

# Understanding Wellness Tourists' Behavioral Intentions: Factors Shaping Visits to Underdeveloped Mountain Regions in China

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## Abstract

*This study examines the factors impacting wellness tourist's behavioral intention in underdeveloped mountain areas in China. The model extends the theory of planned behavior, considering attitudes towards wellness tourism, subjective norms, and perceived behavioral control as central factors, and additionally incorporates health consciousness level and prior knowledge of wellness. Data were randomly collected from 224 residents of Xi'an, Chengdu, and Wuhan cities in China, using a questionnaire survey and analyzed through structural equation modeling. The findings reveal that attitudes towards tourism, subjective norms, perceived behavioral control, and prior knowledge of wellness positively impact wellness tourist's behavioral intention in underdeveloped areas, while health consciousness level has no significant impact. Together, these five variables explain 48 percent of the variance in the dependent variable. This research contributes to the existing body of knowledge by identifying the factors influencing wellness tourism behavior in underdeveloped regions, offering insights for policymakers and marketers to better understand and promote wellness tourism in these types of areas.*

*Keywords: Wellness tourist; Behavioral intention; Theory of planned behavior*

## 1. Introduction

The post-industrial era and technological progress have freed human beings from strenuous physical labor, leading to a new challenge: how to spend leisure time. One choice many people make is to travel to places outside their accustomed environment (Zhou et al., 2022). As such, tourism has become a suitable option for leisure time. In particular, wellness tourism, aimed at maintaining or enhancing individuals' well-being and quality of life on spiritual, physical, and psychological levels, is gaining global popularity (Andreu et al., 2021). The wellness tourism industry is booming worldwide, creating a niche market within the tourism sector. In 2024, the global wellness tourism industry is valued at \$651 billion annually, with an expected average annual expenditure growth rate of 16.6% by 2027.

Countries like China have experienced a significant surge in the demand and supply of wellness tourism in the past decade. On the demand side, it is mainly due to significant improvements in living standards among populations in China. According to the Global Wellness Association 2020, China's wellness economy size of USD 682.7 billion (about 4886.73 billion RMB) ranks second to the United States, accounting for 4.6% of GDP. This increase is primarily attributed to the establishment of an economic foundation, a growing consumer base (Wang et al., 2020), and increased awareness of wellness tourism.

Moreover, the benefit of the "pro-poor tourism" concept established a direct link between tourism development and poverty alleviation, and wellness tourism became an ideal development strategy for underdeveloped regions in China. Many underdeveloped regions

often struggle with unbalanced industrial development due to geographical constraints, weak economic foundations, and over-reliance on primary resources (Streimikiene et al., 2021). Following traditional agricultural or industrial development paths became less beneficial approach for these areas as it mainly locates in the mountain areas and increasing environmental concern. Therefore, China's burgeoning wellness tourism industry enjoys significant support from both the government and businesses, as illustrated by a range of initiatives designed to spur its rapid growth (Liu, 2020).

In the existing empirical literature, there many studies have investigated the factors that impact tourist's behavior intention, and the effect of the tourism industry that promotes the economic development of impoverished regions (Ma et al.,2024; Wang et al.,2023). However, there is still minimal research on the factors that affect tourists' willingness to visit relatively underdeveloped areas for wellness tourism. As many underdeveloped areas are facing challenges of poor transportation, less wellness tourism infrastructure, lower service standards, etc., the factors that may influence tourists' decision to enjoy the underdeveloped regions for wellness remain silent.

Therefore, this study uses 224 randomly selected sample data from three cities surround southern region of Shaanxi province in China to investigate the factors influencing wellness tourist's behavioral intention to the mountain areas of southern region of Shaanxi province. The aim is to analyze their impact on the wellness tourist's behavioral intention to underdeveloped areas of China, offering insights for policymakers and marketers to understand better and promote wellness tourism in these types of regions.

## **2. Theoretical Background and Research Hypotheses**

### **2.1 Wellness Tourism**

Wellness tourism is a concept that emerged in the mid-20th century in the United States and Europe and has been widely adopted (Smith and Puczkó, 2014; Voigt et al., 2011). It is a relatively new segment within global travel and tourism. The term "wellness" was coined by American physician Halbert Dunn (1959), who combined the concepts of well-being and fitness. He pointed out that high-level wellness means achieving physical, mental, and spiritual balance within social, cultural, and environmental contexts.

The academic concept of wellness tourism was started by Kaspar (1995), who defined wellness tourism as a sub-market of health tourism, a sub-field of general tourism. Mueller and Kaufmann (2001) later described wellness tourism as involving individuals who desire health benefits by visiting luxury hotels, spas, or treatment centers that provide products, services, and professional care to promote wellness. The Global Wellness Institute also provides its definition of wellness tourism as travel associated with maintaining or enhancing one's personal well-being and creating a lifestyle that leads to a holistic state of health.

In China, given the differences in the understanding of the word "wellness" in Chinese translation, more attributes have been integrated into the definition of wellness tourism. Wang (2009) provided the first definition of wellness tourism in China, describing it as activities built on natural, human, and cultural environments combined with leisure, fitness, and recreational forms to achieve longevity, physical health, self-cultivation, and medical purposes. The China National Tourism Administration officially issued the tourism industry

standard "National Wellness Tourism Demonstration Base" (LB/T051-2016). This standard defines wellness tourism as activities that achieve excellent physical, mental, and spiritual harmony through beauty and fitness, nutritional diet, mental cultivation, and environmental care (China National Tourism Administration, 2016). The issuance of this standard marked the broad recognition of wellness tourism by the state, society, and market.

## 2.2 Theory of Planned Behavior

The theory of planned behavior is a prominent social psychological model that predicts and understands human decision-making and actions. Numerous empirical studies have validated its efficacy in explaining various behaviors (Abbasi et al., 2021; Ajzen, 1991; Xie, 2016). The theory of planned behavior is frequently employed in tourism research to explore travelers' decision-making processes and behaviors (Leou and Wang, 2023; Wang et al., 2022). The model assesses behavioral intentions by examining three key factors: attitude, subjective norms, and perceived behavioral control. These elements collectively help to predict an individual's intention to engage in a particular behavior. First, attitude reflects an individual's beliefs and general feelings about a positive or negative behavior. Second, subjective norms involve an individual's social pressure regarding whether to perform a specific behavior. Third, perceived behavioral control indicates how difficult an individual perceives to carry out the behavior. Finally, behavioral intention indicates a person's readiness to act, reflecting the culmination of their mental decision-making process leading to that behavior.

In recent years, while research using the theory of planned behavior in wellness tourism has gradually increased, it remains less common compared to other tourism areas such as ecotourism (Ahmed et al., 2022; Xie, 2016), medical tourism (Mathijssen and Dziedzic, 2024), and pro-environmental tourism (Suo et al., 2024). Xie et al. (2019) applied the theory of planned behavior framework and found that attitude, subjective norms, and perceived behavioral control directly and positively influence the behavioral intentions of potential tourists to experience forest wellness tourism. Zhou et al. (2023) compared the wellness tourism intentions of potential tourists from China and South Korea. The study found that attitude and subjective norms significantly positively impacted the behavioral intentions of South Korean potential wellness tourists, but not Chinese potential wellness tourists. Although research on wellness tourism behavioral intention continues in China, studies focusing on the behavioral intention for wellness tourism in less developed areas remain absent. Accordingly, the following hypotheses were established:

**H1** - Attitude towards wellness tourism positively impacts wellness tourist's behavioral intention to visit underdeveloped mountain regions in China.

**H2** - Subjective norms positively impact wellness tourist's behavioral intention to visit underdeveloped mountain regions in China.

**H3** - Perceived behavior control positively impacts wellness tourist's behavioral intention to visit underdeveloped mountain regions in China.

## 2.3 Health Consciousness Level

People's health consciousness, defined as a "trait form of self-focus or self-awareness," refers to the degree of attention individuals pay to health issues (Piko and Keresztes, 2006). Research indicates that individuals with higher levels of health consciousness generally lead healthier lives (Newsom et al., 2005; Park et al., 2017). Meanwhile, health-related value attributes are particularly attractive to tourists aiming for a healthier lifestyle, which can

improve their mental and physical well-being (Zhang et al., 2021). As a result, wellness tourism, as a representative of health tourism, is favored by health-conscious tourists. Chen et al.(2008) proposed a significant connection between five key motivations—health consciousness, relaxation, attractiveness, curiosity, and quality of life—and the pursuit of wellness services. Zhang et al. (2021) highlight the role of health consciousness as an inherent personal trait that serves as a strong motivational force, driving a tourist's desire to achieve their health goals through tourism activities. Therefore, individuals with higher health consciousness levels are more likely to take preventive measures to maintain and improve their health, such as following a balanced diet or participating in wellness tourism. The rich ecological resources in the many underdeveloped region make it an ideal destination for wellness tourism. Thus, based on the above-mentioned literature, it is hypothesized that.

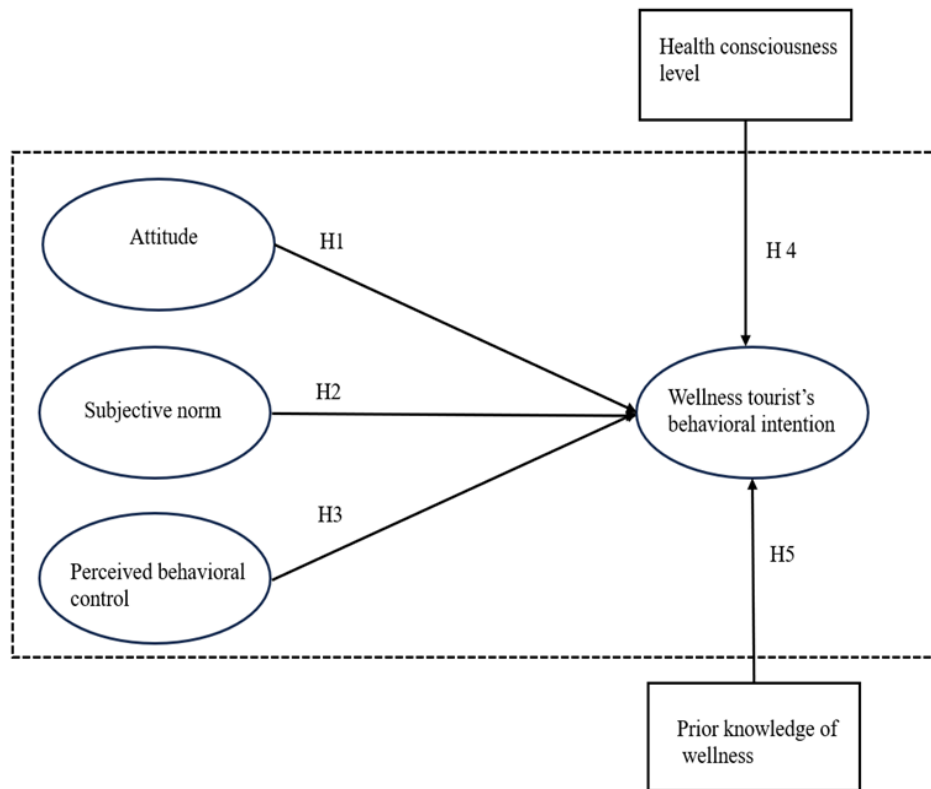
**H4** - Health consciousness level positively impacts wellness tourist's behavioral intention to visit underdeveloped mountain regions in China.

#### 2.4 Prior Knowledge of Wellness

Albert Bandura's social cognitive theory emphasizes that familiarity with knowledge can enhance self-efficacy, meaning the belief in one's ability to execute a behavior, thereby strengthening behavioral intentions (Bandura, 1986; Chen et al., 2014; Seow et al., 2021). Additionally, the information processing theory suggests that the more extensive and precise the information, the more accurate an individual's understanding and expectations of behavior, influencing decision-making (Wickens and Carswell, 2006). Jiang et al. (2022) found that greater knowledge leads to more positive attitudes and stronger intentions to travel (Newsom et al., 2005). Schönherr and Pikkemaat (2024), focusing on Generation Z's environmentally responsible tourism behaviors, showed that increased knowledge about sustainability positively influences attitudes and subjective norms, leading to stronger behavioral intentions to engage in eco-friendly practices while traveling. These studies highlight the role of education and awareness in shaping responsible tourism behaviors. Based on these perspectives, it is hypothesized that.

**H5** - Prior knowledge of wellness positively impacts wellness tourist's behavioral intention to visit underdeveloped mountain regions in China.

Thus, based on the theory of planned behavior theoretical model, this study considered attitude towards wellness tourism, subjective norms, perceived behavioral control, health consciousness level, and prior knowledge of wellness as five antecedent internal variables, with the wellness tourist's behavioral intention as the dependent variable in the proposed conceptual framework (see Figure 1).



Note: Dashed lines represent the content of the theory of planned behavior.

Source: Ajzen (1991).

**Figure 1:** Conceptual framework reassembled from Ajzen (1991)

### 3. Methodology

#### 3.1 Study Area

This study focuses on the southern region of Shaanxi Province in China, including the cities of Ankang, Hanzhong, and Shangluo (see Figure 2). These cities are in the Qinba mountains, an essential ecological function area in China which playing crucial roles in biodiversity conservation, water source conservation, and soil retention. All three cities are covered with around 70 percent of forest. Despite their rich natural resources, economic development is relatively lagging compare to other regions within the province and neighboring provinces. In the first half of 2023, the per capita Gross Domestic Product (GDP) of these three cities was USD 4,086, USD 3,029, and USD 2,443, respectively, all of which were below the provincial average of USD 5,714 (National Bureau of Statistics of China, 2023). Additionally, the annual GDP of these three cities accounted for only 12.47% of Shaanxi Province's GDP in 2023, presenting a coexistence of "resource abundance and economic poverty." Therefore, selecting these three cities as representative underdeveloped mountain areas is significant.

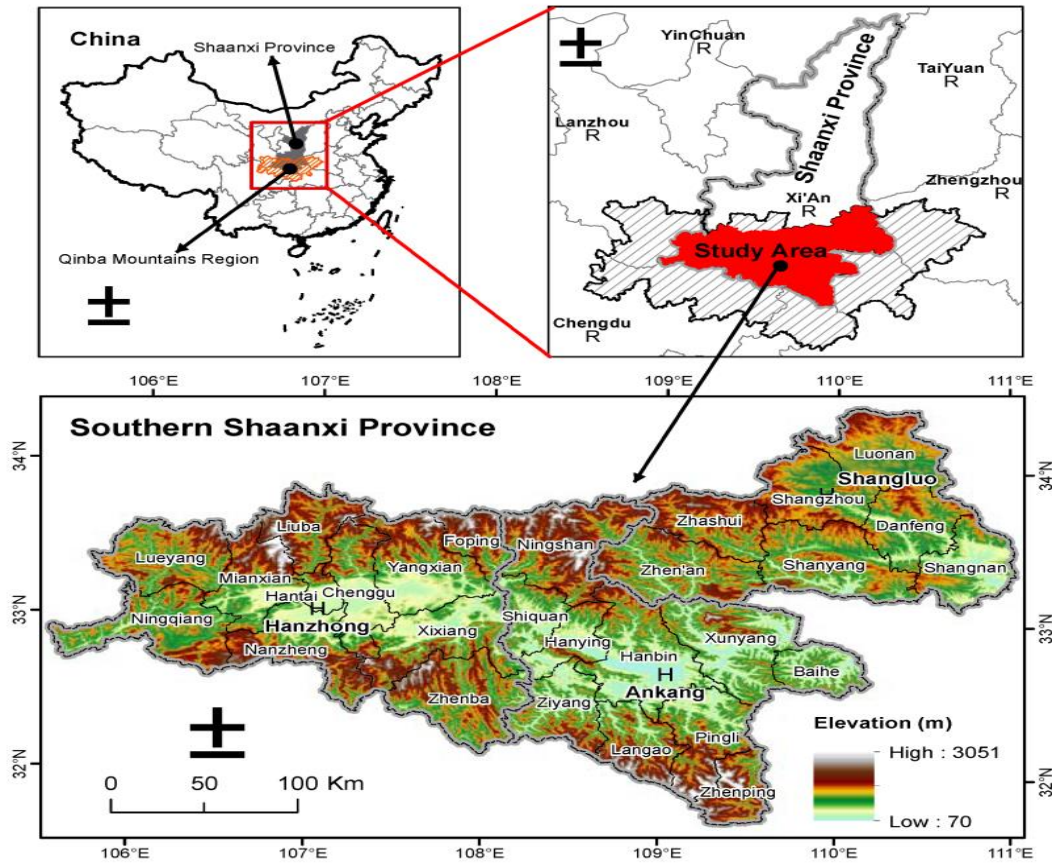


Figure 2: Areas of study

### 3.2 Measures

The items related to the measured constructs were generated after an extensive literature review (Ajzen, 1991; Al-Dmour et al., 2013; De Cannière et al., 2009). Specifically, attitude towards wellness tourism was operationalized with five items (positive, useful, valuable, dynamic, and delightful) adapted from Deng and Chen (2022). Subjective norms were operationalized with six items from De Cannière et al. (2009). Perceived behavioral control and wellness tourists' behavioral intentions were measured using items adapted from Lee et al. (2012). Specifically, perceived behavioral control was measured with five items, while behavioral intention was estimated using four items. Health consciousness level was adopted from Zhang et al. (2021), and Prior knowledge of wellness was adapted from (Jiang et al., 2022) (see Appendix A).

Back translation, face validity, and content validity were sequentially employed to assess the questionnaire's validity. Initially, back translation was conducted by three language experts who translated the original English items into Chinese and then back into English. This process addressed discrepancies between the English and Chinese versions to better align with the cultural and study-specific contexts (Saunders et al., 2009). Next, the face validity procedure was conducted through experts' review (Janssen et al., 2013). Based on experts' feedback, several issues, such as double-barreled, ambiguous, or leading questions, were identified and required modification. The final step involved testing the validity of the content of the questionnaire. Nine experts were invited to quantify their ratings, and the item-content validity index and scale-content validity index values were calculated (Martuza, 1977). As a result, three items from subjective norms were deleted. Through these three

steps, a total of 19 items were assessed using 5-point Likert-type scales, with responses ranging from strongly disagree (1) to strongly agree (5).

### 3.3 Data Collection

Data was collected using self-administered questionnaires. Initially, a pilot study was conducted in February 2024. Electronic questionnaires were distributed using convenience sampling via quick response codes generated by the online platform. The pilot sample consisted of 30 residents aged 18 and above in Xi'an City, Shaanxi province. The results indicated no miscommunication requiring amendments to the questionnaire.

The final survey was conducted in March 2024 using systematic random sampling to ensure unbiased data. Specifically, four trained enumerators conducted the survey in high-traffic areas of Xi'an city, Chengdu city, and Wuhan city. These three cities are the three largest cities nearby our study region. Each city with more than 10 million population. The locations selected to conduct the survey in each city are gyms, shopping malls, wellness centers, and tourist attractions. The final questionnaire data were also generated through the Questionnaire Star platform to facilitate subsequent handling of missing values.

Three hundred questionnaires were distributed in all three cities with one hundred each. Finally, 250 were collected, resulting in a high response rate of 77.6 percent. After removing responses with less than three minutes completion times and extreme outliers, 224 responses were considered for analysis. Regarding the sample size, Kline (2023) suggested a minimum of 10 cases per item. Since the study has 19 items, a minimum of 190 samples was required. Therefore, the final sample of 224 considered in the present research satisfied this prior condition.

### 3.4 Respondent's Profiles

The demographic characteristics of the respondents are presented in Table 1. Among the total number of respondents, there were 68 males (30.4%) and 156 females (69.6%). Most of the respondents were middle-aged (36-55 years old), accounting for 44.7%, followed by young adults (18-35 years old) at 28.2%, and older adults (56 years and above) at 27.2%. The majority held a college degree (47.3%), followed by those with a master's degree or above (17.0%) and those with a junior college degree (14.7%). In terms of occupational distribution, those engaged in business and freelance work accounted for 25% (with business or company employees at 16.5% and freelancers at 8.5%); those involved in education and research made up 20.6% (with students at 11.2% and teachers or educators at 9.4%); those engaged in agriculture and individual businesses constituted 20.1% (with farmers at 11.2% and individual operators at 8.9%); those in public service comprised 19.2% (with government or public sector employees at 17.9% and medical staff at 1.3%); and those in other occupations accounted for 15.2% (with unemployed or job seekers at 7.6%, retirees at 6.7%, and others at 0.9%). The majority of households had a monthly income of 10,000 RMB or less (approximately USD 1,378), representing 67.8%.

### 3.5 Data Analysis

Structural equation modeling was used as an analytical technique to evaluate the proposed model and its related hypotheses, with data analyzed using SPSS 26.0 and AMOS 26.0 software. Following the two-step approach advocated by (Anderson and Gerbing, 1988), we first analyzed the measurement model based on theory of planned behavior, which includes four latent variables: attitude toward wellness tourism, subjective norms, perceived

behavioral control, and wellness tourist's behavioral intention, to determine their reliability and validity. Then, we incorporated two observed variables, health consciousness level and prior knowledge of wellness, and tested the extended theory of planned behavior structural model to examine the interrelationships among the six variables.

**Table 1:** Demographic and general characteristics of respondents

Characteristics	No.	%	Characteristics	No.	%
<i>Gender</i>			<i>Education</i>		
Male	68	30.4	Junior high school and below	30	13.4
Female	156	69.6	High school	17	7.6
<i>Age</i>			Junior college	33	14.7
18-35 years old	63	28.2	College	106	47.3
36-55 years old	100	44.7	Master or above	38	17
≥56 years old	61	27.2	<i>Monthly income (RMB)</i>		
<i>Occupation</i>			≤3000	29	12.9
Student	25	11.2	3001-5000	43	19.2
Government/Public sector staff	40	17.9	5001-7000	34	15.2
Business/Company Staff	37	16.5	7001-10000	46	20.5
Individual operators	20	8.9	10001-15000	30	13.4
Freelancer	19	8.5	15001-20000	35	15.6
Retirees	15	6.7	≥20001	7	3.1
Farmer	25	11.2			
Teachers/Educators	21	9.4			
Medical staff	3	1.3			
Unemployed/Job-seek	17	7.6			
Other	2	0.9			

Notes: RMB is represented by the international code CNY (Chinese Yuan).

**Table 2:** Confirmatory factor analysis (CFA) of measurement model

Construct	Items	Mean (Std.)	Skewness	Kurtosis	Std. Factor Loadings	Cronbach's α	AVE	C.R.	VIF
AT	AT1	4.13(0.871)	-0.46	-1.036	0.777	0.900	0.661	0.907	1.322
	AT2	4.05(0.887)	-0.611	-0.44	0.868				
	AT3	4.1(0.918)	-0.829	-0.114	0.778				
	AT4	4(0.761)	-0.178	-0.774	0.852				
	AT5	3.7(1.138)	-0.422	-1.034	0.786				
SN	SN1	3.79(1.111)	-0.646	-0.282	0.88	0.830	0.653	0.846	1.373
	SN2	4.15(0.734)	-0.719	0.614	0.614				
	SN3	3.78(1.125)	-0.837	-0.025	0.899				
PBC	PBC1	4.41(0.67)	-0.796	-0.092	0.691	0.890	0.62	0.89	1.310
	PBC2	4.13(1.005)	-1.199	0.849	0.836				
	PBC3	3.96(0.808)	-0.433	-0.281	0.865				
	PBC4	3.78(0.875)	-0.399	-0.454	0.766				
	PBC5	4.1(0.999)	-1.106	0.781	0.768				
HCL	HCL1	4(0.727)	-0.353	-0.112					1.782
PKW	PKW1	3.01(0.977)	0.584	-0.362					1.834
WBI	BI1	4.12(0.9)	-0.995	0.553	0.875	0.910	0.717	0.91	
	BI2	3.83(0.86)	-0.529	-0.018	0.823				
	BI3	4.21(0.861)	-1.058	0.622	0.83				
	BI4	4.22(0.716)	-0.572	-0.09	0.858				



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Mardia's coefficient	4.281	0.914
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Notes: AT = Attitude towards wellness tourism; SN = Subjective norms; PBC = Perceived behavioral control; HCL = Health consciousness level; PKW = Prior knowledge of wellness; WBI = Wellness tourist's behavioral intention; AVE = Average variance extracted; C.R. = composite reliability; VIF = Variance inflation factor.

## 4. Results

### 4.1 Test of Common Method Bias (CMB), Multicollinearity, and Normality

CMB was applied to examine whether the results of surveys are influenced by data sources (respondents), measurement environment, project context, and project characteristics. Harman's single-factor test is an effective method to assess CMB. The results indicated that a single factor explains 43.26% of the variance, which did not exceed 50% (Podsakoff et al., 2012).

Normality testing was conducted for both univariate and multivariate data. Skewness and kurtosis tests were performed for univariate normality, with a threshold  $\pm 2$ . The skewness and kurtosis values ranged from -1.199 to 0.849, indicating all items were univariate normality. Mardia's coefficient was 4.281 for multivariate normality, below the threshold of 5, indicating the dataset had multivariate normality. For detailed results (see Table 2).

To check for multicollinearity in the data set, diagnostics revealed a maximum variance inflation factor (VIF) of 1.834, which is well below the cut-off value of 10.1 (Kline, 2023). This confirms that there are no multicollinearity issues. Therefore, the constructs in the measurement model are distinct, making the data suitable for further analysis.

### 4.2 Test of Measurement Model

The measurement properties were tested using confirmatory factor analysis. Four constructs (attitude, subjective norms, perceived behavioral control, and wellness tourist's behavioral intention) were measured using three to five items, with the entire set of items included in the structural model. As shown in Table 3, the goodness-of-fit indices:  $\chi^2 = 170.70$ ,  $df = 113$ ,  $\chi^2/df = 1.511$ , GFI = 0.917, IFI = 0.98, TLI = 0.97, CFI = 0.98, RMSEA = 0.05. All these indices met the recommended cut-off criteria, indicating that the proposed model was a good fit (Byrne, 2010; Hair et al., 2019; Kline, 2023). Cronbach's alpha for each dimension and the overall scale ranged between 0.83 and 0.91, suggesting good reliability (Hair et al., 2019).

In terms of validity, the standardized factor loadings for each item were greater than 0.6, the average variance extracted (AVE) for each dimension exceeded 0.5, and the composite reliability (CR) values were above 0.8. These results indicate good convergent validity within the constructs. Additionally, the correlation matrix shows that the correlations between latent constructs were lower than the square root of the AVE for each construct, demonstrating adequate discriminant validity (Henseler et al., 2015).

### 4.3 Test of Structural Model

After testing the reliability and validity of the measurement model, we conducted a path test of the structural model using SEM with maximum likelihood (ML) estimation. In addition, two observed variables (health consciousness level and prior knowledge of wellness) were

also included in the structural model. The structural model has a good fit:  $\chi^2 = 195.372$ ,  $df = 139$ ,  $\chi^2/df = 1.406$ ,  $GFI = 0.916$ ,  $IFI = 0.978$ ,  $TLI = 0.973$ ,  $CFI = 0.978$ ,  $RMSEA = 0.043$  (see Table 4).

All the direct paths were supported except H4. Attitude towards wellness tourism ( $\beta = 0.428$ ,  $p < 0.001$ ), subjective norms ( $\beta = 0.221$ ,  $p < 0.01$ ), perceived behavioral control ( $\beta = 0.168$ ,  $p < 0.05$ ), and prior knowledge of wellness ( $\beta = 0.148$ ,  $p < 0.05$ ) had a positive impact on wellness tourist's behavioral intention, supporting hypotheses H1, H2, H3, and H5, respectively. However, the path from health consciousness level ( $\beta = -0.032$ ,  $p > 0.05$ ) to wellness tourist's behavioral intention was not significant, indicating that hypothesis H4 was rejected (see Table 5). All these variables explained about 49.5% ( $R^2 = 0.495$ ) of the variance in the wellness tourist's behavioral intention. The SEM model path diagram is shown in Figure 3 and standardized path coefficients were calculated to check the relationships among study constructs.

**Table 3:** Analysis of average variation extraction discriminant validity

Variables	1	2	3	4
1. AT (Attitude towards wellness tourism)	<b>(0.813)</b>			
2. SN (Subjective norms)	0.460***	<b>(0.808)</b>		
3. PBC (Perceived behavioral control)	0.380***	0.478***	<b>(0.787)</b>	
4. WBI (Wellness tourist's behavioral intention)	0.625***	0.507***	0.464***	<b>(0.847)</b>

Notes: The square roots of the AVE are shown by diagonal values (bold figures); Correlations between factors are shown by off-diagonal values; \*\*\* denotes a significance level of 0.1% or  $p < 0.001$ ; \*\*denotes a significance level of 1% or  $p < 0.01$ ; \*denotes a significance level of 5% or  $p < 0.05$ .

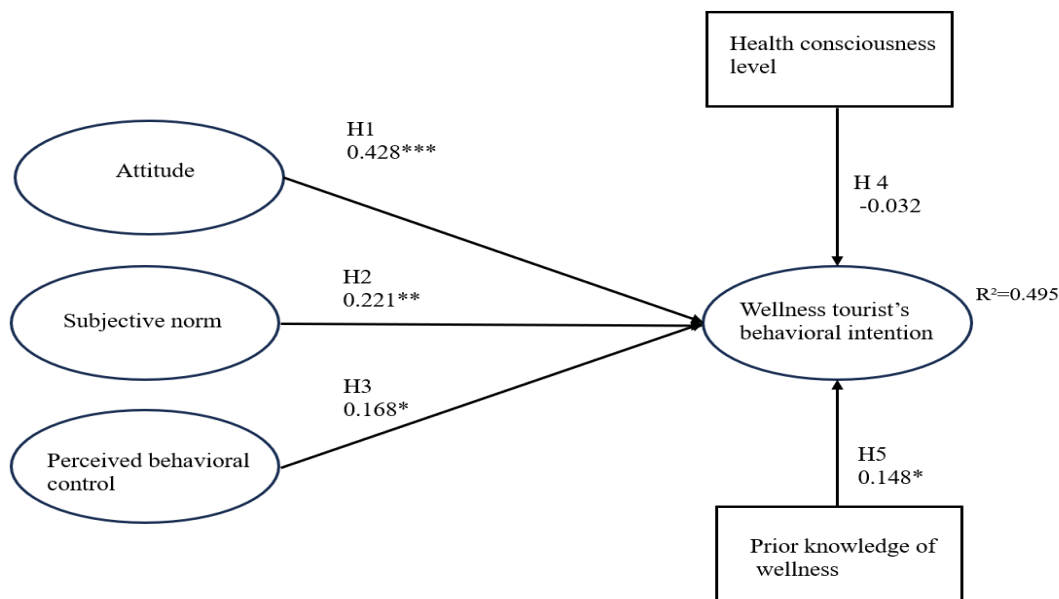
**Table 4:** Results of model fit indices

	$\chi^2$	$df$	$\chi^2/df$	p	GFI	IFI	TLI	CFI	RMSEA
Computed value	195.372	139	1.406	0.001	0.916	0.978	0.973	0.978	0.043
Recommended value			1-3		> 0.9	> 0.9	> 0.9	> 0.9	< 0.05

**Table 5:** Results of structural model analysis

Hypotheses	Structural paths	Standardized estimate coefficient	S.E.	C.R.	Result
H1	AT→WBI	0.428***	0.084	5.895	Supported
H2	SN→WBI	0.221**	0.056	3.04	Supported
H3	PBC→WBI	0.168*	0.081	2.433	Supported
H4	HCL→WBI	-0.032	0.077	-0.451	Rejected
H5	PKW→WBI	0.148*	0.059	2.037	Supported

Notes: AT = attitude towards wellness tourism; SN = Subjective norms; PBC = Perceived behavioral control; HCL = Health consciousness level; PKW = Prior knowledge of wellness; WBI = Wellness tourist's behavioral intention; \*\*\* denotes a significance level of 0.1% or  $p < 0.001$ ; \*\*denotes a significance level of 1% or  $p < 0.01$ ; \*denotes a significance level of 5% or  $p < 0.05$ .



Notes: \*\*\* denotes a significance level of 0.1% or  $p < 0.001$ ; \*\*denotes a significance level of 1% or  $p < 0.01$ ; \*denotes a significance level of 5% or  $p < 0.05$ .

**Figure 3:** Results of statistical analysis (For figure 1 proposed conceptual model)

## 5. Discussions

This study aimed to identify key factors affecting wellness tourist's behavioral intention in underdeveloped mountain areas in China. Our theoretical framework integrated the theory planned behavior with health consciousness and prior knowledge of wellness to understand their impact on wellness tourist's intention. The results showed that all factors based on the theory of planned behavior significantly influenced tourists' decisions to visit the studied areas for wellness tourism. First we discussed H1: Attitude towards wellness tourism positively impacts wellness tourist's behavioral intention to visit underdeveloped mountain regions in China. Although underdeveloped regions often face limitations such as remote locations, inconvenient public transportation, and scarce resources, tourists' perceptions, feelings, and evaluations of wellness tourism play a crucial role in their decision to participate in wellness tourism (Wang et al., 2023). The path coefficients also indicate that the attitude towards wellness tourism has the greatest impact, demonstrating that attitude has the strongest explanatory power for wellness tourist's behavioral intention. This has been confirmed in many empirical studies related to the theory of planned behavioral model (Aribah and Qastharin, 2022; Kim et al., 2019).

Next, for H2: Subjective norms positively impact wellness tourist's behavioral intention to visit underdeveloped mountain regions in China. This indicates that following the COVID-19 pandemic, general health awareness has increased, and those around them influence people's choices regarding wellness tourism. The power of role models and advocacy is particularly evident among tourists (Li and Huang, 2022).

The last variable in the theory planned behavior is perceived behavioral control. For H3: Perceived behavior control positively impacts wellness tourist's behavioral intention to visit underdeveloped mountain regions in China. The measurement of perceived behavioral control is divided into self-efficacy and perceived convenience (Ajzen, 2002). This suggests that whether tourists choose to engage in wellness tourism in underdeveloped areas depends not only on their confidence and belief in their ability to complete a specific behavior but also on their perception of the ease and convenience of performing the behavior in terms of time, effort, and resources. Therefore, wellness tourism in underdeveloped mountain areas is also influenced by perceived behavioral control. The theory of planned behavior (attitude towards wellness tourism, subjective norms, and perceived behavioral control) has been tested in the tourism sector and behavior studies, and the results showed a positive relationship (Aribah and Qastharin, 2022; Wang et al., 2023).

In addition, this study incorporated health consciousness level and prior knowledge of wellness, extending the TPB. For H4: Health consciousness level positively impacts wellness tourists' behavioral intention to visit underdeveloped mountain regions in China, the hypothesis was rejected. Although theoretically, health consciousness should influence people's travel intentions, several considerations must be considered in practice (Pu et al., 2021). Firstly, the motivations for wellness tourism are complex. Wellness tourist's behavioral intention may be influenced by factors such as economic and social considerations and the attractiveness of the destination (Leou and Wang, 2023). Health consciousness is only one aspect among many. Particularly when visiting underdeveloped regions for wellness tourism, even individuals with high health consciousness might not exhibit strong behavioral intentions if they encounter difficulties obtaining reliable health information about the destinations or perceive the regions as unattractive. Secondly, in the post-COVID-19 context, tourists are likely to prioritize the health and safety measures of the destination and government policies on pandemic prevention over their own health consciousness (Pahrudin et al., 2021; Zhang et al., 2021). Therefore, even individuals with high health consciousness may have their travel intentions more significantly influenced by external factors.

For H5: Prior knowledge of wellness positively impacts wellness tourists' behavioral intention to visit underdeveloped mountain regions in China. This hypothesis was supported. The results indicate that the more individuals know about wellness tourism, the stronger their intention to engage in wellness tourism activities. This is because individuals with more knowledge about wellness tourism are more confident in planning and participating in such activities. They understand the benefits, facilities, and activities associated with wellness tourism, reducing uncertainty and perceived risk. The literature also supports this perspective.

## **6. Conclusion and Implications**

### **6.1 Theoretical Implications**

The conceptual model of this study is based on the theory of planned behavior. While the theory of planned behavior model has been widely used in the tourism field to study tourist's behavior, its application to explain wellness tourist' behavioral intention to visit

underdeveloped regions in China remains largely unexplored. Therefore, this study addresses a theoretical gap in applying the theory of planned behavior model. Additionally, this study incorporated two observed variables, health consciousness level and prior knowledge of wellness, to explain wellness tourist's behavioral intention. This approach helps uncover deeper internal perceptions and psychological factors that influence tourists' intention to engage in wellness tourism in underdeveloped regions, providing a more comprehensive understanding of the correlations.

## 6.2 Practical Implications

Cultivating a positive attitude towards wellness tourism is essential. Based on this study, H1 is supported. Underdeveloped mountain areas in southern Shaanxi should fully utilize their natural resources and promote wellness tourism knowledge. Regular wellness tourism promotional activities, such as marathons, yoga, and meditation sessions, should be held to attract and encourage tourists from surrounding areas. These efforts will help cultivate tourists' attitudes towards wellness tourism and increase their participation.

Strengthen the promotion of wellness tourism. Based on this study, H2 is supported. The opinions of friends and surrounding people significantly impact the decision-making process for wellness tourism in these areas. Therefore, government departments and related enterprises should regularly use social platforms such as TikTok and WeChat to promote positive and healthy wellness tourism concepts to the public, organize community activities to educate people about health-related knowledge, conduct wellness lectures at universities, and use public service announcements to promote wellness tourism.

Improve local infrastructure. Based on this study, H3 is supported. This suggests that destinations with a comfortable environment and convenient transportation are more likely to attract tourists (Liu et al., 2020). Therefore, underdeveloped mountain regions should enhance their infrastructure to create a more welcoming environment for wellness tourists. This includes improving transportation networks, ensuring the availability of essential amenities, and maintaining a clean and safe environment.

Enhance the attractiveness and wellness aspects of destination products. Based on the study incorporating two variables, health consciousness level and prior knowledge of wellness, H4 was rejected, and H5 was accepted. The implication is that tourism product developers should focus more on enhancing the destination's attractiveness rather than relying solely on the health consciousness of potential tourists. Additionally, designing and promoting more educational and information-rich wellness tourism products (Ali et al., 2022), such as health lectures and wellness experience camps, can attract well-informed potential tourists.

## 7. Limitations and Future Research

Firstly, the data collection process for this study lasted one month. Future researchers should consider collecting samples from multiple periods and increasing the quantity and diversity of samples to longitudinally examine changes in tourists' behavioral intention towards wellness tourism in underdeveloped areas. Secondly, this study investigates the intentions to engage in wellness tourism in underdeveloped mountain areas rather than actual behavior. It should be noted that tourists' actual behavior does not always align with

their stated behavioral intentions. Therefore, future research should focus on tourists' actual behavior. Finally, future study should incorporate more external variables, such as marketing efforts and government influence, to expand the theory of planned behavior model.

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## Appendix

### Appendix A. Measurement instruments

Items	Description	Source
<hr/>		
<i>Attitude toward wellness tourism</i>		
AT1	Positive	Deng and Chen (2022); Lee et al. (2012)
AT2	Useful	
AT3	Valuable	
AT4	Dynamic	
AT5	Delightful	
<hr/>		
<i>Subjective norms</i>		
SN1	People who are important to me think it's a good idea to visit Shaannan for wellness tourism.	Ajzen (2002); De Cannière et al. (2009)
SN2	People who are important to me approve of my visiting Shaannan for wellness tourism.	
SN3	Most people I know would go to choose wellness tourism in Shaannan for wellness tourism.	
<hr/>		
<i>Perceived behavior control</i>		
PBC1	Whether I visit Shaannan for wellness tourism is completely up to me.	Lee et al., (2012)
PBC2	I am confident that if I want, I can visit Shaannan for wellness tourism.	
PBC3	I have enough resources (money) to visit Shaannan for wellness tourism.	
PBC4	I have enough time to visit Shaannan for wellness tourism.	
PBC5	I have enough opportunities to visit Shaannan for wellness tourism.	
<hr/>		

HCL	I am very self-conscious about my health	Zhang et al., (2021) Jiang et al., (2022)
PKW	I have prior knowledge of wellness	Lee et al., (2012)
<b><i>Wellness tourist's behavioral intention</i></b>		
WBI1	In the next 1-2 years, I intend to travel for wellness tourism in Shaannan.	Lee et al., (2012)
WBI2	In the next 1-2 years, I am planning to travel for wellness tourism in Shaannan.	
WBI3	In the next 1-2 years, I will make an effort to travel for wellness tourism in Shaannan.	
WBI4	In the next 1-2 years, I am certainly invest time and money to travel for wellness tourism in Shaannan.	

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