environment	AEQE1	I experienced the shopping stores' interior harmonized with outdoor surroundings.
		AEQE2	I experienced to have accommodations close to nature during the trip.
		AEQE3	I experienced the harmony between architecture and natural landscapes during the trip.
		AEQE4	I experienced businesses to reflect traditions during the trip.
		AEQE5	I experienced the businesses of the forest park to be clean.
		AEQE6	I experienced the facilities at viewpoints to enhance the experience of nature.
		AEQE7	I experienced the signage in the forest park to be artistic.
		AEQE8	I experienced the shopping stores to feature local characteristics and artistic elements.
		AEQE9	I experienced businesses to be artistically conscious.

Scale		Question
Aesthetic Expectations Confirmation	AEC1	My aesthetic experience in the forest park was better than what I expected.
	AEC2	The aesthetic management level provided by the forest park administrators was better than what I expected.
	AEC3	Overall, most of my aesthetic expectations regarding the forest park were confirmed.
Satisfaction	SA1	I am happy about my decision to tour Zhangjiajie National Forest Park.
	SA2	I believe I did the right thing when I chose to make my holiday in Zhangjiajie National Forest Park.
	SA3	Overall, I am satisfied with decision to make my holiday in Zhangjiajie National Forest Park.

References

1. Rodríguez del Bosque, I.; San Martín, H.; Collado, J.; del Mar García de los Salmones, M. A Framework for Tourist Expectations. *Int. J. Cult. Tour. Hosp. Res.* **2009**, *3*, 139–147. [CrossRef]
2. Hui, T.K.; Wan, D.; Ho, A. Tourists' Satisfaction, Recommendation and Revisiting Singapore. *Tour. Manag.* **2007**, *28*, 965–975. [CrossRef]
3. Huang, S.; Wang, X. COVID-19 Two Years on: A Review of COVID-19-Related Empirical Research in Major Tourism and Hospitality Journals. *Int. J. Contemp. Hosp. Manag.* **2023**, *35*, 743–764. [CrossRef]
4. Zopiatis, A.; Pericleous, K.; Theofanous, Y. COVID-19 and Hospitality and Tourism Research: An Integrative Review. *J. Hosp. Tour. Manag.* **2021**, *48*, 275–279. [CrossRef]
5. Ettman, C.K.; Abdalla, S.M.; Cohen, G.H.; Sampson, L.; Vivier, P.M.; Galea, S. Prevalence of Depression Symptoms in US Adults Before and During the COVID-19 Pandemic. *JAMA Netw. Open* **2020**, *3*, e2019686. [CrossRef]
6. Kim, Y.R.; Liu, A. Social Distancing, Trust and Post-COVID-19 Recovery. *Tour. Manag.* **2022**, *88*, 104416. [CrossRef]
7. Haukeland, J.V.; Grue, B.; Veisten, K. Turning National Parks into Tourist Attractions: Nature Orientation and Quest for Facilities. *Scand. J. Hosp. Tour.* **2010**, *10*, 248–271. [CrossRef]
8. Breiby, M.A.; Slåtten, T. The Role of Aesthetic Experiential Qualities for Tourist Satisfaction and Loyalty. *Int. J. Contemp. Hosp. Manag.* **2018**, *12*, 1–14. [CrossRef]
9. Breiby, M.A. Exploring Aesthetic Dimensions in Nature-Based Tourist Experiences. *Tour. Anal.* **2015**, *20*, 369–380. [CrossRef]
10. Marder, B.; Erz, A.; Angell, R.; Plangger, K. The Role of Photograph Aesthetics on Online Review Sites: Effects of Management- versus Traveler-Generated Photos on Tourists' Decision Making. *J. Travel Res.* **2021**, *60*, 31–46. [CrossRef]
11. Kirillova, K.; Chan, J. "What Is Beautiful We Book": Hotel Visual Appeal and Expected Service Quality. *Int. J. Contemp. Hosp. Manag.* **2018**, *30*, 1788–1807. [CrossRef]
12. Horng, J.-S.; Hsu, H. A Holistic Aesthetic Experience Model: Creating a Harmonious Dining Environment to Increase Customers' Perceived Pleasure. *J. Hosp. Tour. Manag.* **2020**, *45*, 520–534. [CrossRef]
13. Shamdasani, P.N.; Balakrishnan, A.A. Determinants of Relationship Quality and Loyalty in Personalized Services. *Asia Pac. J. Manag.* **2000**, *17*, 399–422. [CrossRef]
14. Thong, J.Y.L.; Hong, S.-J.; Tam, K.Y. The Effects of Post-Adoption Beliefs on the Expectation-Confirmation Model for Information Technology Continuance. *Int. J. Hum.-Comput. Stud.* **2006**, *64*, 799–810. [CrossRef]
15. del Bosque, I.R.; Martín, H.S. Tourist Satisfaction a Cognitive-Affective Model. *Ann. Tour. Res.* **2008**, *35*, 551–573. [CrossRef]
16. Weinstein, N.; Ryan, R.M. When Helping Helps: Autonomous Motivation for Prosocial Behavior and Its Influence on Well-Being for the Helper and Recipient. *J. Personal. Soc. Psychol.* **2010**, *98*, 222–244. [CrossRef] [PubMed]
17. Cohen, S.A.; Prayag, G.; Moital, M. Consumer Behaviour in Tourism: Concepts, Influences and Opportunities. *Curr. Issues Tour.* **2014**, *17*, 872–909. [CrossRef]
18. Ding, N.; Zhong, Y.; Li, J.; Xiao, Q. Study on Selection of Native Greening Plants Based on Eye-Tracking Technology. *Sci. Rep.* **2022**, *12*, 1092. [CrossRef] [PubMed]
19. Fredman, P.; Tyrväinen, L. Frontiers in Nature-Based Tourism. *Scand. J. Hosp. Tour.* **2010**, *10*, 177–189. [CrossRef]
20. Kirillova, K.; Fu, X.; Lehto, X.; Cai, L. What Makes a Destination Beautiful? Dimensions of Tourist Aesthetic Judgment. *Tour. Manag.* **2014**, *42*, 282–293. [CrossRef]
21. Breiby, M.A.; Slåtten, T. The Effects of Aesthetic Experiential Qualities on Tourists' Positive Emotions and Loyalty: A Case of a Nature-Based Context in Norway. *J. Qual. Assur. Hosp. Tour.* **2015**, *16*, 323–346. [CrossRef]
22. Alfakhri, D.; Harness, D.; Nicholson, J.; Harness, T. The Role of Aesthetics and Design in Hotelscape: A Phenomenological Investigation of Cosmopolitan Consumers. *J. Bus. Res.* **2018**, *85*, 523–531. [CrossRef]
23. Leder, H.; Belke, B.; Oeberst, A.; Augustin, D. A Model of Aesthetic Appreciation and Aesthetic Judgments. *Br. J. Psychol.* **2004**, *95*, 489–508. [CrossRef]
24. Hauser, D.; Leopold, A.; Egger, R.; Ganewita, H.; Herrgessell, L. Aesthetic Perception Analysis of Destination Pictures Using #beautifuldestinations on Instagram. *J. Destin. Mark. Manag.* **2022**, *24*, 100702. [CrossRef]

25. Ryan, J.; Silvanto, S. World Heritage Sites: The Purposes and Politics of Destination Branding. *J. Travel Tour. Mark.* **2010**, *27*, 533–545. [CrossRef]
26. Kirillova, K.; Wassler, P. Travel Beautifully: The Role of Aesthetics in Experience Design. In *Atmospheric Turn in Culture and Tourism: Place, Design and Process Impacts on Customer Behaviour, Marketing and Branding*; Volgger, M., Pfister, D., Eds.; Advances in Culture, Tourism and Hospitality Research; Emerald Publishing Limited: Bingley, UK, 2019; Volume 16, pp. 153–163. ISBN 978-1-83867-070-2.
27. Kirillova, K.; Lehto, X. Aesthetic and Restorative Qualities of Vacation Destinations: How Are They Related? *Tour. Anal.* **2016**, *21*, 513–527. [CrossRef]
28. Kirillova, K.; Lehto, X. Destination Aesthetics and Aesthetic Distance in Tourism Experience. *J. Travel Tour. Mark.* **2015**, *32*, 1051–1068. [CrossRef]
29. Kirillova, K. A Review of Aesthetics Research in Tourism: Launching the Annals of Tourism Research Curated Collection on Beauty and Aesthetics in Tourism. *Ann. Tour. Res.* **2023**, *100*, 103553. [CrossRef]
30. Oliver, R.L. Cognitive, Affective, and Attribute Bases of the Satisfaction Response. *J. Consum. Res.* **1993**, *20*, 418. [CrossRef]
31. Anderson, E.W.; Sullivan, M.W. The Antecedents and Consequences of Customer Satisfaction for Firms. *Mark. Sci.* **1993**, *12*, 125–143. [CrossRef]
32. Yoon, S.; Kim, J. An Empirical Validation of a Loyalty Model Based on Expectation Disconfirmation. *J. Consum. Mark.* **2000**, *17*, 120–136. [CrossRef]
33. Wirtz, J.; Mattila, A. Exploring the Role of Alternative Perceived Performance Measures and Needs-Congruency in the Consumer Satisfaction Process. *J. Consum. Psychol.* **2001**, *11*, 181–192. [CrossRef]
34. Oliver, R.L.; DeSarbo, W.S. Response Determinants in Satisfaction Judgments. *J. Consum. Res.* **1988**, *14*, 495. [CrossRef]
35. Bhattacherjee, A. An Empirical Analysis of the Antecedents of Electronic Commerce Service Continuance. *Decis. Support Syst.* **2001**, *32*, 201–214. [CrossRef]
36. Guiry, M.; Scott, J.J.; Vequist, D.G. Experienced and Potential Medical Tourists' Service Quality Expectations. *Int. J. Health Care Qual. Assur.* **2013**, *26*, 433–446. [CrossRef]
37. Lin, C.-P.; Tsai, Y.H.; Chiu, C.-K. Modeling Customer Loyalty from an Integrative Perspective of Self-Determination Theory and Expectation–Confirmation Theory. *J. Bus. Psychol.* **2009**, *24*, 315–326. [CrossRef]
38. Bhattacherjee, A. Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Q.* **2001**, *25*, 351. [CrossRef]
39. Guo, R.-Z.; Lin, L.; Xu, J.-F.; Dai, W.-H.; Song, Y.-B.; Dong, M. Spatio-Temporal Characteristics of Cultural Ecosystem Services and Their Relations to Landscape Factors in Hangzhou Xixi National Wetland Park, China. *Ecol. Indic.* **2023**, *154*, 110910. [CrossRef]
40. Zhang, Z.; Plathong, S.; Sun, Y.; Guo, Z.; Munnoy, T.; Ma, L.; Jantharakhantee, C.; Tanboot, L. Analysis of the Island Tourism Environment Based on Tourists' Perception—A Case Study of Koh Lan, Thailand. *Ocean Coast. Manag.* **2020**, *197*, 105326. [CrossRef]
41. Pleger Bebko, C. Service Intangibility and Its Impact on Consumer Expectations of Service Quality. *J. Serv. Mark.* **2000**, *14*, 9–26. [CrossRef]
42. Ziegler, J.; Dearden, P.; Rollins, R. But Are Tourists Satisfied? Importance-Performance Analysis of the Whale Shark Tourism Industry on Isla Holbox, Mexico. *Tour. Manag.* **2012**, *33*, 692–701. [CrossRef]
43. Oliver, R.L.; Linda, G. Effect of Satisfaction and Its Antecedents on Consumer Preference and Intention. *Adv. Consum. Res.* **1981**, *8*, 88–93.
44. Hong, S.; Thong, J.Y.L.; Tam, K.Y. Understanding Continued Information Technology Usage Behavior: A Comparison of Three Models in the Context of Mobile Internet. *Decis. Support Syst.* **2006**, *42*, 1819–1834. [CrossRef]
45. Ye, S.; Wu, J.S.; Zheng, C.J. Are Tourists with Higher Expectation More Sensitive to Service Performance? Evidence from Urban Tourism. *J. Destin. Mark. Manag.* **2019**, *12*, 64–73. [CrossRef]
46. Chou, S.Y.; Kiser, A.I.T.; Rodriguez, E.L. An Expectation Confirmation Perspective of Medical Tourism. *J. Serv. Sci. Res.* **2012**, *4*, 299–318. [CrossRef]
47. Ritchie, B.W. Bicycle Tourism in the South Island of New Zealand: Planning and Management Issues. *Tour. Manag.* **1998**, *19*, 567–582. [CrossRef]
48. He, X.; Meng, C.; Luo, W. A Measurement Model of Tourist Satisfaction in World Heritage Sites. *Econ. Geogr.* **2013**, *33*, 169–174. [CrossRef]
49. Zhang, Q.; Wang, Z. Evaluation on the Service Quality of Science and EducationTourism Based on the Service Quality Model: A Case Study of UF Software Park. *J. Beijing For. Univ. (Soc. Sci.)* **2016**, *15*, 35–41. [CrossRef]
50. Eisinga, R.; Grotenhuis, M.T.; Pelzer, B. The Reliability of a Two-Item Scale: Pearson, Cronbach, or Spearman-Brown? *Int. J. Public Health* **2013**, *58*, 637–642. [CrossRef]
51. De Keyser, R.; Vanhove, N. Tourism Quality Plan: An Effective Tourism Policy Tool. *Tour. Rev.* **1997**, *52*, 32–37. [CrossRef]
52. Yuksel, A.; Yuksel, F.; Bilim, Y. Destination Attachment: Effects on Customer Satisfaction and Cognitive, Affective and Conative Loyalty. *Tour. Manag.* **2010**, *31*, 274–284. [CrossRef]
53. Lee, S.; Jeon, S.; Kim, D. The Impact of Tour Quality and Tourist Satisfaction on Tourist Loyalty: The Case of Chinese Tourists in Korea. *Tour. Manag.* **2011**, *32*, 1115–1124. [CrossRef]

54. Anderson, J.C.; Gerbing, D.W. Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychol. Bull.* **1988**, *103*, 411–423. [CrossRef]
55. Gerbing, D.W.; Anderson, J.C. An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment. *J. Mark. Res.* **1988**, *25*, 186–192. [CrossRef]
56. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, 7th ed.; Pearson Education: Upper Saddle River, NJ, USA, 2010.
57. Tabachnick, B.G.; Fidell, L.S. *Using Multivariate Statistics*, 6th ed.; Pearson Education, Inc.: Upper Saddle River, NJ, USA, 2013.
58. Chiou, H.J.; Lin, B. *The Principle and Application of Structural Equation Modeling*; China Light Industry Press: Beijing, China, 2009. (In Chinese)