

Tourists' Participation in Rural Tourism Development Based on TPB Theory: A Case Study of Xiqiao Town, Foshan

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Abstract: Rural tourism, as an important means to promote rural economic transformation and rural revitalization, has attracted more and more tourists to participate. Tourists' willingness to participate in rural tourism is influenced by a variety of factors, and in-depth research on its decision-making mechanism is urgently needed. Based on the Theory of Planned Behavior (TPB), this paper constructs a framework for analyzing the influencing factors of tourists' participation in the development of rural tourism, and takes Xiqiao Town in Nanhai, Foshan as a research case to explore the influence of three major factors, namely attitude, subjective norms and perceived behavioral control, on tourists' willingness to participate. This study adopts questionnaire survey and empirical analysis methods, combined with regression analysis model, to identify the key factors affecting tourists' decision-making and propose countermeasures to optimize the development of rural tourism. Perceived behavioral control factors such as tourists' attitudes toward rural tourism, subjective norms of social circles, and travel convenience all significantly affect tourists' willingness to participate. This paper proposes to strengthen the branding of rural tourism, optimize tourism supporting facilities, and enhance the interactive experience of the community in order to promote the sustainable development of rural tourism. The research results not only enrich the application of TPB theory in rural tourism, but also provide theoretical support for local governments and tourism enterprises to formulate targeted policies.

Keywords: TPB Theory, Tourist Participation, Rural Tourism Development, Influencing Factors.

1. Introduction

As an important way to promote rural revitalization and regional economic development, rural tourism has received widespread attention in recent years[1]. Compared with urban tourism, rural tourism has attracted a large number of tourists by virtue of its unique natural scenery, folk culture and ecological environment, but it still faces the challenges of low tourist participation, insufficient market competitiveness, and imperfect infrastructure construction. Enhancing tourists' willingness to participate and the sustainable development of rural tourism has become an important topic of concern in both academic and practical fields[2].

Theory of Planned Behavior (TPB) is a theoretical framework widely used in the study of behavioral decision-making, and it is believed that individual's behavioral intention is mainly influenced by three factors: attitude, subjective norms and perceived behavioral control[3]. In recent years, TPB theory has been applied in tourism behavior research, but the in-depth exploration of rural tourism is still limited. Based on TPB theory, this study analyzes the key factors affecting tourists' participation in rural tourism, and explores how to optimize these factors to enhance the attractiveness and sustainable development of rural tourism.

Xiqiao Town in Nanhai, Foshan is a representative rural tourism destination in Guangdong Province, attracting a large number of tourists by virtue of its rich natural resources, history and culture, and characteristic industries[4]. While developing rapidly, its rural tourism industry still faces problems such as low stickiness of tourists and low revisit rate. Taking Xiqiao Town as a case study, exploring the factors

affecting tourists' participation in rural tourism not only helps to enhance the competitiveness of local tourism, but also provides a reference for other rural tourism destinations.

This study adopts a combination of questionnaire survey and empirical analysis to verify the applicability of TPB theory in the study of rural tourism behavior through data collection and regression analysis. The basic concepts of TPB theory and its application in tourism research are combined with the theory to explore the main factors affecting tourists' participation in rural tourism, including attitudes, subjective norms, and perceived behavioral control[5]. Taking Xiqiao Town, Nanhai, Foshan as a case study, an empirical study is conducted to analyze the influencing factors of tourists' willingness to participate and put forward corresponding development suggestions. Summarize the conclusions of the study and put forward an outlook on the future development of rural tourism[6]. This study not only enriches the application of TPB theory in the field of rural tourism, but also provides a scientific basis for local governments and tourism managers to formulate effective rural tourism development strategies.

2. Overview of TPB Theory and Its Application in Tourism Research

Theory of Planned Behavior (TPB) is a behavioral decision-making model proposed by Ajzen in 1985, which is used to explain how individuals form behavioral intentions and ultimately implement behaviors in specific situations. The theory suggests that an individual's behavioral intention is a direct determinant of the occurrence of his or her behavior,

and that behavioral intention is influenced by three core variables: attitude, subjective norms, and perceived behavioral control. Among them, attitude refers to an individual's positive or negative evaluation of a behavior, subjective norm refers to the social pressure felt by the individual, i.e., the approval or expectation of the behavior by others, and perceived behavioral control involves the individual's perception of his or her own ability to carry out the behavior, including factors such as the available resources and the external environment. This theory has strong applicability in explaining and predicting individual behavior and is widely used in psychology, marketing, health behavior, and other fields. Planned Behavior Theory (TPB) Model Equation:

$$I = \beta_0 + \beta_1A + \beta_2SN + \beta_3PBC + n \quad (1)$$

In the field of tourism research, TPB theory is widely used to analyze tourists' behavioral intentions and actual decisions. Through TPB theory, researchers have explored the factors influencing tourists' choice of destination, participation in tourism activities, consumption behavior and environmental protection behavior. Many empirical studies have shown that tourists' attitudes toward destinations, the influence of social environments, and the perceived convenience of travel significantly affect their decision to travel, and TPB theory has also been used to predict tourists' intention to revisit, word-of-mouth behavior, and the degree of support for sustainable tourism, which further proves the validity of the theory in the study of tourism behavior, showed in Figure 1 :

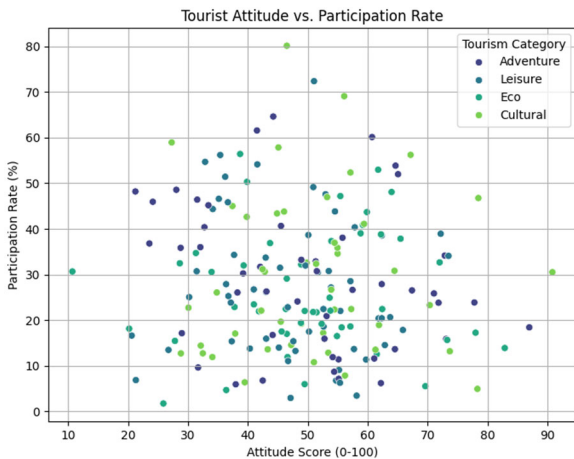


Figure 1. Tourist Attitude vs. Participation Rate

In recent years, with the rise of rural tourism, researchers have begun to apply TPB theory to the study of tourists' participation in rural tourism[7]. As rural tourism involves natural, cultural, and community interactions, the decision-making process of tourists may be more complex, and TPB theory provides a systematic framework for analyzing the psychological mechanisms of tourists' participation in rural tourism, which can help researchers understand the psychological motivation of tourists and their behavioral patterns[8]. Some studies have found that tourists' attitudes toward rural tourism (e.g., preferences for the rural environment), recommendations from their social circles (e.g.,

the influence of friends or social media), and perceptions of transportation and infrastructure (e.g., convenience and safety) all affect their willingness to participate in rural tourism.

Rural tourism research based on TPB theory not only contributes to the improvement of the theoretical model, but also provides practical guidance for the management and promotion of rural tourism. By accurately identifying the key factors affecting tourists' participation, tourism managers can formulate more effective marketing strategies, such as enhancing tourists' positive perceptions of rural tourism, strengthening social media publicity, and optimizing the construction of infrastructure, in order to improve tourists' participation and satisfaction. The application of the TPB theory provides a scientific basis for the development of rural tourism, and helps to promote the sustainable development of the rural tourism industry.

3. Analysis of Influencing Factors of Tourists' Participation in Rural Tourism Development

Whether tourists are willing to participate in rural tourism is affected by a variety of factors, among which TPB theory provides a systematic analytical framework[9]. From this theory, tourists' willingness to participate is mainly influenced by three factors: attitude, subjective norms and perceived behavioral control[10]. Attitude determines tourists' interest in and preference for rural tourism, subjective norms reflect tourists' influences in the social environment, and perceived behavioral control involves tourists' perceptions of the feasibility of rural tourism and their sense of self-efficacy. In the following, each of these three types of factors will be explored to see how they influence tourists' participation in rural tourism.

3.1. Tourists' attitudinal factors towards rural tourism

Tourists' attitude towards rural tourism is an important factor in determining their willingness to participate, which mainly consists of their perception of rural tourism, emotional experience and expected benefits. According to the TPB theory, tourists are more likely to participate in rural tourism if they have a positive attitude towards it and believe that it can bring enjoyable and valuable experiences. On the contrary, if tourists perceive rural tourism as unattractive or inconvenient, they may reduce their willingness to travel. An in-depth analysis of the key factors influencing tourists' attitudes can help to better understand tourists' psychological expectations and provide effective strategies for the promotion of rural tourism. Logistic Regression Model for Participation Probability:

$$P(Y = 1) = \frac{1}{1 + e^{-(\alpha + \beta_1A + \beta_2SN + \beta_3PBC)}} \quad (2)$$

Tourists' cognition of rural tourism is the basis for influencing their attitudes. Cognition mainly includes the degree of tourists' understanding of rural tourism resources, cultural characteristics and development status. If tourists believe that rural tourism can provide rich natural landscapes, traditional cultural experiences and healthy leisure activities, they tend to form positive attitudes. Some tourists may have stereotypical impressions of rural tourism, such as the

perception that the rural environment is relatively backward, the tourism products are single or the supporting facilities are insufficient, which may lead to a decrease in their interest in rural tourism. Strengthening publicity and raising tourists' awareness of the diversity of rural tourism can help improve their attitudes, shown in Figure 2 :

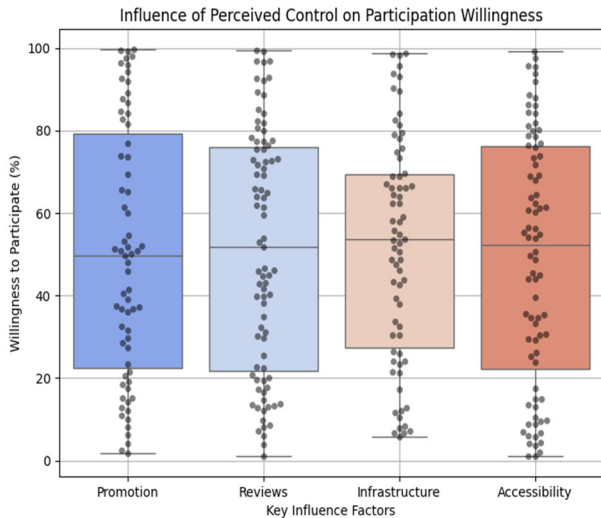


Figure 2. Influence of Perceived Control on Participation Willingness

Tourists' emotional experience plays an important role in the process of attitude formation. Many tourists choose rural tourism because they desire to get away from the hustle and bustle of the city, return to nature and experience the tranquility and simplicity of the countryside. If tourists can get a pleasant emotional experience in the process of rural tourism, such as relaxing their body and mind, feeling the human flavor of the countryside, and experiencing the farming life, they tend to have a more positive attitude toward rural tourism. On the contrary, if tourists encounter dirty environment, low service quality, or poor experience during tourism, they may develop negative attitudes and influence their future travel decisions.

Tourists' expected benefits of rural tourism are also an important factor influencing attitudes. Expected benefits include both material and non-material benefits. Material gains refer to whether tourists believe that rural tourism is cost-effective, with reasonable ticket prices, excellent accommodation and food conditions, and abundant tourist activities. The non-material benefits, on the other hand, relate to whether tourists can gain knowledge, cultural inculcation or unique experience in rural tourism. If tourists believe that rural tourism can provide them with memorable experiences and good rewards, their attitudes will be more positive and may further influence their willingness to participate and behavior.

3.2. Influence of subjective norms on tourists' participation

Subjective norms are an important factor influencing tourists' participation in rural tourism, which mainly refers to the external influences that tourists are subjected to in the social environment, including family members, friends, social media, government policies, and the guidance of social

opinion. According to the TPB theory, tourists are often influenced by people around them when making tourism decisions, especially recommendations from family and friends and information dissemination from social media. Tourists feel the support and recognition of rural tourism from the people around them, and their willingness to participate will increase significantly. If the social environment has a more negative attitude towards rural tourism, tourists may reduce their motivation to participate. Exploring how subjective norms influence tourists' participation in rural tourism helps to understand the role of social factors in tourism decision-making and provides a reference for the promotion of rural tourism.

Recommendations from family and friends are important factors influencing tourists' decisions. Many tourists prioritize the recommendations of family and friends, especially those who have had previous experience in rural tourism, when choosing a destination. If friends and relatives speak positively about rural tourism experiences and recommend related destinations, tourists are more likely to be influenced and thus have a willingness to participate. This influence is further reinforced by the trend towards group travel, with family travel and traveling with friends making tourists more inclined to follow group decisions. Increasing tourist satisfaction in rural tourism and enhancing the word-of-mouth communication effect can help attract more potential tourists.

Social media and online evaluation play an increasingly important role in tourists' decision-making. With the development of digital information dissemination, tourism sharing on social media platforms, short video promotions and online evaluation systems have become important sources of information for tourists. If tourists see a large number of positive reviews, beauty sharing or interesting travel experiences about rural tourism on social platforms, they may develop a stronger interest and be willing to try similar tourism. In particular, the influence on young tourists is especially significant in the case of rural tourism routes recommended by netizens' calling places and bloggers. The promotion of rural tourism should make full use of the influence of social media to enhance tourists' participation through short videos, live broadcasts and user reviews.

Government policies and social promotion also influence tourists' willingness to travel to the countryside to a certain extent. In recent years, governments around the world have actively guided tourists to pay attention to and participate in rural tourism through the introduction of rural tourism support policies, the organization of rural cultural festivals and activities, and the promotion of special B&Bs. Publicity and promotion by mainstream media can also shape tourists' positive perceptions of rural tourism, emphasizing the concepts of eco-tourism, rural revitalization, and non-heritage cultural experiences, all of which may enhance tourists' willingness to participate. Strengthening publicity and promotion at the governmental and social levels can help enhance the social recognition of rural tourism and further promote tourists' actual actions.

3.3. The effect of perceived behavioral control on willingness to participate

Perceived behavioral control is a core variable in the Theory of Planned Behavior (TPB), which refers to an individual's sense of control over the occurrence of a behavior, especially whether he or she believes he or she has the ability

and resources to carry out the behavior in a given situation. For tourists' participation in rural tourism, perceived behavioral control mainly involves tourists' perceptions of the accessibility of rural tourism destinations, the completeness of tourism facilities, the feasibility of activities, and their personal time and economic resources. Tourists' willingness to participate in rural tourism will be higher if they perceive participation to be feasible and if they are able to overcome the obstacles they may encounter on their own. On the contrary, if tourists perceive that participation in rural tourism is too costly, inconveniently accessible, or inadequately serviced, these will significantly reduce their likelihood of participation.

Accessibility is a key factor in the control of tourists' perceived behavior. If tourists perceive that transportation to rural tourism destinations is inconvenient, may require a long drive or face traffic congestion, they will be resistant to rural tourism. A good transportation network, including convenient public transportation, clear travel directions, and improved transportation facilities in rural areas, can effectively increase tourists' willingness to participate. Providing diversified transportation options (e.g., self-driving tours, shared trips, etc.) also enhances tourists' sense of perceived behavioral control, making it easier for them to make participation decisions.

The degree of perfection of tourism facilities is an important factor influencing tourists' perceived behavioral control. Whether the infrastructure of rural tourism destinations, such as accommodation, catering, toilets, rest areas, etc., is perfect or not, directly affects tourists' judgment of participation in tourism. If tourists perceive that rural areas lack high-quality accommodation, that catering does not meet expectations, or that basic services do not satisfy demand, they may become apprehensive as a result, thus reducing their willingness to participate. Good hospitality services and improved details such as information and counseling can also enhance tourists' sense of control and confidence, making them more willing to choose rural tourism.

Further, economic cost and personal time arrangement are also components of perceived behavioral control. If tourists perceive that the economic inputs required for rural tourism are too high, such as transportation costs, accommodation costs, admission fees, etc., or if they are unable to arrange enough vacation time for rural tourism due to time constraints, then they may give up their trips due to budgetary and time issues. Tourists' family responsibilities, work schedules and other factors may also limit their travel plans. The cost of rural tourism should be set as reasonably as possible to provide flexible travel options to meet the needs of different groups of tourists, thus reducing the barriers in perceived behavioral control.

4. An Empirical Study Based on The Example of Xiqiao Town, Nanhai, Foshan, China

In this study, we chose Xiqiao Town, Nanhai, Foshan as a case study to explore the influencing factors of tourists' participation in rural tourism. Xiqiao Town is a typical rural tourism destination, integrating rich natural landscape, historical and cultural heritage, and modern tourism facilities. Through questionnaire surveys and interviews with tourists, combined with the framework of TPB theory, the factors influencing tourists' participation in rural tourism in Xiqiao

Town are analyzed, with a view to providing valuable references and inspirations for the development of Xiqiao Town and other similar rural tourism destinations.

By analyzing tourists' attitudes, the study found that tourists have a more positive attitude towards rural tourism in Xiqiao Town. Most of the tourists indicated that they were very interested in the natural landscape and cultural resources of Xiqiao Town, especially the scenic spots of Xiqiao Mountain and the rich traditional cultural activities, such as temple fairs and folklore performances. These unique resources attracted a large number of tourists. Some tourists also made some negative comments, mainly focusing on issues such as inadequate tourist facilities and inconvenient transportation. Overall, tourists' attitudes are relatively positive, but further improvements in infrastructure and service quality are still needed to enhance tourists' willingness to participate.

Regarding the influence of subjective norms, the empirical study shows that tourists' willingness to participate is largely influenced by recommendations from family and friends. Many tourists indicated that in choosing Xiqiao Town as a tourist destination, they were mainly based on recommendations from family and friends or favorable reviews they had heard before. Travel sharing on social media also had a greater impact on tourists' decision-making, especially through the dissemination of short video platforms and travel blogs, which enabled Xiqiao Town to gain a high level of attention among the younger group of tourists. This phenomenon suggests that social networks and interpersonal communication play an important role in promoting rural tourism and can effectively enhance tourists' willingness to participate.

Perceived behavioral control plays an important role in tourists' decisions to participate in rural tourism in Xiqiao Town. Through the research, tourists generally reflect that inconvenient transportation and insufficient tourism facilities are important factors that restrict their travel. Although Xiqiao Town is located in Foshan City and has a relatively well-developed transportation network, due to the remote location of attractions such as Xiqiao Mountain and the limited coverage of public transportation, some tourists perceived that it takes a longer drive to get to these attractions. Although accommodation and catering services in Xiqiao Town have been upgraded, some tourists still feel that accommodation is insufficient during the peak tourist season, resulting in higher accommodation pressure. Enhancing transportation accessibility and strengthening infrastructure development are key to increasing tourists' willingness to participate.

The empirical study shows that each factor in the TPB theory - tourists' attitudes, subjective norms and perceived behavioral control - has a significant impact on tourists' participation in rural tourism in Xiqiao Town. Based on the results of the study, we put forward corresponding recommendations: Xiqiao Town should further explore and publicize its unique culture and natural resources to increase tourists' awareness of the destination; second, strengthen cooperation with social media and tourism platforms, and utilize modern means of communication to increase the influence of rural tourism; and lastly, improve transportation facilities, enhance the quality of tourism services, and increase the tourists' sense of control so as to enhance their willingness to participate and satisfaction.

5. Conclusion

Based on the framework of the Theory of Planned Behavior (TPB), this study explored the main influencing factors of tourists' participation in rural tourism and took Xiqiao Town in Nanhai, Foshan as a case study for empirical analysis. The findings show that tourists' willingness to participate in rural tourism is significantly influenced by three factors: attitude, subjective norms and perceived behavioral control. In Xiqiao Town, tourists generally have positive attitudes toward the natural landscape and cultural resources of the area, and there are problems such as inconvenient transportation and imperfect tourism facilities, which affect tourists' participation decisions to a certain extent. Subjective normative factors, such as recommendations from friends and family and positive comments on social media, have a positive effect on tourists' tourism decisions, with a particularly significant effect on the young tourist group. Perceived behavioral control is also a key factor influencing tourists' intention to participate, and the degree of improvement of transportation and facilities is directly related to tourists' intention to participate.

Xiqiao Town should further enhance its tourism infrastructure, especially in terms of transportation and accommodation facilities, to ensure that tourists can reach the attractions more conveniently and have a comfortable tourism experience. Cooperation with social media platforms should be strengthened and modern communication methods should be utilized to enhance the visibility and attractiveness of the destination, especially through user reviews and travel recommendations, to attract more potential tourists. The government and tourism administration can further strengthen policy support and improve the service quality and environment of rural tourism in order to improve tourists' perceived behavioral control and further stimulate their willingness to participate.

Through empirical analysis, this study provides an in-depth discussion of the psychological and behavioral mechanisms of tourists' participation in rural tourism, which provides a theoretical basis and practical guidance for the planning and development of rural tourism destinations. In the future, with the promotion of the rural revitalization strategy, rural tourism is expected to usher in a broader development prospect, and how to enhance the tourists' participation experience in this process remains a problem that needs to be continuously

focused on and solved.

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