

# Research on the Behavioral Intention of Health and Wellness Tourism for Elderly People in Chongqing Based on ETPB Theory

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Abstract: This study is based on the Extended Theory of Planned Behavior (ETPB) and focuses on the elderly population in the main urban area of Chongqing to explore their intentions and influencing factors regarding health and wellness tourism behavior. Data was collected through questionnaire surveys and field research, and SPSS 26.0 and Amos 29.0 software were used for reliability, validity analysis, and structural equation modeling testing. The study shows that behavioral attitude, perceived behavior control, and the context of health and wellness tourism have a significant positive impact on the elderly's intentions regarding health and wellness tourism behavior, while the influence of subjective norms is not significant. In addition, subjective norms have a significant positive effect on behavioral attitudes and perceived behavioral control. Based on the research conclusions, suggestions are made to strengthen the behavioral intention of elderly tourists to participate in health and wellness tourism.

Keywords: Health and wellness tourism; Theory of Planned Behavior; Elderly; Behavioral intention

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### **1. Introduction**

With the intensifying aging of the population, health and wellness tourism, as an emerging healthy lifestyle, is receiving increasing attention from the elderly. Health and wellness tourism not only helps improve the physical health of the elderly but also enriches their spiritual and cultural life. However, current research on health and wellness tourism at home and abroad is mostly focused on the supply side, and rarely considers the demand side, especially from the perspective of the elderly as a special group. This study, based on the Extended Theory of Planned Behavior (ETPB) and focusing on the elderly in Chongqing, explores their intentions and influencing factors regarding health and wellness tourism behavior through questionnaire surveys and field research. The aim is to provide theoretical support and practical guidance for the development of the health and wellness tourism market and the improvement of the quality of healthy living for the elderly.

## 2. Literature review and theoretical basis

Both domestic and foreign research on healthcare tourism started late and has had a short development time. Moreover, there is no unified definition of healthcare tourism in academic circles at home and abroad. Goodrich and Goodrich were the first to propose the concept of "Healthcare Tourism," defining it as a type of tourism that attracts tourists with health services and facilities <sup>[1]</sup>. Hall proposed the concept of healthcare tourism, believing that it is a general term for activities such as sauna, massage, and recuperation conducted in a casual environment motivated by health<sup>[2]</sup>. Wang first proposed the concept of healthcare tourism in China, stating that it is tourism activities that rely on the cultural, natural ecological, and humanistic environments, and integrate various forms such as viewing, leisure, health, and play to achieve physical and mental health, prolong lifespan, enhance physical fitness, and healthcare <sup>[3]</sup>. Du believed that healthcare tourism refers to specialized tourism activities that promote physical and mental health through various activities during the tourism process, based on superior material and climatic conditions, and cultural environment, and sometimes combined with traditional Chinese medicine and Western medical health technology and equipment<sup>[4]</sup>. Peng defined healthcare tourism as tourism activities based on the excellent natural ecological environment of the tourism destination, equipped with good medical and health equipment, for the purpose of health preservation, recuperation, and healthcare, and finally achieving the harmonious complementarity of tourists' body and mind through various tourism activities <sup>[5]</sup>. Sun believed that "healthcare" refers to health + wellness + elderly care, and "healthcare tourism" refers to the general term for various tourism activities where tourists travel to different places for more than 24 hours for the purpose of health, wellness, and elderly care, combining the external environment of the tourism destination to bring tourists close to or achieve harmony in physiological, psychological, and spiritual aspects, and be in a better natural state <sup>[6]</sup>. The above research mainly defines healthcare tourism in terms of tourism form and purpose. Healthcare tourism is a cross-regional tourism activity, and its core lies in promoting and achieving human physical and mental health.

Research on healthcare tourism at home and abroad mainly focuses on the following aspects: (1) Research on healthcare tourism destinations, focusing on the development, evaluation, advantages, and development strategies of healthcare tourism destinations. Zhang believed that Guangxi's unique natural environment, ethnic culture, and dietary characteristics are unique advantages for the development of healthcare tourism <sup>[7]</sup>. Yang and Du innovatively adopted the Random Forest algorithm (RF) model by integrating multi-source information such as geospatial data, network platform data, and socio-economic statistical data, to accurately evaluate the suitability of mountain healthcare tourism in Yunnan Province, and systematically explored its influencing factors<sup>[8]</sup>. (2) Research on health and wellness tourism products focuses on the types of products covered and the development of related products. Zhao and Sun selected Qinhuangdao City in China as the specific target for their research, conducting an analysis of the current development status of the health and wellness tourism industry in Qinhuangdao. They believed that a comprehensive exploration of the characteristics of regional internal resources should be carried out, and new business formats should be developed to achieve continuous innovation and effective development of corresponding products <sup>[9]</sup>. (3) Research on health and wellness tourists mainly revolves around tourist motivations and behavioral intentions. Domestic research on the motivations of health and wellness tourism is relatively limited, focusing primarily on the motivations of forest health and wellness tourists. Han constructed a structural equation model with health accounts and consumer attitudes as intermediary variables based on psychological account theory and the "cognition-attitude-willingness" theory, exploring the influencing factors of forest health and wellness tourism willingness from the perspectives of frugality and cognition<sup>[10]</sup>.

In summary, research on health and wellness tourism at home and abroad has started relatively late. From the

perspective of the concept of health and wellness tourism, there is currently no unified and clear definition. In terms of the main research content of health and wellness tourism, it is mainly focused on the supply side, while there is less research on the demand side, especially the health and wellness tourism needs of special groups such as the elderly.

The Theory of Planned Behavior is a cognitive model proposed by Ajzen in 1985 based on the Theory of Reasoned Action, which aims to systematically explain and predict human behavior and decision-making processes. The theory suggests that behavioral attitude, subjective norm, and perceived behavioral control are the core variables that drive individuals' behavioral intentions and ultimately influence actual behavior through the mediating role of intentions <sup>[11]</sup>. Behavioral attitude reflects an individual's positive or negative evaluation of a specific behavior, and its strength depends on the assessment of behavioral outcomes and the subjective degree of association between the behavior and the outcomes. For example, if an individual believes that exercise can significantly improve health levels, they will have a stronger willingness to exercise. Subjective norm refers to the social pressure perceived by an individual, namely the expectations of significant others (such as family and friends) or organizations regarding whether they should perform a certain behavior. If the reference group generally supports a certain behavior, individuals will be more inclined to comply due to social pressure. Perceived behavioral control covers individuals' comprehensive judgments on the ease of implementing a behavior, including both internal factors (such as ability, emotions, and willpower) and external conditions (such as time, money, and resources). This variable directly affects behavioral intentions and enhances the feasibility of actual behavior when resources are sufficient. In domestic academic circles, the Theory of Planned Behavior (TPB) has gradually been introduced and applied to specific research to explore the relationship between behavioral intentions and actual behaviors. Currently, this theory has been widely used in various tourism research fields such as eco-tourism, lowcarbon tourism, and rural tourism, and it has become a relatively mature research model. Li et al. studied virtual tourism experiencers and constructed a structural equation model based on the Theory of Planned Behavior. By introducing dual variables of virtual tourism experience and epidemic effects, they analyzed the driving path for experiencers to transition from virtual scenes to actual tourism behavior<sup>[12]</sup>. Xiang studied the historical and cultural block of Nanchang Wanshou Palace, applying the Theory of Planned Behavior to analyze influencing factors, propose research hypotheses, and construct a research framework for tourists' consumption behavior in nighttime cultural tourism<sup>[13]</sup>. However, as research on tourism behavior deepens, more scholars are gradually realizing the limitations of the TPB model. Especially in complex and changing tourism scenarios, the applicability of the TPB model is questioned. Therefore, researchers have introduced extended variables such as tourism experience into the TPB model to more comprehensively explain the formation process of tourists' behavioral intentions. Liu studied potential cruise tourists, based on the Theory of Planned Behavior, combined with the actual situation of cruise tourism development, introduced risk perception variables, and established an extended Theory of Planned Behavior model for the formation mechanism of cruise tourism behavioral intentions<sup>[14]</sup>. Zheng studied the Qingming Bridge historical and cultural block. Based on the Theory of Planned Behavior (TPB), he introduced tourism experience as an extended variable, constructed an extended TPB model, and systematically explored the influence of subjective norms, perceived behavioral control, tourist attitudes, and tourism experience on tourists' behavioral intentions<sup>[15]</sup>.

This article focuses on the elderly population in the main urban area of Chongqing, collecting data through questionnaire surveys combined with field research. Under the framework of the Theory of Planned Behavior, the concept of healthcare and wellness tourism is introduced to construct an Extended Theory of Planned Behavior (ETPB) model. This model is used to explore tourists' behavioral intentions and influencing factors in healthcare

and wellness tourism, thus contributing a new perspective to research in related fields.

## 3. Research hypotheses

(1) Behavioral attitude, subjective norm, and perceived behavioral control, along with behavioral intention, are the main variables of the Theory of Planned Behavior. Previous studies have repeatedly verified the impact of behavioral attitude, subjective norm, and perceived behavioral control on tourists' willingness to participate. According to Zhang's research, there is a significant positive correlation between perceived behavioral control and both revisit intention and recommendation intention <sup>[16]</sup>. Li and Jiang believed that the subjective norm of dark tourists has a significant positive impact on their behavioral attitude, subjective norm, and perceived behavioral attitude and behavioral intention <sup>[17]</sup>. This study suggests that in the field of health and wellness tourism, behavioral attitude, subjective norm, and perceived behavioral control also have a significant impact on the willingness of elderly people to participate in health and wellness tourism. In summary, based on the Theory of Planned Behavior, the following hypotheses are proposed:

H1: Among elderly tourists, behavioral attitude has a significant positive impact on behavioral intention in health and wellness tourism decisions.

H2: Among elderly tourists, subjective norm has a significant positive impact on behavioral intention in health and wellness tourism decisions.

H3: Among elderly tourists, perceived behavioral control has a positive impact on behavioral intention in health and wellness tourism decisions.

(2) Besides the above three independent variable factors, the behavioral intention of elderly tourists to participate in health and wellness tourism is also influenced by other factors. Tourism is an activity that occurs in a specific place, and in the context of health and wellness tourism, the environment can affect tourists' behavioral intentions. The concept of health and wellness tourism scenarios includes the collection of environmental factors such as health and wellness philosophy, industry, and services that can influence the behavioral intentions of health and wellness tourism participants. Therefore, this paper proposes the following hypothesis:

H4: Among elderly tourists, the health and wellness tourism scenario has a significant positive impact on behavioral intention in decision-making.

Subjective norm refers to a kind of social pressure that individuals feel when engaging in specific behaviors. This pressure mainly comes from organizations or individuals who have a significant impact on the behavioral subject, such as peer pressure from family, colleagues, and friends, as well as superior pressure from leaders, parents, teachers, etc. After processing these pressures, the behavioral subject will form different types of attitudes and thinking results <sup>[18]</sup>.

Therefore, this paper proposes the following hypotheses:

H5: Among elderly tourists, subjective norm has a significant positive impact on behavioral attitude in health and wellness tourism decisions.

H6: Among elderly tourists, subjective norm has a significant positive impact on perceived behavioral control in health and wellness tourism decisions.

### 4. Research design

#### 4.1. Variable measurement

The initial questionnaire for this study was designed based on several established questionnaires. It consists of

three parts: the first part introduces the research, mainly elaborating on the purpose of this survey and the definition of health and wellness tourism; the second part collects basic information about the respondents, including gender, age, education, income, etc.; and the third part focuses on five latent variables related to health and wellness tourism, namely behavioral attitude, subjective norms, perceived behavioral control, health and wellness context, and behavioral intention. The five items for behavioral attitude were referenced from the scale designed by Zhang and others, the five items for subjective norms were referenced from the scale designed by Song and others, the three items for perceived behavioral control were referenced from the scale designed by Zhang and others, the four items for health and wellness context were referenced from the scale designed by Zhang and Mo, and the three items for behavioral intention were referenced from the scale designed by Wang and Mo, and the three items for behavioral intention were referenced from the scale designed by Ajzen and others. This study uses a Likert scale to measure observed variables, with a positive assignment method where 1 to 5 correspond to "strongly disagree," "disagree," "neutral," "agree," and "strongly agree," respectively. Respondents are required to choose based on their actual situation.

### 4.2. Data collection

The questionnaire was distributed mainly through sampling surveys, using both online and offline methods to collect data. Offline surveys were conducted in places such as universities and travel agencies for the elderly. Online surveys were created and distributed using questionnaire stars. After screening, 443 valid questionnaires were retained.

## 5. Empirical analysis

## 5.1. Reliability and validity testing

This study used SPSS 26.0 to analyze the reliability and validity of the sample (**Table 1**). Firstly, the Cronbach's  $\alpha$  coefficient of the overall scale was 0.994, indicating extremely high reliability. Further reliability analysis was conducted separately for the five variables of behavioral attitude, subjective norms, perceived behavioral control, wellness context, and behavioral intention. The results showed that the Cronbach's  $\alpha$  coefficients of all scales were higher than the standard of 0.7, indicating good reliability of the measurement items. The factor analysis results showed that the KMO value was 0.911, which was far higher than the suitable standard of 0.5, and the significance level of the Bartlett test of sphericity was 0.000 (less than 0.001). The factor loadings of all items were greater than 0.7, indicating that the data were suitable for factor analysis. Additionally, to ensure the convergent validity of the model, the average variance extracted (AVE) ranged from 0.863 to 0.936, all higher than the standard of 0.5; the composite reliability (CR) ranged from 0.954 to 0.983, all higher than the standard of 0.7. These results indicate that all variables have good convergent validity.

Factor	Measurement item	Standardized factor loading	Cronbach's α	CR	AVE
Behavioral attitude	1. Participating in wellness tourism is pleasant.	0.926	0.980	0.980	0.909
	2. Participating in wellness tourism is beneficial for physical health.	0.966			
	3. Participating in wellness tourism is wise.	0.930			
	4. Participating in wellness tourism is enjoyable.	0.969			
	5. Participating in wellness tourism is relaxing.	0.976			
Subjective norm	1. People important to me (family/friends/colleagues) support my participation.	0.931	0.978	0.969	0.863
	2. People important to me approve of my participation.	0.946			
	3. People important to me recommend I participate.	0.915			
	4. I am more willing to participate if invited by important people.	0.979			
	5. I am more willing to participate if I see social media posts about it.	0.869			
Perceived behavioral control	1. I have sufficient time to participate.	0.958	0.951	0.954	0.873
	2. I have sufficient financial resources to participate.	0.859			
	3. I am physically fit to participate.	0.982			
Wellness context	1. I value abundant wellness resources at the destination.	0.999	0.987	0.983	0.936
	2. I value diverse wellness product offerings.	0.923			
	3. I value well-developed infrastructure.	0.998			
	4. I value mature service management systems.	0.948			
Behavioral intention	1. I am willing to participate in wellness tourism.	0.987	0.984	0.984	0.953
	2. I am willing to recommend wellness tourism to others.	0.983			
	3. I am willing to share my wellness tourism experiences.	0.958			

#### Table 1. Results of confirmatory factor analysis

#### 5.2. Testing of structural model equations

This study tested the hypothetical model using Amos 29.0 software, calculating the standardized path coefficients between various measurement variables in the structural equation model. The test results are shown in **Table 2**.

#### Table 2. Hypothesis testing table

Hypothesis	Path	Standardized path coefficient	Significance	Conclusion
H1	Behavioral Attitude $\rightarrow$ Behavioral Intention	0.571	***	Supported
H2	Subjective Norm $\rightarrow$ Behavioral Intention	-0.078	0.555	Not supported
H3	Perceived Behavioral Control $\rightarrow$ Behavioral Intention	0.316	***	Supported
H4	Wellness Context $\rightarrow$ Behavioral Intention	0.187	***	Supported
Н5	Subjective Norm $\rightarrow$ Behavioral Attitude	1.005	***	Supported
H6	Subjective Norm $\rightarrow$ Perceived Behavioral Control	0.979	***	Supported

Note: \* indicates P < 0.05, \*\* indicates P < 0.01, and \*\*\* indicates P < 0.001

## 6. Research conclusions and suggestions

### 6.1. Research conclusions

Both behavioral attitude and perceived behavioral control have significant positive effects on older adults' intentions to participate in healthcare tourism, while subjective norms do not significantly affect these intentions. This is consistent with the findings of some scholars <sup>[19]</sup>. When elderly tourists recognize that healthcare tourism can not only promote physical health but also bring pleasure and acquire more knowledge about healthy lifestyles, they form a positive impression of healthcare tourism, thereby enhancing their intention to participate. Additionally, if older adults perceive that they have enough time, money, and physical condition to support participation in tourism, they are more likely to form intentions for healthcare tourism. Conversely, a lack of these resources and abilities may inhibit the formation of such intentions.

The healthcare tourism context has a significant positive effect on behavioral intentions. If the healthcare tourism destination has rich resources, diverse product types, well-developed infrastructure, and mature service management, it can enhance older tourists' intentions to participate in healthcare tourism.

Subjective norms have a significant positive effect on behavioral attitudes and perceived behavioral control, which is supported by numerous scholarly studies. When choosing to experience healthcare tourism, the supportive attitudes of surrounding people (such as family and friends) are important considerations for older adults' decision-making. This social support directly affects older adults' behavioral attitudes and perceived behavioral control towards healthcare tourism.

#### 6.2. Research suggestions

Based on the above research conclusions, suggestions for guiding older adults in Chongqing to participate in healthcare tourism focus on three main areas:

- (1) Improving resource suitability for older adults and enhancing perceived behavioral control: Design products suitable for aging, such as developing short-cycle, time-segmented healthcare tourism packages, to lower the time and physical barriers for older tourists to participate in healthcare tourism. Travel agencies in scenic areas should increase emergency response systems, set up emergency stations for the elderly, and provide health management services to enhance safety perceptions.
- (2) Deconstructing traditional concepts of elderly care and building a positive social identity: Increase promotion of healthcare tourism to make more older adults aware of its benefits. For example, create role model communications by inviting "elderly travel enthusiasts" to shoot documentary shorts showcasing the tangible improvements in quality of life brought by healthcare tourism, thereby weakening the "luxury consumption" label and increasing participation intentions. Additionally, incentives for family members can be increased by offering "family group discounts" to encourage children to book travel products for their parents, turning social pressure into supportive motivation.
- (3) Deepening the development of the healthcare tourism context and activating core driving forces: Relevant government departments should integrate resources, establish a regional database of healthcare tourism resources, and develop integrated "medical, health, education, and tourism" products in collaboration with traditional Chinese medicine clinics and forest therapy bases. Upgrade smart services tailored for older adults, utilizing apps with features such as VR-based previews, one-click emergency calls, and health data tracking to improve facilities and services in scenic areas catering to older tourists.

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## References

- Goodrich JN, Goodrich GE, 1987, Health-Care Tourism—An Exploratory Study. Tourism Management, 8(3): 217– 222.
- [2] Hall CM, 1992, Adventure, Sport and Health Tourism, Belhaven Press, London.
- [3] Wang Z, 2009, International Tourism Island: Hainan Needs to Develop Health and Wellness Tourism as a "Recipe." Today's Hainan, 2009(12): 12.
- [4] Du F, 2021, Research on Behavioral Intentions in Health and Wellness Tourism Based on an Integrated Model of PMT and TPB, dissertation, Sichuan Agricultural University.
- [5] Peng X, 2022, Research on Behavioral Intentions of Elderly People in Health and Wellness Tourism Based on the TPB Model, dissertation, Sichuan Agricultural University.
- [6] Sun Q, 2023, Research on the Influencing Mechanism of Elderly People's Health and Wellness Tourism Behavior in Zhoushan City Based on the Theory of Planned Behavior, dissertation, Zhejiang Ocean University.
- [7] Zhang S, 2021, Concept Application of Guangxi Rural Tourism Characteristic Cuisine and Health Tourism Development—Commentary on "Rural Tourism Planning and Development." Food Science and Technology, 46(01): 322–323.
- [8] Yang Y, Du S, 2025, Suitability Evaluation of Mountain Health and Wellness Tourism Space—An Empirical Study of Yunnan Based on Random Forest Algorithm. Mountain Research, 43(01): 46–58.
- [9] Zhao Y, Sun X, 2020, Research on the Innovative Development of Health and Wellness Tourism Industry in China's Coastal Areas—Taking Qinhuangdao City as an Example. Urban Development Studies, 27(06): 24–28.
- [10] Han Q, 2022, Research on the Impact of Thrift and Cognition on Forest Health and Wellness Tourism Intentions, dissertation, Liaoning University.
- [11] Ajzen I, 1985, Action Control: From Cognition to Behavior, Springer, Heidelberg.
- [12] Li X, Li Z, Song C, et al., 2021, Research on the Influencing Mechanism of Virtual Tourism Behavior Based on the Theory of Planned Behavior. Tourism Tribune, 36(08): 15–26.
- [13] Xiang P, 2023, Research on Tourists' Willingness to Consume Cultural Tourism at Night Based on the Theory of Planned Behavior, dissertation, Jiangxi University of Finance and Economics.
- [14] Liu J, 2023, Research on Cruise Tourism Behavioral Intentions Based on the Extended Theory of Planned Behavior, dissertation, Hainan University.
- [15] Zheng C, 2025, Research on the Impact of Tourism Experience on Tourist Behavioral Intentions Based on the Extended TPB Model. Green Technology, 27(05): 222–228.
- [16] Zhang C, 2021, Research on the Mechanism of Ecotourism Perceived Value's Impact on Behavioral Intentions, dissertation, China University of Mining and Technology.
- [17] Li J, Jiang S, 2022, Research on the Influencing Mechanism of Black Tourism Behavioral Intentions Based on the TPB Model—An Empirical Analysis of Tourism to the Memorial Hall of the Victims of the Nanjing Massacre by

Japanese Invaders. Journal of Anhui University (Philosophy and Social Sciences Edition), 46(05): 126–134.

- [18] Xie T, 2016, Research on Customers' Behavioral Intentions to Choose Green Hotels—Based on the Theory of Planned Behavior. Tourism Tribune, 31(238): 94–103.
- [19] Zhou S, 2023, Research on the Influencing Factors of Tourists' Behavioral Intentions in Health and Wellness Tourism Based on the Theory of Planned Behavior. Western Tourism, (10): 33–35 + 39.

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