Study on University Students' Behavior in Leisure Fishing Villages Based on the Theory of Planned Behavior (TPB)

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Abstract. Fishing village tourism, which blends natural landscapes and cultural experiences, attracts many visitors. However, research on university students' tourism behavior in this context is limited. This study uses the Theory of Planned Behavior (TPB) and Structural Equation Modeling (SEM) to analyze factors such as travel motivation, behavioral intention, and perceived value among students. The results indicate that attitude, primarily influenced by natural and cultural attractions, significantly impacts tourism intentions. Subjective norms, like social circles and media influence, and perceived behavioral control, including travel convenience and safety, also play crucial roles. The study further identifies perceived value as a mediator between these factors and behavioral intention. These findings provide empirical support and policy recommendations for developing and marketing fishing village tourism to attract university students.

Keywords: Theory of Planned Behavior; Fishing Village Tourism; University Students; Travel Motivation

1 Introduction

Fishing village tourism, blending natural landscapes with cultural experiences, has grown rapidly in recent years. However, research on university students' participation in this form of tourism is limited. This study uses the Theory of Planned Behavior (TPB) to explore students' travel motivations and intentions, providing insights for the development and marketing of fishing village destinations. Post-pandemic, villages like Xunpu, Danjia, and Houhai have gained popularity, reflecting the broader growth trend in leisure fisheries, which reached a national output value of 83.925 billion yuan in 2022. The transformation of villages such as Zengcuoan in Xiamen demonstrates the economic and tourism potential of this sector.

University students are a key tourism market segment, essential for understanding the factors driving participation in fishing village tourism. This study uses the TPB to analyze their behavior, offering theoretical and practical insights. With rising living standards and urbanization, many students seek natural escapes and unique fishing cul-

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tures during their free time. Leisure fishing villages attract with marine resources, cultural experiences, and fresh seafood, allowing tourists to engage in fishing activities and learn traditional practices. Tourism development has also diversified local income, preserving cultural heritage while boosting economic growth[7].

Foreign scholars tend to focus on culture and arts as key elements in the development of fishing village tourism. For example, Kim Hee-Jae, through surveys of fishing village cultural tourism and group activities, emphasized the importance of fishery cultural resources in tourism development[2]. However, these studies often focus on cultural and artistic aspects, lacking systematic analysis of tourism behavior. Kim suggested the development and improvement of fishery cultural resources using market-recognized products to create fishing village tourism projects. Although domestic research on leisure fishing village tourism is relatively weak, studies using the TPB in tourism research are more mature and offer applicable insights. Hu Chi and Yuan Mengru used the TPB to study the effects of three potential variables on the travel behavior intentions of parents of primary and secondary school students, finding that perceived behavioral control had a relatively small impact[3]. Sun Jinwei pointed out that traditional fishery production methods are outdated and inefficient, and that efforts to build new types of fishing villages are insufficient, advocating for stronger government guidance and promoting fishermen's autonomy[5]. Bai Yunchao and Lin Xianpeng, after studying mass skiing consumption behavior intentions, found that perceived behavioral control had a relatively small impact, and that in winter tourism, perceived behavioral control did not significantly affect behavior attitudes[4]. Wang Juan and Zhou Xin, through questionnaire surveys and structural equation modeling, studied fishing village culture and tourism development, finding that the degree of cultural adaptation among residents under tourism development had a significant positive impact on cultural heritage behavior and role identity[1].

Despite extensive research on tourism behavior, gaps remain. Many studies focus on specific regions or populations, limiting external validity and generalizability across different geographical, cultural, and socio-economic contexts[6]. Although progress has been made in leisure fishing village research, a disconnect persists between theory and practical application. The TPB offers a structured framework to understand the psychological and social factors influencing behavior, making it a valuable tool for developing practical tourism management strategies and promoting specific tourism behaviors.

2 Theoretical Foundation and Research Hypotheses

2.1 Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) is a framework for understanding and predicting human behavior. It suggests that behavioral intention, the direct precursor to actual behavior, is influenced by three factors: attitude, subjective norms, and perceived behavioral control. Attitude refers to students' perceptions of fishing village tourism. If they view it as a unique cultural experience or a way to relax, their intention to participate increases. Subjective norms involve social expectations; if students see their peers engaging in and speaking positively about fishing village tourism, they are more likely

to follow suit. Positive social media promotions can also influence students' decisions regarding fishing village tourism. Perceived behavioral control refers to students' beliefs about their ability to participate, considering factors like travel costs, academic schedules, and transportation. If they feel these factors won't hinder their plans, their intention to participate increases. Behavioral intention, shaped by attitude, subjective norms, and perceived control, predicts students' willingness to engage in tourism. A positive attitude, social support, and perceived ability lead to stronger intentions, which typically result in actual participation. However, perceived control can directly impact behavior; for instance, if students have sufficient financial or time support, they are more likely to take part. This study uses the TPB to model the factors influencing university students' intention to participate in fishing village tourism. By analyzing these factors, we can better understand and predict their behavior, helping tourism operators design more appealing products and services for this demographic. This insight also guides the development of effective marketing strategies, including leveraging social media to promote fishing village tourism.

2.2 Research Hypotheses

Based on the Theory of Planned Behavior (TPB), this study proposes five hypotheses about university students' intentions to participate in fishing village tourism:

- H1: A positive attitude toward the behavior increases students' intention to engage in fishing village tourism.
- H2: Subjective norms (e.g., expectations from friends and family) positively influence their intention to participate.
- H3: Perceived behavioral control (e.g., self-assessment of ability and resources) positively influences their intention to engage in tourism.
- H4: Perceived behavioral control directly affects actual participation.
- H5: Intention to engage in fishing village tourism positively influences actual participation.

As shown in Figure 1, these hypotheses aim to provide insights into students' tourism behavior, informing the development and marketing of fishing village tourism projects.

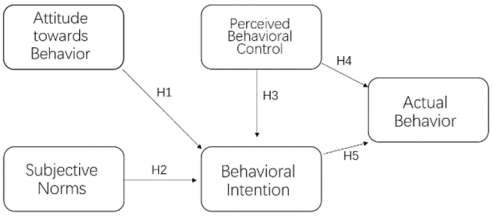

Fig. 1. Hypothesized Model of Behavioral Intention and Actual Behavior

3 Research Design and Survey

3.1 Questionnaire Design

The questionnaire, based on the Theory of Planned Behavior (TPB), targets university students across various academic levels. It is divided into six sections: basic information, participation attitude (TD), perceived behavioral control (GZ), subjective norms (ZG), participation intention (YX), and participation behavior (XW). Each section includes three items measured on a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree) to quantify respondents' attitudes and intentions. Clear and simple language is used to ensure comprehension. The questionnaire also collects demographic information like gender, academic year, and major to analyze differences in tourism behavior and intentions among various groups.

Items TD1-TD3 measure respondents' overall perceptions of fishing village tourism, including cultural experiences, relaxation, and overall attitude, to understand how these attitudes influence behavioral intentions. Items GZ1-GZ3 focus on perceived ability and resources, such as finances, time management, and transportation, to evaluate how perceived control affects intentions and behavior. Items ZG1-ZG3 assess social pressures from friends, family, and social media, highlighting social influence in decision-making. Items YX1-YX3 measure future plans and willingness to participate, reflecting behavioral intentions. Lastly, items XW1-XW3 explore past participation and future intentions to verify the relationship between behavioral intention and actual behavior.

To ensure that the questionnaire's structure is clear and logically coherent, each section and item includes clear instructions. Through these design steps, the questionnaire can comprehensively measure the factors influencing university students' intentions to participate in fishing village tourism and provide actionable insights to support the promotion and strategic planning of fishing village tourism.

3.2 Data Collection and Analysis

Data for this study was collected using the Wenjuanxing online survey platform. Out of 220 questionnaires, 18 were invalid, leaving 212 valid responses. The respondents included 116 males (54.72%) and 96 females (45.28%). The sample comprised 52 first-year students (24.53%), 47 second-year students (22.17%), 50 third-year students (23.58%), and 16 graduate students (7.55%). Most respondents were from the sciences (34.43%), followed by humanities (31.13%), engineering (18.87%), business (10.38%), and others (5.19%).

3.3 Results Analysis

The data were analyzed using SPSS 27 and AMOS 24. Cronbach's α was used to assess internal consistency, with values above 0.7 for all variables, indicating good consistency. Composite Reliability (CR) evaluated overall reliability, with most variables scoring above 0.7, except for GZ and ZG, which were slightly lower but still acceptable. Average Variance Extracted (AVE) values exceeded 0.5 for all variables, showing

strong correlations among items. Factor loadings were above 0.8, indicating each item's significant contribution. These results confirm the questionnaire's suitability for further research and analysis.

Table 1. Questionnaire information sheet

Category	Options	Number (n)	Percentage (%)
Gender	Male	116	54.72%
	Female	96	45.28%
Grade	Freshman	52	24.53%
	Sophomore	47	22.17%
	Junior	50	23.58%
	Senior	47	22.17%
	Postgraduate	16	7.55%
Major	Science	73	34.43%
	Arts	66	31.13%
	Engineering	40	18.87%
	Business	22	10.38%
	Others	11	5.19%
Monthly Disposable Income (RMB)	1000 or less	112	52.83%
	1001-3000	60	28.30%
	3001-5000	30	14.15%
	5001 and above	10	4.72%

Table 2. Data analysis results

Variable	Cronbach's α	Factor load value	CR	AVE
TD	0.847	0.958	0.937	0.917
GZ	0.913	0.834	0.757	0.696
ZG	0.887	0.809	0.721	0.654
YX	0.772	0.818	0.734	0.669
XY	0.849	0.843	0.770	0.711

Model Hypothesis Testing. According to Table 1 and Table 2, After confirming the model's reliability and validity, Python was used for model analysis and testing. Path coefficients and explanatory power assessed the model's validity. Linear regression was employed to test each hypothesis: the impact of behavioral attitude (TD1-3) on behavioral intention (YX1-3) for H1, subjective norms (ZG1-3) on behavioral intention for H2, perceived behavioral control (GZ1-3) on behavioral intention for H3, perceived control on actual behavior (XW1-3) for H4, and behavioral intention on actual behavior for H5. Mean values of variables (TD, ZG, GZ, YX, XW) were used in the regression analysis, recording the regression coefficients and significance levels (p-values) for each predictor.

The regression analysis showed a coefficient of 0.8175 for H2 ($p<0.05$), indicating that subjective norms significantly and positively impact behavioral intention. An R-squared value of 0.716 means the model explains 71.6% of the variance in behavioral

intention, demonstrating high explanatory power. A significant and positive regression coefficient supports the hypothesis, while a non-significant or negative coefficient suggests further investigation is needed. For H2, a one-unit increase in subjective norms results in a 0.5193 unit increase in behavioral intention. The R-squared value indicates the proportion of variance explained by the model, with values closer to 1 showing greater explanatory power. The F-statistic assesses the model's overall significance, and a p-value less than 0.05 confirms a significant influence of the independent variable on the dependent variable. The table below details the impact of various factors on students' behavioral intentions and actual behavior in fishing village tourism.

Table 3. Data analysis results

Assume	IV	DV	RC	R	F	P
H1	TD_avg	YX_avg	0.7472	0.617	8.057	0.0363
H2	ZG_avg	YX_avg	0.8175	0.716	12.564	0.0162
H3	GZ_avg	YX_avg	0.7291	0.667	10.024	0.0243
H4	GZ_avg	XW_avg	0.5038	0.606	7.674	0.0393
H5	YX_avg	XW_avg	0.6154	0.570	6.615	0.0499

Table 3 shows that attitude toward behavior, subjective norms, and perceived behavioral control all significantly and positively impact university students' behavioral intentions. Subjective norms have the strongest influence, highlighting the critical role of social expectations and peer pressure in shaping students' tourism intentions. A positive attitude toward fishing village tourism also enhances the intention to participate. While perceived behavioral control affects behavioral intention, its direct impact on actual behavior is weaker, suggesting that external factors like economic constraints, academic workload, or scheduling conflicts may affect students' decision-making. Social media and peer influence are key drivers in students' tourism decisions, as they heavily rely on these sources for information and guidance.

Despite generally feeling some level of control over their travel plans (perceived behavioral control), students often face several practical challenges when attempting to turn their intentions into actual behavior. For example, many students face significant financial pressures, making the cost of travel a major obstacle to actual participation. Additionally, heavy academic commitments and tight schedules can limit their opportunities for tourism, meaning that even with strong intentions, actual participation may be hindered by these external factors.

These conditions suggest that while university students may have high intentions to engage in tourism, converting these intentions into actual behavior requires addressing their economic, time, and convenience-related barriers. For example, offering affordable travel packages, optimizing travel schedules, and improving transportation and accommodation facilities are all important measures to encourage more active participation in leisure fishing village tourism among university students. These strategies can not only enhance their sense of control over their travel plans but also better meet their practical needs, thereby increasing the conversion rate of tourism intentions into actual behavior.

Overall, these findings validate the applicability of the Theory of Planned Behavior in explaining university students' leisure fishing village tourism behaviors. However, they also highlight the need for future research to further explore potential moderating factors that influence the relationship between perceived behavioral control and actual behavior.

4 Conclusion

This study, based on the Theory of Planned Behavior (TPB), examines the factors driving university students' participation in leisure fishing village tourism. Data were collected via the WenJuanXing platform from undergraduates, associate degree students, and graduate students, resulting in 212 valid responses. The findings indicate that attitude, subjective norms, and perceived behavioral control are key influencers of students' tourism intentions, with behavioral intention significantly affecting actual participation.

University students' positive attitudes toward fishing village tourism are mainly due to their appreciation of natural resources and cultural experiences. To meet modern tourism demands, fishing villages can attract younger visitors by diversifying agriculture and fisheries. Integrating modern technology to develop leisure agriculture and eco-fishery projects not only adds value to these products but also provides engaging experiences, such as agricultural activities, fishing, and seafood processing.

Secondly, subjective norms strongly influence university students' tourism decisions, especially through social media and word-of-mouth marketing. To boost the brand image of fishing villages, leveraging platforms like WeChat, Weibo, and TikTok to share success stories can highlight innovative integration of modern agriculture with cultural heritage. Social circles, including friends and classmates, play a crucial role in shaping students' tourism intentions through shared experiences on these platforms. These strategies can effectively capture students' interest in fishing village tourism.

Thirdly, perceived behavioral control significantly impacts students' tourism intentions and participation. To reduce participation barriers, fishing villages should focus on improving infrastructure such as transportation, accommodation, and internet services. Integrating modern agricultural and fishery projects with diverse tourism products can enhance perceived control, encouraging students to turn their intentions into actual behavior.

Moreover, to achieve sustainable development in fishing villages, it is necessary to further promote eco-tourism and environmental protection, strengthen community involvement and cultural preservation, and explore the application of smart agriculture and fishery technologies. These measures not only enhance the sustainable appeal of fishing villages but also promote the long-term development of the local economy, culture, and environment.

References

1. Wang Juan, Zhou Xin. A Study on the Influence of Cultural Adaptation of Fishing Village Residents on Cultural Heritage Behavior in the Context of Tourism Development [J/OL]. Journal of Capital Normal University (Natural Science Edition), 1-10 [2024-08-01].
2. Kim Hee-Jae. Rediscovery of fishing village culture throughout the fishing village fraternity (EoChongye). *Journal of North-East Asian Cultures*, 2016, 46(3): 63-78.
3. Hu Chi, Yuan Mengru. A Study on the Behavioral Intention of Parents of Primary and Secondary School Students in Tea Culture Study Tours Based on the Theory of Planned Behavior [J]. Journal of Huangshan University, 2023, 25(06): 44-50.
4. BAI Yunchao , LIN Xianpeng. Consumption Behavior Intention of Mass Skiing in China Under the Background of Winter Olympic Games:Taking Chongli as an Example. Journal of Shenyang Sport University. 2021, 40(2): 77-85 https://doi.org/10.12163/j.ssu.20201684.
5. Sun Jinwei. A Study on the Revitalization Path of Marine Fishing Villages in China [D]. Shanghai Ocean University, 2023. DOI: 10.27314/d.cnki.gsscu.2023.000796.
6. Staffan W ,Johan B ,Kristian S , et al.Are local fisheries important for marine tourism? A case study of the Swedish fishing village Träslövsläge[J].Regional Studies in Marine Science,2023,61.
7. Jorge A ,Fabián P ,Tamara F , et al.Managing marine recreational fisheries in Cuba for sustainability and economic development with emphasis on the tourism sector[J].Marine Policy,2022,145.