

A Study on the Influencing Factors and Guidance Strategies of Tourists' Environmentally Friendly Behavior in the Context of Sustainable Tourism

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Abstract: *With the rapid development of the tourism industry, environmental pressures are becoming increasingly prominent. Sustainable tourism has become a core direction for promoting the long-term development of the tourism industry. As the main actors in tourism activities, tourists' environmentally friendly behavior directly affects the ecological quality of tourist destinations and the achievement of sustainable tourism goals. Taking sustainable tourism as the context, this paper, through literature analysis and logical analysis, focuses on the influencing factors and guidance strategies of tourists' environmentally friendly behavior. The study finds that tourists' environmentally friendly behavior is influenced by three factors: individual, situational, and institutional. At the individual level, environmental awareness, values, and environmental knowledge serve as the internal foundation for behavior; at the situational level, the destination's environmental atmosphere, peer influence, and the availability of facilities serve as external conditions for behavioral transformation; and at the institutional level, policies, regulations, and incentive mechanisms are important safeguards for behavior reinforcement. These three factors interact in a "foundation-condition-guarantee" mechanism. Based on this, this paper designs targeted guidance strategies at the individual, situational, and institutional levels and constructs a three-dimensional implementation support system: "organization-resource-assessment" to promote the normalization of tourists' environmentally friendly behavior. This study not only enriches the theoretical research on sustainable tourism and tourist behavior but also provides practical references for tourist destinations to achieve the coordination of ecological protection and tourism development through guiding tourists' environmentally friendly behavior.*

Keywords: *Sustainable Tourism, Tourist Environmental Behavior, Influencing Factors, Guidance Strategies, Implementation Guarantees*

1. Introduction

In recent years, the global tourism industry has continued to expand. While driving economic growth and cultural exchange, it has also led to problems such as overconsumption of resources, ecological damage, and environmental pollution. Phenomena such as garbage accumulation, vegetation destruction, and water pollution are frequent in tourist destinations, hindering the long-term development of the tourism industry. Against this backdrop, the concept of "sustainable tourism" has emerged. Its core goal is to achieve coordination between tourism activities and ecological protection and social development. As direct participants in tourism activities, tourists' behavioral choices have a decisive impact on the environmental quality of tourist destinations. Whether actively participating in environmental activities or passively complying with environmental regulations, tourists' environmental behavior is a key component in reducing the negative impacts of tourism on the environment and promoting the implementation of sustainable tourism. Current academic research on tourists' environmental behavior has achieved some results, but it often focuses on the role of single factors and lacks a systematic analysis of influencing factors. Furthermore, proposed guidance strategies often struggle to be implemented due to being out of touch with real-world contexts or lacking institutional support. Based on this, this paper, following the logical framework of "influencing factors - interaction mechanisms - guidance strategies - implementation guarantees," systematically analyzes the factors influencing tourists' environmental behavior in the context of sustainable tourism, explores the interplay between these factors, and designs targeted and feasible guidance strategies and guarantee systems, aiming to provide a theoretical basis and practical path for optimizing environmental management and promoting sustainable tourism development in tourist destinations.

2. Definition of Sustainable Tourism and Tourist Environmental Behavior

To deeply analyze the factors influencing tourist environmental behavior and strategies for guiding it, it is first necessary to clarify the core concepts of sustainable tourism and tourist environmental behavior to avoid research deviations caused by conceptual ambiguity. The core of sustainable tourism is to achieve coordinated development across the three dimensions of "ecology, economy, and society," not simply "ecological protection." From an ecological perspective, it requires protecting the natural resources and biodiversity of tourist destinations, reducing pollution generated by tourism activities, and preventing irreversible damage to ecosystems. From an economic perspective, it requires ensuring reasonable incomes for residents of tourist destinations, avoiding economic imbalances caused by excessive commercialization, and ensuring the long-term economic value of the tourism industry. From a social perspective, it requires respecting the local culture and lifestyle of tourist destinations, promoting community participation in tourism management, and achieving harmonious coexistence between tourism activities and local society[1]. Tourist environmental behavior refers to the active or passive actions taken by tourists during their travels to reduce negative impacts on the destination environment and protect the ecological environment. Behaviors can be divided into two categories: passive environmental behaviors, which are fundamental behaviors that comply with the destination's environmental regulations, such as refraining from picking plants, feeding wildlife, or using disposable plastics. These behaviors are fundamental manifestations of tourists' environmental literacy. Active environmental behaviors, which go beyond simply complying with regulations, include participating in trash cleanup activities organized by the destination, promoting environmental awareness to fellow travelers, and offering friendly reminders about unhealthy behaviors. These behaviors represent a high-level manifestation of the transformation of tourists' environmental awareness from "cognition" to "practice." Together, these two categories constitute a comprehensive system of tourist environmental behaviors and represent the concrete implementation of sustainable tourism at the "tourist level."

3. Analysis of the Core Factors Influencing Tourists' Environmental Behavior

Tourists' environmental behavior is not the result of a single factor, but rather a product of three factors: individual, situational, and institutional. These factors influence tourists' behavioral choices from different perspectives.

3.1 Individual Level: The Internal Basis of Behavior

Individual factors are the core determinants of whether tourists adopt environmentally friendly behaviors, primarily including environmental awareness, values, and environmental knowledge. Environmental awareness refers to tourists' understanding of the relationship between tourism activities and the environment. If tourists clearly understand that "littering pollutes water bodies" and "destroying vegetation affects the ecological balance," they are more likely to proactively control their behavior. Conversely, if they lack awareness of environmental issues, their willingness to engage in environmentally friendly behavior is significantly reduced. Values determine how tourists prioritize environmental values. Tourists with ecocentric values prioritize environmental protection over personal experience and are more inclined to actively engage in environmental protection. Tourists with anthropocentric values prioritize the comfort of their personal travel experience, and their environmental behavior is easily influenced by personal needs. Furthermore, environmental knowledge is essential. Even if tourists have environmental intentions, it's difficult to translate these intentions into actual behavior without understanding how to sort their trash and what items are considered environmentally friendly.

3.2 Situational Level: External Conditions for Behavioral Transformation

Contextual factors serve as the bridge between tourists' environmental intentions and actual behavior, primarily including the destination's environmental atmosphere, peer influence, and the availability of amenities. The destination's environmental atmosphere influences tourist behavior through the "bandwagon effect"—if a destination is generally clean, with environmental signs everywhere, and other tourists complying with environmental regulations, tourists are more likely to embrace this atmosphere and actively adopt environmentally friendly behaviors. Conversely, if a destination is littered and unmaintained, tourists' environmental restraints will significantly relax[2]. Peer influence manifests itself in the form of "group pressure": the behavior of fellow travelers directly influences individuals. If

companions actively participate in environmental activities, individuals may also join in, refusing to be separated from the group. However, if companions engage in unhealthy behaviors such as littering, the likelihood of individuals adopting environmentally friendly behaviors decreases significantly. The completeness of facilities provides the "material support" for environmentally friendly behavior. If a tourist destination only provides standard trash cans, it will be difficult for tourists to sort their trash. If there aren't enough trash cans, even if tourists are willing to refrain from littering, they may choose not to do so due to lack of space.

3.3 Institutional Level: A Key Guarantee for Behavior Reinforcement

Institutional factors are key to maintaining the stability of tourists' environmentally friendly behavior, primarily including policies, regulations, and incentive mechanisms. Policies and regulations regulate tourist behavior through "binding" measures. For example, if a tourist destination clearly stipulates a "50 yuan fine for littering" and has staff to oversee enforcement, tourists will comply to avoid penalties. Conversely, if only "No Littering" signs exist without actual constraints, regulations can become a formality. Incentive mechanisms enhance tourists' environmental willingness through "motivation." If a tourist destination offers rewards such as "environmental points redeemable for ticket discounts" or "certificates of honor for environmentally friendly behavior," tourists' motivation to actively engage in environmental protection will be significantly enhanced. Without incentives, proactive environmental behavior may be difficult to sustain due to lack of rewards.

4. Interaction Mechanism of Factors Influencing Tourists' Environmental Behavior

Influencing factors at the individual, situational, and institutional levels do not exist in isolation; rather, they form an interactive mechanism of "foundation-conditions-guarantees" that jointly determine the ultimate outcome of tourists' environmentally friendly behavior. First, individual factors serve as the "foundation," but they require the support of situational factors to translate into behavior. For example, if a tourist has strong environmental awareness and is willing to proactively pick up trash, but the destination lacks trash collection bags and other tourists are not actively involved in environmental protection, their intention may not translate into actual behavior due to the "lack of conditions." Conversely, if a destination has comprehensive facilities and a positive atmosphere, but tourists themselves lack environmental awareness, even with the "external conditions," they will find it difficult to proactively engage in environmentally friendly behavior[3]. Second, institutional factors can simultaneously reinforce the effects of both individual and situational factors. From the perspective of strengthening the individual level, destinations can promote policies and regulations to enhance tourists' awareness of environmental issues and, in turn, strengthen their environmental awareness. Incentive mechanisms can also help guide tourists to develop a value system that values environmental protection, thus driving individual factors in a positive direction. From the perspective of contextual reinforcement, government policies requiring tourist destinations to improve environmental protection facilities can directly improve the "material conditions" of the context. Encouraging tourism businesses to carry out environmental awareness campaigns can foster a stronger environmental atmosphere and enhance the positive impact of contextual factors. Finally, contextual factors can also have a reverse effect on the individual level. A positive environmental atmosphere in a tourist destination can, through a "demonstration effect," help tourists with limited environmental awareness realize that environmental protection is a universal behavior, subtly enhancing their environmental awareness. Furthermore, environmental interaction among peers can allow tourists to accumulate environmental knowledge through practice, promoting the improvement of individual factors. This interactive mechanism suggests that guiding tourists' environmental behavior requires comprehensive consideration of all three levels. Focusing solely on a single factor can result in ineffective results.

5. Designing Tourist Environmental Behavior Guidance Strategies Based on Influencing Factors

Based on the influencing factors and interactive mechanisms of tourists' environmental behavior, targeted guidance strategies should be designed at the individual, contextual, and institutional levels to achieve a synergistic approach of "stimulating internal motivation, optimizing external conditions, and strengthening institutional support."

5.1 Individual Level: Strengthen Environmental Education and Enhance Inner Competencies

From an individual perspective, the core focus is to raise tourists' environmental awareness, cultivate ecological values, and supplement their environmental knowledge through education and promotion. Online, travel platforms can promote environmental content: A "destination ecological vulnerability reminder" can be displayed when tourists book tickets; and "environmentally friendly behavior guidelines" can be included in travel guides. Offline, environmental awareness areas can be set up at destination entrances and visitor centers. Graphic panels can highlight the environmental impacts of tourism activities and short videos can explain specific ways to engage in environmentally friendly behavior. Tour guides can also incorporate environmental content into their tours, such as explaining the significance of protecting vegetation at a particular attraction, to help tourists understand the importance of environmental protection through their experiences. Furthermore, "environmental knowledge quizzes" can be designed, where participants receive small gifts. This interactive education strengthens environmental knowledge retention.

5.2 Contextual Level: Optimize the environmental context and reduce the cost of behavior

From a contextual perspective, the "implementation cost" of environmental behavior for tourists should be reduced through the creation of an atmosphere and improved facilities. First, foster an environmentally friendly atmosphere: Place friendly environmental reminders at key points in tourist destinations, avoiding blunt "no" signs. Display a "photo wall of environmentally friendly behavior" in tourist rest areas to create a positive impact through real tourists' environmentally friendly behavior. Second, optimize peer influence: Tour guides should emphasize the concept of "environmentally friendly companionship" before the group departs, encouraging tourists to monitor each other. Tourist destinations can also launch "environmental groups" where tourists voluntarily form teams to participate in environmental protection tasks, reinforcing positive influence through group interaction. Third, improve environmental protection facilities: Arrange appropriate waste bins based on tourist flow and route layout, increasing their density at popular attractions. Provide services such as biodegradable trash bags and eco-friendly water bottles for rental to address the problem of tourists wanting to be environmentally friendly but lacking the tools.

5.3 Institutional Level: Improve Constraints and Incentives to Strengthen Behavioral Guarantees

From an institutional perspective, a dual-track system of "constraints and incentives" is needed to strengthen the stability of tourists' environmentally friendly behavior. First, improve restrictive policies: Tourist destinations should formulate clear environmental regulations, set reasonable penalties for littering and vegetation damage, and deploy staff and volunteers to oversee implementation. Furthermore, environmental requirements should be incorporated into tourism enterprise performance assessments, such as awarding bonus points to hotels that strictly adhere to a "no disposables" policy, to encourage participation in these regulations. Second, establish diversified incentives: Introduce an "environmental points" system, allowing tourists to accumulate points by participating in environmental activities and complying with regulations. Points can be redeemed for ticket discounts, souvenirs, and other benefits. An honorary title of "environmentally friendly tourist" should be established and publicized on the destination's official website and social media platforms to meet tourists' sense of honor[4]. Tourists who consistently adhere to environmentally friendly behaviors can be issued "lifetime environmental membership cards" to enjoy exclusive benefits at the destination.

6. Implementation and Support System for Tourist Environmental Behavior Guidance Strategies

For guidance strategies to be effective, a three-dimensional implementation support system ("organization-resources-assessment") must be established to address the issues of "who will do it," "how it will be done," and "how well it will be done."

6.1 Organizational Support: Establish a Multi-Stakeholder Collaboration Mechanism

Guiding tourist environmental behavior requires the coordinated efforts of the government, tourism enterprises, and social organizations to avoid the limitations of a single entity. The government plays a leading role: formulating macroeconomic policies and coordinating fiscal funding for environmental infrastructure; strengthening oversight of tourist destinations and regularly reviewing compliance with

environmental regulations. Tourism enterprises play an implementing role: scenic spots are responsible for improving environmental protection facilities, conducting on-site publicity and oversight; hotels are implementing "no disposables" and "waste sorting" services; travel agencies are incorporating environmental protection requirements into travel contracts and guiding tour guides in fulfilling their environmental outreach responsibilities. Social organizations play a supervisory and supplementary role: environmental NGOs regularly assess the environmental performance of tourist destinations and provide improvement recommendations to the government and businesses; volunteer groups are stationed at tourist destinations during peak tourist season to help guide tourists in environmentally friendly behavior, thus forming a collaborative framework of "government leadership, business implementation, and social oversight."

6.2 Resource Guarantee: Providing Financial and Technical Support

Resource guarantee is the "material foundation" for strategy implementation, and addressing funding and technical issues is crucial. In terms of funding, the government has established a "Sustainable Tourism Environmental Protection Special Fund" to be used for environmental protection facility construction, publicity and education, and incentives. Tourism enterprises are required to include environmental protection investments in their annual budgets and are encouraged to expand funding sources through green credit and social donations. Tax exemptions, subsidies, and other policy support are provided to businesses and social organizations participating in environmental protection projects. Regarding technology, digital technologies are being utilized to improve management efficiency: intelligent monitoring systems are used to monitor tourists' environmentally friendly behaviors in real time and provide timely warnings of unhealthy behavior. Big data is used to analyze the characteristics of tourists' environmentally friendly behaviors and provide a basis for strategic adjustments. Environmentally friendly technologies are being promoted, such as solar lighting and rainwater recycling systems in scenic spots and wastewater treatment technologies in hotels, to reduce the environmental impact of tourist destinations and provide technical support for tourists' environmentally friendly behaviors[5].

6.3 Evaluation and Support: Establishing a Dynamic Adjustment Mechanism

To avoid policy rigidity, a dynamic evaluation and adjustment mechanism is necessary to ensure that the strategy remains relevant to actual needs. First, a scientific evaluation indicator system should be developed: this includes three core dimensions: "incidence of tourist environmentally friendly behaviors," "destination environmental quality," and "tourist satisfaction," with specific quantitative indicators set for each dimension. Secondly, regular evaluations should be conducted: quarterly, through questionnaires, on-site observations, and statistical analysis, indicator data should be collected to analyze the effectiveness of strategy implementation. If the "incidence of proactive environmental behavior" has not increased, the incentive mechanism should be optimized; if "visitor satisfaction with facilities is low," the trash can layout should be adjusted. Finally, strategies should be dynamically adjusted based on the evaluation results: strategies with significant effects should be further strengthened; strategies with poor results should be promptly replaced to ensure that the guidance strategy remains targeted and effective.

7. Conclusion

This paper systematically examines the factors influencing tourists' environmental behavior and guidance strategies in the context of sustainable tourism. Through conceptual definition, factor analysis, mechanism exploration, strategy design, and support construction, a relatively comprehensive research framework has been established. The research shows that tourists' environmental behavior is the result of the interaction of factors at the individual, situational, and institutional levels: individual environmental awareness, values, and environmental knowledge are the internal foundation for behavior; situational atmosphere, peer influence, and facilities are the external conditions for behavior transformation; and institutional policies and incentives ensure behavior reinforcement. These three factors form a synergistic mechanism of "foundation-condition-support," and none of them can be disjointed. Based on the above research, this paper proposes a guidance strategy that precisely addresses individual, situational, and institutional levels. It not only focuses on stimulating tourists' inherent environmental intentions but also emphasizes optimizing external implementation conditions and strengthening institutional support, thus avoiding the limitations of a single strategy. The three-dimensional

"organization-resource-assessment" support system further addresses the implementation challenges of the strategy, including the "subject, funding, and effectiveness," enhancing its feasibility and adaptability. In terms of research value, theoretically, this paper enriches the research on sustainable tourism and tourist behavior by systematically analyzing the influencing factors and interaction mechanisms, addressing the shortcomings of existing research that focuses on a single factor. Practically, the research findings can directly provide operational guidance for tourist destinations, aiming to reduce environmental pressures by guiding tourists' environmentally friendly behaviors, promote the tourism industry's transition from "scale expansion" to "quality improvement," and achieve the coordination of ecological protection with economic and social development. However, this paper also has certain limitations: the research focuses primarily on logical analysis and strategy design, lacks empirical data support, and fails to deeply analyze the differences in tourists' environmental behavior across different types of tourist destinations. Subsequent research can conduct empirical research in specific tourist destinations, collect data through questionnaires, interviews, etc., verify the intensity of influencing factors, and further optimize guidance strategies; it can also focus on the environmental protection behavior characteristics of specific groups and design more targeted intervention plans to provide more accurate theoretical and practical support for the development of sustainable tourism.

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