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Analysis of Pathways for Optimizing Sanya's Tourism Image Driven by Visitor Perceptions

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Abstract: Destination image is an important influence on tourists' behavioral decisions, and the construction of an image assessment model based on tourists' perception helps to identify the key variables that influence their cognitive judgments. Taking Sanya as a typical coastal tourist city, we use structural equation modeling to construct a “perception-image” structural path based on tourist questionnaire data and explore the relationship between the six perceptual dimensions on destination image. The study shows that: (1) the four perceptual dimensions of convenience, comfort, safety and knowledge growth have a significant positive impact on the image of a tourist destination, with convenience playing the strongest role; (2) the path coefficients of novelty and unique experience are not significant, reflecting that the marginal effect of differentiated cultural resources on the overall image perception is limited; (3) the tourists' subjective judgments of spatial order, service efficiency and environmental control significantly affect their perception of the destination in coastal tourism scenarios; tourism scenario significantly affects their overall evaluation tendency of the destination.

1. Introduction

In recent years, tourism has played an increasingly significant role in China’s national economy. With the steady implementation of key policy documents such as the *14th Five-Year Plan for Tou*rism Development, the Implementation Plan for National Ecological Civilization Pilot Zones, and the National Cultural Park Construction Plan, the construction of tourism destination image has been regarded as a strategic pathway to enhance regional soft power and to promote high-quality integration of culture and tourism. The National Development and Reform Commission, in its Guidelines on Promoting Cultural and Tourism Consumption, further emphasized the importance of building tourism cities with attractiveness, distinctiveness, and communication potential, alongside the optimization of public tourism services and improvement of visitor satisfaction[1]. Against this backdrop, evaluating destination image from the tourists’ perspective has become a critical approach to advancing evidence-based and scientific tourism governance.

Tourism Destination Image (TDI) refers to the overall cognitive and affective evaluations formed by tourists based on their experiences with a destination’s natural environment, cultural assets, service quality, safety, and infrastructure[2]. TDI encompasses both cognitive appraisals and emotional impressions, exerting a strong influence on tourists’ travel decisions, duration of stay, revisit

intentions, and word-of-mouth communication. Prior studies have confirmed that various perceptual dimensions-such as novelty, cultural richness, convenience, safety, and comfort-play central roles in shaping destination image[3]. Accordingly, the construction of tourism image has shifted from being supply-driven to perception-driven, highlighting the tourists' subjective experience and multi-dimensional evaluations in forming an overall impression of the city[4]. The analysis of destination image through the lens of tourist perception has thus emerged as a dominant trend in recent academic discourse.

As one of China's most iconic coastal tourism cities, Sanya has been positioned as a national pilot zone for international tourism consumption. Its abundant tropical coastal resources, well-developed resort infrastructure, and preferential free-trade policies have made it a premier destination for domestic and international travelers. The *Implementation Plan for Promoting the Construction of the International Tourism Consumption Center in Hainan Province (2023–2025)* specifically calls for upgrading tourism quality and reshaping Sanya's image by fostering a destination that integrates cultural depth, social vitality, and service appeal[5]. However, amid the rapid expansion of its tourism sector, tourists' perceptions of Sanya have become increasingly fragmented. While natural scenery and resort facilities continue to be well-received, experiences related to cultural uniqueness, service accessibility, and safety remain inconsistent, which in turn weakens tourists' overall evaluation and emotional attachment to the city[6].

At present, scholarly attention has increasingly focused on the perceptual dimensions and underlying mechanisms through which tourists construct destination image. The development of multi-factor evaluation models that integrate various aspects of tourist perception has become a key strategy for identifying the principal drivers of impression formation[7].

From a practical standpoint, clarifying the structure of tourist perceptions and elucidating the relationships between different perceptual dimensions and overall image have become essential for managing urban tourism brands, enhancing product experience, and creating tourist-friendly environments[8]. Given Sanya's tourism development context, constructing an evaluation path based on perceptual variables offers significant theoretical and practical value in elevating tourism space quality and achieving its strategic goal of becoming a globally recognized tourism consumption center[9].

2. Literature Review

2.1 Theoretical Foundation: Cognitive Appraisal Theory

Cognitive Appraisal Theory, originally proposed by psychologist Richard Lazarus, provides a framework for understanding how individuals interpret external stimuli and subsequently generate emotional, attitudinal, or behavioral responses. According to the theory, individuals first engage in subjective evaluations and meaning construction when encountering a particular situation or event. These cognitive processes serve as a prerequisite for emotional experience and behavioral inclination. Whether external stimuli elicit responses depends on how individuals perceive their relevance, significance, or value.

In the field of tourism research, Cognitive Appraisal Theory has been widely adopted to explain the mechanisms underlying tourist behavior, particularly in the formation paths of destination image, satisfaction, and loyalty. Tourists cognitively assess the environment, services, and cultural elements of a destination throughout their travel experience[10]. This process not only shapes their immediate emotional reactions but also plays a central role in constructing their overall image of the destination. Cognitive appraisal thus functions as a foundational bridge, linking tourists' exposure to tourism resources with the formation of psychological impressions.

The theory provides strong support for modeling frameworks that utilize multiple perceptual

dimensions as antecedents of destination image. Tourists' evaluations of safety, convenience, comfort, novelty, and other experiential factors represent core components of their subjective cognitive structures, directly influencing the way they form an integrated image of a destination. This "multi-source input–unified output" structure aligns with the integrative processing characteristics of Cognitive Appraisal Theory, emphasizing how diverse cognitive dimensions are synthesized into coherent psychological responses[11].

In the context of model development, the theory offers a clear psychological foundation for constructing perception–image pathways. It establishes a theoretically grounded and empirically testable linkage between multidimensional tourist perceptions and the singular variable of destination image. As such, Cognitive Appraisal Theory has been widely applied in tourism psychology and behavioral studies to explain how tourists' subjective experiences translate into broader cognitive judgments and image formation processes[12].

2.2 Concept and Evaluation Framework of Tourism Destination Image

Tourism Destination Image (TDI) refers to tourists' subjective and comprehensive evaluations of a destination's overall characteristics, cultural atmosphere, environmental setting, and service quality, based on the process of information acquisition, cognitive formation, and experiential engagement. The construction of TDI reflects not only tourists' cognitive impressions of a place but also encompasses emotional attitudes and behavioral tendencies, significantly influencing travel intentions, satisfaction, loyalty, and word-of-mouth communication[13].

In academic research, the structural composition of destination image is most commonly conceptualized through the three-dimensional model of "cognition–affect–conation," first proposed by Gartner. Within this framework, the cognitive dimension involves tourists' perceived evaluations of resource quality, safety, and cultural richness; the affective dimension pertains to emotional responses toward the destination; and the conative dimension captures behavioral intentions such as recommendation, revisit, and loyalty. This triadic model has been widely validated in empirical studies and serves as a foundational logic path in destination image assessment.

Empirically, the measurement of TDI has evolved through various methodological stages-from semantic differential scales and adjective-based descriptors to multidimensional perception scales combined with structural equation modeling. In recent years, more advanced analytical tools such as Fuzzy Comprehensive Evaluation and Fuzzy-set Qualitative Comparative Analysis (fsQCA) have been introduced to capture the configurational effects of key variables influencing destination image. For instance, research on rural tourism in Hainan has developed an "attractiveness configuration model" based on the concept of rurality, emphasizing the combined influence of multiple factors on tourists' holistic image formation, thus extending the analytical dimension of traditional TDI models[14].

Overall, destination image research has undergone a paradigmatic shift-from a supply-side, media-oriented construction logic to a demand-side, perception-driven evaluation logic. Modern evaluation frameworks increasingly emphasize the interactive effects among multiple dimensions and highlight the central role of tourists' subjective perspectives in shaping destination image[15]. This trend reflects a deeper understanding of how tourists' internal processing of environmental, cultural, and service-related stimuli coalesce into coherent image perceptions.

2.3 Tourist Perception in Shaping Destination Attractiveness and Image

With the diversification of the tourism market, tourists' understanding of destination attractiveness has gradually shifted from a resource-driven model to an experience-oriented paradigm. As a foundational element of tourism destination image, the study of tourism attractiveness has evolved

from focusing on macro-level geographic and resource-based factors to emphasizing tourists' subjective perceptions during the travel experience. Scholars widely agree that destination attractiveness is not merely a function of the resource portfolio provided by the destination, but more fundamentally reflects tourists' psychological perceptions and value evaluations of those resources [16].

At the perceptual level, tourists' concerns are increasingly characterized by multidimensionality and situational sensitivity. For instance, Liao, using Sanya as a case study, constructed a coastal tourism attractiveness model based on dimensions such as safety, convenience, cultural atmosphere, and recreational comfort, emphasizing the dominant role of tourists' subjective experiences in destination cognition. Lu applied the Importance–Performance Analysis (IPA) method to assess the attractiveness of traditional courtyard-style homestays, identifying perceptual factors such as novelty, uniqueness, and environmental ambiance as key influencers of cultural recognition and destination image formation. Similarly, Lu and Yang found in their respective studies on wine tourism and national parks that dimensions such as knowledge acquisition, cultural immersion, and emotional connection are critical experiential components of perceived attractiveness

From a behavioral standpoint, tourists' overall perception not only shapes their impressions of specific attractions or tourism products but also contributes to the emergence of destination-wide identification or alienation through emotional processing and social interaction. In recent years, research on perceptual dimensions has become increasingly refined, resulting in the development of structural frameworks incorporating factors such as novelty experience, cultural integration, emotional safety, and social participation. These dimensions offer a micro-level cognitive basis for understanding the mechanisms behind destination image formation[17].

In sum, tourist perception has emerged as a vital analytical lens through which to examine tourism attractiveness and destination image construction. Developing a multidimensional perception index system grounded in the tourist perspective significantly enhances the specificity and explanatory power of destination image assessments.

2.4 Review Summary

In summary, the study of tourism destination image has developed into a relatively systematic theoretical and evaluative framework. The widely accepted triadic model of cognition–affect–conation provides a solid foundation for understanding the formation path of destination image from the tourist perspective. In terms of research perspective, the focus has gradually shifted from destination-supply-centered paradigms toward tourist-perception-driven approaches, wherein tourists' subjective experiences, cognitive judgments, and emotional associations during travel are increasingly incorporated into analytical frameworks. Methodologically, the application of multidimensional scales, structural equation modeling (SEM), and fuzzy-set qualitative comparative analysis (fsQCA) has significantly enhanced the precision of destination image measurement[18].

Existing literature has also developed a rich taxonomy of tourism attractiveness dimensions, including novelty, uniqueness, cultural atmosphere, and safety and comfort, all of which have been empirically validated across diverse tourism settings. Some studies have made valuable efforts to incorporate perceptual elements such as social experience, cultural ambiance, and functional service quality into destination image models, thereby exploring the direct linkages between tourist perception and image cognition.

Nevertheless, certain limitations persist in the current body of research. First, there remains a lack of systematic integration in modeling multiple tourist perception factors, especially concerning their functional mechanisms in real-world tourism contexts. Second, relatively few empirical studies focus specifically on coastal city environments, where social perception and cultural adaptability play an

essential yet underexplored role in shaping image evaluations.

Therefore, future research should further examine destination image formation from the tourist's perspective, by identifying perception dimensions that incorporate functionality, safety, and social context, and by constructing clearly defined structural pathways to better understand how image cognition is formed. Such efforts would offer important theoretical enrichment and empirical expansion to the field of destination image studies.

3. Methodology

3.1 Research Design

This study constructs an exploratory structural model to investigate the formation path of tourism destination image, placing tourists' perceptions at the core of the analytical framework. The model adopts a perception–image logic path, with six perceptual dimensions set as independent variables: novelty experience, unique experience, knowledge acquisition, safety, comfort, and convenience. These dimensions collectively capture tourists' holistic perceptions of the natural environment, social atmosphere, and functional services encountered during their travel experience. The dependent variable is destination image, which reflects tourists' overall psychological impression and attitudinal orientation toward the destination[19].

The model is designed not to test predefined hypotheses, but rather to explore potential causal relationships among variables based on the data. This approach is particularly appropriate for research contexts that are theoretically emergent or where structural relationships are not yet fully established. The measurement scale is adapted from established theoretical frameworks and refined to suit the contextual characteristics of the study. All items are evaluated using a five-point Likert scale, capturing the intensity of tourists' subjective perceptions across each dimension.

Data analysis follows the exploratory modeling approach within Structural Equation Modeling (SEM). Reliability and validity tests are conducted using SPSS, while AMOS is employed to estimate path coefficients and assess model fit. This combined analytical process enables the identification of key perceptual factors that significantly influence the formation of destination image, as well as the relative strength of their impacts.

3.2 Model Construction

The formation of tourism destination image is primarily driven by tourists' multidimensional perceptions. Based on Cognitive Appraisal Theory, this study constructs a structural path model where tourist perception serves as input and destination image as output (see Figure 1). The model aims to explore how subjective evaluations shape overall destination assessment.

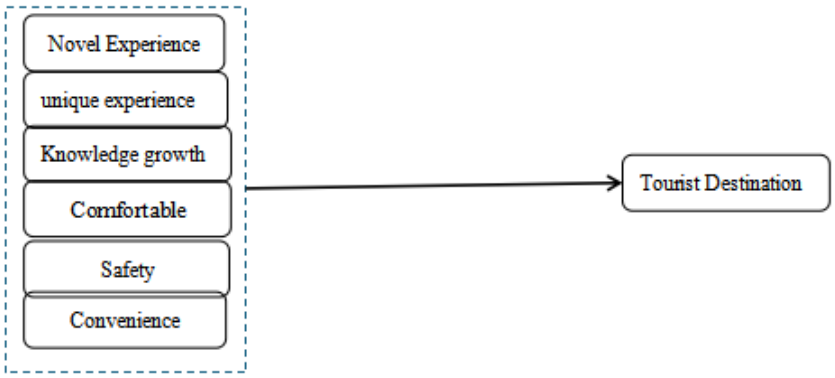

Figure 1: Tourist Perception -Structural Path Diagram of Tourism Destination Image

It includes six perceptual dimensions-novelty, uniqueness, knowledge acquisition, safety, comfort, and convenience-representing tourists' appraisals of environment, culture, services, and atmosphere. The outcome variable, destination image, reflects tourists' comprehensive psychological and attitudinal evaluations.

Assuming all six dimensions have significant direct effects, the model adopts a cognition–affect pathway without mediating or moderating variables, ensuring structural simplicity. Variable selection is grounded in existing literature and field observations, with measurements based on five-point Likert scales.

Structural Equation Modeling (SEM) is used to estimate path coefficients and identify key perception-based influences on destination image. The model offers a clear and effective framework for analyzing perception-driven evaluations, particularly in coastal tourism settings[20].

4. Data Collection and Methods

4.1 Data Collection and Sample Profile

The data used in this study were collected between April and May 2025 through a combination of on-site questionnaire surveys and online supplementary responses conducted in Sanya, China. The fieldwork targeted representative types of shared tourism spaces, including seaside parks, night-market commercial streets, and cultural scenic areas such as Xidao Island, which collectively capture the diversity of spatial environments in a coastal tourism context.

A convenience sampling method was employed, with questionnaires distributed to tourists actively engaged in tourism activities during their visit. This approach ensured that the collected responses accurately reflected tourists' real-time perceptions of the destination's spatial environment and experiential content. By covering a broad range of shared space types, the data provide a strong empirical foundation for analyzing perception-based image formation in coastal urban destinations[21].

4.2 Hypotheses and Analytical Approach

The formation mechanism of tourism destination image can be conceptualized as a "perception–cognition" pathway, emphasizing how tourists' subjective perceptions of environmental, service-related, and cultural elements during travel directly influence their overall evaluation of the destination. Based on this logic, the structural model is constructed with six perceptual dimensions-novelty experience, unique experience, knowledge acquisition, safety, comfort, and convenience-as independent variables, and destination image as the dependent variable. The model aims to examine the direct effects of each perception factor on image formation.

Accordingly, the following six hypotheses are proposed:

- H1a: Novelty experience has a significant positive effect on tourism destination image.
- H1b: Unique experience has a significant positive effect on tourism destination image.
- H1c: Knowledge acquisition has a significant positive effect on tourism destination image.
- H1d: Safety perception has a significant positive effect on tourism destination image.
- H1e: Comfort perception has a significant positive effect on tourism destination image.
- H1f: Convenience perception has a significant positive effect on tourism destination image.

To test these hypotheses, data analysis was conducted using SPSS 26.0 and AMOS 24.0. First, reliability analysis and validity tests were performed to assess the internal consistency, convergent validity, and discriminant validity of the measurement variables. Subsequently, a Structural Equation Modeling (SEM) approach was used to evaluate the significance of path coefficients and the overall model fit. Key fit indices include χ^2/df, Root Mean Square Error of Approximation (RMSEA),

Comparative Fit Index (CFI), and Tucker–Lewis Index (TLI).

The SEM analysis enables the identification of both the relative strength and statistical significance of each perceptual dimension's influence on destination image. The resulting model provides empirical evidence and theoretical insight to support targeted destination image enhancement and management strategies.

5. Empirical Results and Analysis

5.1 Reliability and Validity Testing

To ensure the measurement scale's reliability and validity, psychometric tests were conducted on the questionnaire data. Cronbach's Alpha for the 23 items reached 0.951, well above the 0.70 threshold, indicating excellent internal consistency.

Validity was supported by a high KMO value (0.957) and significant Bartlett's Test result (χ^2 = 4245.433, df = 253, $p < 0.001$), confirming the data's suitability for structural equation modeling (SEM).

These results demonstrate strong psychometric quality, providing a solid foundation for SEM analysis. Further evaluations such as Composite Reliability (CR) and Average Variance Extracted (AVE) can enhance the assessment of convergent and discriminant validity. Overall, the instrument shows high stability and theoretical soundness.

5.2 Path Analysis Using Exploratory SEM

The structural model was evaluated using exploratory structural equation modeling (SEM) to determine the degree to which the theoretical framework matched the empirical data. As shown in Table 1, the χ^2/df ratio was 6.35, which slightly exceeds the commonly recommended threshold of 5. The RMSEA value was 0.125, indicating that the model does not meet the ideal fit criterion of < 0.080. In addition, incremental fit indices including IFI (0.714), CFI (0.712), TLI (0.67), and NFI (0.678) all fell below the recommended benchmark of 0.900, suggesting that the overall model fit remains suboptimal.

Nevertheless, the parsimonious fit indices-PNFI (0.592) and PCFI (0.622)-were both above the threshold of 0.500, indicating acceptable fit relative to the model's complexity. Considering the model involves a relatively large number of variables and was designed for exploratory purposes rather than confirmatory testing, these results still offer valuable insights.

In summary, although the model does not meet all conventional standards of fit, it remains theoretically sound in its structure and directionality. The results offer a meaningful first-step exploration of the perception–image pathway in tourism research. These findings also provide a useful empirical basis for future model optimization, path simplification, and construct refinement, particularly in the context of coastal tourism environments(see table 1).

Table 1: 'Perception-image' Model Goodness-of-fit Test

Index	χ2/df	RMSEA	IFI	CFI	TLI	NFI	PNFI	PCFI
Ref.	<5	<0.080	>0.900	>0.900	>0.900	>0.900	>0.500	>0.500
Value	6.35	1.125	0.714	0.712	0.67	0.678	0.592	0.622
Result	Poor	Poor	Fair	Fair	Fair	Fair	Pass	Pass

Figure 1 illustrates the exploratory structural equation model (SEM) path diagram constructed to assess the effects of tourists' perceptual dimensions on destination image. The model includes six exogenous latent variables: novelty experience, unique experience.

The exogenous latent constructs—knowledge acquisition, safety, comfort, and convenience—

were each measured by three to four observed variables capturing tourists' subjective evaluations during their travel experiences. The endogenous latent construct, destination image, was assessed using two observed indicators, providing a parsimonious representation of the overall image construct within the model.

As illustrated in Figure 2 and Table 2, novelty experience and unique experience exhibit significant negative effects on destination image, with coefficients of −1.06 and −3.17, respectively. In contrast, knowledge acquisition, safety, comfort, and convenience are all positively associated with destination image. Among these, convenience (2.87) and comfort (1.13) demonstrate the strongest positive effects, suggesting that tourists' perceptions of ease of access and physical comfort play a critical role in shaping their overall evaluations of the destination.

Additionally, the factor loadings for most observed variables exceed 0.70, indicating strong convergent validity within the measurement model.

Structural equation modeling revealed significant differences in how tourist perception dimensions influence destination image. Novelty ($\beta = -1.06$) and uniqueness ($\beta = -3.17$) showed non-significant negative effects, leading to the rejection of H1a and H1b. This suggests that in coastal settings with homogeneous offerings, tourists may not perceive novelty or distinctiveness strongly, and over-marketing may even lead to expectation gaps.

In contrast, knowledge acquisition, safety, convenience, and comfort showed significant positive effects on destination image, underscoring the role of functional and emotional factors in shaping tourists' overall evaluations.

Knowledge acquisition ($\beta = 0.40$) has a modest yet significant positive impact, indicating that cultural learning and cognitive stimulation contribute to destination image, especially in culturally rich settings.

Safety ($\beta = 1.24$) exerts a moderately strong influence, showing that psychological security-ensured through public order and hygiene-forms a foundational layer for positive evaluations.

Convenience ($\beta = 2.87$) emerges as the most influential factor, emphasizing tourists' preference for seamless transportation, efficient services, and accessible information in the context of smart tourism.

The comfort dimension also demonstrates a strong and significant influence, with a coefficient of 1.73, ranking second only to convenience. Elements such as pleasant climate, clean environments, and comfortable facilities are major contributors to tourists' affection and trust toward a destination. In coastal tourism settings, comfort carries heightened relevance, encompassing not only physical space but also emotional ambience and well-being.

Overall, the integration of tourists' functional and emotional needs forms the foundation of destination image construction. Convenience and comfort emerge as the most influential factors, reflecting the growing sensitivity of tourists to their on-site experiences. In contrast, novelty and uniqueness-though potentially attractive-fail to translate into image value without meaningful emotional or cognitive resonance. These insights are valuable for optimizing tourism product design, emphasizing the importance of emotional connection and cultural engagement in image enhancement strategies.

From a theoretical perspective, the findings support the perception–behavior framework, where subjective perceptions of service and environmental quality shape individuals' attitudes and behavioral tendencies. In this study, practical (e.g., convenience) and affective (e.g., comfort) dimensions have a greater impact on destination image than abstract novelty traits, underscoring the importance of positive experiential feedback.

In conclusion, the structural path analysis identifies the differential impacts of six perceptual dimensions on destination image, providing empirical support for further studies on cognitive mechanisms in tourism perception. Future research could incorporate moderating or contextual

variables-such as travel motivation, frequency, or group structure-to explore more personalized and context-sensitive pathways of image formation.

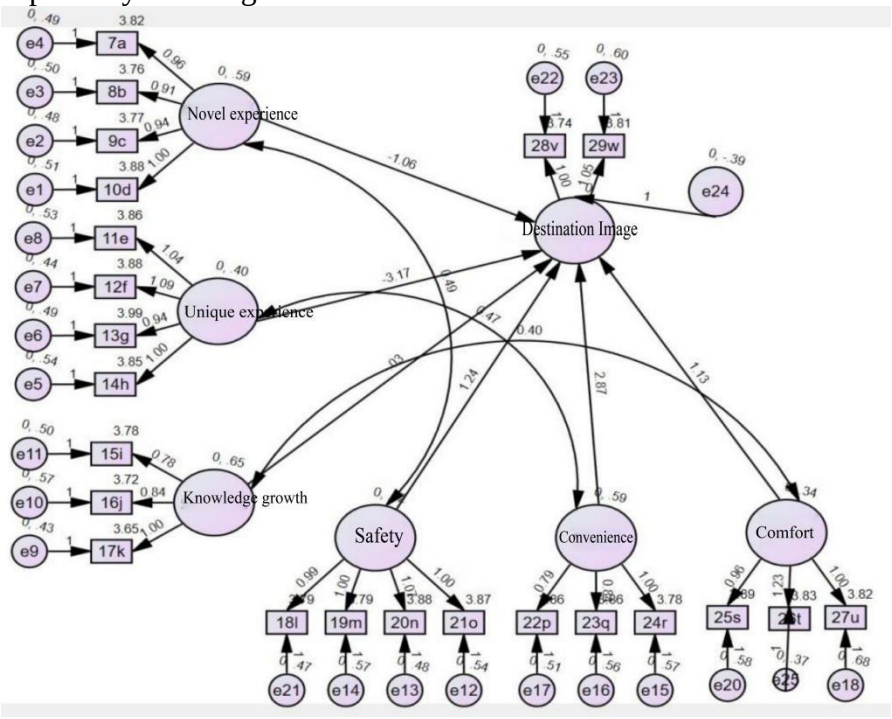

Figure 2 Path Diagram of Structural Equation of Tourism Destination Image (Exploratory Model)

Table 2: Table of Path Effect Test Results

X→Y	Coef.	Result	Sig.
H1a Novelty → Image	-1.06	Not Supported	No
H1b Uniqueness → Image	-3.17	Not Supported	No
H1c Knowledge → Image	0.40	Supported	No
H1d Safety → Image	1.24	Supported	Weak
H1e Convenience →Image	2.87	Supported	Yes
H1f Comfort→Image	1.73	Supported	Yes

6. Discussion

This study examined how tourists' multidimensional perceptions influence destination image in Sanya's coastal shared spaces. Based on Cognitive Appraisal Theory and a perception–image framework, the SEM results identified key predictors.

Convenience (β = 2.87) and comfort (β = 1.73) emerged as the strongest positive influences, highlighting tourists' emphasis on accessibility, service efficiency, and physical ease. Safety (β = 1.24) also showed a significant effect, reinforcing its role in supporting a stable image through hygiene, crowd control, and security measures. Knowledge acquisition (β = 0.40), though weaker, indicated interest in cultural learning and meaningful engagement, especially in heritage-rich environments.

The non-significant and negative effects of novelty (β = −1.06) and uniqueness (β = −3.17) challenge the assumption that these elements always enhance destination image. This may reflect a mismatch between tourists' expectations and actual experiences in commercialized or homogenized coastal settings. The findings highlight that emotional satisfaction and functional reliability-rather

than novelty-are more critical in shaping image perception, especially in mature tourism markets.

Theoretically, the results align with Cognitive Appraisal Theory, underscoring tourists' integrated evaluations of perceived attributes. Practically, destinations like Sanya should focus on improving infrastructure, service quality, and visitor comfort, while shifting marketing from abstract uniqueness to tangible, emotionally engaging experiences. Strengthening shared space management through stakeholder cooperation can further enhance safety, convenience, and overall competitiveness.

7. Conclusion and Recommendations

7.1 Conclusion

The formation of a tourism destination image is the result of tourists' comprehensive perception of spatial environment, service quality, and cultural atmosphere. Based on the empirical analysis of Sanya as a representative coastal tourism city, this study identified several key perception dimensions that significantly influence tourists' image evaluations.

First, among the six perception variables, comfort and convenience demonstrated the strongest positive effects on destination image. This finding reflects tourists' high sensitivity to infrastructure quality, environmental pleasantness, and spatial usability. Well-designed accommodations, efficient transportation systems, and clean public spaces significantly contribute to a favorable overall impression.

Second, knowledge gain and safety also had statistically significant and positive effects on image perception. Enhancements in marine culture promotion, ecological education, and local heritage dissemination have the potential to stimulate tourists' cognitive engagement, while perceived safety remains a fundamental psychological anchor for image formation.

Third, although novelty and uniqueness are commonly regarded as motivational factors for travel, they showed weaker and non-significant impacts on image formation. A possible explanation is the homogenization of coastal destinations, where spatial design and activity offerings become too like distinguish, leading to diminished novelty recognition and emotional resonance among visitors.

Lastly, the structural equation model demonstrated good overall fit, indicating that the causal paths from perception dimensions to destination image possess strong explanatory power. Tourists evaluate a destination's image through a synthesis of their perceptions of service, environment, and culture, validating the perception-to-image model.

7.2 Recommendations

(1) Enhance Spatial Comfort and Environmental Design

Comfort is a fundamental factor in shaping a positive destination image. It is recommended that coastal destinations optimize public space design by adding shaded areas, rest zones, seating, and climate-responsive facilities. Moreover, spatial layout should balance dynamic and static zones, providing an orderly and breathable leisure environment. Intelligent systems may be used to monitor crowd density in real time and improve visitor experience during peak seasons.

(2) Strengthen Cultural Interpretation and Knowledge-based Experience

The significant effect of knowledge gain underscores tourists' demand for intellectual and cultural stimulation. It is suggested to integrate educational and cultural elements into tourism products through thematic exhibitions, intangible heritage workshops, and cultural map-guided tours. Partnerships with universities, research institutes, or local cultural figures can help develop authoritative and engaging knowledge-oriented tourism offerings.

(3) Create Novel and Distinctive Local Experiences

Although novelty and uniqueness did not show strong statistical significance, they remain essential

for attracting first-time visitors. Destinations should explore local differentiators such as tropical marine ecology, Li and Miao ethnic culture, and traditional fishing village lifestyles. Immersive scenarios, festivals, and creative markets can help enhance tourists' sensory, emotional, and cognitive engagement, reinforcing destination recognition and brand memory.

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