

How Psychological and Contextual Factors Influence Green Hotel Stay? An Empirical Evidence from Young Indians

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Abstract

Objective: Recent reports on green hotel market highlight that the acceptance rate of green hotel is rising. Therefore, the current study aims at investigating the influence of psychological (perceived consumer effectiveness — PCE) and contextual factors (environmental knowledge — EK, environmental consciousness — EC, and willingness to pay more — WtP) on green hotel stay (GHS). Recent studies suggested that PCE, EK and WtP have a positive and significant influence on green consumer behaviour.

Methodology: The data was collected from 238 respondents through MTurk. The proposed model was statistically tested using CB-SEM and the Process Macro. The study found PCE, WtP, and EK to be positively and significantly influencing GHS.

Findings: The key findings of current study demonstrate: I. Consumers in emerging nations are also WtP for green hotels; II. Results of moderation analysis reveal that EC has a positive moderating effect on all the three proposed associations, such as high level of EC increases the predictive power of PCE, WtP, and EK; and III. Among all, EK appeared as a major predictor of GHS indicating that EK among consumers is high and the hospitality marketers can utilize this opportunity to increase the GHS.

Originality: The novelty of the current study is to investigate the moderating role of EC on the relationship of GHS with EK, PCE, and WtP. Six hypotheses were formulated.

Keywords: *Perceived consumer effectiveness; Environmental consciousness; Environmental knowledge; Willingness to pay; Green hotel stay.*



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1. Introduction

The hotel industry has been identified as a significant contributor to global warming (Yadav et al., 2019). Around 75% of the negative environmental consequences caused by the hotels are related to excessive use of energy and natural resources, as well as pollutants discharged into the air, water, and soil (Aboelmaged, 2018) leading to a rise in concern for the environment and environmental knowledge (Sadiq et al., 2022). Consumers mostly reflect their concern for the environment through a range of practices, one of which might be preferring to stay at green hotel while travelling (Verma et al., 2019). Despite raising awareness for environmental issues and having a positive attitude toward the selection of green hotel, consumers' actions do not portray the same (Wang et al., 2020a).

Green consumption has expanded significantly in developed nations, although with consumers' growing awareness of environmental protection, it is rapidly spreading in developing nations such as India. The green hotel literature reveals that previously scholars focused on developed nations, while a few studies have been undertaken in developing nations such as India but they lack insightful implications for hospitality industry (Sadiq et al., 2022; Verma et al., 2019). As a result, the research contributes to the extant literature on green hotels by validating the conceptual model in India. The current study fills the gap in the green hotels literature by achieving the following objectives: (1) to determine the influence of consumers' psychological (PCE) and contextual factors (EK and WtP) on a GHS, and (2) to investigate the moderating effect of EC on the associations of GHS with EK, PCE, and WtP.

2. Literature Review and Hypothesis Development

2.1 Green Hotels

The term "green hotel" refers to a hotel that is environmentally conscious and takes steps to safeguard the environment. The Green Hotel Association (2008) proposed a universally accepted definition of eco-friendly hotels, referring to them as "environmentally friendly properties whose managers are eager to institute programs to save water, energy and reduced solid waste while saving money — to protect our one and only earth." This definition successfully emphasises the importance of green management techniques, which aim to reduce environmental damage (Verma et al., 2019), and sets the obligations on hotel officials to educate visitors about environment protection (Yadav et al., 2019).

2.2 Perceived Consumer Effectiveness

PCE toward green purchase relates to an individual's belief that his/her actions will have distinct outcomes in terms of aiding and solving environmental concerns



(Jaiswal & Kant, 2018). It reflects consumer's perception of controlling his/her ability to mitigate the damage done to the eco-system (Han & Yoon, 2015). High level of PCE is essential to allow consumer favorable attitude to be translated into effective pro-environmental behavior (Albayrak et al., 2011).

Wang et al. (2018) revealed that PCE has positive association with consumers' intention to GHS, however, Wang (2020) has reported non-significant relation of PCE with consumers' intention to GHS. Therefore, the following is we hypothesized:

H1: PCE has positive influence on consumers' GHS

2.3 Environmental Knowledge

EK is defined as "an individual's general knowledge of facts, concepts and relationships related to environmental protection and its major ecosystems" (Wang et al., 2020, p. 69). This can be further divided into two types of EK that influence pro-environmental behaviour: (1) objective EK (i.e., individuals must be taught to comprehend the effect of a product on the environment); (2) subjective EK (i.e., an individual's understanding of the product's ability to be produced in an environment friendly manner). A review of previous studies (Wang, 2020) highlighted that it is crucial to take significance of EK seriously in future studies since it plays a vital role in understanding pro-environmental behaviour. Therefore, we hypothesize the following:

H2: EK has positive influence on consumers' GHS

2.4 Willingness to Pay

Price is always regarded as a critical factor in consumer purchase decision. Understanding the desire of customers to pay is critical for GHS, as pricing is among significant inhibitors of environment friendly consumerism (Albayrak et al., 2011). Scholars (eg. Lee et al., 2010; Yadav et al., 2019) argued that consumers' WtP is significantly associated with their GHS. Therefore, we hypothesize the following:

H3: WtP has positive influence on consumers' GHS

2.5 Environmental Consciousness as a Moderator

Individuals' EC can be indicated by their understanding of environmental issues, their conviction that specific activities may help to address the related issues, and their desire to engage in these behaviours (Sadiq et al., 2020). Furthermore, with increased evidence of environmental damage, people's concern for the environment has grown. Many researchers (Jaiswal & Kant, 2018; Sadiq et al., 2022) have found a substantial relationship between EC and attitudes toward eco-friendly practises. EC, in particular, has supported as a moderator, providing instinctive insights into sustainable action



(Sreen et al., 2021). Therefore, we hypothesize the following hypotheses:

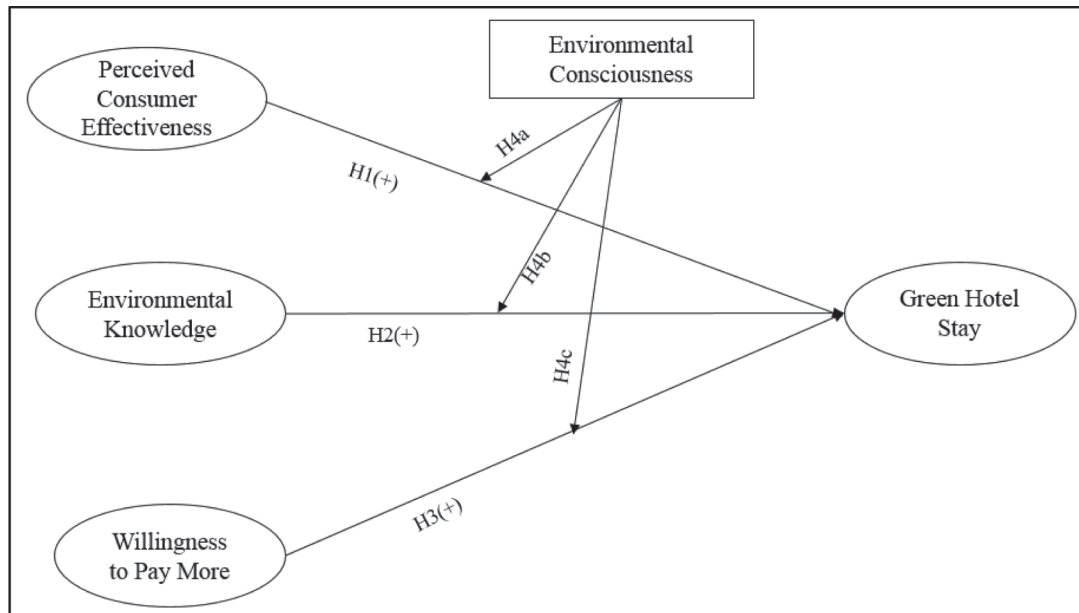
H4a: EC has positive moderating influence between PCE and GHS

H4b: EC has positive moderating influence between EK and GHS

H4c: EC has positive moderating influence between WtP and GHS

Based on the above arguments, we developed the conceptual model under the current study

Figure 1: Conceptual Model



3. Research Methodology

This study primarily focuses only on India's young consumers as they are more conscious than aged consumers (Jaiswal & Kant, 2018). Considering the COVID-19 pandemic and nature of the study, an e-survey was conducted to collect the data. Following suggestions of Sadiq et al. (2020), we decided to use the services of the MTurk platform as it offers a large respondents' database with varied socio-demographic profile with sufficient accuracy (Sadiq et al., 2022). The data were collected from 238 respondents.

3.1 Statistical Analysis

Following the recommendations of Sadiq et al. (2021), and Khan and Adil (2013) this study employed a preliminary analysis to examine the outliers and missing data before proceeding with the advanced statistical analysis of the data. Thereafter, a test for normality of the data, and common method bias (CMB) were computed.



3.2 Common Method Bias

After initial checking, the data were tested against the CMB with the help of ‘Harman’s single factor test’ in SPSS (Sadiq et al., 2021). The result reflected the absence of CMB as ‘variance explained by single factor’ was 29.45% which is within the upper limit i.e., 50%. Thus, our data are free from CMB.

3.3 Measurement Model

Confirmatory factor analysis was used to determine validity and reliability of the research model. The indices indicate ‘a good model fit’ ($\chi^2/df= 1.971$, CFI = 0.954, GFI = 0.922, RMSEA = 0.041). As shown in Table 1, the values of composite reliability (CR) and omega (ω) for all the variables were above 0.70 (Lance et al., 2006) and hence, convergent validity was established. Following the recommendations of Hayes and Coutts (2020), we have used Omega (ω) to determine the reliability of each selected variable. Further, convergent validity was established as Average Variance Extracted (AVE) for all the employed variables is above the threshold value i.e., 0.50. This establishes the presence of internal reliability together with convergent validity. Similarly, AVE is more than the square of correlation among the selected variables, therefore, this establishes discriminant validity (see Table 2).

Table-1, Validity and Reliability Analysis

Variable	Item Code	λ	AVE	CR	ω
Perceived consumer effectiveness	PCE1	0.81	0.82	0.81	0.78
	PCE2	0.83			
	PCE3	0.78			
Environmental Knowledge	EK1	0.94	0.83	0.93	0.92
	EK2	0.91			
Willingness to Pay More	WtP1	0.72	0.74	0.80	0.79
	WtP2	0.81			
	WtP3	0.79			
Green Hotel Stay	GHS1	0.85	0.73	0.94	0.92
	GHS2	0.89			
	GHS3	0.91			
	GHS4	0.80			

Table-2, Fornell-Larcker Analysis

	PCE	EK	WtP	GHS
PCE	0.82			
EK	0.21	0.83		
WtP	0.18	0.14	0.74	
GHS	0.27	0.31	0.22	0.73

Note: PCE= Perceived Consumer Effectiveness, EK= Environmental Knowledge, WtP= Willingness to Pay

3.4 Structural Model

The structural model enables the researchers to test the proposed hypotheses and model with theoretically designed relationships (Adil, 2013; Adil et al., 2020). The model's indices exhibit 'a good fit' ($\chi^2/df = 2.17$, GFI = .92 CFI = .91, TLI = .91, RMSEA = .052). The influence of PCE on GHS was positive and significant ($\beta = 0.47^{***}$). Similarly, the influence of EK ($\beta = 0.53^{***}$) and WtP ($\beta = 0.28^{**}$) was positive and significant on GHS. Thus, H1, H2, and H3 were supported. Further, PCE, EK, and WtP explained 64% variance in GHS.

3.5 Moderating Effect

For testing the moderating effect of EC, we used the 'model 1 of Process Macro for SPSS'. Our results demonstrate that EC is significantly and positively moderating the associations of GHS with PCE, EK, and WtP respectively. Thus H4a, H4b, and H4c were supported (see Table 3).

Table-3, Results of Moderation Analysis

<i>Environmental Consciousness</i>							
		β	T	P	LLCI	ULCI	Moderation?
H4a	PCE”GHS	.13	2.81	.005	.061	.124	Yes
H4b	EK”GHS	.16	3.07	.002	.084	.179	Yes
H4c	WtP”GHS	.09	2.09	.046	.053	.107	Yes

4. Discussion

The current study has extended the determinants of consumer' GHS by testing a validated theoretical model. The SEM analysis showed that PCE, EK, and WtP significantly and positively affect consumers' GHS. Psychological factor (PCE) was found to be significant in this study (H1) which is in consonance with the results of Wang et al. (2018). The findings of current study show that contextual factors (EK and WtP) have significant relation with consumers' GHS. This result confirms the findings of Wang et al. (2020a) where their study yielded that consumer with high EK have more tendency to behave environment friendly. However, it contradicts the result of Wang et al. (2020b) where EK has no significant influence on consumer's green hotel selection. The finding of H3 is congruent with extant literature on GHS (Lee et al., 2010; Yadav et al., 2019) highlighting that the consumers are willing to pay more for the environment. The findings also supported the moderating role of



EC between the relations of GHS with PCE, EK, and WtP (H4a-H4c). By testing the moderating effect of EC on the psychological and contextual factors, this study contributes and extends the literature on GHS.

5. Implication

This research offers several implications to the hospitality literature. Consequently, in the current study we devised an integrated framework for assessing consumers' acceptability of green hotel that includes consumers' psychological and contextual factors. As a result, this study expands our understanding and can provide useful information about consumers' consideration of the GHS by taking into account both 'contextual and psychological factors' at the same time. Secondly, EK is the strongest driver of GHS. Therefore, it is critical to consider the role of EK in future studies. Finally, previous research has yielded ambiguous and often contradictory results in terms of consumer WtP for green hotels (Wang et al., 2018). Considering these vague findings, the current study reveals that a customer's desire to pay more is an important component in defining their behaviour i.e., GHS.

The findings of this study can be used to enable green hotel managers in making better decisions. The results have shown that PCE, EK, and WtP are the significant determinants of GHS. By taking into account the results obtained in this study, managers should offer green services to their consumers, based on the psychological and contextual factors to stimulate a positive green emotional response. The task of increasing EK of consumers is also important for marketing; for instance, hotels can display informative posters in guests' rooms to inform them about the impact of their consumption on the environment. Such initiatives ensure that consumers reckon the fact that making green hotel selection is beneficial to the future. Thus, marketers could create a promotional effort that promotes their adherence to green initiatives and increases consumer awareness of green hotels. Additionally, managers should also inform consumers about the environmental risks caused by traditional hotels and educate them about the environmental protection. Since, consumers' WtP a premium has a positive influence toward GHS, managers should engage in environment friendly activities while considering the costs incurred by the hotels. The theoretical framework of constructs offered in this paper can be applied to consumer green purchase behavior in a variety of domains.

Limitations and Future research directions

This research has following limitations and offers significant directions to future scholars. First, this study was conducted in India, an emerging nation, which has different culture characteristics in comparison to developed nations. Therefore, the findings of this research may not be generalised to developed nations, thus future scholars can test the model in cross-cultural context. Second, we used 'single cross-

sectional method’, which may affect our conclusive findings. Therefore, future researchers are suggested to conduct a longitudinal research as consumer behaviour changes with time.

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