

FACTORS AFFECTING TOURISTS' INTENTION TO BOOK GREEN HOTELS IN VIETNAM UTILIZING THE THEORY OF PLANNED BEHAVIOR

PhD. Tran Thi Tuyet*

Abstract: *This study aims to look at important variables that affect booking intentions, including attitude, perceived behavioral control, subjective norms, perceived customer effectiveness, and environmental concern. Data from 214 guests staying at the green hotels was collected, and SmartPLS 4.0 was used for data analysis. The result showed that booking intention is significantly impacted by attitude, subjective norms, and perceived behavioral control. Perceived customer effectiveness and the intention to reserve a green hotel were mediated by attitude, and the relationship between perceived customer effectiveness and attitude is moderated by environmental concern. These findings offer helpful guidance for boosting potential tourists' desire to book green hotels and contribute to the expanding body of research on the intention to book green hotels and the highly context-dependent theory of planned behavior.*

• Keywords: *booking intention, green hotel, perceived customer effectiveness, environmental concern, theory of planned behavior.*

JEL code: L83

Date of receipt: 14th Nov., 2024

Date of delivery revision: 20th Dec., 2024

DOI: <https://doi.org/10.71374/jfar.v25.i2.25>

Date of receipt revision: 10th Jan., 2025

Date of approval: 03rd Feb., 2025

1. Introduction

Green hotels are essential to sustainable development since they use eco-friendly procedures that satisfy tourists' needs and boost their competitiveness (Alsheref et al., 2024; Merli et al., 2019). For example, a study by Merli et al. (2019) found that hotels should implement environmental practices to meet customer demand for their environmental practices. Moreover, Alsheref et al. (2024) proved that implementing environmental practices can help hotels gain competitive advantages. Consequently, hotels strive to adopt environmentally friendly practices.

Tourists' booking intentions toward the green hotel have been a hot topic of interest for academic researchers and hotel managers. Understanding tourists' booking intentions for green hotels is crucial for hotel managers to develop effective strategies to attract more tourists (Fauzi et al., 2022; Huy et al., 2023). Specifically, Huy et al. (2023) suggested that managers of green hotels can utilize effective digital platforms to conduct environmental campaigns to target green-oriented customers.

The theory of planned behavior (TPB) has been used to explain customers' intentions, including booking intentions for green hotels (Pan et al., 2022;

Wang et al., 2019; Yeh et al., 2021). However, the results are contradictory. Specifically, Wang et al. (2019) discovered that subjective norms had a negative and substantial impact on green selection intention, while green booking attitude and perceived behavioral control had a positive and significant impact. In contrast, Pan et al. (2022) found that tourists' intentions to visit a green hotel are positively and significantly influenced by their attitude, subjective norms, and perceived behavioral control, with attitude being the most important factor. In addition, a study by Yeh et al. (2021) found that attitudes and perceived behavioral control have a significant impact on tourists' decisions to stay at green hotels. According to Nimri et al. (2020), perceived behavioral control seems to be the best indicator of green patronage intention, but subjective norms have little direct effect on behavioral intention to stay at a green hotel. Because of this, the TPB is context-dependent, and in order to better describe intention, additional factors need to be included.

Perceived customer effectiveness (PCE) significantly influences the intention to book green hotels. PCE refers to the belief that individual actions can contribute to environmental sustainability (Jang et al., 2015), and it has been shown to impact a consumer

* Thuongmai University; email: tuyett@tmu.edu.vn; ORCID <https://orcid.org/0000-0002-4764-1265>

attitude and intention toward green hotel bookings positively (Wang et al., 2018). Although perceived consumer effectiveness is a key predictor of the desire to book green hotels, little is known about how it interacts with other factors like environmental concern. This study seeks to close these gaps by examining the purpose of reserving green hotels through the enlarged TPB by including PCE and environmental concern in hotels in Vietnam.

2. Literature review

Theory of planned behavior

The theory of planned behavior (TPB) has been developed from the theory of reasoned action (TRA) by Ajzen and Fishbein (1980). This theory has been widely used to predict human behavior in various contexts (Fauzi et al., 2022; Han et al., 2010; Yeh et al., 2021). This theory consists of attitude, subjective norms, and perceived behavioral control, which affect behavior differently in different contexts. The TPB is used to predict intention to book green hotels, however, as mentioned above, depending on context, the findings can be different. As a result, the TPB can be used in Taiwan (Yeh et al., 2021), China (Nimri et al., 2020; Wang et al., 2019), Malaysia (Fauzi et al., 2022), Korea (Kim, 2023), and India (Verma & Chandra, 2018). However, this might not be true in Vietnam, where people have started to practice green behavior. Therefore, this theory should be expanded in the context of Vietnam.

The TPB should be expanded to explain human behavior better. As a result, adding or adjusting variables is necessary. For example, there are differences among the effects of attitude, subjective norms, and perceived behavioral control on the intention to book green hotels. Specifically, Wang et al. (2019) found that green purchase attitude and perceived behavioral control positively and significantly influence green hotel selection intention. At the same time, the subjective norm was shown to influence green selection intention negatively and significantly. In contrast, Pan et al. (2022) discovered that tourists' attitude, subjective norms, and perceived behavioral control positively and significantly influence their green hotel visit intention, with attitude being the most significant factor. In addition, a study by Yeh et al. (2021) concluded that attitude and perceived behavioral control substantially affect green hotel decisions to stay. The subjective norm has a minimal direct impact on behavioral intention to stay at a green hotel, while Nimri et al. (2020) found that perceived behavioral control appears to be the strongest predictor of green patronage intention. In addition, perceived consumer effectiveness and environmental

concern are among the significant predictors in explaining the intention to book green hotels (Wang et al., 2018), but their interaction is not fully explored. Thus, this study adds perceived consumer effectiveness and environmental concern to the TPB to explain the intention to book green hotels in Vietnam.

Hypothesis development

Attitude affects the intention to book a green hotel

A person's attitude represents their evaluation of a specific behavior, shaped by beliefs about its potential consequences and assessed by weighing each outcome (Ajzen & Fishbein, 1980). This evaluation can range from positive to negative (Ajzen, 2011). A positive attitude toward a behavior enhances the intention to perform it, whereas a negative attitude reduces the possibility to perform an action (Ajzen, 2011). In this research, attitude refers to how individuals perceive and evaluate their experiences booking green hotels. Previous studies proved that attitude positively affected the intention to book green hotels (Nimri et al., 2020; Wang et al., 2018; Yeh et al., 2021). Hence, the author proposed the following hypothesis:

H1: Attitude positively impacts the intention to book green hotels.

Subjective norms affect the intention to book a green hotel

A person's behavior is often shaped by subjective norms, which represent the social pressures exerted by others (Ajzen, 2011). This construct captures perceptions of how important references - as family, friends, or colleagues - view the behavior in question (Ajzen, 2011). In this research, subjective norms refer to the perceived opinions of influential others regarding the booking of green hotels. The more an individual believes these referents expect or support the activity, the higher the likelihood of their engagement. Prior research revealed that subjective norms affected the intention to book green hotels (Nimri et al., 2020; Wang et al., 2018; Yeh et al., 2021). Hence, the author proposed the following hypothesis:

H2: Subjective norms positively affect the intention to book a green hotel.

Perceived behavior control affects the intention to book a green hotel

Perceived behavioral control, as defined by Ajzen (2011), is an individual's perception of their capacity to perform a task, considering resources such as time, skills, and cooperation from others. This research refers to perceived behavioral control as the determinants impacting a person's decision to book green hotels. Existing literature proved that perceived behavioral

control positively impacts the intention to book green hotels. For instance, Nimri et al. (2020) found that perceived behavioral control is the strongest predictor of green patronage intention. Hence, the author proposed the following hypothesis:

H3: Perceived behavioral control positively affects the intention to book a green hotel.

Perceived consumer effectiveness affects the attitude

Perceived consumer effectiveness (PCE) refers to the belief that individual actions can contribute to environmental sustainability (Jang et al., 2015), and it has been shown to impact a consumer's attitude and intention toward green hotel bookings positively (Wang et al., 2018). Wang et al. (2018) suggested that perceived consumer effectiveness significantly and positively influences attitude and intention to book green hotels. Hence, the author proposed the following hypothesis:

H4: Perceived consumer effectiveness positively affects attitude toward booking green hotels.

H5: Perceived consumer effectiveness positively affects intention to book green hotels.

Mediating effect

Since perceived consumer effectiveness affects attitude and attitude affects intention to book green hotels, the author proposed the following hypothesis:

H6: Attitude mediates the relationship between perceived consumer effectiveness and intention to book green hotels

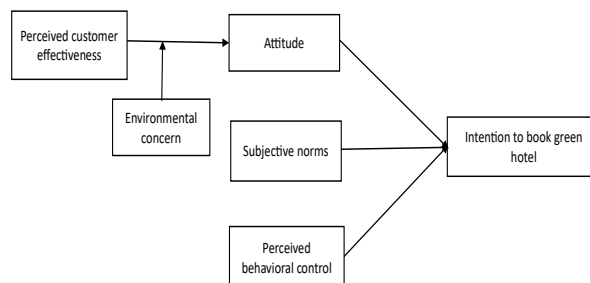
Moderating effect of environmental concern

Environmental concern refers to the extent to which individuals are aware of environmental issues and actively support initiatives to address them, including a personal willingness to contribute to their solution (Han et al., 2009). Studies suggest that environmental concern plays a vital role in explaining eco-friendly behaviors. Wang et al. (2018), for instance, the TPB model was extended by including environmental concern as a factor in exploring consumers' intentions to adopt hybrid electric vehicles, finding a positive relationship between environmental concern and such intentions. However, the moderating role of environmental concern in the relationship between perceived customer effectiveness and attitude is not fully explored. Hence, the author proposed the following hypothesis:

H7: Environmental concern moderates the relationship between perceived consumer effectiveness and attitude.

From all hypotheses, the research model is proposed as follows:

Figure 1. The research model proposed



3. Methodology

Sample and Data Collection

To explore the intention to book green hotels, the author conducted a survey targeting Vietnamese tourists who had stayed in green hotels within the past year. These tourists were chosen as the study population to ensure they were familiar with or had knowledge of green hotels. The investigation proceeded as follows: First, the author contacted several hotel managers in Hanoi known for adopting green business practices between June 20 and July 20, 2024, and requested their support in distributing a survey questionnaire to their current tourists. Second, the survey questionnaire included an informed consent form, which clearly outlined the research objectives, ensured confidentiality, and highlighted participants' rights to withdraw at any time. Ultimately, 214 tourists completed the survey.

Instrument Development

All measurement items used in this study were adapted from prior research. Specifically, three items for perceived consumer effectiveness were drawn from Han and Kim (2010), while four items for environmental concern were sourced from Kim and Choi (2005). The items measuring attitude (three items), perceived behavioral control (three items), subjective norm (four items), and intention (three items) were adapted from Han et al. (2010) and Ajzen (1991). A five-point Likert scale, ranging from "strongly agree" to "strongly disagree," was used, except for attitude, which was measured using a five-point semantic differential scale. Since the scales were originally in English, the author employed forward and backward translation and consulted three tourism experts and two language lecturers for feedback. Once the Vietnamese version of the questionnaire was approved, the author created a survey questionnaire.

Data Analysis: This study used PLS-SEM via Smart PLS 4.0 to analyze the data.

4. Results

Table 1. Constructs' validity and reliability

Items	Outer loadings	Cronbach Alpha	CR	AVE
EC1	0.789	0.754	0.724	0.462
EC2	0.687			
EC3	0.619			
EC4	0.751			
PCE1	0.737	0.781	0.779	0.541
PCE2	0.693			
PCE3	0.929			
AT1	0.892	0.857	0.856	0.667
AT2	0.683			
AT3	0.860			
PCB1	0.701	0.781	0.779	0.629
PBC2	0.721			
PBC3	0.782			
SN1	0.679	0.791	0.791	0.587
SN2	0.735			
SN3	0.650			
SN4	0.722			
BI1	0.695	0.768	0.768	0.525
BI2	0.758			
BI3	0.719			

Table 2. Discriminant validity (HTMT matrix)

	AT	BI	EC	PBC	PCE	SN
AT						
BI	0.476					
EC	0.350	0.620				
PBC	0.478	0.695	0.534			
PCE	0.600	0.723	0.601	0.573		
SN	0.349	0.691	0.784	0.745	0.541	

To assess the measurement model, the authors followed Hair et al. (2023) by examining outer loadings, Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), and Heterotrait-Monotrait (HTMT) ratios. The reliability, convergent, and discriminant validity results are detailed in Tables 1, 2.

Table 2 indicates that all outer loadings exceeded 0.5. Hair et al. (2023) recommend a preferred threshold of 0.7, they suggest retaining items with loadings between 0.5 and 0.7 if AVE and CR values meet the required benchmarks. In this study, AVE and CR values for all scales surpassed these thresholds, justifying the retention of such items.

Reliability was evaluated using Cronbach's Alpha and CR. As shown in Table 1, Cronbach's Alpha values ranged from 0.754 to 0.857, and CR values ranged from 0.724 to 0.856, both exceeding the recommended threshold of 0.7, confirming the scales' reliability.

Convergent and discriminant validity were assessed using AVE and HTMT coefficients. All AVE values exceeded the recommended 0.5 thresholds and HTMT ratios for all constructs were below the upper limit of 0.9 (Table 2), establishing the scales' convergent and discriminant validity.

Path analysis

Table 3 provides the results of hypothesis testing. Attitude positively influenced the intention to book

green hotels (Adjusted $\beta = 0.232$, $p < 0.01$), supporting hypothesis H1. Similarly, subjective norms and perceived behavioral control (Adjusted $\beta = 0.357$, $p < 0.01$, Adjusted $\beta = 0.238$, $p = 0.001$), positively influenced the intention to book green hotels, supporting hypotheses H2 and H3. PCE significantly impacted attitude (Adjusted $\beta = 0.487$, $p < 0.01$), supporting hypothesis H4.

The mediating effect of attitude in the relationship between PCE and the intention to book green hotels was significant (Adjusted $\beta = 0.113$, $p = 0.011$). Moreover, the total effect of PCE on the intention to book green hotels was significant, supporting hypotheses H5 and H6. In addition, environmental concern positively moderated the relationships between PCE and attitude (Adjusted $\beta = 0.148$, $p = 0.004$), supporting H7.

Table 3. Hypothesis testing results

Relationships	Adjusted β	p-value	t	Decisions
AT->BI	0.232	0.000	4.328	Accepted H1
SN->BI	0.357	0.000	4.930	Accepted H2
PBC->BI	0.238	0.001	3.468	Accepted H3
PCE->AT	0.487	0.000	7.606	Accepted H4
PCE->AT->BI	0.113	0.001	3.384	Accepted H5, H6
EC x EPC->AT	0.148	0.004	2.863	Accepted H7

5. Discussion

This study investigates factors affecting the intention to book green hotels in Vietnam. The findings showed that attitude, subjective norms, and perceived behavioral control positively influenced the intention to book green hotels. These findings align with studies of Wang et al. (2019), Nimri et al. (2020), and Pan et al. (2022) promoting green consumption is now a key marketing strategy in the hospitality and tourism industry. As it is vital green hotels predict their customers' visit intention, this study attempts to discover the factors affecting Taiwan's Z-generation tourists' green hotel visit intention using an extended theory of planned behavior [including personal moral norms (PMN). Notably, this study found that subjective norms are among the strongest components affecting the intention to book green hotels, which contradicts Yeh et al. (2021), in which they found that subjective norms had a minimal effect on the intention to choose green hotels. There are two main reasons for this. First, Vietnam's collectivist culture places great importance on group harmony, social cohesion, and conformity to social norms. Travel decisions, such as booking green hotels, are often shaped by the influence of family, friends, and social networks. Vietnamese tourists will likely follow suit to align with these expectations if people in their circle support eco-friendly choices. Second, as Vietnam progresses, environmental

concerns like pollution and climate change have become increasingly significant. Public awareness is heightened through government initiatives and media campaigns promoting sustainability, encouraging individuals to align with these societal values.

This study revealed that PCE influences attitude, subsequently impacting the intention to book green hotels. Furthermore, environmental concern moderates the relationship between PCE and attitude. Specifically, when environmental concern is high, individuals with strong PCE are more likely to act on their values, perceiving their choices as impactful. Conversely, without high environmental concern, even individuals with strong PCE may feel their efforts are insignificant and may not act. These findings are consistent with previous research, which demonstrated that PCE and environmental concern positively influence the intention to book green hotels (Fauzi et al., 2022; Wang et al., 2018). A total of 160 valid questionnaire responses were collected via an online survey. The partial least square–structural equation modelling (PLS-SEM). Notably, this study is among the first to explore the interaction between PCE and environmental concern, its effect on attitude, and ultimately booking intention. In Vietnam's collectivist culture, where social values and group norms significantly shape attitudes, tourists with high environmental concern are more attuned to societal environmental trends. Combined with strong PCE, this fosters greater motivation to book green hotels, as they see their actions benefiting themselves and the community.

Theoretical implications

This study provides several theoretical contributions as follows. First, this research reconfirmed that the TPB is context-dependent by expanding research in Vietnam to explain the intention to book green hotels. While the TPB is primarily used to explain human behavior through attitude, subjective norms, and perceived behavioral control, this study confirms that the TPB is context-dependent. Thus, future research should pay attention to context-dependent when interpreting the results. Second, this study highlights PCE and environmental concern, adding to the TPB in explaining the intention to book green hotels. This study pioneered the addition of TPB and testing the interaction between PCE and environmental concerns. This provides a novel explanation of its role, which benefits future research in the intention to book green hotels.

Practical implications

The findings of this study offer valuable insights for hotel managers in Vietnam to enhance tourists' intention to book green hotels. It highlights that

attitude, subjective norms, and perceived behavioral control positively influence booking intentions, with subjective norms having the strongest impact. Therefore, hotel managers should prioritize strategies that strengthen subjective norms. For instance, they can market eco-friendly choices made by previous guests, such as stating, "85% of our guests choose to reuse towels during their stay," to create a sense of collective behavior. PCE and environmental concern also play critical roles in shaping tourists' intentions. Managers can enhance these factors by showcasing measurable outcomes, such as "By reusing towels, tourists helped save 10,000 liters of water last month," or displaying infographics in communal areas.

6. Conclusion

This study investigates the factors influencing customers' intention to book green hotels in Vietnam. The findings reveal that attitude, subjective norms, and perceived behavioral control significantly influence customers' intention to book green hotels, with A being the most impactful factor. Additionally, PCE and environmental concern play important roles in shaping these intentions. From these findings, this study provides valuable insights into the factors driving customers' intention to book green hotels in Vietnam, offering practical strategies for hotel managers to increase customers' intention to book green hotels.

This study has two main limitations. First, it relied on a single survey method, which may have introduced common method bias. Future research could address this by employing longitudinal data collection methods to minimize such bias. Second, the study primarily focused on green hotels in Hanoi, which may limit the generalizability of the findings to other regions, such as Danang or Ho Chi Minh City.

References:

- Ajzen, I. (1991). *The theory of planned behavior*. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2011). *The theory of planned behaviour: Reactions and reflections*. *Psychology & Health*, 26(9), 1113–1127. <https://doi.org/10.1080/08870446.2011.613995>
- Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs. <https://cir.nii.ac.jp/crid/1572543024551612928>
- Alsheref, F. K., Khairy, H. A., Alsetoohy, O., Elsayy, O., Fayyad, S., Salama, M., Al-Romeedy, B. S., & Soliman, S. A. E. M. (2024). Catalyzing Green Identity and Sustainable Advantage in Tourism and Hotel Businesses. *Sustainability*, 16(12), Article 12. <https://doi.org/10.3390/su16125267>
- Han, H., & Kim, Y. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. *International Journal of Hospitality Management*, 29(4), 659–668. <https://doi.org/10.1016/j.ijhm.2010.01.001>
- Insights from guests experience in green hotels. *International Journal of Hospitality Management*, 81, 169–179. <https://doi.org/10.1016/j.ijhm.2019.04.022>
- Nimri, R., Patiar, A., & Jin, X. (2020). The determinants of consumers' intention of purchasing green hotel accommodation: Extending the theory of planned behaviour. *Journal of Hospitality and Tourism Management*, 45, 535–543. <https://doi.org/10.1016/j.jhtm.2020.10.013>
- Wang, J., Wang, S., Wang, Y., Li, J., & Zhao, D. (2018). Extending the theory of planned behavior to understand consumers' intentions to visit green hotels in the Chinese context. *International Journal of Contemporary Hospitality Management*, 30(8), 2810–2825. <https://doi.org/10.1108/IJCHM-04-2017-0223>
- Wang, L., Wong, P. P. W., Narayanan Alagas, E., & Chee, W. M. (2019). Green Hotel Selection of Chinese Consumers: A Planned Behavior Perspective. *Journal of China Tourism Research*, 15(2), 192–212. <https://doi.org/10.1080/19388160.2018.1553743>
- Yeh, S. S., Guan, X., Chiang, T. Y., Ho, J. L., & Huan, T. C. T. (2021). Reinterpreting the theory of planned behavior and its application to green hotel consumption intention. *International Journal of Hospitality Management*, 94, 102827. <https://doi.org/10.1016/j.ijhm.2020.102827>