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Unveiling Multi-Dimensional Value for Green Hotel Customers' Purchase Intentions using the Extended Social Exchange Theory– Revelations from Beijing, China

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Abstract: This study explores the influence of green values on customers' intention to select green hotels in Beijing, focusing on the role of environmental concern, perceived green benefits, and perceived green costs. Using a quantitative research design, the study identifies four dimensions of perceived green benefits, such as functional, emotional, social, and cognitive, along with three dimensions of perceived green costs including monetary, explicit and implicit costs. The findings reveal that environmental concern significantly influences both perceived green benefits and costs, which in turn predict customers' purchase intentions. Furthermore, perceived green benefits and perceived green costs mediate the relationship between environmental concern and behavioural intention, highlighting their role in green consumer behaviour. These insights help explain the gap between pro-environmental attitudes and purchase behaviour. The study offers practical implications for managers by emphasising strategies to increase customers' green awareness and enhance communication on the value of eco-friendly offerings. Despite focusing on pre-purchase perceptions and relying on a convenience sample in Beijing, this study extends current literature by integrating the Social Exchange Theory and examining multi-dimensional perceived values within the green hotel context.

Keywords: Environmental concern, green hotel, green hotel purchase intention, green values, Social Exchange Theory

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Introduction

Green tourism, introduced in the 1980s, initially focused on eco-friendly hotel practices such as encouraging towel reuse to reduce waste (Rainforest Alliance, 2023). Over time, hotels began emphasising their sustainability efforts, showcasing conservation and community initiatives online (Rainforest Alliance, 2023). These practices are vital for environmental management and are aligned with the United Nations' Sustainable Development Goals (SDGs), aimed at reducing carbon emissions and promoting global sustainability (Azam et al., 2018). Given the tourism sector's significant ecological footprint, there is a growing need to understand consumer behaviour in support of green hotels (Demir et al., 2021).

The hospitality industry plays a pivotal role in promoting sustainable tourism by adapting to environmentally conscious consumer preferences. It should be noted that green consumers, who actively seek products and services that protect the environment, are an emerging market segment (ÇavuÇoğlu et al., 2020; Konar et al., 2024). Effective green hospitality practices not only support ecological goals, but also enhance business reputation and customer loyalty (Chung, 2020). Despite increased awareness and interest in sustainability, however, there remains a critical gap between consumers' environmental concerns and their actual purchasing behaviours. Studies have reported that while many consumers express positive attitudes toward sustainability, these attitudes do not consistently translate into green hotel purchases (Awan et al., 2021; Sivapalan et al., 2021). As environmental knowledge rises, consumers increasingly expect businesses to lead the charge toward sustainable development rather than simply minimise harm (Arun et al., 2021).

This inconsistency raises important questions about the perceived value of green hotels, especially regarding the costs and benefits that influence decision making. While some consumers are willing to pay a premium for environmentally friendly accommodations (Demir et al., 2021), they often expect tangible personal rewards beyond moral satisfaction. Emotional, social, and cognitive perceptions of value play a significant role in shaping these decisions (Ahn & Kwon, 2019; Taufique, 2020). At the same time, ambiguity in defining green services and concerns about higher costs create barriers to adoption (Sun & Yoon, 2022). These complexities highlight the need for deeper insights into how consumers evaluate green hotels, particularly through the lens of perceived green benefits and costs.

Previous research has examined sustainable consumer lifestyles and general attitudes towards eco-friendly practices (Agarwal & Kasliwal, 2021), yet few studies have explored how these attitudes translate into action. A persistent gap exists in the understanding of how consumers' environmental concerns influence their behavioural intentions, especially in emerging markets like China (Wang & Mangmeechai, 2021; Wang et al., 2021). The Social Exchange Theory (SET) provides a theoretical

foundation to explain this dynamic, suggesting that consumers weigh perceived rewards against the costs of adopting eco-friendly behaviours (Abdou et al., 2022). In this context, perceived green value comprising both benefits and costs serves as a critical factor that mediates the relationship between environmental concerns and purchase intentions (Chen et al., 2021).

This study aims to address these gaps by examining how environmental concern influences perceived green benefits and costs, and how these perceptions shape consumers' intentions to choose green hotels. By focusing on prospective customers in Beijing, China, the research not only contributes to theoretical development through the extension of SET but also provides practical implications for green hotel marketing and policy development. Specifically, this study seeks to: (1) examine the relationship between perceived green value and its benefit-cost dimensions, (2) investigate the links between environmental concerns, perceived green value, and behavioural intentions, and (3) assess how perceived green benefits and costs mediate the influence of environmental concern on green hotel purchase intentions.

Literature Review and Hypotheses Development

This study investigated how environmental concern (EC) shapes customers' behavioural intention (BI) to stay in green hotels in Beijing. It also examines how this relationship is mediated by perceived green benefit (PGB) and perceived green cost (PGC). The framework is guided by the Social Exchange Theory (SET), which suggests that people weigh the benefits and costs of their actions to make rational decisions, especially in ethical and environmental contexts.

Underpinning Theory

The Social Exchange Theory (SET) posits that human behaviour is motivated by an evaluation of costs and benefits (Ahmad et al., 2023). In the context of green hotel, recent applications of SET in tourism and environmental behaviour studies explain why customers act on environmental concerns if they believe the benefits of doing so outweigh the costs (Chang, 2021; Giango et al., 2022). In this study, SET justifies the inclusion of both PGB and PGC as mediators, as it captures the cognitive process behind the customer's behavioural intention. Additionally, SET is applied as it assumes that individuals' actions are based on rational evaluation (Abbasian et al., 2023), whereby EC would influence hotel customers to consider PGB and PGC prior to behavioural intentions (BI) to choose green hotels. SET offers further reinforcement as social interactions and norms shape exchange behaviours, where high EC may align with pro-environmental norms, encouraging behavioural intentions if PGB outweighs PGC. Furthermore, building on SET's principle of reciprocity (Abdou et al., 2022), customers intending to stay at green

hotels (BI) would do so to alleviate their environmental concerns (EC) with tangible or intangible green benefits (PGB).

Environmental Concern (EC)

Environmental concern refers to an individual's awareness of environmental problems and their willingness to take action to address them. It is a critical psychological driver that influences pro-environmental behaviour, such as choosing eco-friendly hotels. Consumers with high levels of EC are typically more responsive to environmental issues and tend to favour businesses that align with their ethical and ecological values. Using the SET context on reciprocity, it means that consumers with higher EC would choose to stay at a hotel that practices environmental protection as a way of reciprocating eco-friendly businesses efforts (Abdou et al., 2022).

Researchers have shown that individuals with strong environmental concerns are more likely to demonstrate sustainable consumer behaviour, and that EC translates into positive attitudes and intentions towards green products and services (Ahmed et al., 2021; De Canio et al., 2021). However, some scholars also caution that environmental concern, while influential, does not always lead directly to action, particularly when external barriers like high prices or inconvenience are present (Arun, 2021; Damigos, 2023). This leads to the hypothesis:

> *H1: Environmental Concerns (EC) positively influences customers' Behavioural Intention (BI) of green hotels in Beijing.*

Perceived Green Benefit (PGB)

Perceived green benefit (PGB) reflects the advantages or values that consumers perceive from using environmentally friendly services. In hospitality, these benefits may include improved health outcomes, emotional satisfaction, and self-appreciation for contributing to global environmental sustainability.

Certifications like LEED or local eco-labels add credibility to the green claims, increasing trust and perceived value (Nelson et al., 2021; Velaoras et al., 2025), which makes customers feel good (intrinsic) and consider social recognition as a reward (extrinsic) when they stay at a green hotel (Kim & Ha, 2022). Studies reveal that these benefits create a strong emotional connection between the consumer and the service provider, influencing not just first-time visits but leads to positive word-of-mouth and repeat patronage (Ahn & Kwon, 2020; Nosrati et al., 2024). However, hotels who adopt eco-friendly practices mainly to cut costs may trigger greenwashing concerns that deter customer patronage (Tan & Abd Aziz, 2021). Therefore, when customers believe the green benefits are meaningful and aligned

with their personal values, they are more likely to make eco-conscious choices. From the above discussion, it can be hypothesised that:

H2: Perceived Green Benefit (PGB) positively influences customers' Behavioural Intention (BI) of green hotels in Beijing.

Perceived Green Costs (PGC)

Perceived green costs (PGC) refers to the sacrifices (monetary and non-monetary) that customers associate with choosing green alternatives. These costs may include higher room rates, reduced convenience, time spent researching options, or uncertainty about quality.

While consumers with high EC might accept some trade-offs, they still perform cost-benefit evaluations. Studies indicate that the psychological weight of costs (PGC) is reduced with higher EC when consumers are willing to pay more as they value a greener environment (Thakkar, 2021). On the contrary, perceived costs can suppress behavioural intention even among environmentally concerned individuals (Arun et al., 2021; Zhao & Chen, 2021). However, when green options are affordable and accessible, their attractiveness increases (Nelson et al., 2021). Hence, this study contributes with the following assumption made:

H3: Perceived Green Costs (PGC) has an impact on customers' Behavioural Intention (BI) of green hotels in Beijing.

Perceived Green Benefit's (PGB) Mediating Impact

Consumers do not just act on concern; they also assess whether their actions will result in personal or collective benefits. PGB serves as a bridge between EC and BI. When consumers understand and value the outcomes of eco-behaviour (e.g., better health, satisfaction, positive impact), they are more likely to translate concerns into action (De Meyer et al., 2020; Hoffmann et al., 2022; Quan, 2023). Some research highlights that perceived emotional and functional benefits significantly strengthen the link between concern and behaviour (Han et al., 2019; Tan, 2022), thereby supporting PGB's role as a mediator. In the light of above literature, it can be hypothesised that:

H4: Environmental Concerns (EC) positively influence Perceived Green Benefits (PGB).
H5: Perceived Green Benefits (PGB) mediate the relationship between Environmental Concerns (EC) and customers' Behavioural Intention (BI) of green hotels in Beijing.

Perceived Green Costs' (PGC) Mediating Impact

While consumers may value the environment, they still weigh the downsides of eco-options. PGC represents these trade-offs as even concerned consumers may abandon their intentions if the financial or time burden is too high (Shen & Wang, 2022). Studies show that reducing perceived cost, through government subsidies, value bundling, or clear eco-labelling can reduce barriers and increase green hotel adoption (Demir et al., 2021; Hanafiah et al., 2020). Therefore, PGC is a necessary filter in the decision-making process.

H6: Environmental Concerns (EC) has an impact on Perceived Green Costs (PGC).
H7: Perceived Green Costs (PGC) mediate the relationship between Environmental Concerns (EC) and customers' Behavioural Intention (BI) of green hotels in Beijing.

Figure 1 demonstrates the proposed conceptual research framework which is supported by the Social Exchange Theory. The independent variable of the study is Environmental Concerns (EC) and the dependent variable is Behavioural Intention (BI). Perceived Benefits (PB) and Perceived Green Costs (PGC) are considered as mediating variables.

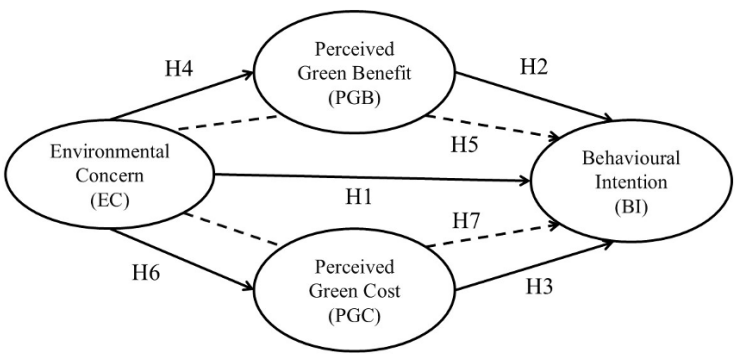

Figure 1. Research model

Methodology

This study explored consumers' purchase intentions towards green hotels in Beijing by employing a quantitative research approach grounded in the positivist paradigm and a deductive reasoning method (Park et al., 2020; Varpio et al., 2020). Research strategies aligned with positivism and deduction such as surveys are widely adopted in quantitative studies (Ali, 2024; Konar et al., 2018). Hence, a survey method was selected to gather empirical data and test the proposed hypotheses.

Data were collected using a structured questionnaire, administered face-to-face to ensure control over the survey process and minimise response bias. The survey targeted prospective customers of green hotels at Hopson Plaza, Beijing, which was chosen due to the area's popularity among tourists. The instrument used measurement items which were adapted from previous studies and included sections on demographics and variables such as Perceived Green Benefits (PGB), Perceived Green Costs (PGC), Environmental Concerns (EC), and Behavioural Intentions (BI).

To ensure measurement precision, a 5-point Likert scale was employed, providing objectivity in capturing respondent attitudes. The questionnaire drew on Churchill's (1979) validated scales to enhance reliability and validity. Additionally, a pre-test was conducted with feedback from hospitality professionals, who suggested an additional item for PGC.

Participants were screened based on their experience of staying at a hotel within the past year and were prompted to consider environmentally friendly hotel attributes before completing the survey. The definition of green hotels adopted in this study emphasises reduced environmental impact and increased societal benefit. Surveys were distributed during the Chinese National Day holiday to ensure a high response rate. Trained college students facilitated data collection on-site, assisting respondents when needed to ensure accurate responses.

A sample size of 384 was determined based on Beijing's population data, meeting the recommended range for Structural Equation Modelling (SEM) analysis (Rahman & Rahman, 2023). Larger samples reduce the risk of Type II errors, although exceeding 500 may lead to overly sensitive results (Poudel et al., 2024). To assess common method bias (CMB), Harman's single factor test was conducted using principal component analysis on all 24 measurement items. Results show that CMB is not a major concern as a single factor accounted for 45.812% of the total variance, which is below the 50% threshold (Islam et al., 2023; Polas, 2025).

Data were analysed using SPSS (version 9) for descriptive and inferential statistics (Pallant, 2020), followed by SEM for examining relationships between observed and latent constructs (Memon et al., 2021; Russo & Stol, 2021).

Data Analysis and Results

Demographics of Respondents

The demographic characteristics of the 384 valid respondents are summarised in Table 1. The gender distribution was balanced, with 51.3% female and 48.7% male participants. Regarding age, 37% were under 30 years, and 63% were between 30–39 years. In terms of occupation, 75.3% were students, followed by 17.4% company employees and 7.3% business owners. Income distribution showed that 49.5%

earned less than CNY20,000, while 50.5% earned between CNY20,000–35,549. These demographic details contextualise the subsequent analysis of variables and hypothesis testing.

Table 1. Respondents profile (n = 384)

		Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Gender	Male	187	48.7	48.7	48.7
	Female	197	51.3	51.3	100.0
	Total	**384**	**100.0**	**100.0**	
Age	Below 30 years	142	37.0	37.0	37.0
	30–39	242	63.0	63.0	100.0
	Total	**384**	**100.0**	**100.0**	
Occupation	Employee	67	17.4	17.4	17.4
	Businessman	28	7.3	7.3	24.7
	Student	289	75.3	75.3	100.0
	Total	**384**	**100.0**	**100.0**	
Income (CNY= Chinese Yuan)	Less than CNY20000	190	49.5	49.5	49.5
	CNY20000 and above	194	50.5	50.5	100.0
	Total	**384**	**100.0**	**100.0**	

Reliability Analysis

To assess the internal consistency of the constructs, Cronbach's alpha was calculated. A threshold of 0.70 was adopted as the benchmark for acceptable reliability (Islam et al., 2024; Izah et al., 2023). All constructs reported Cronbach's alpha values above 0.89, signifying excellent reliability and measurement consistency. These results confirm strong internal consistency across all items measuring Perceived Green Benefits (PGB), Perceived Green Costs (PGC), Environmental Concern (EC), and Behavioural Intention (BI), validating the instrument's dependability for further analysis.

Correlation

Table 2 displays the Pearson correlation coefficients among key study variables. All relationships were positive and statistically significant at the 0.01 level, indicating meaningful associations. Key findings include a moderate positive correlation

between EC and PGB (r = 0.419) and between EC and PGC (r = 0.360), suggesting increased environmental concern enhances perceived benefits and awareness of green costs. Additionally, a stronger relationship was found between PGB and BI (r = 0.535), indicating that perceived benefits are a critical driver of green hotel purchase intentions. Furthermore, even PGC showed a moderate positive relationship with BI (r = 0.485), implying that while costs are acknowledged, they do not deter sustainable intentions significantly. These findings highlight the importance of perceived benefits over costs in shaping pro-environmental behaviour.

Table 2. Pearson correlation

Correlations				
	EC	PGB	PGC	BI
EC	1			
PGB	0.419**	1		
PGC	0.360**	0.476**	1	
BI	0.454**	0.535**	0.485**	1

**. Correlation is significant at the 0.01 level (2-tailed)

Measurement Model

To validate the measurement model, factor analysis was conducted. As presented in Table 3, the Kaiser-Meyer-Olkin (KMO) measure exceeded 0.5, and Bartlett's Test of Sphericity was significant ($p < 0.05$), affirming the suitability of the data for factor analysis (Abdullah et al., 2022). Items with factor loadings below 0.5 were excluded. Principal Component Analysis (PCA) with rotation improved factor interpretability. Composite Reliability (CR) values exceeded 0.70, and Average Variance Extracted (AVE) values surpassed 0.50, indicating both convergent and discriminant validity (Hair et al., 2021). These metrics confirm the measurement model's reliability and validity, allowing progression to the structural model analysis.

Table 3. KMO and Bartletts test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.882
Bartlett's Test of Sphericity	Approx. Chi-Square	2880.152
	df	78
	Sig.	0.000

Table 4 presents the results of the factor analysis using the Rotated Component Matrix with Varimax rotation and Kaiser Normalization. This method was used to assess the factor loadings of the observed variables (PGB1–PGB4, PGC1–PGC3, EC1–EC3, and BI1–BI3) onto distinct components, along with their Average Variance Extracted (AVE) and Composite Reliability (CR). According to Hair et al. (2021), the threshold for construct reliability is typically ≥ 0.70. Only after confirming the adequacy of the measurement model should researchers proceed to assess the structural model (Hair et al., 2021).

All factor loadings exceed the minimum recommended threshold of 0.70, indicating strong loadings and suggesting that each item is a valid indicator of its respective factor. In addition, the AVE values for all constructs exceed 0.50, and CR values are above 0.70, fulfilling the recommended thresholds (Hair et al., 2021). These results confirm both convergent validity and internal consistency reliability for all constructs, supporting their robustness for further structural model testing.

Table 4. Factor analysis

Rotated Component Matrix[a]						
	Component				**AVE**	**CR**
	1	2	3	4		
PGB1	0.817				0.63	0.87
PGB2	0.741					
PGB3	0.740					
PGB4	0.863					
PGC1		0.844			0.73	0.89
PGC2		0.847				
PGC3		0.866				
EC1			0.816		0.70	0.87
EC2			0.839			
EC3			0.853			
BI1				0.791	0.66	0.85
BI2				0.813		
BI3				0.832		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
[a] Rotation converged in 5 iterations.

Structural Model Assessment and Hypothesis Testing

This study conducted SEM analysis on data from 384 responses to assess the measurement and structural models. The framework comprised Perceived Green Benefits (PGB), Perceived Green Costs (PGC), Environmental Concern (EC), and Behavioural Intention (BI). To ensure reliability and convergent validity, squared loadings, Cronbach's alpha, and Average Variance Extracted (AVE) indicators were tested. The results, presented in Table 4, demonstrate that all constructs met the established criteria for reliability and validity (Hair et al., 2021).

Table 5. Model summary

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate	Change Statistics				
					R-Squared Change	F Change	df1	df2	Sig. F Change
1	0.630a	0.396	0.392	2.41533	0.396	83.202	3	380	0.000

a. Predictors: (Constant), PGC, EC, PGB

The Model Summary (refer Table 5) presents key statistics related to the regression analysis used to assess the relationship between the independent variables (PGC, EC, and PGB) and the dependent variable (BI). The R value of 0.630 indicates a moderately strong positive correlation between the dependent variable and the combined independent variables (PGC, EC, PGB). The R^2 value of 0.396 indicates that the model explains 39.6% of the variance in the dependent variable, with the remaining 60.4% attributed to other unaccounted factors. The adjusted R^2 of 0.392, slightly lower than the R^2, confirms that about 39.2% of the variance in the dependent variable is explained by the model, accounting for the number of predictors and sample size.

The standard error of 2.41533 indicates moderate variation around the predicted values, reflecting the model's average prediction accuracy as a smaller standard error suggests a more accurate prediction model. The values of degrees of freedom (df1 = 3, df2 = 380) reflect the number of independent variables (3) and the residual degrees of freedom (380). The F change value of 83.202 indicates that the independent variables significantly improve the model's prediction compared to using only the mean. The significance of F change value of 0.000 indicates the model is statistically significant, confirming a non-random relationship between the independent variables and BI.

The regression model suggests that PGC, EC, and PGB collectively explain 39.6% of the variance in the dependent variable, which indicates a moderately strong model. The statistical significance ($p < 0.001$) shows that these independent

variables have a significant impact on predicting the dependent variable. Even though 60.4% of the variance is unexplained, the independent variables still account for a substantial portion of the dependent variable's behaviour. Hence this model summary table indicates that there is a meaningful relationship between PGC, EC, and PGB and the BI, and further refinement or inclusion of other variables could improve the prediction accuracy.

The structural model indicates the relationship between latent variables, and it helps determine the degree of correlation or path coefficients (Hair et al., 2021). Two measures are advised to test the structural model: hypothesis testing and coefficient of determination (R^2). Table 6 presents the results of hypotheses testing with standardized regression coefficients (β), explained variance (R^2), p-values, and the significance of the relationships. Results show that all seven hypotheses are statistically significant ($p < 0.001$) suggesting that each variable plays an important role in the model. The highest path coefficient is PGB → BI (β = 0.650), making it the strongest predictor of Behavioural Intention (BI). Both PGB and PGC mediate the relationship between EC and BI, indicating that environmental concern influences behavioural intention through perceived benefits and costs related to green initiatives.

Table 6. Summary of hypotheses results

No	Hypotheses	β	R^2	p-value	Result
1	EC → BI	0.449	0.206	0.000	Significant
2	PGB → BI	0.650	0.286	0.000	Significant
3	PGC → BI	0.517	0.235	0.000	Significant
4	EC → PGB	0.341	0.176	0.000	Significant
5	EC → PGB → BI	0.344	0.350	0.000	Significant
6	EC → PGC	0.333	0.129	0.000	Significant
7	EC → PGC → BI	0.346	0.325	0.000	Significant

Discussion and Implications

The results of this study strongly support the role of perceived green benefits (PGB) and perceived green costs (PGC) in shaping consumers' behavioural intentions toward green hotels, as evidenced by the significant path coefficients and robust statistical measures (Cronbach's alpha). However, the R^2 value of 39.6% for behavioural intention indicates that there are additional variables that may influence consumer decisions which were not captured in this model. Hence, future research could delve deeper into this.

A key finding is that the mediation effects of PGB and PGC, while statistically significant, are relatively modest (β = 0.344–0.346). While these factors are important,

it is suggested that other influences may play a substantial role in shaping consumer behaviour. Potential influences such as cultural norms, prior experience with green hotels, and brand loyalty were not included in this study. For instance, the cultural context in Beijing, where environmental consciousness may be heightened due to government policies and local attitudes toward sustainability, could have influenced the weight placed on green benefits versus costs. Further exploration of these influences in future studies would provide a more comprehensive understanding of the factors that drive consumers' intentions.

This study also found that PGB ($\beta = 0.650$) had a stronger impact on behavioural intention than PGC ($\beta = 0.517$), which raises important questions about the reasons behind this disparity. One potential explanation is that consumers may perceive the benefits of green hotels as more immediate and tangible, such as better health, improved environmental conditions, or personal satisfaction. Altruistic motivations, driven by a desire to contribute to sustainability, may also be significant in amplifying perceived benefits. Additionally, marketing strategies employed by green hotels could emphasise the positive aspects of sustainable practices, leading consumers to prioritise these benefits over the associated costs. In Beijing, local government initiatives and public awareness campaigns promoting environmental sustainability might further elevate the perceived green benefits, to be more salient in consumers' decision-making processes.

Theoretical Implications

The theoretical implications of this study provide a nuanced understanding of consumer behaviour within the green hotel industry, challenging traditional assumptions about price sensitivity among cost-conscious consumers. This research advances theory by highlighting that, in the context of green hotels, sustainability and perceived quality can override purely economic considerations. By examining Perceived Green Benefits (PGB) and Perceived Green Costs (PGC), this study contributes to value-based theories by underscoring the significant role of functional benefits, such as environmental responsibility and ethical practices, as being central to consumer decision-making. These insights redefine perceived value, framing it as a multi-dimensional construct that extends beyond economic gains to include environmental and societal values.

Furthermore, the study reveals the importance of emotional and altruistic motivators, such as selflessness and concern for the environment, which have traditionally been underexplored in hospitality literature. The acknowledgment of these non-economic drivers calls for a rethinking of existing consumer behaviour models, especially within the green consumption context. Interestingly, perceived green costs often considered as barriers are shown to potentially enhance consumer loyalty when the associated green benefits are perceived as meaningful and impactful.

This finding enriches theoretical perspectives on consumer sacrifice and benefit trade-offs. By demonstrating that consumers derive substantial value from green practices despite perceived costs, the study contributes to broader theories of sustainable consumerism and decision-making in environmentally conscious settings.

Practical Implications

From a practical standpoint, the findings offer green hotel managers valuable insights to enhance the effectiveness of sustainability initiatives and marketing strategies. A major implication is the need to bridge awareness gaps by developing communication strategies that clearly articulate the personal and environmental benefits of green practices. Educating customers through informative digital or printed materials can help demystify sustainability efforts and foster informed participation. Dual-modal education campaigns using both digital platforms and traditional in-room materials can cater to diverse customer preferences to enhance message retention. It is also crucial for managers to highlight the unique value proposition of green hotels by emphasising reduced carbon footprints, conservation efforts, and guests' contributions as tangible environmental protection to shift consumer focus from cost to impact. For example, a customised score board viewable on in-room digital (TV) screens to indicate reduction of carbon footprint when guests opt for non-disposable utensils, minimise use of aircon or water heaters. Additionally, the findings encourage managers to design relevant marketing messages that reflect both emotional and practical motivators, acknowledging that consumer choices are driven by a blend of self-interest and environmental concern.

Transparency around perceived green costs, whether financial or effort-related, is vital and hotel managers should frame these costs as meaningful investments towards a sustainable future. Offering tiered pricing for green amenities and empowering eco-friendly behavioural actions to further incentivise participation would reinforce the value of sustainable choices. For example, standard hotel rates would apply to basic green actions, such as optional daily linen change, while a nominal discount is offered for enhanced green actions, such as towel reuse or minimising housekeeping requests, and even higher discounts for premier green actions that include selecting rooms with natural lighting (low-energy) or efficient water or energy appliances. Finally, to foster long-term loyalty, hotels must focus on delivering a customer-centric value proposition minimising perceived sacrifices related to convenience or cost, while maximising the tangible and intangible benefits of green practices. Hotels can reinforce engagement by aligning guest behaviours with the hotel's sustainability projects (e.g., hotel's tree planting events or saving endangered animals) through loyalty programs, where guests are offered accumulated points for green actions that are redeemed for free breakfast, room upgrades, or discounts on future stays.

Conclusion

This research, anchored in the proposed framework, successfully gathered and analysed responses from 384 valid survey questionnaires. The findings robustly support the hypotheses put forth. Firstly, environmental concern emerges as a significant driver, positively influencing customers' choice of green hotels in Beijing, substantiating Hypothesis 1 (H1). Additionally, the study verifies that perceived green benefits play a pivotal role in shaping customers' preferences for green hotels in the city, offering strong support for Hypothesis 2 (H2). Moreover, the identified factor of green perception cost is shown to influence customers' choice of green hotels in Beijing, supporting Hypothesis 3 (H3).

The research further validates that environmental concern positively impacts the perception of green benefits, affirming Hypothesis 4 (H4). Lastly, the study establishes a positive correlation between the environment and green costs, providing robust support for Hypothesis 6 (H6). In essence, these conclusive results not only strengthen the proposed conceptual framework but also offer valuable insights into the complex interplay of environmental concern, perceived green benefits and costs, providing a foundation for strategic decision-making in the green hotel industry in Beijing.

Limitations and Future Research Directions

Value cognition formation is notably influenced by various situational factors. Firstly, the study primarily focused on pre-purchase perceived value in green hotel accommodation, leaving post-experience evaluations unexplored. Incorporating longitudinal studies could offer insights into how green perceived value evolves over time, considering factors like revisiting, word-of-mouth, and willingness to pay more.

Secondly, the research emphasised a single dimension of value, potentially overlooking variations based on decision-making levels and product/service types. Diverse dimensions of value may be crucial, particularly concerning different customer segments in the green hotel industry. Similarly, the respondents of this study, who were mainly students (75.3%), would limit the generalisability of this study. While student sample represents a growing segment of eco-conscious travellers and early adopters of sustainable behaviours (Roy & Jasrotia, 2024), future studies could validate these findings with a demographically balanced and diversely represented sample.

Thirdly, the study's focus on Hopson Plaza in Beijing, China, may restrict its generalisability, as the area's tourist-driven, urban context may not reflect consumer behaviour in other regions. Additionally, differences in cultural, economic, and environmental settings could influence green hotel perceptions. Future research should cross-validate findings across diverse locations or nationalities to enhance this study's application.

Lastly, the study's reliance on data from October 2022 highlights a potential time lag. Acknowledging the dynamic nature of the world and consumer perceptions, hotel managers are advised to stay abreast of real-time industry trends and adjust policies accordingly.

Hence, the analysis conducted in this study would warrant deeper exploration of the discussed factors and their dynamics. It is hoped that this study would spark interests and prompt future research to explore the complex interplay between PGB, PGC, environmental concerns and behavioural intentions. Based on this study, future models could progress to provide a more complete picture of the psychological and behavioural drivers behind consumer intentions toward green hotels, with other omitted variables such as consumer experiences, cultural influences, and brand loyalty.

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