How Rural Tourism Enhances Tourist Happiness: A Logical Perspective and Pathway Exploration

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Abstract

With the deepening implementation of the rural revitalization strategy and the improvement of people's living standards, rural tourism has become a widely popular leisure activity, and consequently, the happiness of tourists has received increasing attention. Through the analysis of the 4E model, it is found that rural tourism can enhance tourists' happiness through educational experiences, escapism, aesthetic experiences, and entertainment experiences. An evaluation system for the enhancement of tourists' happiness through rural tourism is constructed from the dimensions of "subjective well-being" and "objective well-being." Data analysis based on survey data confirms the rationality of this system. Finally, using the AHP-entropy method to assign weights to various indicators, it is further proposed that to enhance tourists' happiness, the development of rural tourism should also focus on: the government strengthening the formulation of guiding policies, innovating rural tourism service models, enhancing ecological governance in scenic areas, improving infrastructure construction in tourist attractions, comprehensively elevating tourism service levels, and enriching tourism product offerings.

Keywords: rural tourism; tourists' happiness; evaluation system；Path optimisation.

1 Introduction

The most challenging and arduous tasks in achieving the goal of building a moderately prosperous society in all respects and advancing the comprehensive construction of a socialist modern country lie in rural areas. Rural areas also serve as the broadest and most profound foundation, with the greatest potential for future development. In the report of the 19th National Congress of the Communist Party of China, President Xi Jinping proposed the Rural Revitalization Strategy. In recent years, both theoretical discussions and practical explorations have actively sought effective approaches to promote rural revitalization.

Rural tourism refers to tourism activities that take place in rural areas, with rural-specific natural and cultural elements as the primary attractions. The development of rural tourism aligns closely with and serves the needs of China's national development strategies in the new era, contributing

to improving the quality and efficiency of agriculture, increasing farmers' incomes, fostering rural prosperity and stability, and accelerating the coordinated development of urban and rural areas. It is regarded as an effective approach to advancing rural revitalization.

The Chinese government strongly supports the development of rural tourism. The Guiding Opinions of the State Council on Promoting Rural Revitalization calls for the implementation of high-quality rural tourism projects, the construction of well-equipped and multifunctional leisure and sightseeing parks, rural homestays, forest lodges, and wellness centers, as well as the cultivation of beautiful leisure villages, key rural tourism villages, and demonstration counties for rural leisure tourism. Additionally, the Opinions of the CPC Central Committee and the State Council on Advancing Rural Revitalization in 2022 emphasizes continuously promoting the integrated development of primary, secondary, and tertiary industries in rural areas, implementing plans to upgrade rural leisure tourism, supporting farmers to directly operate or participate in the management of rural homestays and agritourism villages (sites), and including qualified rural leisure tourism projects into science education bases and labor practice bases for primary and secondary school students.

With ongoing efforts to promote rural tourism at the national policy level, local governments have also intensified their efforts, resulting in notable achievements. As tourism is considered a key industry that enhances people's happiness, improving tourism-related happiness has become a critical agenda in tourism development. The 14th Five-Year Plan for Tourism Development explicitly states that tourism should be built into an industry with prominent contemporary characteristics and a happiness-oriented sector. However, existing studies on tourism-related happiness mostly focus on the overall tourism industry, with limited attention given to rural tourism specifically.

The concept of "enhancing tourists' happiness" in this study refers to the perceived enhancement of happiness that tourists experience from participating in rural tourism compared to not participating in such activities. This enhancement includes both the improved sense of flow that tourists experience through rural tourism participation, and the satisfaction brought by the physical conditions and service levels in rural tourism destinations. Researching the enhancement of tourists' happiness in rural tourism not only helps improve the overall rural tourism experience but also provides valuable insights for improving the quality of rural tourism development.

Rural tourism plays an important role in promoting regional economic development and fostering the integration of agricultural industries. Enhancing tourists' happiness serves as an important indicator to evaluate the development effectiveness of rural tourism. Therefore, studying how rural tourism enhances tourists' happiness holds significant contemporary relevance.

The structure of this paper is as follows: first, it reviews the existing literature on rural tourism and tourism happiness. Next, it applies the 4E framework to analyze the logical pathways through which rural tourism enhances tourists' happiness. Furthermore, an evaluation system for rural tourism's impact on tourists' happiness is constructed from two dimensions: "subjective happiness" and "objective happiness." Finally, the entropy weight method is used to assign weights to each indicator, and based on the weighting results, recommendations are proposed to optimize rural tourism for enhancing tourists' happiness.

2 Literature Review

(1) Research on Rural Tourism

At the beginning of the 21st century, scholars first began discussing the concept of rural tourism. Some scholars defined rural tourism as a form of tourism that relies on the rural spatial environment, with unique rural production patterns, folk customs, lifestyle, rural scenery, rural dwellings, and rural culture as core elements. This form of tourism utilizes urban-rural differences to plan and design products, integrating sightseeing, touring, entertainment, leisure, vacationing, and shopping into a comprehensive tourism experience.

Other scholars suggested that the concept of rural tourism should consist of two essential elements: first, the tourism activities must take place in rural areas; second, the rural characteristics must serve as key attractions. Both conditions are indispensable. Although there is no unified consensus on the definition of rural tourism, scholars generally recognize three core characteristics: rural tourism occurs in rural areas, the tourism activities themselves reflect rural characteristics, and rural destinations are significantly different from urban areas.

Subsequent research further refined the development models for rural tourism. For example, case studies in Chengdu summarized four major models: the village cluster model, the garden-style agricultural industry-based model, the courtyard-style leisure resort model, and the ancient street-style folk tourism town model. Later studies further classified China's rural tourism development into five types: demand-driven, supply-driven, intermediary-influenced, supportive role-driven, and mixed-driven models, gradually clarifying the development pathways for rural tourism.

In recent years, to promote the sustainable development of rural tourism, scholars have proposed advancing high-quality development, emphasizing innovative services, improving infrastructure, enhancing ecological management, and enriching tourism products. Digital rural tourism development frameworks have also been explored, such as the "1+2+N" scenario system, which integrates digital resources into rural tourism experiences. More recently, research has

highlighted the role of emerging productive forces in driving the high-quality development of rural tourism.

International scholars have also focused on the sustainable development of rural tourism. Some studies found that community-based rural tourism projects can be sustainable, but they require stronger collaboration between tourism organizations. Others proposed that to ensure the sustainable development of rural tourism, several principles must be followed: tourism activities should be initiated by local residents, local communities should maintain control over tourism development, tourism should create jobs for local residents, tourism development should improve local living standards, and there should be a balanced relationship between tourism development and local economic activities.

(2) Research on Tourist Happiness in Rural Tourism

Happiness can be divided into two categories: subjective well-being and objective well-being. Subjective well-being, which is also the general concept of happiness in psychology, serves as an important indicator for assessing individual and social quality of life. It emphasizes factors such as quality of life, comfort, and utility.

Objective well-being, on the other hand, assesses happiness from the perspective of an individual's evaluation of their living conditions and experiences, focusing on their sense of pleasure, satisfaction, and value.

Current research on tourism happiness primarily focuses on "subjective well-being" in the context of tourism. Early studies explored how tourism economic development contributes to improving residents' happiness. Researchers highlighted that promoting tourism development is an important way to enhance the happiness of local residents. Other scholars analyzed the value of tourism happiness from interdisciplinary perspectives, pointing out that the essence of tourism is a process in which people pursue happiness. Researchers also developed measurement models for tourist happiness, systematically examining its influencing factors.

Some studies specifically focus on rural tourism happiness, which can be divided into two primary research directions:

The first direction focuses on how rural tourism enhances tourists' happiness. Studies have shown that place attachment and nostalgic emotions positively influence tourists' subjective well-being.

The second direction examines the impact of rural tourism on the happiness of local community residents. Research has demonstrated that the positive effects of tourism poverty alleviation significantly enhance the subjective well-being of residents in ethnic minority areas.

(3) Literature Review and Summary

Currently, research on rural tourism is relatively comprehensive. Scholars have not only made continuous theoretical innovations, injecting sustained vitality into the development of rural tourism, but they have also paid increasing attention to practical applications, exploring suitable development models tailored to local conditions.

However, in the context of rapid economic and social development and increasingly diversified demands for rural tourism, it is necessary to continuously explore new tourism development models and identify new drivers of tourism development. Enhancing tourists' happiness through rural tourism is a fundamental goal of rural tourism development. However, existing research pays insufficient attention to the happiness of rural tourists, and relevant research findings are relatively limited. Moreover, there is a lack of comprehensive evaluation systems for assessing how rural tourism enhances tourist happiness.

In addition, most existing studies focus primarily on "subjective well-being" while overlooking the fact that enhancing subjective well-being also requires the expression of material attributes. These social and material resources, which can meet the prior needs of subjective well-being, are precisely the embodiment of "objective well-being."

Based on this understanding, this study incorporates "objective well-being" into the research framework for enhancing tourist happiness through rural tourism. It also attempts to construct an evaluation system to measure the extent to which rural tourism enhances tourist happiness, providing a basis for the future improvement of rural tourism development. Furthermore, this paper assigns weights to each indicator to explore the key factors that tourists prioritize in rural tourism development, offering directional suggestions for improving rural tourism destinations.

3 Logical Analysis of How Rural Tourism Enhances Tourist Happiness under the 4E Model

The happiness brought to consumers by rural tourism is essentially a form of experience. Pine and Gilmore (1999) proposed the concept of the experience economy, which constructs a two-dimensional matrix based on horizontal consumer participation (ranging from passive to active) and vertical consumer connection (ranging from absorption to immersion). This matrix forms four dimensions that influence consumer experiences: educational, escapist, esthetic, and entertainment, collectively referred to as the 4E model.

Rural tourism also offers tourists a rich experiential process. Therefore, this paper applies the 4E model proposed by Pine and Gilmore to analyze the internal logic of how rural tourism

enhances tourist happiness.
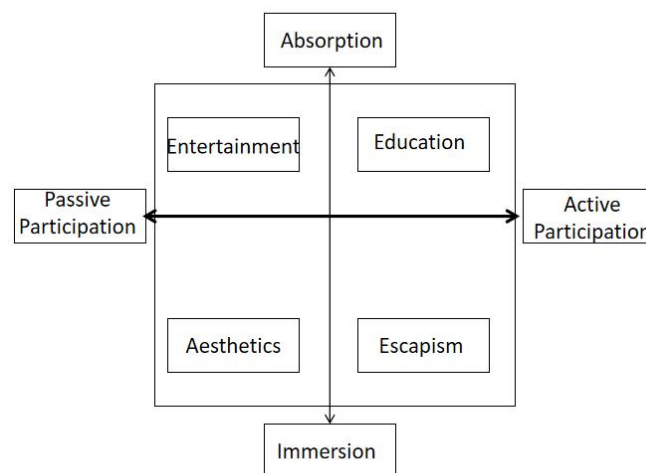
Figure 1 The 4E Model Diagram

(1) Enhancing Tourist Happiness through Educational Experiences in Rural Tourism

Under the background of rural revitalization, many regions have actively developed educational tourism programs to promote rural tourism. These programs integrate local tourism resources with educational elements, allowing tourists to gain knowledge while traveling. Moreover, if we broaden the definition of education, every experience and every encounter with something new during the trip carries educational significance. The cultural resources inherent in rural tourism destinations themselves also provide educational experiences for tourists during their visits. From this perspective, rural tourism offers tourists valuable educational experiences. When people acquire new knowledge and enrich their personal understanding, they tend to experience positive emotions, which in turn enhances their sense of happiness.

(2) Enhancing Tourist Happiness through Escapist Experiences in Rural Tourism

When selecting rural tourism destinations, most tourists choose places near their workplaces or schools, extending to nearby rural areas. Due to the pressures of daily study, work, and life, they seek to temporarily escape these realities through short-term rural tourism. The natural scenery and simple folk customs of rural areas make it easy for tourists to immerse themselves in the tourism experience, allowing them to fully enjoy the pleasures of travel without being burdened by the worries of reality. Tourists often gain happiness from this state of complete relaxation. Additionally, rural tourism destinations are usually located away from urban centers, far from noise and crowds, providing tourists with a better opportunity to relax and unwind in nature.

(3) Enhancing Tourist Happiness through Aesthetic Experiences in Rural Tourism

The aesthetic experience of rural tourism mainly comes from the natural landscapes and cultural scenery of the destination. In recent years, China has actively promoted sustainable development and green growth, embedding the concept of environmental protection into the development of rural tourism. As a result, rural tourism focusing on leisure and sightseeing pays more attention to ecological preservation, contributing to the improvement of rural ecological environments. Tourists' perception of the attractiveness, emotional impact, and harmony of rural landscapes enhances their visual enjoyment, ultimately contributing to a positive tourism experience and enhancing their sense of happiness.

(4) Enhancing Tourist Happiness through Entertainment Experiences in Rural Tourism

Single-purpose sightseeing based solely on natural scenery is unlikely to generate long-term appeal, and it is also easily affected by weather and seasonal changes. Therefore, most rural tourism destinations enrich their offerings by developing unique tourism activities alongside natural sightseeing. These special projects not only enhance the fun of the trip but also diversify the available tourism experiences. Tourists not only enjoy the beauty of nature through visual perception but also participate in hands-on leisure activities, further enhancing their sense of enjoyment and overall happiness.
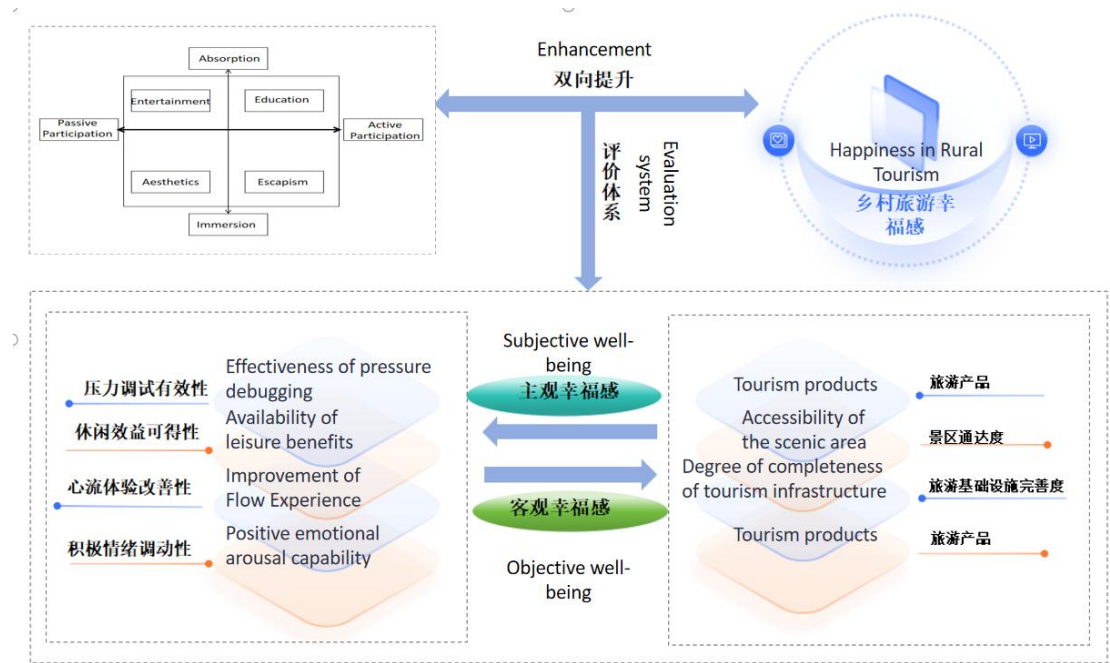
4 Construction and Validation of the Evaluation System for Enhancing Tourist Happiness through Rural Tourism

(1) Construction of the Evaluation System

This paper proposes that the rural tourism happiness system can be divided into two dimensions: "subjective happiness" and "objective happiness." These two dimensions are not independent of each other but are instead interrelated and coupled to some extent.

In rural tourism, tourists can relieve stress, gain leisure benefits, improve their flow experience, and stimulate positive emotions through educational, entertainment, aesthetic, and escapist experiences, thereby enhancing their subjective happiness.

At the same time, the tourism products provided by scenic areas, the accessibility of the destination, the completeness of infrastructure, and the quality of tourism services not only contribute to tourists' objective happiness but also enhance their "4E" experiences, ultimately boosting their subjective happiness as well (Figure 2).

Figure 2 Logical Framework for the Construction of the Evaluation Index System

Based on this, and drawing on Zhang Yuangang's pressure source measurement model, Yan Wenhua's evaluation index system for green development in rural tourism destinations, the Oxford Happiness Inventory (OHI), and the sustainable development evaluation system for rural tourism destinations proposed by Sun Jiuxia and Wang Shujia (2022), this paper constructs an evaluation index system for the enhancement of tourist happiness through rural tourism, with "subjective happiness" and "objective happiness" as the target dimensions (Table 1).

Table 1 Evaluation Index System for Enhancing Tourist Happiness through Rural Tourism

destination layer	oil level indicator tap-changer	two grade index evaluation
	Pressure adjustment effectiveness （SA）	Actively participate in decompression projects （SA1）
		Reduce stress as the motivation for travel （SA2）
Tourist subjective well-being		It is believed that rural tourism can establish good interpersonal relationship（SB1）

（Sbjective）	Availability of leisure benefits （SB）	It is thought that rural tourism can relieve fatigue（SB2）
		Tourists think that rural tourism can bring new experiences（SB3）
	Flow experience improvement （SC）	Tourists feel completely relaxed while traveling （SC1）
		Satisfied with the trip so far（SC2）
		Looking forward to the journey ahead（SC3）
	Positive emotional mobilization（SD）	Be happy with who you are now（SD1）
		The tourists were in a happy mood throughout the trip（SD2）
Tourist objective happiness （Objective）	tourism product （OA）	No price discrimination（OA1）
		Product range meets demand（OA2）
		product quality assurance（OA3）
		post-sales service（OA4）
	Accessibility of scenic spot （OB）	Scenic arrival time（OB1）
		Types and quantities of tools used（OB2）
		Scenic road construction level（OB3）
		The distance between the scenic area and the city（OB4）
	The perfection of tourism infrastructure （OC）	The number and spacing of supermarkets and convenience stores in scenic spots（OC1）
		The number and spacing of public toilets in the scenic area（OC2）
		Construction of emergency places in scenic spots（OC3）
		Transparency of tourism policy

Tourism service level（OD）	（OD1）
	Tourist arrivals（OD2）
	Number of incidents to protect the rights and interests of tourists（OD3）

(2) Validation of the Evaluation System

To test the validity, scientific rigor, and practical applicability of the evaluation indicators, this study employed a questionnaire survey for validation. A questionnaire was designed and distributed through public platforms and personal social networks, collecting a total of 258 responses. Responses with a completion time of less than 90 seconds were deemed invalid. Additionally, considering that users who have participated in rural tourism can provide more representative feedback based on their own experiences, responses from users who had never engaged in rural tourism were also marked as invalid.

After data cleaning, a total of 253 valid responses were obtained. The collected data were then processed and analyzed using SPSS 23 and AMOS 26 software for reliability and validity testing.

1. Reliability Testing

Table 2 Reliability Analysis of Subjective Happiness Indicators

dimensionality	number of terms	Cronbach.α coefficient	Totality Cronbach.α coefficient
Pressure adjustment effectiveness	2	0.75	
Availability of leisure benefits	3	0.825	0.941
Flow experience improvement	3	0.825	
Positive emotional mobilization	2	0.802	

Table 3 Reliability Analysis of Objective Happiness Indicators

dimensionality	number of terms	Cronbach.α coefficient	Totality Cronbach.α coefficient
tourism product	4	0.859	
Accessibility of scenic spot	4	0.867	0.956
The perfection of tourism infrastructure	3	0.809	
Tourism service level	3	0.833	

Reliability refers to the degree of consistency, stability, and dependability of the measurement results. The reliability coefficient ranges between 0 and 1, with values closer to 1 indicating a more reasonable questionnaire design. When the Cronbach's α coefficient exceeds 0.7, the questionnaire is considered to have acceptable reliability.

As shown in Tables 2 and 3, the Cronbach's α coefficients for each dimension, as well as the overall Cronbach's α coefficient, are all greater than 0.7, indicating that the questionnaire demonstrates high reliability and that the indicator design is reasonable.

2. Validity Testing

Validity refers to the extent to which the indicators effectively measure what they are intended to measure. Since the indicator dimensions were already designed in this study, Confirmatory Factor Analysis (CFA) was conducted after the KMO and Bartlett's test. CFA is used to verify whether a pre-established theoretical framework is reasonable under known factors. This analysis includes three components: structural validity, convergent validity, and discriminant validity. This paper evaluates the rationality of the indicator design from both the subjective happiness and objective happiness dimensions.

(1) KMO and Bartlett's Test

Table 4 KMO and Bartlett's Test

KMO Sample appropriateness measure		.982
Bartlett sphericity test	Approximate chi-square	4949.876
	degree of freedom	276
	significance	.000

The closer the KMO value is to 1, the more suitable the data is for factor analysis. Based on the data analysis in this study, the KMO value is 0.982, and the significance level of Bartlett's test of sphericity is 0.000, indicating that it is appropriate to proceed with factor analysis.

(2) Confirmatory Factor Analysis of Subjective Happiness Indicators

Using AMOS software, a factor analysis diagram was generated (Figure 3) to clarify the relationships among the variables measuring subjective happiness.
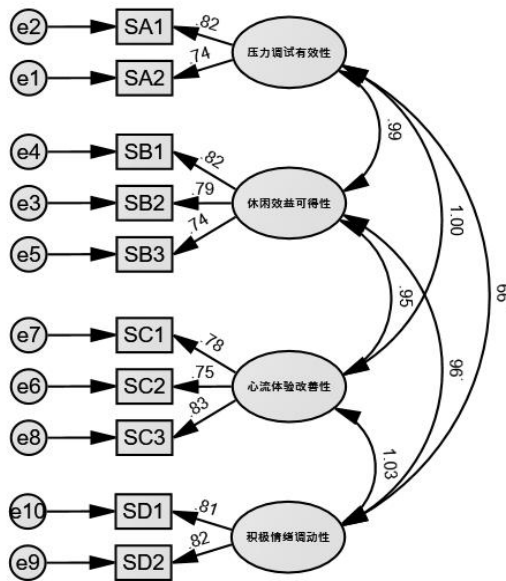

Figure 3 Factor Analysis Diagram of Subjective Happiness

Structural Validity Test:

Table 5 Overall Fit Indices Table

X2/df	RMSEA	NFI	RFI	CFI	IFI	TLI
1.261	O.O32	0.979	0.968	0.996	0.996	0.993

Structural validity aims to demonstrate the degree of fit between the model and the data. As shown in Table 5, the X^2/df value is 1.262, which is less than 3, and the RMSEA value is 0.032, which is less than 0.05, indicating an ideal fit. Additionally, the values for NFI, RFI, CFI, IFI, and TLI are all greater than 0.9 and close to 1, demonstrating that the system composed of stress adjustment effectiveness, accessibility of leisure benefits, improvement of flow experience, and activation of positive emotions fits well.

Convergent Validity Test:

Table 6 Factor Loadings

	path		Estimate	AVE	Composite reliability
SA2	<---	Pressure adjustment effectiveness	0.735		
				0.6055	0.7537
SA1	<---	Pressure adjustment effectiveness	0.819		
SB2	<---	Availability of leisure benefits	0.793		
SB1	<---	Availability of leisure benefits	0.819	0.6167	0.8282
SB3	<---	Availability of leisure benefits	0.742		
SC2	<---	Flow experience improvement	0.745		
SC1	<---	Flow experience improvement	0.778	0.6153	0.8273
SC3	<---	Flow experience improvement	0.828		
SD2	<---	Positive emotional mobilization	0.824		
				0.67	0.8263
SD1	<---	Positive emotional mobilization	0.813		

Convergent validity reflects the degree of similarity among different dimensions. As shown in Table 6, the factor loadings for each item under stress adjustment effectiveness, accessibility of leisure benefits, improvement of flow experience, and activation of positive emotions are all greater than 0.7, indicating that each latent variable is well represented by its corresponding items. In addition, the Average Variance Extracted (AVE) values for each latent variable are all greater than 0.5, and the Composite Reliability (CR) values are all greater than 0.7, indicating that the

system demonstrates good convergent validity.

Discriminant Validity Test:

**Table 7 Discriminant Validity of the Tourist Subjective Happiness Indicator System**

	Pressure adjustment effectiveness	Availability of leisure benefits	Flow experience improvement	Positive emotional mobilization
Pressure adjustment effectiveness	0.606			
Availability of leisure benefits	0.118***	0.617		
Flow experience improvement	0.113***	0.122***	0.615	
Positive emotional mobilization	0.115***	0.125 ***	0.125***	0.670
AVE square root	0.778	0.785	0.784	0.819

*** indicates that the p-value is less than 0.001. The values on the diagonal represent the square root of the AVE (Average Variance Extracted) for each dimension (same applies below).

Discriminant validity refers to the degree to which each dimension can be distinguished from the others. As shown in Table 7, the dimensions of stress adjustment effectiveness, accessibility of leisure benefits, improvement of flow experience, and activation of positive emotions show significant correlations with each other, but these correlations are all lower than the square root of the AVE, indicating that each dimension is related yet maintains a certain degree of distinction from one another.

(3) Factor Analysis Diagram for Objective Happiness

Using AMOS software, the factor analysis diagram for the objective happiness indicator system was generated, as shown in Figure 4.
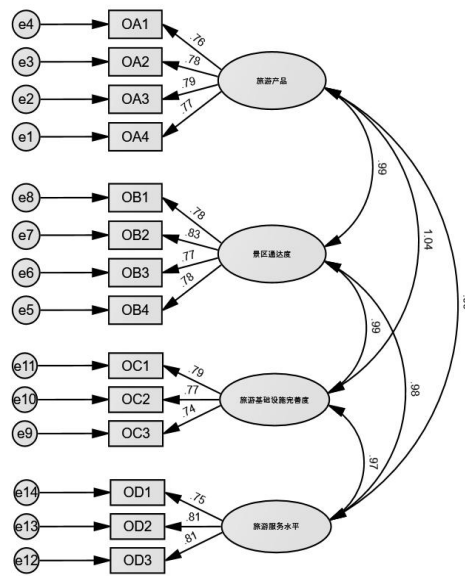
Figure 4 Factor Analysis Diagram of the Objective Happiness Indicator System for Tourists

Structural Validity Test:

Table 8 Overall Fit Indices Table

X2/df	RMSEA	NFI	RFI	CFI	IFI	TLI
1.416	O.O41	0.962	0.951	0.988	0.988	0.985

As shown in Table 8, the X²/df value is 1.416, which is less than 3, and the RMSEA value is 0.041, which is less than 0.05, indicating an ideal fit. Furthermore, the values of NFI, RFI, CFI, IFI, and TLI are all greater than 0.9 and close to 1, demonstrating that the system composed of tourism products, scenic area accessibility, completeness of tourism infrastructure, and quality of tourism services fits well.

Convergent Validity Test:

Table 9 Factor Loadings

	path		Estimate	AVE	composite reliability
OA4	<---	tourism product	0.769		
				0.6035	0.8589
OA3	<---	tourism product	0.794		

OA2	<---	tourism product	0.782		
OA1	<---	tourism product	0.762		
OB4	<---	Accessibility of scenic spot	0.775		
OB3	<---	Accessibility of scenic spot	0.77	0.6231	0.8685
OB2	<---	Accessibility of scenic spot	0.83		
OB1	<---	Accessibility of scenic spot	0.781		
OC3	<---	The perfection of tourism infrastructure	0.736		
OC2	<---	The perfection of tourism infrastructure	0.769	0.5841	0.8081
OC1	<---	The perfection of tourism infrastructure	0.787		
OD3	<---	Tourism service level	0.809		
OD2	<---	Tourism service level	0.809	0.6238	0.8325
OD1	<---	Tourism service level	0.75		

As shown in Table 9, the factor loadings for each item under tourism products, scenic area accessibility, completeness of tourism infrastructure, and quality of tourism services are all greater than 0.7, indicating that each latent variable is well represented by its corresponding items. In addition, the Average Variance Extracted (AVE) for each latent variable is greater than 0.5, and the Composite Reliability (CR) is greater than 0.8, demonstrating that the system exhibits good convergent validity.

Discriminant Validity Test:

Table 10 Discriminant Validity of the Objective Happiness Indicator System for Tourists

	tourism product	Accessibility of scenic spot	The perfection of tourism infrastructure	Tourism service level
tourism product	0.604			
Accessibility of scenic spot	0.109***	0.623		
The perfection of tourism infrastructure	0.107***	0.104***	0.584	
Tourism service level	0.119***	0.119***	0.113***	0.624
AVE square root	0.777	0.789	0.764	0.790

As shown in Table 10, tourism products, scenic area accessibility, completeness of tourism infrastructure, and quality of tourism services exhibit significant correlations with each other, but these correlations are all lower than the square root of the corresponding AVE values. This indicates that the dimensions are correlated while maintaining a certain degree of distinctiveness.

In summary, the indicator system designed in this study demonstrates good reliability and validity, with a reasonable indicator design. It can be effectively used to assess the extent to which rural tourism enhances tourists' happiness.

5 Pathways for Enhancing Tourist Happiness in Rural Tourism

(1) Indicator Weighting

Indicator weights can reflect the degree of importance people attach to factors influencing their happiness in rural tourism. The higher the comprehensive score, the more attention people pay to that specific indicator when participating in rural tourism.

The weighting process generally includes two methods: subjective weighting and objective weighting. To overcome the potential biases caused by subjective judgment and the complexity of operations, which could lead to deviations between the weighting results and reality, this paper adopts a combined weighting method using AHP and the entropy method to assign weights to each indicator.

The formula for combined weighting is as follows:

$$w_j^* = \frac{w_j v_j}{\sum w_j v_j}$$

Where:

w_j^* represents the combined weight.

w_j represents the AHP weight.

v_j represents the entropy weight.

The combined weights for each indicator are shown in Table 11 below:

Table 11 Weights of Subjective Happiness Indicators

Oil level indicator tap-changer	two grade index evaluation	AHPweight w_j	Entropy method weightv_j	combination weightw_i^*
Pressure adjustment effectiveness （SA）	Tourists actively participate in the scenic area decompression project（SA1）	0.0987	0.1062	0.1048
	Tourists are motivated by stress reduction（SA2）	0.1002	0.0887	0.0888
Availability of leisure benefits （SB）	Tourists believe that rural tourism can build good interpersonal relationship （SB1）	0.0991	0.0891	0.0883
	Tourists think rural tourism can relieve fatigue（SB2）	0.1002	0.1028	0.1029
	Tourists think that rural tourism can	0.1005	0.1035	0.1040

	bring new experiences（SB3）			
	Tourists feel completely relaxed while traveling （SC1）	0.1024	0.0948	0.0971
Flow experience improvement （SC）	The tourists are satisfied with the trip so far（SC2）	0.0913	0.1025	0.1016
	The tourists are looking forward to the next journey （SC3）	0.1004	0.1105	0.1109
	The tourists are satisfied with themselves now （SD1）	0.1010	0.1042	0.1052
Positive emotional mobilization （SD）	The tourists were in a happy mood throughout the trip （SD2）	0.0985	0.0979	0.0964

Similarly, the same method is applied to assign weights to the Objective Happiness Indicator System (Table 12):

Table 12 Weights of Objective Happiness Indicators

Oil level indicator tap-changer	two grade index evaluation	AHPweightwj	Entropy method weightv_j	combination weightw_i^*
tourism product （OA）	There is no discrimination in the price of scenic products （OA1）	0.0726	0.0650	0.0661
	The product range	0.0721		0.0784

	meets the consumer demand of tourists （OA2）		0.0776	
	product quality assurance（OA3）	0.0704	0.0743	0.0733
	post-sales service （OA4）	0.0725	0.0641	0.0651
	Scenic arrival time （OB1）	0.0709	0.0796	0.0791
Accessibility of scenic spot （OB）	Types and quantities of traffic tools in scenic spots （OB2）	0.0703	0.0693	0.0683
	Scenic road construction level （OB3）	0.0723	0.0727	0.0736
	The distance between the scenic area and the city （OB4）	0.0708	0.0660	0.0654
	The number and spacing of supermarkets and convenience stores in scenic spots （OC1）	0.0688	0.0775	0.0747
The perfection of tourism infrastructure （OC）	The number and spacing of public toilets in the scenic area（OC2）	0.0730	0.0709	0.0725
	Construction of emergency places in scenic spots （OC3）	0.0725	0.0595	0.0605
	Transparency of	0.0696	0.0749	0.0730

Tourism service level （OD）	tourism policy （OD1）			
	Tourist arrivals （OD2）	0.0716	0.0744	0.0747
	Number of incidents to protect the rights and interests of tourists （OD3）	0.0725	0.0742	0.0753

Based on the results of the indicator weighting, it can be concluded that in the evaluation of tourists' subjective happiness, rural tourism that makes tourists look forward to their next trip, allows them to relieve stress, alleviates fatigue caused by work or study, helps them regain confidence, and provides them with new and exciting experiences can effectively enhance their subjective happiness.

At the same time, some tourists hope that rural tourism can help them establish good interpersonal relationships and allow them to fully immerse themselves in the fun and enjoyment of the trip.

In the evaluation of tourists' objective happiness, tourists place the highest importance on the time it takes to reach the destination and whether the destination can provide products that meet their needs. In addition, tourists also have high expectations for the completeness of the destination's infrastructure and the quality of its tourism services.

(2) Pathway Optimization

Enhancing the happiness of tourists in rural tourism requires both leveraging the unique advantages of rural tourism itself and meeting the actual needs of tourists. Based on the analysis above, the following optimization pathways are proposed:

Strengthening the Formulation of Government Guidance Policies
In the process of China's economic and social development, the government plays a leading role in economic development and serves as a key guide for the development of the rural tourism industry. The government must shift its functions and scientifically formulate incentive and guidance policies. It should promptly identify and address problems emerging in rural tourism, and for common and recurring issues, conduct scientific and standardized assessments to consider incorporating them into public policies. By using policy tools to regulate the development of rural tourism, the government can protect the legitimate rights and interests of

tourists and enhance their overall sense of happiness.

Innovating Rural Tourism Service Models

The main purpose for most tourists choosing rural tourism is to relieve stress, reduce fatigue, and rediscover themselves through rural experiences. Single-purpose sightseeing and homogenized rural tourism models fail to provide tourists with fresh and immersive experiences. Therefore, it is necessary to explore and leverage local features and advantages to enrich rural tourism activities. Rural tourism should not only offer sightseeing services that showcase natural rural landscapes but also, under the background of industrial integration, combine tourism with other elements. For example, in areas where medicinal herbs are the main crops, health and wellness tourism or rural healing retreats can be developed. In regions focused on flower cultivation, wedding tourism and related industries can be promoted. By centering on leisure and relaxation, rural tourism can enhance its attractiveness and increase the variety of experiences offered.

Enhancing Ecological Management in Scenic Areas

Rural tourism often highlights ecological tourism and countryside scenery, which makes it highly dependent on the natural environment. Therefore, it is essential to continuously improve environmental sanitation within and around scenic areas, attracting tourists with beautiful surroundings. At the same time, environmental monitoring and regulation should be strengthened, with clear ecological management plans and regular sanitation and cleaning efforts. Enhancing tourists' awareness of environmental hygiene and environmental protection should also be promoted, encouraging responsible tourism and advancing ecological construction and sustainable development in rural tourism. Improving the ecological environment of scenic areas not only benefits tourism but also contributes to improving rural living conditions, helping to build livable, business-friendly, and beautiful rural communities. This can ultimately foster a series of environmentally friendly, ecologically sound, and sustainable rural tourism destinations.

Improving Scenic Area Infrastructure

The initial development of many rural tourism destinations was primarily aimed at poverty alleviation, leaving infrastructure underdeveloped. Many scenic areas are located in remote regions and were developed relatively late, leading to incomplete infrastructure that fails to provide tourists with satisfactory experiences. Therefore, infrastructure development must be improved. On one hand, resources should be allocated rationally to avoid waste and ensure efficient utilization. On the other hand, infrastructure construction should be demand-oriented, providing the necessary facilities and satisfactory services that tourists expect.

Comprehensively Enhancing Tourism Service Levels

High-quality service is also a key factor in enhancing tourists' happiness. First, staff should be well-trained to meet tourists' reasonable needs to the greatest extent possible, protect their legal rights, and help them resolve issues efficiently, improving their overall travel experience. Second, tourism information and policies should be transparent and publicly accessible. For situations

where natural factors such as weather or other incidents may cause scenic areas to close temporarily, timely notifications should be issued to help tourists plan their trips reasonably. Finally, scenic areas should actively learn from and adopt advanced experiences and practices, continuously improving service quality and comprehensively enhancing the overall service level.

Enriching the Supply of Tourism Products

Rural tourism destinations not only need to provide local specialty products but also products that meet tourists' travel and consumption needs. Many rural tourism destinations are located in remote areas, placing higher demands on product supply within the destinations. First, the products should be diverse enough to meet tourists' varied and differentiated consumption demands. Second, the quality of tourism products must be guaranteed. Finally, the pricing of tourism products should be reasonably regulated to avoid price gouging, hidden charges, and other forms of price discrimination or "tourist traps."

6 Conclusion

The development of rural tourism is highly aligned with the goals of industrial prosperity and ecological livability proposed in the current rural revitalization strategy. Tourists are the primary consumers in the rural tourism market, and research on enhancing tourists' happiness has significant theoretical value and practical implications. The marginal contributions of this paper are as follows:

First, this paper uses the 4E model to analyze the logic of how rural tourism enhances tourists' happiness, offering a novel research perspective. Second, previous studies only introduced subjective happiness into tourism research, while this paper argues that including objective happiness provides a more accurate measure of overall tourist happiness, enriching the concept of tourism happiness. Third, this paper constructs an evaluation index system for enhancing tourists' happiness through rural tourism, providing a quantitative tool for measuring the improvement of tourists' happiness. Moreover, the empirical validation of the index system demonstrates that the selected indicators are scientifically chosen, and the structure of the index system is reasonable.

Finally, this paper assigns weights to the indicators using the entropy method and proposes optimization pathways for enhancing tourists' happiness in rural tourism based on the weighting structure. This approach has practical value and development orientation. Rural tourism is an inclusive business model, and according to Maslow's hierarchy of needs, human needs are an ongoing process of pursuing higher levels. Research on tourists' happiness should continue to evolve, and the study of how rural tourism enhances tourists' happiness should be a long-term endeavor, continuously innovating from different perspectives and using various methods to

drive the sustained improvement of tourists' happiness through rural tourism.

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