# An Investigation into the Multifactor Influences on Ecotourism Behavioural Intention, with Satisfaction as a Mediating Variable

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#### Abstract

This study examines the multifactor influencing ecotourism behavioural intention in China from the perspective of ecotourism satisfaction. The study distributed a self-filled questionnaire to 400 tourists who had visited a famous scenic ecotourism spot in China. Use PLS-SEM for structural equation modelling and analysis. The survey results indicate that tourist satisfaction only mediates perceived values, attitudes, and ecotourism behavioural intentions. Subjective norms, perceived value, attitude, and perceived behavioural control all impact tourist satisfaction. This provides theoretical support and management direction for China's sustainable and healthy ecotourism development.

Keywords: Ecotourism; Satisfaction; Perceived Value; Ecotourism Behavioural Intention

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#### 1.0 Introduction

Tourism is considered to be an essential growth industry for countries around the world(Li et al., 2018; Merli et al., 2019). The tourism industry is booming, and ecotourism has become a whole-of-humanity phenomenon. Ecotourism has different definitions among different researchers. The concept of 'ecotourism' originates from the 'Ecological Tourism' proposed by Hetzer (1965). Ceballos Lascurain, then a special advisor to the IUCN 1983, scrambled the definition of ecotourism. The most recognised approach is confirmed by UNEP (2002), which has a minimal effect on the environment, respects local cultures, and recognises the significance of preserving natural resources. Ecotourism is defined as "a form of tourism based on the sustainable management philosophy" by the Chinese Ministry of Culture and Tourism. It emphasises protecting the ecological environment, promoting harmonious coexistence between humans and nature, and engaging in tourism experiences and education through ecologically friendly methods. This approach to tourism relies on exceptional natural ecosystems and distinctive cultural landscapes, aiming to enhance individuals' ecological awareness while providing them with physical and mental enjoyment.

According to TIES, the International Ecotourism Society, ecotourism has developed rapidly in tourism industry in this century, with an annual growth rate of 25% to 30%. Ecotourism accounts for 55% of national tourist arrivals in Europe and the United States, whereas Asian countries reaches 35%, while in European countries, 70% of the population is interested in ecotourism (Zeppel, 2006). After the COVID-19 outbreak, "nature and health" became the first choice of many Chinese tourists. Government information disclosure shows that according to statistics in 2021, China's domestic 3.246 billion people participate in tourism, and the number of ecotourism tourists was 2.083 billion, exceeding half of the total number of domestic tourists in China. Ecotourism is a tourism behaviour that emphasises the experience of natural areas and the protection of the environment. In hundreds of years of human development, the destruction of the environment to gain economic benefits, resulting in the rapid deterioration of the human living environment, the urgent need to raise people's awareness of ecological and environmental protection, so this phenomenon has increased researchers' interest in ecotourism research.

# 1.1 Problem of Study

Travelers' choice of travel decision-making method is a complex process. Over the past few decades, many academic research objectives have focused on determining tourists' destination revisit intentions within the larger framework of journeys. Understanding the behavioural intention factors that influence tourists' choice of travel modes is vital for the progress of the tourist industry (Mheidat & Marzuki, 2023).

Ecotourism has a low environmental impact, respects local cultures, and contributes significantly to preserving environmental resources (UNEP, 2002). That's why countries are now developing ecotourism. For the continued prosperity of ecotourism, it is imperative to study the behavioural intention of tourists to choose ecotourism, which is conducive to the sustainable development of ecotourism (Tan, Chong, Lo, Mohamad & Wang, 2019). Behavioural intention has always been considered the most critical research field in tourism research, but research on its predictors, including perceived value, is still lacking. Therefore, the questions of what factors influence tourists' ecotourism behavioural intentions, their relationships, and how they influence tourists' behavioural intentions have not been fully explained.

# 1.2 Objectives of Study

Tourist tourism decision-making requires considering many factors and is a highly complex process. Instead of attracting new tourists, finding ways to keep former tourists at a lower cost is better. Therefore, generating positive tourist attitudes and revisiting intention can reduce the cost of publicity and marketing and attract as many tourists as possible to join ecotourism so that the already injured environment can be repaired and ultimately achieve the purpose of balancing the relationship between economic and environmental benefits. So, studying tourists' behavioural intentions regarding their travel mode is essential. Behavioural intention is a systematic thought process designed to plan and implement a behavioural plan within a specific acceptable range. Hasan et al. (2020) research has shown that to predict relative behaviour accurately, it is necessary to study behavioural intention. Aizen (1991) suggested that behavioural intention is the resultant variable of the "Theory of Reasoned Action" and is framed as how a human develops a plan to behave in a particular way in future behaviours. According to Blackwell et al. (2001), behavioural intention refers to an individual's actual purchasing behaviour and specific actions taken towards a goal, that is, an individual's subjective judgment of the probability of completing a specific task or an individual's tendency to take explicit actions in the future. However, research often defines behavioural intention as two dimensions: revisiting and willingness to recommend specific destinations or tourism products. However, travel intention and revisit (purchase) intention are commonly used indicators in existing research (Soliman, 2021).

Scholars have studied tourists' behavioural intentions from various viewpoints, including the experience quality of the destination experience, the experience of destination amenities, host-guest interactions, and service quality (Chong, Tan, Lo, Mohamad & Wang, 2018). In addition, some scholars have started studying behavioural intentions from the perspective of tourist motivation. The Theory of Planned

Behaviour is often used to study behavioural intention (Ajzen, 1991). Although many fields have successfully applied the "planned behaviour theory" for research, more elements are still needed to improve its explanatory power. Therefore, this study applies the Theory of Planned Behaviour, Satisfaction, and Perceived Value as variables to the research framework of tourists' behavioural intention to choose tourism methods in order to study ecotourism behavioural intention.

#### 2.0 Literature Review

## 2.1 Theory of Planned Behaviour (TPB)

Human behaviours are complex, and to better understand human behaviours, the TPB is often used to assess and anticipate people's behaviour. The TPB theory refers to adding a perceptual behaviour control scalar in TRA theory (Ajzen, 1991). Previous research on the TPB shows that three important variables affect behavioural intention: perceived behavioural control, subjective norms, and attitudes.

TPB has been widely used in different areas of tourism research, such as the Restaurant, Hotel, and Mass tourism industries. Similarly, many scholars use TPB to evaluate the behavioural intentions of various types of tourism, such as Dark Tourism Intention, Creative tourism behavioural intention, and behavioural intention for environmentally responsible tourism (Lewis et al., 2021). Therefore, this study adopts the TPB method to fully explain the intention of ecotourism behaviour by studying the impact of each variable of TPB on ecotourism behaviour intention. To enhance the TPB predictive power, as proposed by some scholars, more variables can be included (Abbasi et al., 2020). In this study, perceived value and satisfaction will be added to pre-extend the original TPB theory. Individuals' overall evaluation of a particular behaviour is reflected in behavioural norms, attitudes, and perceived behavioural control, which depends on their beliefs about the outcome of that behaviour. (Ajzen, 1991; Zhang et al., 2017). Subjective norms refer to attending or not attending to perceived stress from those around them (Ajzen, 1991). Perceived behaviour means the assessment of the level of difficulty or easiness to perform a behaviour as expected and perceived(Ajzen, 2002). According to Ajzen's (1991) research, behavioural norms, attitudes, and perceived behavioural control can have far-reaching consequences on behavioural intentions and behaviours.

#### 2.2 Attitude

Ajzen, (1991) argues that attitudes are proportional to the strength of the influence of behavioural beliefs about possible consequences. This can be expressed through the

expected value theory model. Therefore, the more positive the attitude, the higher the behavioural intention, and the lower the attitude, the lesser the behavioural intention. Therefore, define attitude as a positive or negative evaluation that individuals hold towards ecotourism(Bamberg et al., 2003; Li et al., 2018)

Numerous investigations into the TPB theory have consistently indicated a direct and influential relationship between attitude and behavioral intention (Ajzen, 1991; Al Ziadat, 2015). Within the realm of tourism research, Ryu et al. (2008) identified a substantial positive correlation between attitude and behavioral intention through a survey involving hotel patrons in the United States. Therefore, we establish the subsequent hypothesis:

H1. Attitude positively influences ecotourism behavioural intention.

## 2.3 Subjective Norm

Normative beliefs and compliance incentives shape subjective norms, which are an individual's impression of the expectations to behave in a specific manner according to the group's beliefs, and the individual's inclination to adhere to these expectations(Ajzen, 1991).

Subjective norms are crucial in shaping an individual's decision-making process(Chang et al., 2016). In research, subjective norms refer to individuals' perception of social pressure to engage in ecotourism behavior or not (Wang et al., 2016). Zhang et al. (2017) conducted a study on rural tourists in mainland China within the field of tourism research. They discovered a notable and favourable relationship between the subjective norms of tourists and their behavioural intention. In a study conducted by Lee & Jan, (2018) on ecotourism visitors in Taiwan, it was discovered that there exists a direct correlation between subjective norms and the intention to engage in ecotourism activities. Therefore, we establish the subsequent hypothesis:

H2. Subjective norm positively influences ecotourism behavioural intention.

#### 2.4 Perceived Behavioural Control

Perceived behavioural control, as employed in this research, pertains to the extent to which an individual believes ecotourism to be either effortless or challenging to engage in. The perception is mostly shaped by the accessibility of resources and opportunities for ecotourists (Lam & Hsu, 2006; Zhang et al., 2017).

As perceived behavioural control increases, the association between attitudes and behavioural intentions also increases (La Barbera & Ajzen, 2021). As per the findings of Bosnjak et al. (2020), individuals are more inclined to put in more effort and follow their intended actions when they feel a strong sense of control. There is a strong and

positive correlation between perceived behavioural control and behavioural intention, as demonstrated in several research studies (Dong et al., 2023; lancu & lancu, 2023; Kim et al., 2022). Several studies in the field of tourism research have revealed that there is no significant correlation between perceived behavioural control and behavioural intention (Hasan et al., 2020). Nevertheless, the majority of studies have demonstrated a substantial and favorable correlation between perceived behavioural control and behavioural intention. For instance, In their study on ecotourism in Taiwan, Zhang et al. (2017) found a positive correlation between perceived behavioural control and behavioural intention in ecotourism. Therefore, we establish the subsequent hypothesis:

H3. Perceived behavioural control positively influences ecotourism behavioural intention.

#### 2.5 Perceived Value

Zeithaml (1988) The evaluation of a product that considers the perceived benefits of customers to be weighed against the costs paid. Perceived value is an integral assessment of the ecotourism product in terms of perceived benefits and losses from participation in the process (Gallarza & Gil Saura, 2006; Zeithaml, 1988). The effect of perceived value on behavioural intention has been demonstrated in past research in many industries, such as Manufacturing, Financial, Consultancy, Media Services and Information industry, and other industrial fields. Many studies in tourism research have also demonstrated that perceived value positively affects tourists' behavioural intentions (Ashraf et al., 2020). Similarly, Ghorbanzadeh et al. (2021) investigated war tourism in Iran and identified a significant positive correlation between perceived value and behavioural intention. According to Wu et al. (2016), a survey conducted among medical tourism travellers in China's mainland revealed a strong and positive relationship between behavioural intention and perceived value. In their 2021 study, Ghorbanzadeh et al. examined war tourism in Iran and found a notable and favourable relationship between perceived value and behavioural intention. Therefore, we establish the subsequent hypothesis:

H4. Perceived value positively influences ecotourism behavioural intention.

#### 2.6 Satisfaction

Satisfaction is usually derived from comparing assessment expectations and satisfaction (Oliver, 1980). However, Füller and Matzler (2008) consider satisfaction as a subjective evaluation of a tourist's perception of a tourist destination or service.

#### 2.6.1 Attitude and Satisfaction

Attitudes have a crucial role in influencing satisfaction within the tourism business, as demonstrated by Kim and Seo (2020) research in the field of tourism. The study conducted by Cardinali et al. (2020). The results of a survey conducted on 142 Italian people about their perspectives on sustainable tourism indicated a direct correlation between favourable views towards tourism and the fulfilment of key psychological requirements. In their study on concentrated travel during Chinese holiday tourism, Zhu et al. (2019) discovered that attitude had a substantial influence on satisfaction. We therefore formulate the following hypothesis:

H5. Attitude positively influences satisfaction.

## 2.6.2 Subjective Norm and Satisfaction

In a study on travel behavioural during peak season visits, Zhu et al. (2019) discovered that subjective standards have a favorable impact on satisfaction. In their study on mass tourism in Bangladesh, Hasan et al. (2020) discovered that subjective standards have a favourable influence on satisfaction. We therefore formulate the following hypothesis:

H6. Subjective norm positively influences satisfaction.

#### 2.6.3 Perceived Behavioural Control and Satisfaction

The findings demonstrated a beneficial impact of perceived behavioural control on contentment. In a study conducted Zhu et al. (2019), they found a positive link between the perceived behavioural control and its effects, based on a survey carried out among tourists in Xining City, China. Similarly, an exploration into the connection between satisfaction and perceived behavioural control was undertaken by Hasan et al. (2020). They used data collected from local visitors in Bangladesh for their research. The results of their study revealed that perceived behavioural control had a favourable influence on satisfaction. We therefore formulate the following hypothesis:

H7. Perceived behavioural control influences satisfaction.

#### 2.6.4 Perceived Value and Satisfaction

Perceived value and satisfaction are two pivotal concepts of significant importance. Perceived value and satisfaction are often studied simultaneously in marketing and consumer behaviour. Perceived value is also a precursor to customer satisfaction and loyalty (Carvache-Franco et al., 2019). Many studies in tourism research have demonstrated that perceived value is associated positively with satisfaction (Quynh et al., 2021). Therefore, we establish the subsequent hypothesis:

H8. Perceived value positively affects satisfaction.

#### 2.6.5 Satisfaction and Ecotourism Behavioural Intention

Satisfaction is often considered an antecedent variable of behavioural intention (Gallarza et al., 2013). In the study on tourism, Han (2015) indicates that satisfaction positively influences behavioural intention. We therefore formulate the following hypothesis:

H9. Satisfaction positively influences ecotourism behavioural intention.

# 2.6.6 Satisfaction as the Mediating Variable

Satisfaction research is now relatively well-established and is often included in other studies to construct empirical models to increase proposed model interpretive strength and the study's depth. In previous studies, the mediator of satisfaction between behavioural intention and perceived value has been investigated. Rajaguru (2016) demonstrates that the perceived service quality of full-service airlines significantly increases the behavioural intention through the effect of customer satisfaction compared to low-cost airlines. Similarly, the mediating role between perceived value and customer behavioural intention was demonstrated, and a positive relationship was established between the two (Kuppelwieser et al., 2022). A study by Hasan et al. (2020) showed that satisfaction mediated between attitude, subjective norm, perceived behavioural control, and tourist behavioural intention and established a positive relationship between them. We therefore formulate the following hypothesis:

- H10. Satisfaction acts as an intermediary in the connection between perceived value and the intention to ecotourism behavioural intention.
- H11. Satisfaction acts as an intermediary in the connection between attitude and the intention to ecotourism behavioural intention.
- H12. Satisfaction acts as an intermediary in the connection between subjective norms and the intention to ecotourism behavioural intention.
- H13. Satisfaction acts as an intermediary in the connection between perceived behavioural control and ecotourism behavioural intention.

By integrating these hypotheses, Fig. 1 presents a conceptual model.

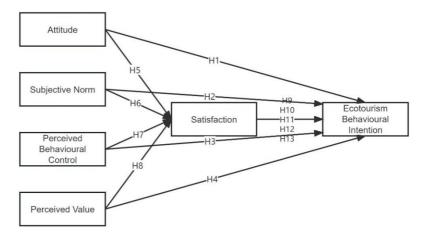


Fig. 1: Conceptual model (Source: Hultman et al; Bamberg et al.; Wang & Zhang; Lam & Hs; Zhang et al.; Gallarza & Gil Saura; Füller & Matzler)

# 3.0 Methodology

# 3.1 Sample

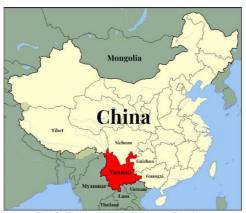


Fig. 2: The Location of Yunnan Province (Sources: https://wiki.ubc.ca/File:Yunnan-Province-China)

China is a famous world tourist destination with its vast territory and rich natural tourism resources (Dichen & Guangrui, 1983). Yunnan Province is located in southwestern China, bordering Myanmar, Laos and Vietnam. As shown in (Fig. 2)

Yunnan Province has both highlands and tropical rainforests due to its geography, with an altitude difference of more than 4,000 meters. Significant changes in altitude result in diverse ecological conditions. Academics have pointed out that the diversity in tourists' traits and their ecotourism activities is influenced by the variety of recreational sites situated at various elevation levels(Lee 2007). As shown in Table 1, Yunnan has rich and extensive ecotourism resources.

Table 1. Types of Ecotourism Resources in Yunnan

Main Categories	Subcategories	<b>Basic Types</b>	Scenic Areas			
Land Scenery	Comprehensive natural	Vertical natural	Three rivers and mountains, snow-capped			
	tourism destination	zone	mountains			
		Biofossil site	Lufeng Jurassic Dinosaur Geology			
	Sedimentary landform	Karst landform	Shilin and Alu Ancient Cave			
	Natural change relics	Landscape	Yulong Snow Mountain, Dali Cangshan, etc			
		Gorges	Nujiang valley			
		Caldera	Tengchong volcano			
Water Scenery	Lakes		Dianchi Lake, Erhai Sea, etc.			
	Waterfalls		Jiulong Waterfall, Dajishui Waterfall			
	Hotsprings		Tengchong Hot Sea			
Organisms	Floral land		Chenggong Flower Base			
Vistas	Vineyard		Mile Vineyard			
Climactic	Seven different climate zones		All over the province			
Architecture &	Pagoda Xishuangbanna Hinayana Buddhist Stu					
Facilities	Ancient Towns		Lijiang, Heshun and other ancient towns			
	Habitat		Residences of Bai and Zhuang minorities			
Ethnic Culture	Ethnic Minorities		Lugu Lake Mosuo			
	Memorial Sites		Memorial sites such as the Zhaxi			
			Conference in Northeast Yunnan			
	Arts & Crafts		Heavy Colour Paintings and Various Ethnic			
			Arts			

(Source: Author)

The destination of this study was chosen to be Shangri-La Potatso National Park in Yunnan, China, at the location shown in the figure (3).

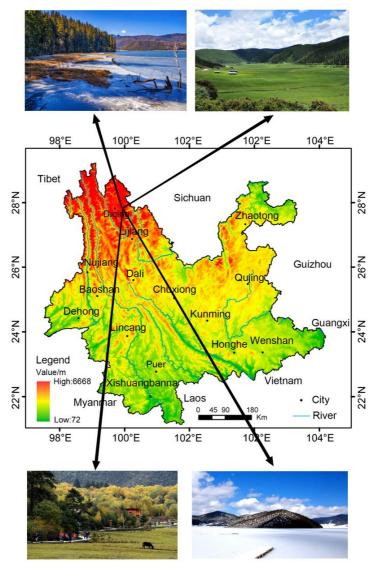


Fig. 3: Study sites (Source: https://www.chinadiscovery.com/yunnan.html)

Yunnan has rich tourism resources and ranks second in China in tourism revenue in 2022. Public information from the Chinese government shows that Shangri-La is a national nature reserve in China, while Potatso National Park is in the core zone of the "Three Rivers Parallel Streams" World Natural Heritage Site, known for its rich biodiversity, landscape variety, and cultural variety, with national conservation and exhibition value. Potatso National Park covers 302.1 square kilometres, with 53.02% of the total area being government-core protected areas and the other 46.98% being generally protected areas. This trip is considered ecotourism because it meets the critical requirements of ecotourism (e.g., nature-based, providing environmental education, and ecological sustainability). The Potatso scenic area is located in a national park with almost no commercial development and is famous for its ecotourism. Tour guides and site managers provide environmental education. Tourism is sustainable, and there is no responsible tourist behaviour, such as throwing garbage or destroying plants.

## 3.2 Measurements

To quantitatively analyse the variables in the model, the study reviewed the literature and selected the most appropriate scale to measure the variables—five questions on behavioural intentions in ecotourism adapted from Hultman et al. (2015). Five projects with the same attitude were adapted from Bamberg et al. (2003). Wang and Zhang (2017) adapted the six subjective norm items. Perceived Behavioural Control five projects adapted from Lam & Hsu (2006) and Zhang et al. (2017). The five programs of Perceived Value are adapted from Gallarza and Gil Saura (2006). Satisfaction five projects adapted from Gallarza and Gil Saura (2006), Füller and Matzler (2008), and Ladhari et al. (2008). The assessment of all items was conducted using a five-point Likert scale, with responses ranging from (1) strongly disagree to (5) strongly agree. Tourists are requested to evaluate the material given in each question by drawing on their genuine comprehension and personal encounters with ecotourism, with the support of pertinent departments and tourism experts.

#### 3.3 Data Collection

The survey used random sampling to collect data. Questionnaire Star was utilised to survey tourists who had previously visited the scenic spot, and only those who had visited Shangri-La Potatso National Park could complete the questionnaire. 400 copies were distributed, and 358 were recovered, a recovery rate of 87.5%. The researchers scrutinised each questionnaire received, and 350 were deemed suitable for subsequent data analysis.

#### 3.4 Data Analysis

In the process of evaluating research hypotheses, we have chosen the Partial Least Squares Structural Equation Modeling (PLS-SEM) as our primary analytical tool. The goal of this study is to predict the expected structure. Given that the collected data did not meet the assumption of normal distribution, we decided to use the PLS-SEM as our analytical technique. According to the research by Hair et al. (2014), they believe that using PLS-SEM is the most appropriate research method in this particular situation. This method can not only effectively handle the non-normality of the data but also provide accurate predictions of the expected structure. Therefore, we chose this method for our study in the hope of obtaining more accurate research results.

# 4.0 Findings

Table 2. Research model measurements for the study

Latent variables	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE	
Attitude	0.882	0.903	0.914		
Ecotourism Behavioural Intention	0.782	0.783	0.859	0.605	
Perceived Behavioural control	0.788	0.789	0.855	0.541	
Perceived value	0.852	0.853	0.894	0.628	
Satisfaction	0.790	0.793	0.864	0.614	
Subjective norm	0.843	0.846	0.885	0.562	

(Source: Author)

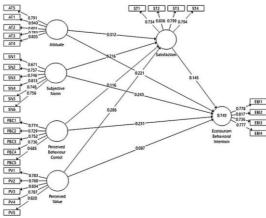


Fig. 4: Results of the path analysis (Source: Author)

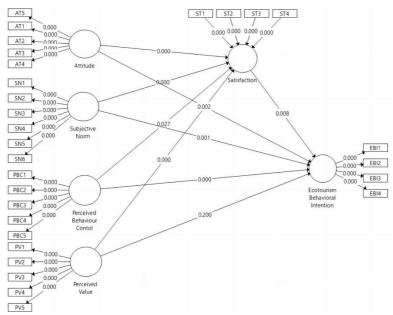


Fig. 5: Results of bootstrapping (Source: Author)

# The findings of the hypotheses testing are shown in Table 3 below

Table 3: Results of hypothesis testing

Hypothesis	Relationship	T statistics	P-values	Results
H1	Attitude > Ecotourism behavioural intention	3.029	0.002	Accepted
H2	Subjective norm > Ecotourism behavioural intention	3.404	0.001	Accepted
H3	Perceived behavioural control > Ecotourism behavioural intention	4.385	0.000	Accepted
H4	Perceived value > Ecotourism behavioural intention	1.282	0.200	Rejected
H5	Attitude > Satisfaction	5.222	0.000	Accepted
H6	Subjective norm > Satisfaction	3.577	0.000	Accepted
H7	Perceived behavioural control > Satisfaction	2.292	0.022	Accepted
H8	Perceived value > Satisfaction	4.803	0.000	Accepted
H9	Satisfaction > Ecotourism behavioural intention	2.604	0.009	Accepted
H10	Perceived value > Satisfaction > Ecotourism behavioural intention	2.327	0.020	Accepted
H11	Attitude > Satisfaction > Ecotourism behavioural intention	2.364	0.018	Accepted
H12	Subjective norm > Satisfaction > Ecotourism behavioural intention	1.959	0.050	Rejected
H13	Perceived behavioural control > Satisfaction > Ecotourism behavioural intention	1.537	0.124	Rejected

(Source: Author)

#### 5.0 Discussion

The study exhibited more substantial statistical consistency with an  $R^2$  value of 0.74 (Fig. 4). The structural validity of the study was assessed before the hypotheses were evaluated, and reliability and construct validity were examined. The composite reliability and Cronbach's alpha were used to test the internal consistency of the constructs, and the Cronbach  $\alpha$  values ranged from 0.782 to 0.882, with composite reliabilities greater than 0.80, reflecting good internal consistency. To check the validity of the study structure, two aspects, convergence, and discriminative sanitisation, were measured separately. Both validities reflect the relevance of the structures. Convergent validity is the actual correlation between theoretically related structures. The study examined convergent validity using the average variance (AVE) extracted from the item loadings. Table 2 shows that the AVE of the constructs ranged from 0.541 to 0.682, which is higher than 0.50, indicating sufficient internal consistency.

Structural model tests were performed using standardised path coefficients, Tstatistics, and P-values. This study used PLS-SMART to analyse the hypotheses, and the results are shown in Table 3. From the T-values and P-values tested, H1, H2, and H3 predicted ecotourism behavioural intention, use of subjective norms, attitudes, and perceived behavioural control, respectively, and the results were all statistically valid. However, H4, the impact of perceived value on ecotourism behavioural intention, was not supported as no significant relationship was found. It is hypothesised that H5 (Attitude), H6 (Subjective Norms), H7 (Perceived Behavioural Control), and H8 (Perceived Value) all have a direct positive effect on satisfaction. Hypothesis H9 Satisfaction predicts ecotourism behavioural intention, and a statistically significant relationship was found. H10, H11, H12, H13 Four hypotheses of satisfaction as a mediating variable turned out to be supported. H10 and H11 didn't find a statistically student-significant relationship. In contrast, the results do not support H12 and H13 because no significant relationship was found. Therefore, by analysing the mediating effect of satisfaction, the results support the partial mediating effect of satisfaction in the combined model of perceived value and the theory of planned behaviour.

## 6.0 Conclusion & Recommendations

This study examined ecotourism behavioural intention by developing a new model for using the theory of planned behaviour. Interesting phenomena were found based on collecting samples of tourists from ecotourism scenic spots in China and analysing them by PLS-SEM. Satisfaction does not mediate between perceived behavioural control, subjective norms, and ecotourism behavioural intentions. This is inconsistent with the findings of Hasan et al. (2020) in the context of mass tourism. Satisfaction can

only partially mediate the study of TPB modelling in the context of ecotourism. All independent variables in the study had a positive effect on satisfaction. The study results indicate that satisfaction is not only the tourists' evaluation of their ecotourism experience but also an important factor influencing their future behaviour. Perceived value has no significant effect on behavioural intentions towards ecotourism, which is inconsistent with the results of traditional consumer behaviour research and maybe because ecotourism has special social and environmental attributes that lead tourists to give more consideration to the non-economic value of ecotourism.

The implication of this study for ecotourism management is to positively influence ecotourism tourists' attitudes, subjective norms, and perceived behavioural control in terms of public opinion propaganda, and so on, to shape a good social image and atmosphere of ecotourism and to enhance tourists' capabilities in terms of time, energy, and other aspects, while enhancing tourists' ecotourism behavioural intentions. In addition, improving the perceived value of ecotourism tourists can improve satisfaction, and the growth of satisfaction can effectively promote the increase of ecotourism behavioural intention, thus promoting the sustainable development of ecotourism.

Chinese ecotourism management organisations, in order to improve ecotourism behavioural intentions, can establish an effective feedback mechanism for ecotourists to share their ecotourism experiences and suggestions. This will provide effective data support for the construction of scenic spots and ecotourism management departments, thus increasing the willingness of tourists to participate in ecotourism again, and ensuring that ecotourism can continue to develop in China.

This study uses an expanded TPB model to study the influencing factors of ecotourism behaviour intention. It discusses variables such as perceived value, attitude, subjective norms, perceived behaviour control, and satisfaction. Although, the extended model of TPB proposed by the study provides a new explanation for the study. However, there are some limitations in analysing the results of the study. For example, this study did not include variables like demographics, geography, or experience. There may be more potential influences on people's ecotourism behavioural intention. In addition, the sample was collected in too few locations, which may affect the generalisation of the results.

In the future, to avoid the above limitations. It may be possible to continue to extend the TPB model in the future in light of the ecotourism context and, therefore, understand more accurately the factors influencing ecotourism behavioural intention. Future data releases could add as many ecotourism destinations as possible, which would better explain tourists' ecotourism behavioural intention.

# Paper Contribution to Related Field of Study

Policymakers should focus more on establishing environmental awareness and a sense of responsibility, as these are key factors in developing ecotourism. Improving tourist satisfaction is equally crucial for the sustainable development of ecotourism.

## References

Abbasi, G., Su-Yee, S., & Goh, Y.-N. (2020). An integrative approach for determining consumers mobile advertising related attitudes and intentions. *International Association of Online Engineering*.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of Applied Social Psychology*, 32(4), 665–683.

Al Ziadat, M. T. (2015). Applications of Planned Behavior Theory (TPB) in Jordanian Tourism. *International Journal of Marketing Studies*, 7(3), p95. https://doi.org/10.5539/ijms.v7n3p95

Ashraf, M. S., Hou, F., Kim, W. G., Ahmad, W., & Ashraf, R. U. (2020). Modeling tourists' visiting intentions toward ecofriendly destinations: Implications for sustainable tourism operators. *Business Strategy and the Environment*, 29(1), 54–71.

Bamberg, S., Ajzen, I., & Schmidt, P. (2003). Choice of travel mode in the theory of planned behavior: The roles of past behavior, habit, and reasoned action. *Basic and Applied Social Psychology*, 25(3), 175–187.

Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2001). Consumer behavior 9th. South-Western Thomas Learning. Mason, OH, 1–13.

Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The theory of planned behavior: Selected recent advances and applications. *Europe's Journal of Psychology*, *16*(3), 352.

Cardinali, P., Varani, N., & Migliorini, L. (2020). Sustainable Tourism Attitude and Preference in Italian Adults: Value Orientation and Psychological Need Satisfaction. Sustainability, 12(24), 10517. https://doi.org/10.3390/su122410517

Carvache-Franco, M., Carvache-Franco, O., Solis-Radilla, M. M., & Carvache-Franco, W. (2019). The perceived value and profile of protected areas visitors: A case study of the Guayas province, Ecuador. *Geographica Pannonica*, 23(2), 135–147.

Chang, I.-C., Chou, P.-C., Yeh, R. K.-J., & Tseng, H.-T. (2016). Factors influencing Chinese tourists' intentions to use the Taiwan Medical Travel App. *Telematics and Informatics*, 33(2), 401–409.

Dichen, G., & Guangrui, Z. (1983). China's tourism: Policy and practice. Tourism Management, 4(2), 75-84.

Dong, H., Zhang, Y., & Chen, T. (2023). A study on Farmers' participation in environmental protection in the context of rural revitalization: The moderating role of policy environment. *International Journal of Environmental Research and Public Health*, 20(3), 1768.

Füller, J., & Matzler, K. (2008). Customer delight and market segmentation: An application of the three-factor theory of customer satisfaction on life style groups. *Tourism Management*, 29(1), 116–126.

Gallarza, M. G., & Gil Saura, I. (2006). Value dimensions, perceived value, satisfaction and loyalty: An investigation of university students' travel behaviour. *Tourism Management*, 27(3), 437–452. https://doi.org/10.1016/j.tourman.2004.12.002

Gallarza, M. G., Gil Saura, I., & Arteaga Moreno, F. (2013). The quality-value-satisfaction-loyalty chain: Relationships and impacts. *Tourism Review*, 68(1), 3–20.

Ghorbanzadeh, D., Shabbir, M. S., Mahmood, A., & Kazemi, E. (2021). Investigating the role of experience quality in predicting destination image, perceived value, satisfaction, and behavioural intentions: A case of war tourism. *Current Issues in Tourism*, 24(21), 3090–3106. https://doi.org/10.1080/13683500.2020.1863924

Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121.

Han, C. (2015). The relationship between tourism perceived value, satisfaction, and behavioral intention. *Human Geography*, 30(3), 137-144+150.

Hasan, A. A., Biswas, C., Roy, M., Akter, S., & Kuri, B. C. (2020). The applicability of theory of planned behaviour to predict domestic tourist behavioural intention: The case of Bangladesh. *GeoJournal of Tourism and Geosites*, 31(3), 1019–1026.

Hetzer, N. D. (1965). Environment, tourism, culture. Links, 1(3), 1-3.

Hultman, M., Kazeminia, A., & Ghasemi, V. (2015). Intention to visit and willingness to pay premium for ecotourism: The impact of attitude, materialism, and motivation. *Journal of Business Research*, 68(9), 1854–1861. https://doi.org/10.1016/j.jbusres.2015.01.013

lancu, I., & lancu, B. (2023). Interacting with chatbots later in life: A technology acceptance perspective in COVID-19 pandemic situation. *Frontiers in Psychology*. 13, 1111003.

Kim, D. S., & Seo, Y. W. (2020). A study on the effects of package tourism motives and tourism constraints on attitude and satisfaction. *Journal of Digital Convergence*, 18(5), 473–484.

Kim, H., Min, M. O., & Han, D. H. (2022). Personal Social Networks and Relapses in Women With Substance Dependence: Application of the Theory of Planned Behavior. *Psychiatry Investigation*, 19(10), 795.

Kuppelwieser, V. G., Klaus, P., Manthiou, A., & Hollebeek, L. D. (2022). The role of customer experience in the perceived value—word-of-mouth relationship. *Journal of Services Marketing*, 36(3), 364–378.

La Barbera, F., & Ajzen, I. (2021). Moderating role of perceived behavioral control in the theory of planned behavior: A preregistered study. *Journal of Theoretical Social Psychology*, *5*(1), 35–45.

Ladhari, R., Brun, I., & Morales, M. (2008). Determinants of dining satisfaction and post-dining behavioral intentions. *International Journal of Hospitality Management*, 27(4), 563–573. https://doi.org/10.1016/j.ijhm.2007.07.025

Lam, T., & Hsu, C. H. C. (2006). Predicting behavioral intention of choosing a travel destination. *Tourism Management*, 27(4), 589–599. https://doi.org/10.1016/j.tourman.2005.02.003

Lee, T. H. (2007). An ecotourism behavioural model of national forest recreation areas in Taiwan. International Forestry Review, 9(3), 771–785. https://doi.org/10.1505/ifor.9.3.771

Lee, T. H., & Jan, F.-H. (2018). Ecotourism Behavior of Nature-Based Tourists: An Integrative Framework. Journal of Travel Research, 57(6), 792–810. https://doi.org/10.1177/0047287517717350

Lewis, H., Schrier, T., & Xu, S. (2021). Dark tourism: Motivations and visit intentions of tourists. *International Hospitality Review*, 36(1), 107–123.

Li, K. X., Jin, M., & Shi, W. (2018). Tourism as an important impetus to promoting economic growth: A critical review. *Tourism Management Perspectives*, 26, 135–142.

Merli, R., Preziosi, M., Acampora, A., & Ali, F. (2019). Why should hotels go green? Insights from guests experience in green hotels. *International Journal of Hospitality Management*, *81*, 169–179.

Mheidat, M. Z., & Marzuki, A. (2023). A Framework for Understanding Travel Intention Post-Pandemic to International Tourist Destinations. *Tourism: An International Interdisciplinary Journal*, 71(2), 388–397.

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469.

Quynh, N., Hoai, N. T., & Loi, N. V. (2021). The role of emotional experience and destination image on ecotourism satisfaction. *Spanish Journal of Marketing - ESIC*, 25(2), 312–332. https://doi.org/10.1108/SJME-04-2020-0055

Rajaguru, R. (2016). Role of value for money and service quality on behavioural intention: A study of full service and low cost airlines. *Journal of Air Transport Management*, 53, 114–122.

Ryu, K., Han, H., & Kim, T.-H. (2008). The relationships among overall quick-casual restaurant image, perceived value, customer satisfaction, and behavioral intentions. *International Journal of Hospitality Management*, 27(3), 459–469. https://doi.org/10.1016/j.ijhm.2007.11.001

Soliman, M. (2021). Extending the theory of planned behavior to predict tourism destination revisit intention. *International Journal of Hospitality & Tourism Administration*, 22(5), 524–549.

UNEP, W. (2002). World Ecotourism Summit Final Report. World Tourism Organization and the United Nations Environment Programme.

Wang, C., Qu, H., & Hsu, M. K. (2016). Toward an integrated model of tourist expectation formation and gender difference. *Tourism Management*, *54*, 58–71.

Wang, Y., & Zhang, J. (2017). Application Progress and Enlightenment of Planned Behavior Theory in Domestic Tourism Research. *Journal of Shandong Normal University*, 1, 9.

Wu, H.-C., Li, T., & Li, M.-Y. (2016). A Study of Behavioral Intentions, Patient Satisfaction, Perceived Value, Patient Trust and Experiential Quality for Medical Tourists. *Journal of Quality Assurance in Hospitality & Tourism*, 17(2), 114–150. https://doi.org/10.1080/1528008X.2015.1042621

Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2–22. https://doi.org/10.1177/002224298805200302

Zeppel, H. (2006). Indigenous ecotourism: Sustainable development and management (Vol. 3). Cabi.

Zhang, Y., Yu, X., Cheng, J., Chen, X., & Liu, T. (2017). A Study on the Behavior Intention of Rural Tourists Based on TPB and TSR Models. *Geographical Research*, 36(9), 1725–1741.

Zhu, H., Guan, Z., Han, Y., Ll, W., & Zhao, L. (2019). A Study on the Influence of Psychological Factors on the Travel Behavior of Downstream Tourists during Holidays and Peak Shifts. *Transportation System Engineering and Information*, 19(5), 225.