“Exploring the role of green hotel knowledge in the relationship between norms and customer green behavior”

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EXPLORING THE ROLE OF GREEN HOTEL KNOWLEDGE IN THE RELATIONSHIP BETWEEN NORMS AND CUSTOMER GREEN BEHAVIOR

Abstract

The global hotel industry has progressively integrated sustainable practices to mitigate its environmental impact, with an increasing emphasis on active customer involvement. This study aims to explore the relationship between customer norms and their green behavior, and examine how green hotel knowledge moderates this relationship. A survey of 254 domestic guests staying at green hotels in Vietnam was analyzed using structural equation modeling. The findings indicate that perceived moral obligation significantly influences both subjective norms (β = 0.584) and personal norms (β = 0.429). Similarly, ascription of responsibility is a strong predictor of personal norms (β = 0.424). The results further reveal that both subjective norms (β = 0.240) and personal norms (β = 0.269) positively affect customer green behavior. Importantly, green hotel knowledge acts as a moderator between personal norms and green behavior (β = 0.247), though it does not significantly moderate the relationship with subjective norms. This study contributes to a better understanding of customer behavior in the context of green hotels and offers managerial implications for promoting active participation in environmentally friendly initiatives.

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Keywords customer green behavior, green hotels, personal norms, subjective norms, green hotel knowledge

JEL Classification M31, Z32, Z33

INTRODUCTION

Currently, the global hotel industry is implementing various initiatives to promote sustainable development through the concept of "green hotel" (Wang, 2022). Increasingly, hotels are adopting eco-friendly measures, such as reusing towels, reducing single-use plastics, applying energy-saving technologies, and creating environmentally friendly menus. By motivating customers to engage in these activities voluntarily, eco-friendly hotels can reduce pollution and protect the environment (Rahman & Reynolds, 2019; Su & Swanson, 2019).

While recent studies within the hotel context have focused on purchasing behavior or willingness to pay for green services (Senooane & Mkhize, 2025; Shehawy et al., 2024), actual sustainable behavior during guests' stays has received comparatively little attention (Liu et al., 2025). Consequently, research on consumer behavior in the green hotel sector remains limited, as the mechanisms underlying such behavior have not been fully explored (Nimri et al., 2022). The literature review shows that scant attention has been paid to individual factors and social influences in this specific domain (Patwary et al., 2023; Piramanayagam et al., 2024).

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Perceived moral obligation arises from one's conviction in the appropriateness of a chosen course of action (Haq et al., 2023) and is considered a determinant of staying at a green hotel. Fauzi et al. (2024) suggest expanding research on the impact of perceived moral obligation and ascription of responsibility on customers' behavioral intentions in the hotel industry. Moreover, social norms have been identified as key factors in shaping eco-friendly behavior (Han, 2020; Senooane & Mkhize, 2025; Yeh et al., 2021). However, the extent and underlying mechanisms through which these variables shape green behavior among hotel guests warrant further clarification.

Knowledge of eco-friendly hotels is positively associated with tourists' green consumption behavior (Chen & Peng, 2012). When customers have greater knowledge, they tend to trust the effectiveness and authenticity of green initiatives, thereby increasing their likelihood of engaging in green actions. Although prior research has examined the moderating role of green hotel knowledge in the relationship between motivational factors and customer behavior (Noraz Mohd Suki & Norb Mohd Suki, 2015), its role in moderating the influence of norms on customers' green behavior remains insufficiently explored.

1. LITERATURE REVIEW AND HYPOTHESES

The increasing demands of customers in the hotel industry have triggered negative environmental and social consequences, including noise and air pollution, increased waste generation, and non-compliance with labor regulations (Zientara & Zamojska, 2018). Therefore, hotel businesses have focused on committing to and implementing environmental action solutions. Green hotels are environmentally friendly establishments that implement measures to minimize their environmental impacts (Han et al., 2010).

Customer green behavior (BEH) refers to customers' actions and choices regarding pro-environmental products, services, and practices (Huang et al., 2019). Su and Swanson (2019) emphasized that green behavior indicates a commitment to reducing negative environmental effects through choices such as eco-friendly consumption, support for clean businesses, and waste reduction and resource conservation. BEH depends on various factors, such as environmental awareness, social norms, and understanding of businesses' sustainability initiatives (Amrutha & Geetha, 2021). Within the hospitality context, managers strive to influence and guide customer behavior by considering factors they perceive as influencing customers' decisions (Liu et al., 2025).

Introduced by Fishbein and Ajzen (1975), the Theory of Reasoned Action (TRA) is applied to predict human behavior that is fully under volitional control, determined by conscious personal choices rather than external influences (Untaru et al., 2016). TRA includes two main factors to predict behavior: attitude and subjective norm. Besides the attitude factor, Subjective Norm (SN) plays a crucial role in predicting behavior, as it reflects the pressure on individuals to conform to the expectations of important others (Ajzen, 1991; Fishbein & Ajzen, 1975). To date, subjective norms have been an important factor in the study of environmental behaviors due to their predictive power. In green hotels, subjective norms have been shown to have a considerable impact on guests' visiting intentions in many previous studies (Fauzi et al., 2024). Subjective norms can also affect guests' attitude and green citizen behavior (Van Tonder et al., 2023).

The Norm Activation Model (NAM) was proposed by Schwartz (1977) to study the altruistic intentions and behaviors in the context of social support. NAM includes three main concepts for explaining the formation of intentions and behaviors: awareness of consequences, ascription of responsibility, and personal norms. NAM is widely used in studies on environmental protection behaviors. Research on green consumer behaviors in the hospitality and tourism fields has confirmed the predictive validity of these variables (Han, 2015, 2020).

Ascription of Responsibility (AR) refers to an individual's belief regarding whether they can prevent or raise the likelihood of foreseeing negative consequences or not (Kiatkawsin & Han, 2017). Therefore, it strongly predicts personal norms re-

garding the decision to stay at a green hotel while traveling. It can also predict the effectiveness of guests' environmentally friendly behaviors during stays at green hotels (Verma et al., 2019).

Personal Norm (PN) is an individual's internal moral factor. In contrast with SN, PN indicates an individual's internalized belief (Sia & Jose, 2019). PN refers to internalized social principles that guide individuals in how they believe they should act and behave (Kiatkawsin & Han, 2017). Regarding eco-friendly behaviors, PN indicates the extent to which an individual can contribute to addressing basic environmental issues and take significant actions to address environmental challenges (Choi et al., 2015).

Moral obligation is a code of conduct that governs individual behavior (Kujala, 2001). It reflects conformity to social norms and can be influenced by moral and emotional identity. Perceived moral obligation refers to the sense of responsibility to act ethically when an individual faces moral dilemmas (Chen & Tung, 2014). In the context of green behavior studies, predicting consumer engagement in environmental protection behavior may involve social responsibility and personal ethics (Kaiser, 2006). Perceived Moral Obligation (PMO) demonstrates a close connection with norms as a form of moral reflection (Fauzi et al., 2024).

Green Hotel Knowledge (GHK) refers to customers' understanding of how eco-friendly initiatives are implemented to protect the environment in hotel operations (Chen & Peng, 2012). During customers' stays at a green hotel, the positive feeling and satisfaction of doing something good for the environment influence their travel behavior (Manaktola & Jauhari, 2007). The diffusion of innovation activities in the hotel sector influences customers' green consumption behavior (Sharma et al., 2024). As customers gain greater knowledge of green hotels, they are more inclined to believe in the effectiveness and authenticity of green initiatives, thereby enhancing their intrinsic motivation to take stronger environmental protection actions. The role of green hotel knowledge in guest behavior has been emphasized, as Noraz Mohd Suki and Norb Mohd Suki (2015) proposed studying its moderating effect on the relationship between psychological factors and customer behavior. The findings of Hwang and Lee (2019) showed that product knowledge significantly moderates the formation of positive behavioral intentions among elderly tourists.

This study aims to examine the moderating role of green hotel knowledge in the relationship between norms and customers' green behavior. It further investigates two factors that may influence customers' norms, namely, ascription of responsibility and perceived moral obligation. Accordingly, the proposed model is structured around six latent constructs and seven hypotheses.

Based on the existing literature, this study proposes the following hypotheses:

H1: Subjective norms positively influence customer green behavior.

H2: Ascription of responsibility positively influences customers' personal norms.

H3: Personal norms positively influence customer green behavior.

H4: Perceived moral obligation positively influences subjective norms.

H5: Perceived moral obligation positively influences personal norms.

H6: Green hotel knowledge moderates the relationship between subjective norms and customers' green behavior.

H7: Green hotel knowledge moderates the relationship between personal norms and customers' green behavior.

2. METHODOLOGY

Vietnam's hotel industry is experiencing rapid growth, in line with the country's comprehensive, rapid, and sustainable tourism development orientation. This study verifies the proposed hypotheses in Vietnam, where the concept of green hotels is relatively new and guests' awareness of environmentally friendly hotels remains limited.

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The research team collected primary data through surveys of domestic customers at several green-certified hotels. Paper-based questionnaires were directly distributed to respondents. The sample was obtained through convenience sampling due to the exploratory nature of the study. The participants were provided with definitions of green hotels and green behavior to ensure comprehension. Respondents voluntarily participated in the survey, and their anonymity was guaranteed. They were informed of the study's purpose before completing the questionnaires and could opt out at any time.

Table 1. The participants' demographic profile

Category	Item	Number of participants	Proportion
Gender	Male	146	57.5%
	Female	99	39.0%
	Other	9	3.5%
Marital status	Get married	117	46.1%
	Single	123	48.4%
	Other	14	5.5%
Age	30 and under	113	44.5%
	31 - 40	76	29.9%
	41 - 50	52	20.5%
	51 and above	13	5.1%
Education	College level and under	55	21.7 %
	Bachelor's degree	134	52.7 %
	Postgraduate degree	65	25.6%
Monthly income	15 million VND and under	115	45.3 %
	16 million VND - 25 million VND	116	45.7 %
	More than 25 million VND	23	9.0%

This study analyzed 254 valid responses, comprising 146 females (57.5%), 99 males (39.0%), and 9 individuals (3.5%) identifying as other genders. Regarding marital status, 117 participants (46.1%) were married, 123 (48.4%) were single, and 14 (5.5%) indicated other statuses. In terms of age distribution, 113 participants (44.5%) were 30 and under, 76 participants (29.9%) were between 31 and 40, 52 participants (20.5%) were between 41 and 50, and 13 participants (5.1%) were over 51. Regarding education, a large proportion of participants reported holding a bachelor's degree or higher, with 199 individuals (78.3%), suggesting a relatively well-educated sample. In terms of monthly income, 115 participants (45.3%) earned less than 15 million VND, 116 (45.7%) earned between 16 and 25 million VND, and 23 (9.0%) earned more than 25 million VND, indicating that the sample is largely concentrated within the low- to middle-income segments.

To measure constructs, perceived moral obligation (three items) was based on Haq et al. (2023). The scales for ascription of responsibility and subjective norms (three items) were adapted from Han (2015). Personal norms were assessed using three items adapted from Botetzagias et al. (2015), while green hotel knowledge was evaluated using three items from Mohd Suki and Mohd Suki (2015). Finally, customer green behavior was measured with five items derived from Liu et al. (2025). All observed variables in the model were assessed on a 7-point Likert scale (ranging from 1 – "completely disagree" to 7 – "completely agree").

The data were analyzed using SmartPLS 4.0 software. The proposed hypotheses were examined by employing Partial Least Squares Structural Equation Modeling (PLS-SEM). This method is widely adopted in behavioral studies because of its efficacy in modeling relationships between latent variables and analyzing complex structural paths (Hair et al., 2011).

To assess common method bias, a full collinearity test was conducted following the recommendation of Kock and Lynn (2012). The analysis results showed that the Variance Inflation Factor (VIF) coefficients for all latent variables ranged from 1.267 to 2.620 (below the 3.3 threshold), indicating that the data is free from common method bias (Kock, 2015).

Initial PLS-SEM analysis revealed that the outer Factor Loading (FL) for the item BEH4 was 0.49, falling below the acceptable threshold of 0.5. Consequently, BEH4 was removed from the scale to ensure measurement quality.

3. RESULTS

In the final measurement model, convergent validity was established, as all factor loadings (FL) and Average Variance Extracted (AVE) val-

Table 2. Assessment of measurement scales' reliability and validity

Structure	Item	FL	VIF	CA	CR (rho_a)	AVE
AR	AR1	0.879	1.947	0.826	0.834	0.741
	AR2	0.821	1.697			
	AR3	0.882	2.110			
BEH	BEH1	0.717	1.575	0.731	0.788	0.542
	BEH2	0.675	1.267			
	BEH3	0.723	1.539			
	BEH5	0.822	1.320			
GHK	GHK1	0.796	1.539	0.754	0.760	0.669
	GHK2	0.836	1.606			
	GHK3	0.822	1.437			
PMO	PMO1	0.782	1.586	0.744	0.761	0.657
	PMO2	0.823	1.340			
	PMO3	0.827	1.743			
PN	PN1	0.823	1.631	0.807	0.809	0.722
	PN2	0.867	1.874			
	PN3	0.857	1.807			
SN	SN1	0.854	1.883	0.867	0.881	0.790
	SN2	0.928	2.023			
	SN3	0.883	2.620			

Note: AR = Ascription of Responsibility; BEH = Customer Green Behavior; GHK = Green Hotel Knowledge; PMO = Perceived Moral Obligation; PN = Personal Norms; SN = Subjective Norms.

ues exceeded 0.5 (Hair et al., 2011). In terms of internal consistency reliability, all Cronbach's Alpha (CA) and Composite Reliability (CR) values were above 0.7, meeting the recommended threshold levels (Hair et al., 2014), as presented in Table 2.

The Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio were used to evaluate discriminant validity. The square roots of AVE for each construct were greater than their correlations with other constructs. Furthermore. The HTMT ratios were all within acceptable limits (less than 0.85). Thus, all constructs in the proposed model met both convergent and discriminant validity (Henseler et al., 2015; Teck Soon & Syed A. Kadir, 2017).

Table 3. Discriminant validity analysis based on the Fornell-Larcker approach

Variable		1	2	3	4	5	6
1	AR	0.861					
2	BEH	0.311	0.736				
3	GHK	0.384	0.292	0.818			
4	PMO	0.392	0.525	0.356	0.811		
5	PN	0.593	0.435	0.527	0.596	0.850	
6	SN	0.480	0.427	0.528	0.584	0.689	0.889

Table 4. Discriminant validity analysis based on the HTMT coefficient

Variable		1	2	3	4	5	6
1	AR						
2	BEH	0.378					
3	GHK	0.480	0.335				
4	PMO	0.472	0.651	0.487			
5	PN	0.723	0.526	0.677	0.742		
6	SN	0.564	0.493	0.656	0.709	0.818	

A bootstrapping procedure was conducted to assess the direct relationships within the model (excluding the interaction term for green hotel knowledge). The coefficient of determination (R2) values for the SN, PN, and GHK variables were 0.341, 0.507, and 0.219, respectively, all exceeding the minimum threshold of 0.1 (Kock, 2016). The predictive relevance (Q2) values for SN, PN, and GHK were 0.330, 0.490, and 0.229, respectively, indicating that the model demonstrates predictive relevance, as all values were above zero (Hair et al., 2017). The Standardized Root Mean Square Residual (SRMR) value was 0.085 (below the 0.10 limit), indicating good model fit (Hair et al., 2014).

Based on *H1*, the positive impact of SN on BEH was supported ($\beta 1 = 0.240$; $f^2 = 0.039$; $p < 0.05$). *H2*

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Table 5. Summary of hypothesis testing results for *H1-H5*

Hypothesis	Direct effects	Beta-value	p-value	f^2	Results
H1	SN → BEH	0.240	0.016	0.039	Accepted
H2	AR → PN	0.424	0.000	0.309	Accepted
H3	PN → BEH	0.269	0.003	0.049	Accepted
H4	PMO → SN	0.584	0.000	0.518	Accepted
H5	PMO → PN	0.429	0.000	0.317	Accepted

Table 6. Results of hypothesis testing for *H6* and *H7*

Hypothesis	Indirect effect	Beta-value	P-value	Result
H6	GHK × SN → BEH	-0.111	0.188	Rejected
H7	GHK × PN → BEH	0.247	0.000	Accepted

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

is supported, which proposed a positive influence of AR on PN (β2 = 0.424; f^2 = 0.309; p < 0.001). According to *H3*, it is supported that PN positively affects BEH (β3 = 0.269; f^2 = 0.048; p < 0.01). *H4*, showing PMO positive influences on SN, was supported (β4 = 0.584; f^2=0.518; p < 0.001). *H5* proposed a positive influence of PMO on PN, which was supported (β5 = 0.429; f^2 = 0.317; p < 0.001). The analysis results indicate that all five hypotheses (*H1* to *H5*) regarding direct effects were supported (Table 5).

A second bootstrapping analysis was performed to evaluate the moderating effects in the research model, including the green hotel knowledge construct. According to Table 6, green hotel knowledge significantly moderates the effect of personal norms on customers' green behavior. Specifically, the positive interaction coefficient (β = 0.247; p < 0.001) indicates that greater green hotel knowledge strengthens the relationship between personal norms and customers' green behavior. However, the analysis also revealed no statistically significant moderating effect of green hotel knowledge on the relationship between subjective norms and customers' green behavior (β = –0.111; p > 0.05).

4. DISCUSSION

This research investigates the impact of green hotel knowledge on the relationship between norms and the environmentally friendly behavior of domestic customers. Results from the consumer sur-

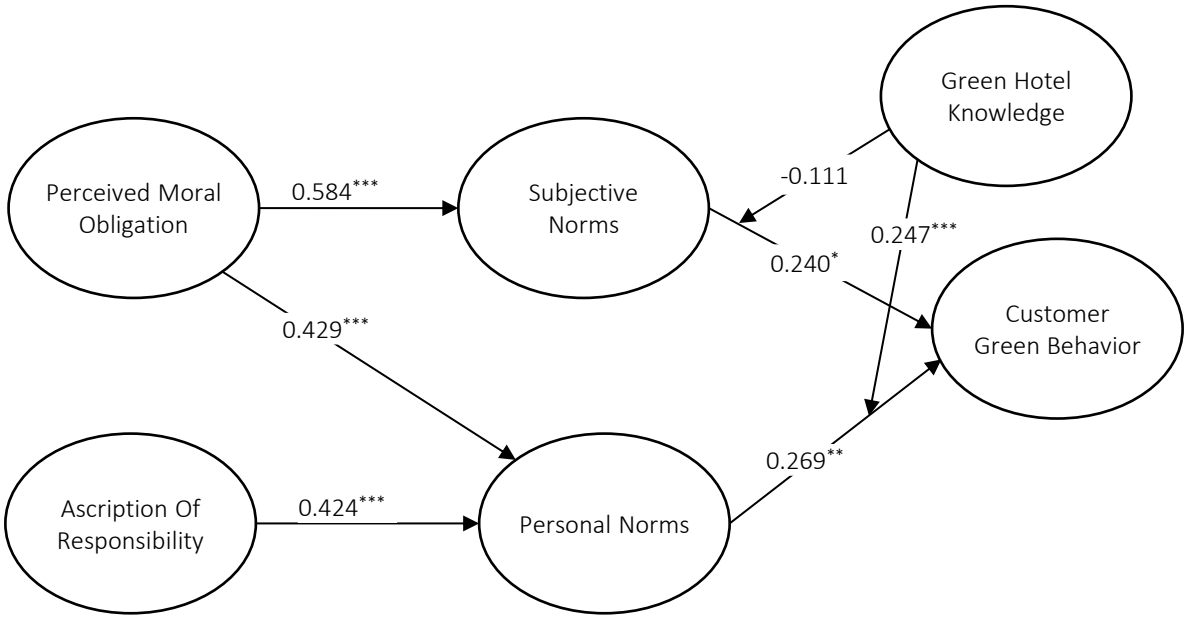

Figure 1. Results of the structural equation model analysis

vey confirm the validity of the research model and its ability to explain and predict customer behavior. Furthermore, ethical, responsible, and normative considerations clearly explain and justify customers' green behavior.

Customers' perceived moral obligation plays a crucial part in the decision to support eco-friendly hotel initiatives. This result is supported by findings from prior studies in different research contexts (Chang & Chou, 2018; Yoon, 2011). Specifically, the positive association between moral obligation and subjective norms has been confirmed by research on hotel selection in Egypt (Agag & Colmekcioglu, 2020) and Bangladesh (Haq et al., 2023). Additionally, Fauzi et al. (2024) noted the considerable effects of perceived moral obligation on personal norms regarding staying at green hotels.

Besides, this study has shown that the ascription of responsibility significantly affected personal norms regarding guests' green behaviors in the context of temporary residence. This relationship has also been verified in some recent research (Verma et al., 2019; Han, 2020). Therefore, regarding guests' green behaviors, it is evident that consumers' moral awareness and sense of responsibility are foundational in shaping their actual behavior.

Furthermore, this study demonstrates the dual impact of subjective and personal norms on environmentally friendly behaviors. The results on the effects of subjective norms on guests' green behaviors in this research align with prior findings on green consumption behaviors in the hotel sector (Yeh et al., 2021; Senooane & Mkhize, 2025). This study also confirms the considerable impact of personal norms on guests' green behaviors in practice, consistent with Han's (2020) findings. However, contrary to our findings, the study by Fauzi et al. (2024) reported that the relation between personal norms and intentions to stay at hotels was not statistically significant. Differences in specific behaviors measured can explain this discrepancy; while intentions reflect a future plan, actual behavior during a stay requires immediate commitment. Another point worth noting is that while guests in this study exhibited pro-environmental behaviors (e.g., reusing towels), the 'willingness to pay a premium' item was removed due to a low factor loading. This suggests that while Vietnamese domestic guests are willing to perform green actions that require personal effort, they may be less willing to incur financial costs, reflecting a price-sensitive market characteristic.

Lastly, a major contribution of this study lies in the analysis of the moderating role of green hotel knowledge in the relationship between personal norms and guests' green behaviors. The findings suggest that if temporary residents are familiar with green practices in hotels, personal norms will significantly boost their behavior. This occurs because personal norms indicate distinct social principles that regulate how a person should act based on their beliefs (Kiatkawsin & Han, 2017). However, green hotel knowledge does not moderate the impact of subjective norms on green behaviors in this research. This is consistent with the results drawn in the research conducted by Noraz Mohd Suki and Norb Mohd Suki (2015). Kim and Hwang (2020) also found that product knowledge did not moderate the relationship between subjective norm and behavioral intention in the context of drone food delivery services. A possible explanation is that subjective norms are driven by external social pressure and the desire for social approval, independent of the individual's technical knowledge of specific green initiatives.

CONCLUSIONS

This study investigates the determinants of customers' green behavior, emphasizing the pivotal role customers play in driving sustainable innovation in the hotel sector. The findings identify morality, responsibility, and norms as critical antecedents and elucidate the moderating role of green hotel knowledge in the relationship between personal norms and sustainable behaviors. The distinct context of an emerging economy like Vietnam, where the green hotel concept is relatively novel, offers unique insights into how norms and knowledge shape customer behavior.

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Theoretically, this research contributes to the literature on green consumption behaviors by establishing the role of green hotel knowledge as a catalyst in the relationship between personal norms and guests' environmentally friendly behaviors. Specifically, the results demonstrate that green hotel knowledge significantly moderates the relationship between personal norms and eco-friendly behaviors. This finding underscores the central role of internalized norms in explaining sustainable consumption behaviors. This implies that integrating knowledge factors into normative frameworks enhances the explanatory power of sustainable behavior models, particularly in the hospitality industry. Furthermore, empirical evidence highlights a distinct difference between the impacts of personal and subjective norms. Results suggest that for Vietnamese guests, green behaviors are driven more strongly by internal beliefs and individual responsibility than by social pressure. Additionally, this research emphasizes the necessity of exploring perceived moral obligation and ascription of responsibility as fundamental premises of guests' environmentally friendly behaviors.

From a managerial perspective, the results suggest that hotels should prioritize enhancing guests' understanding of green practices. Transparent, easily accessible communication through signage, in-room messaging, or inspirational stories can enhance guests' knowledge, thereby amplifying the influence of personal norms on guest participation. Hotels should design campaigns that appeal to guests' individual values by emphasizing moral obligations, pride, and the social benefits of environmental action. Integrating green initiatives with service experiences, such as acknowledging guests' contributions, will foster positive emotions and encourage sustained pro-environmental behaviors. Additionally, marketing campaigns should target guest segments that value moral obligation, individual responsibility, and social impact. This approach not only increases marketing effectiveness but also helps build a strong brand image and create long-term competitive advantages.

Despite these contributions, this research has limitations that suggest directions for future studies. First, because this research relied solely on customer self-assessments, future research should explore hotel managers' perspectives. Second, as this study surveyed only domestic guests, future research should expand to international guests visiting Vietnam. This would further clarify how cultural factors influence the impact of norms on guest behaviors. Finally, future research could investigate specific green behaviors in greater depth, such as energy or water conservation.

AUTHOR CONTRIBUTIONS

Conceptualization: Van Hao Hoang, Van Hung Duong.
Data curation: Van Hao Hoang, Van Hung Duong.
Formal analysis: Van Hao Hoang.
Investigation: Van Hao Hoang, Van Hung Duong.
Methodology: Van Hao Hoang, Van Hung Duong.
Project Administration: Van Hao Hoang.
Resources: Van Hao Hoang.
Solfware: Van Hao Hoang.
Supervision: Van Hao Hoang, Van Hung Duong.
Visualization: Van Hao Hoang.
Writing - original draft: Van Hao Hoang, Van Hung Duong.
Writing - review & editing: Van Hao Hoang, Van Hung Duong.

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NO CONFLICT OF INTEREST STATEMENT

The authors declare that they have no conflict of interest.

DECLARATION OF AI USE

It is declared that no generative AI tools/LLMs were used in writing this manuscript. Only Grammarly was used for correcting the grammatical errors and for clarity of the writing.

REFERENCES

1. Agag, G., & Colmekcioglu, N. (2020). Understanding guests' behavior to visit green hotels: The role of ethical ideology and religiosity. *International Journal of Hospitality Management, 91,* 102679. https://doi.org/10.1016/j.ijhm.2020.102679
2. 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
3. Amrutha, V. N., & Geetha, S. N. (2021). Linking organizational green training and voluntary workplace green behavior: Mediating role of green supporting climate and employees' green satisfaction. *Journal of Cleaner Production, 290,* 125876. https://doi.org/10.1016/j.jclepro.2021.125876
4. Botetzagias, I., Dima, A. F., & Malesios, C. (2015). Extending the theory of planned behavior in the context of recycling: The role of moral norms and of demographic predictors. *Resources, Conservation and Recycling, 95,* 58-67. https://doi.org/10.1016/j.resconrec.2014.12.004
5. Chang, S. H., & Chou, C. H. (2018). Consumer intention toward bringing your own shopping bags in Taiwan: An application of ethics perspective and theory of planned behavior. *Sustainability, 10*(6), 1815. https://doi.org/10.3390/su10061815
6. Chen, A., & Peng, N. (2012). Green hotel knowledge and tourists' staying behavior. *Annals of Tourism Research, 39*(4), 2211-2219. https://doi.org/10.1016/j.annals.2012.07.003
7. Chen, M. F., & Tung, P. J. (2014). Developing an extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management, 36,* 221-230. https://doi.org/10.1016/j.ijhm.2013.09.006
8. Choi, H., Jang, J., & Kandampully, J. (2015). Application of the extended VBN theory to understand consumers' decisions about green hotels. *International Journal of Hospitality Management, 51,* 87-95. https://doi.org/10.1016/j.ijhm.2015.08.004
9. Fauzi, M. A., Hanafiah, M. H., & Kunjuraman, V. (2024). Tourists' intention to visit green hotels: Building on the theory of planned behaviour and the value-belief-norm theory. *Journal of Tourism Futures, 10*(2), 255-276. https://doi.org/10.1108/JTF-01-2022-0008
10. Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Addison-Wesley.
11. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice, 19*(2), 139-152. https://doi.org/10.2753/MTP1069-6679190202
12. Hair, 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. https://doi.org/10.1108/EBR-10-2013-0128
13. Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems, 117*(3), 442-458. https://doi.org/10.1108/IMDS-04-2016-0130
14. Han, H. (2015). Travelers' pro-environmental behavior in a green lodging context: Converging value-belief-norm theory and the theory of planned behavior. *Tourism Management, 47,* 164-177. https://doi.org/10.1016/j.tourman.2014.09.014
15. Han, H. (2020). Theory of green purchase behavior (TGPB): A new theory for sustainable consumption of green hotel and green restaurant products. *Business Strategy and the Environment, 29*(6), 2815-2828. https://doi.org/10.1002/bse.2545
16. Han, H., Hsu, L. T. J., & Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmentally friendly activities. *Tourism Management, 31*(3), 325-334. https://doi.org/10.1016/j.tourman.2009.03.013
17. Haq, M. M., Miah, M., Biswas, S., & Rahman, S. M. M. (2023). The impact of deontological and teleological variables on the intention to visit green hotel: The moderating role of trust. *Heliyon, 9*(4), e14720. https://doi.org/10.1016/j.heliyon.2023.e14720

http://dx.doi.org/10.21511/im.22(2).2026.23

18. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8

19. Huang, Y. F., Do, M. H., & Kumar, V. (2019). Consumers' perception on corporate social responsibility: Evidence from Vietnam. *Corporate Social Responsibility and Environmental Management, 26*(6), 1272-1284. https://doi.org/10.1002/csr.1746

20. Hwang, J., & Lee, J. (2019). Relationships among senior tourists' perceptions of tour guides' professional competencies, rapport, satisfaction with the guide service, tour satisfaction, and word of mouth. *Journal of Travel Research, 58*(8), 1331-1346. https://doi.org/10.1177/0047287518803199

21. Kaiser, F. G. (2006). A moral extension of the theory of planned behavior: Norms and anticipated feelings of regret in conservationism. *Personality and Individual Differences, 41*(1), 71-81. https://doi.org/10.1016/j.paid.2005.11.028

22. Kiatkawsin, K., & Han, H. (2017). Young travelers' intention to behave pro-environmentally: Merging the value-belief-norm theory and the expectancy theory. *Tourism Management, 59,* 76-88. https://doi.org/10.1016/j.tourman.2016.06.018

23. Kim, J. J., & Hwang, J. (2020). Merging the norm activation model and the theory of planned behavior in the context of drone food delivery services: Does the level of product knowledge really matter? *Journal of Hospitality and Tourism Management, 42,* 1-11. https://doi.org/10.1016/j.jhtm.2019.11.002

24. Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (IJeC), 11*(4), 1-10. https://doi.org/10.4018/ijec.2015100101

25. Kock, N. (2016). Hypothesis testing with confidence intervals and P values in PLS-SEM. *International Journal of e-Collaboration (IJeC), 12*(3), 1-6. https://doi.org/10.4018/IJeC.2016070101

26. Kock, N., & Lynn, G. S. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems, 13*(7), 546-580. https://doi.org/10.17705/1jais.00302

27. Kujala, J. (2001). A multidimensional approach to Finnish managers' moral decision-making. *Journal of Business Ethics, 34*(3-4), 231-254. https://doi.org/10.1023/A:1012583424721

28. Liu, H., Ma, S., AlWadi, B. M., Alam, F., & Zhang, Y. (2025). Exploring the nexus between corporate social responsibility and consumer green behavior: The interplay of corporate image, service quality, customer trust and satisfaction. *Social Responsibility Journal, 21*(4), 751-775. https://doi.org/10.1108/SRJ-03-2024-0189

29. Manaktola, K., & Jauhari, V. (2007). Exploring consumer attitude and behaviour towards green practices in the lodging industry in India. *International Journal of Contemporary Hospitality Management, 19*(5), 364-377. https://doi.org/10.1108/09596110710757534

30. Mohd Suki, Noraz, & Mohd Suki, Norb. (2015). Consumers' environmental behaviour towards staying at a green hotel: Moderation of green hotel knowledge. *Management of Environmental Quality: An International Journal, 26*(1), 103-117. https://doi.org/10.1108/MEQ-02-2014-0023

31. Nimri, R., Patiar, A., & Jin, X. (2022). The impact of message framing on travellers' behavioural intentions towards green hotels. *Consumer Behavior in Tourism and Hospitality, 17*(3), 249-263. https://doi.org/10.1108/CBTH-12-2021-0280

32. Patwary, A. K., Aziz, R. C., & Hashim, N. A. A. N. (2023). Investigating tourists' intention toward green hotels in Malaysia: A direction on tourist sustainable consumption. *Environmental Science and Pollution Research, 30*(13), 38500-38511. https://doi.org/10.1007/s11356-022-24946-x

33. Piramanayagam, S., Sen, S., & Seal, P. P. (2024). Sustainable consumption behaviour among guests in luxury hotels through the lens of the extended theory of planned behaviour. *Environment, Development and Sustainability, 26*(10), 25397-25413. https://doi.org/10.1007/s10668-023-03686-z

34. Rahman, I., & Reynolds, D. (2019). The influence of values and attitudes on green consumer behavior: A conceptual model of green hotel patronage. *International Journal of Hospitality & Tourism Administration, 20*(1), 47-74. https://doi.org/10.1080/15256480.2017.1359729

35. Schwartz, S. H. (1977). Normative influences on altruism. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (pp. 221-279). https://doi.org/10.1016/S0065-2601(08)60358-5

36. Senooane, B. C., & Mkhize, N. H. B. (2025). Spirituality, moral norms, and habit as determinants of intention to visit green hotels. *Consumer Behavior in Tourism and Hospitality, 20*(2), 294-309. https://doi.org/10.1108/CBTH-07-2024-0237

37. Sharma, T., Chen, J. S., Ramos, W. D., & Sharma, A. (2024). Visitors' eco-innovation adoption and green consumption behavior: The case of green hotels. *International Journal of Contemporary Hospitality Management, 36*(4), 1005-1024. https://doi.org/10.1108/IJCHM-04-2022-0480

38. Shehawy, Y. M., Agag, G., Alamoudi, H. O., Alharthi, M. D., Brown, A., Labben, T. G., & Abdelmoety, Z. H. (2024). Cross-national differences in consumers' willingness to pay (WTP) more for green hotels. *Journal of Retailing and Consumer Services, 77,* 103665. https://doi.org/10.1016/j.jretconser.2023.103665

39. Sia, S. K., & Jose, A. (2019). Attitude and subjective norm as personal moral obligation mediated predictors of intention to build eco-friendly house. *Management of Environmental Quality: An In-*

ternational Journal, 30(4), 678-694. https://doi.org/10.1108/MEQ-02-2019-0038

40. Su, L., & Swanson, S. R. (2019). Perceived corporate social responsibility's impact on the well-being and supportive green behaviors of hotel employees: The mediating role of the employee-corporate relationship. *Tourism Management, 72,* 437-450. https://doi.org/10.1016/j.tourman.2019.01.009

41. Teck Soon, H., & Syed A. Kadir, S. L. (2017). The drivers for cloud-based virtual learning environment: Examining the moderating effect of school category. *Internet Research, 27*(4), 942-973. https://doi.org/10.1108/IntR-08-2016-0256

42. Untaru, E. N., Ispas, A., Candrea, A. N., Luca, M., & Epuran, G. (2016). Predictors of individuals' intention to conserve water in a lodging context: The application of an extended theory of reasoned action. *International Journal of Hospitality Management, 59,* 50-59. https://doi.org/10.1016/j.ijhm.2016.09.001

43. Van Tonder, E., Fullerton, S., De Beer, L. T., & Saunders, S. G. (2023). Social and personal factors influencing green customer citizenship behaviours: The role of subjective norm, internal values and attitudes. *Journal of Retailing and Consumer Services, 71,* 103190. https://doi.org/10.1016/j.jretconser.2022.103190

44. Verma, V. K., Chandra, B., & Kumar, S. (2019). Values and ascribed responsibility to predict consumers' attitude and concern towards green hotel visit intention. *Journal of Business Research, 96,* 206-216. https://doi.org/10.1016/j.jbusres.2018.11.021

45. Wang, L. (2022). Determinants of consumers purchase attitude and intention toward green hotel selection. *Journal of China Tourism Research, 18*(1), 203-222. https://doi.org/10.1080/19388160.2020.1816241

46. 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

47. Yoon, C. (2011). Theory of planned behavior and ethics theory in digital piracy: An integrated model. *Journal of Business Ethics, 100*(3), 405-417. https://doi.org/10.1007/s10551-010-0687-7

48. Zientara, P., & Zamojska, A. (2018). Green organizational climates and employee pro-environmental behaviour in the hotel industry. *Journal of Sustainable Tourism, 26*(7), 1142-1159. https://doi.org/10.1080/09669582.2016.1206554

http://dx.doi.org/10.21511/im.22(2).2026.23

APPENDIX A

Table A1. Items of the six constructs used for the research model

Constructs	Code of items	Items
Perceived moral obligation	PMO1	I would feel guilty if I stayed in a hotel damaging the environment
	PMO2	To stay in a hotel that damages the environment would be morally wrong for me
	PMO3	Staying in a hotel that affects the environment would go against my principles I like to purchase products and services from eco-friendly hotels
Ascription of responsibility	AR1	I believe that every hotel guest is partly responsible for the environmental problems caused by the hotel industry
	AR2	I feel that every hotel guest is jointly responsible for the environmental deterioration caused by the hotel industry
	AR3	Every hotel guest must take responsibility for the environmental problems caused by hotels
Subjective norms	SN1	Most people who are important to me think I should have green behavior when staying in hotels
	SN2	Most people who are important to me would want me to have green behavior at hotels
	SN3	People whose opinions I value would prefer that I adopt eco-friendly behavior when staying in hotels
Personal norms	PN1	I believe I have a moral obligation to behave environmentally friendly when staying at hotels
	PN2	Green behavior at hotels is in line with my principles to protect the environment
	PN3	My personal values encourage me to adopt environmentally friendly when staying at hotels
Green hotel knowledge	GHK1	Compared to an average person, I am familiar with hotels' environmental policies
	GHK2	Compared to my friends, I am familiar with hotels' green programs
	GHK3	Compared to people who travel a lot, I am familiar with hotels' green labels
Customer green behavior	BEH1	I prefer to use eco-friendly amenities provided by the hotel
	BEH2	The hotel's pro-environmental efforts have influenced me to adopt more eco-friendly behaviors during my stay
	BEH3	I support hotels that provide organic or sustainable food options
	BEH4	The hotel's commitment to sustainability has increased my willingness to pay a premium for eco-friendly options
	BEH5	The hotel's eco-friendly actions have motivated me to adopt greener habits in my everyday life