Public Intention on Eco-hotels in China

Yu Qi[1,*]

[1]University of Sanya, Sanya, China
*Corresponding author

Abstract: In this study, an expanded version of the theory of planned behavior was employed to investigate the factors affecting customers' inclination to select green hotels in China. By integrating four elements, namely attitude, subjective norm, perceived behavior control, and environmental concern, the study identified the key factors influencing customers' intention to choose green hotels. This research holds significant value within the realm of sustainable development in the hospitality industry as it enhances our understanding of green hotels beyond the existing knowledge. The findings of this study will be particularly beneficial for hotels that are transitioning to green practices and those that have already established themselves as environmentally friendly establishments.

1. Introduction

The exponential surge in industrialization and economic progress has exacted a toll on the environment and the well-being of individuals [3]. Amongst the energy-intensive sectors within the tourism industry, the hospitality business stands as a prominent contributor, heavily reliant on non-renewable resources and materials throughout its operational framework. Conventional hotels, lacking ecological consciousness, bear the brunt of blame for the severe challenges facing our living environment [4]. In contrast, green hotels embody a commitment to environmental preservation, embracing sustainable development measures, and adhering to eco-labels. These environmentally conscious establishments prioritize electricity conservation, pollution mitigation, and enhanced operational efficiency as cornerstones of their existence. In the contemporary landscape, hospitality entities from across the globe champion green and renewable technologies, harmonize with environmental policies, and cater to the discerning needs of their clientele [8].

Consumers, in their pursuit of conscious consumption practices, are increasingly concerned about environmental sustainability, with green hotels emerging as a favorable choice during their travels [6]. The mounting apprehension among consumers regarding environmental safety, coupled with their affinity for sustainable products, has played a pivotal role in shaping the trajectory of the green hospitality industry [5]. The objective of this paper is to examine customers' inclination towards selecting eco-friendly hotels in China, as well as identify the independent variables that influence consumers' intention to choose such accommodations (Figure 1).
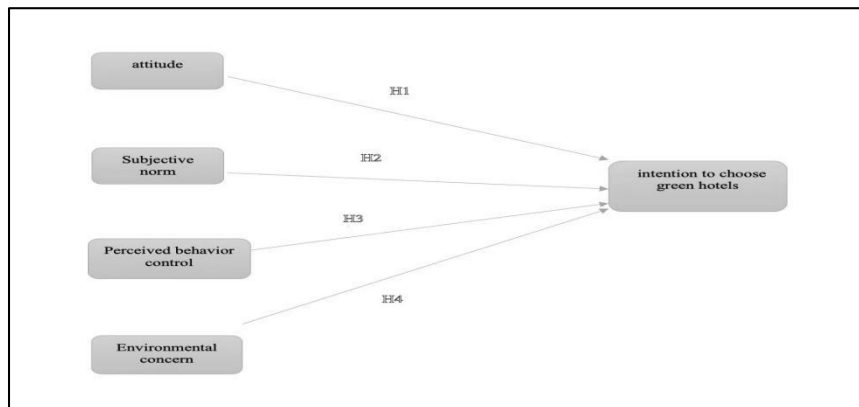
2. Methods

Figure 1: Research framework. (Adopted from Chen & Tung, 2014)

The research population consisted of clients residing in green hotels in Shanghai, China. Purposeful sampling was employed, selecting respondents based on convenience and availability. However, generalizability beyond the study is limited. The questionnaire was designed in English and Chinese, ensuring equivalence through back translation. It consisted of two sections: Section A for sociodemographic information and Section B for variables including attitude (Att), subjective norm (Sn), perceived behavior control, and environmental concerns (Ec). A five-point Likert scale was used for responses.

A total of 400 respondents were targeted, and permission was obtained from four popular green hotels in Shanghai. Descriptive analysis, reliability and validity analysis, multiple regression, and interaction effect testing were performed using IBM SPSS. Descriptive analysis was used to classify results and identify trends. Reliability analysis and factor analysis were conducted for validity assessment. Multiple regression was employed to predict intention based on attitude, subjective orm,perceived behavior control, and environmental concern.

3. Result

Table 1: KMO and Bartlett's Testa

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.882
Bartlett's Test of Sphericity	Approx. Chi-Square	1359.455
	df	10
	Sig.	0

Table 2: Communalities

	Initial	Extraction
Att	1	0.793
Sn	1	0.828
Pbc	1	0.883
Ec	1	0.774
VI	1	0.879

Table 3: Factor loading

Construct	No. elements	Factor loading
Attitude	Att 1	0.901
	Att 2	0.905
	Att 3	0.919
	Att 4	0.903
Subjective norm	Sn 1	0.923
	Sn 2	0.904
	Sn 3	0.908
Perceived behavior control	Pbc 1	0.926
	Pbc 2	0.918
	Pbc 3	0.918
Environmental concern	Ec 1	0.916
	Ec 2	0.905
	Ec 3	0.912
Visit intention	Vi 1	0.893
	Vi 2	0.890
	Vi 3	0.915

Table 4: Consistency of measure

Factors	No. elements	Coefficient α
Att	Four	0.928
Sn	Three	0.898
Pbc	Three	0.910
Ec	Three	0.897
Vi	Three	0.882

The examination of the results (Table 1-4) revealed an impressive Kaiser-Meyer-Olkin (KMO) value of 0.882, indicating the questionnaire's structural validity with utmost excellence. The p-value obtained from Bartlett's test was a striking 0.000, further solidifying the suitability of factor analysis for this particular research endeavor. Intriguingly, all research items displayed communalities values above the threshold of 0.4, signifying a remarkable extraction of item information and reinforcing the precision of the analysis. To ensure meticulousness, Cronbach's Alpha values were employed as a reliable index, following the time-honored approach of previous researchers. As espoused by the esteemed scholars Hinkin, Tracey, and Enz (1997), reliability coefficients surpassing the commendable threshold of 0.7 reflect a heightened degree of element covariance and homogeneity, instilling confidence in the reliability of the sample. Before delving into the realm of descriptive statistics and multiple regression analysis, the reliability of the research sample was meticulously tested utilizing the powerful SPSS program. The reliability table unveiled the awe-inspiring truth that all overall α values transcended the significant 0.7, irrefutably establishing the unwavering reliability of this momentous study.

Through the employment of linear regression analysis, the study investigated the interplay of Att, Pbc, Sn, and Ec as predictor variables, with Vi serving as the outcome variable. Notably, the model showed an R-squared value of 0.551, indicating that the combined effects of Att, Sn, Pbc and Ec accounted for 55.1% of the observed variability in Visit Intention. The empirical results demonstrate the significant and favourable relationships between Att (= 0.209, t = 3.768, p 0.05), Sn (= 0.190, t = 3.681, p 0.05), and Pbc (= 0.186, t = 3.743, p 0.05) with customers' intention to stay at green hotels.

These relationships are highlighted by the empirical findings. Additionally, the inclusion of Ec in the TPB model demonstrated its notable influence on guests' propensity to stay at green hotels (β = 0.347, t = 6.296, p 0.05). Notably, the standardized coefficients and t-values underscored the dominant role of Perceived Behavioral Control, surpassing Attitude, Subjective Norm, and Environmental Concern, as evidenced by the accompanying table (Table 5-7).

Table 5: Model

Model	R^2	Adjusted R^2	*S_e
1	0.551	0.547	0.751
a. Predictors (Constant), Att, Sn, Pbc, Ec * standard error of estimate			

Table 6: Analysis of Variance

Model		Σ square	df	M^2	F	sig.
1	Regression	273.250	4	68.313	121.213	0.000
	Residual	222.612	395	0.564		
	Total	495.862	399			
a. DV= Vi						
b.Predictors:(Constant), Att, Sn, Pbc, Ec						

Table 7: Multiplicative factors[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	sig.
		B	std. Error	β		
1	(Constant)	1.198	.125		9.621	.227
	Att	.209	.056	.221	3.768	0
	Sn	.190	.052	.208	3.681	0
	Pbc	.186	.050	.183	3.743	0
	Ec	.347	.055	.372	6.296	0
a. DV= Vi						

4. Discussion

The Theory of Planned Behaviour (TPB) is frequently used in the literature to predict customers' intentions and behaviours regarding environmentally responsible purchases [1] [2]. The TPB is used in this study as a theoretical framework to evaluate the drivers of travellers' intentions to choose green hotels when travelling [7]. Customers' intention to select a green hotel in the hospitality sector reflects their preference when making lodging decisions, taking into account elements like their propensity to stay at green hotels, their willingness to spread the word about them favourably, and their willingness to pay more for environmentally friendly accommodations. The intention of a consumer is crucial to hotels because it indicates both their chance of making a purchase and their propensity to recommend the establishment to others.

5. Conclusion

In order to provide useful insights into the development of ecologically sustainable establishments and to emphasise the critical relevance of environmental concern, this study set out to investigate the

wide range of variables that influence consumers' choice of green hotels in China. This research greatly improves our understanding of customer intentions towards green hotels, especially within the complex context of China, by seamlessly combining attitude, subjective norm, perceived behaviour control, and environmental concern. Nonetheless, it is crucial to acknowledge certain limitations inherent in this study, such as the confined scope of the survey area and the temporal constraints imposed. To address these limitations, future investigations should diligently refine the questionnaire, encompass diverse viewpoints from hotel management, and undertake more expansive research endeavors, encompassing illuminating interviews with clients and in-depth discourse with hotel operators. Moreover, an expansion of the sampling framework beyond a single city is highly recommended to enrich the accuracy and heterogeneity of the findings.

References

[1] Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. Journal of applied social psychology, 32(4), 665-683.

[2] Aman, A. L., Harun, A., & Hussein, Z. (2012). The influence of environmental knowledge and concern on green purchase intention the role of attitude as a mediating variable. British Journal of Arts and Social Sciences, 7(2), 145-167.

[3] Albert, E., & Xu, B. (2016). China's environmental crisis. Council on Foreign Relations, 18.

[4] Chan, D., Ye, T., & Xu, H. (2016). Localization of senior managers of international luxury hotels in China: The current situation and influencing factors. Journal of China Tourism Research, 12(1), 126-143.

[5] Han, H., & Kim, Y. (2010). An investigation of green hotel customers' decision formation: Developing an extended model of the theory of planned behavior. International journal of hospitality management, 29(4), 659-668.

[6] Gordon-Wilson, S., & Modi, P. (2015). Personality and older consumers' green behaviour in the UK. Futures, 71, 1-10.

[7] Han, H., Hsu, L. T. J., & Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. Tourism management, 31(3), 325-334.

[8] Tang, Y. H., Amran, A., & Goh, Y. N. (2014). Environmental management practices of hotels in Malaysia: Stakeholder perspective. International Journal of Tourism Research, 16(6), 586-595.