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Factors influencing customer intention to stay in green hotel in Malaysia

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Abstract. Customer stay intention (CSI) in green hotel needs a disclosure as there has been interest sought after by customer, society and business owners. Understanding customers drive and factors influencing their choices on green hotel is a very difficult task as it deals with complex human decision. No past studies had been done to assess customer stay intention (CSI) in Green Hotels in Malaysia as this study aims to provide factual findings for decision making and policy implementation. This study investigates the relationship between subjective norm (SN), perceived behavioral control (PBC), environmental awareness (EA), and perceived moral obligation (PMO) towards customer stay intention (CSI) in green hotel. A research model was developed to analyze the influence of SN,PBC,EA, and PMO towards CSI as extended from Theory of Planned Behavior (TPB). The survey was participated by 300 respondents that gathered what influenced CSI. These findings suggested that SN, PBC, EA, and PMO have positive influence towards CSI. Research deducted as environmental awareness (EA) has the strongest relationship with the customer stay intention. (CSI) in a green hotel and followed by the perceived moral obligation (PMO), perceived behavioural control (PBC) and subjective norms (SN) chronologically.

1. Introduction

With the changes of the era, the concerns of the society toward the environmental issues and disasters have progressively escalated [1]. Lately, Malaysia has been confronting tremendous amount of environmental issues like deforestation, climate change, and global warming. Malaysia's temperatures are predicted to increase by 0.6 C to 4.5 C by the year 2060 by the Intergovernmental Panel on Climate Change (2007) [2]. According to [3], global tourism sector has brought about the occurrences of harmful events that are eroding the health of the natural environment which are the global carbon emissions and the greenhouse emissions with the total percentage of 5% and 14% respectively. Thus, tourism is

considered to have a major impact on the environment. In many countries, tourism is one of the major sources of income and employment. In recent years, numerous customers have been aware of the harming of environmental resources and environmental damages induced by the hotel industry [4]. A great alteration in the purchasing behaviors of customers and the customers' attitudes towards environmentally-friendly business establishment has occurred due to these environmental concerns and awareness [1]. Many customers had begun to change their purchasing habits by inquiring and purchasing for eco-friendly products because they have been realizing on the damages brought to the environment caused by their purchasing behavior [5].

Subsequently, hotels are turning up to be more concerned on keeping the balance among ecological problems, resources consumption problems, moral and societal issue and productivity. Mohamad et al (2014) [2] stated that the attention particularly in the sector of tourism towards the environment problems has result in the expanding number of the eco-friendly hotel. [6] characterized that Green hotel is a pro-environmental lodging property whose managers are keen to execute diverse green practices/programs that are water saving, energy saving and reducing the use of solid/ hazardous waste to assist in securing our planet and while at the same time to save cost. [7]. In recent years, numerous hotels around the world are putting intensive efforts in searching for compelling approaches to become "green" so as to position themselves distinctively within the competitive hotel industry and Malaysia is not an exception to this [8]. In the recent past, many counties have taken serious consideration relation to the environment and Malaysia was no exception. Malaysia had enacted the Environment Quality Act in the year 1974. Therefore, Malaysia has been considered as one of the earliest among those countries [9]. Likewise, in other countries, many hotels in Malaysia had incorporated the green concept in their business operations. There were several most known green hotels in Malaysia. The aim of this study is to understand the drive that affect customer's intention to stay in green hotels in Malaysia.

2.0 Methodology

2.1 Data Collection and Analysis

The sampling strategy of the target group focus on respondents within the age eligible by law to book for hotel accommodation. The minimum age was taken as 18 years with no predefined maximum age. A well-structured questionnaire in the form of nominal, ordinal and Likert scale (section A, B and C) were designed and administered to the respondents in Klang valley and Ipoh. This study area was selected because of their high level of attraction and patronage. Non probability sampling technique was used to select the population size. As such, a total of 300 respondents were selected for the study. The data were analysed using descriptive statistics and inferential techniques (Pearson correlation and Multiple linear regression). The correlation analysis was devised by Pearson based on the value of correlation coefficient 'r'. The correlation between two parameters plotted on a XY scatter diagram can be termed as positive or negative. Correlation analysis is a common and useful statistical tool for assessing tourists' loyalty to the choice of hotel stay and comparing the relationships between certain critical variables [10]. The regression statistical technique is simply a measure to exhibit how well one variable predicts the other. It is use to ascertain to what extent an independent variable affects a dependent variable from coefficient of determination. It is use to form explicit equations that are less complex [11]. Using this method SN, PBC, EA, PMO were selected as the independent variable to understand their relationship and impact on CSI. Before then, a reliability test of the data was carried out to test if the data composition is fit for the analysis.

3.0 Result and Discussion

3.1 Demographic characteristics of the Respondents

In that sample size of 300 respondents, there were 157(52.33%) female A (47.67%) male respondents in total. 38.67% of survey participants from 31-40 years old had 116 respondents.102 respondents fall into income group RM 3001-RM4500.

3.2 Result for Pearson Correlation

Furthermore, the following correlation values are outcomes based on the analysis results: SN and CSI is r=0.57009 (p<0.0001); PBC and CSI is r=0.60253 (p<0.0001) and PMO and CSI is r=0.61292 (p<0.0001). In the correlation test, EA has found to be the most effect over CSI with the highest value of 0.64069. Due to the positive values shown in the results, all IVs are verified to have a positive influence towards the DV. Visitor loyalty to a unique place of choice remains an important indicator of successful destination development [13]

3.3 Result for Multiple Regression Model

Table 1 describe that F-vales is shown at the value of 117.68 with a significant table <0.001. All four constructs are shown to be significant which is SN, PBC, PMO, and EA. According to the table, EA has the strongest relationship towards CSI with the value of 0.33737. Hence, H1, H2, H3, and H4 are supported by the results.R^2 value formed in this analysis is 0.6147 which indicates that around 61% of the variation CSI in green hotel in Malaysia has been explain by the four variables. The following detailed observation can be deduced from the multiple regression model.

Table 1: Summary of result for multiple regression model.

Relationship	Parameter Estimated	Multiple Linear Regression	
	Results	Results	Remarks
H1: There is a significant relationship between SN and CSI in green hotel in Malaysia	0.22697	<.0001	Supported
H2: There is a significant relationship between PBC and CSI in green hotel in Malaysia	0.24261	<.0001	Supported
H3: There is a significant relationship between PMO and CSI in green hotel in Malaysia	0.28371	<.0001	Supported
H4: There is a significant relationship between EA and CSI in green hotel in Malaysia	0.33737	<.0001	Supported

3.3.1 H1: SN has a positive influence on the CSI in a green hotel in Malaysia

From table 1, results indicate that there is a significant relationship between SN and CSI. Han et al (2010) [4] further support this with their findings by defining that individuals tend to perceive social pressure from people who are considered significant to them. This is because of prominent referents are able to assist the individual in obtaining positive assessments of outcomes of the behavior for staying in an eco-friendly hotel. As also stated by Chang, (1998); Vallerand et al (1992); Ryu and Jang, (2006) [14,15,16], the positive or negative views of a person's important (referents) on the matter consider the performance of green behaviour would affect the formation of the favourable or unfavourable attitude toward staying in an eco-friendly hotel. Moreover, several past studies had found that a person's attitude

towards an eco-friendly hotel and behavioural intention is significantly influenced by subjective norms [4,17,18,19]. Consequently, the results for H1 is supported as SN have a positive effect on CSI.

3.3.2 H2: PBC has a positive influence on the CSI in a green hotel in Malaysia

Referring to the outcomes from table 1, PBC is proven to have a significant influence towards CSI. This outcome is supported by [4,1,8] who discovered that the CSI is positively associated with his/her perceived control over the barriers for an eco-friendly hotel stay. This is also reinforced by other researchers such as Lien et al (2012) [20], Chen and Peng (2012) [21]. Moreover, Chen and Tung (2014) [5] states that one of the significant determinants that trigger CSI in a green hotel is the customer's perception of the ready availability of staying in a green hotel. In addition, the findings also justify that customers will have more intention to choose to stay in an eco-friendly hotel when it is considered easily accessible to them. Furthermore, Mohd (2015) [22] shared that a CSI in a green hotel is hinged on the accessible width of his/her time, resources, and opportunities to stay. In other words, customers control numerous factors, for instance, money, time and efforts that may influence his/her actual environmental behaviour and the staying intention in a green hotel. Untaru (2014) [23] also certify that the higher control on a particular behaviour of an individual due to the readiness of needed resources, his/her behavioural intention will be higher. Hence, H2 is supported as PBC has a positive effect on CSI.

3.3.3 H3: PMO has a positive influence on the CSI in a green hotel in Malaysia

PMO was shown to be statistically significant (P=<0.0001). As a result, H3 is supported. According to the findings of [24], moral obligation is considered as a vital element as the root for a pro-environmental behavioral disposition. Consumers would deem that they were morally obligated to secure the ecosystem and also prevent the used up of the limited natural resources. Prior researchers such as [25,26,27] has reported that moral obligation is an influential driving force of environmental behaviour. Thus, PMO had a positive impact on the CSI in an eco-friendly hotel. [5]. The results of the findings were also aligned with other studies such as [28, 29].

3.3.4 H4: EA has a positive influence on the CSI in a green hotel in Malaysia

The result shows a positive relationship between EA and CSI in a green hotel, whereby the result adheres to the findings of [17]. Han and Kim (2010) [17] indicate that environmental awareness is one of the variables to ameliorate the attitude towards the green business establishment. Thus, the higher the customer's awareness towards the environment, the higher the staying intention in green hotels will be. Besides, there were several past researchers [30,31,32,33,34,35] who had studied on the green marketing, green consumer behaviour and environmental psychology that have asserted the significance of the consumer's environmental awareness, environmental behaviours, perceived effectiveness and environmentally-friendly reputation during the occasion of making decision to involve in an environmentally responsible buying behaviour. Furthermore, the results from the statistical analysis are also supported by [5]. As mentioned by the researchers, the attitude of customers to visit an eco-friendly hotel positively depends on their personal concern towards the environment. In addition, a favourable attitude toward visiting the green hotel was formed the minute environmental concern is of high level. Therefore, H4 is supported and have been demonstrated that there is a positive impact on the CSI in a green hotel by EA.

4.0 Conclusion

By conducting this study, an insight about the factors that affect CSI in Malaysia's green hotel is provided. The result show that SN, PBC, PMO, and EA have a significant correlation with the CSI.

5.0 References

[1] Han H and 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* 659–668

[2] Mohamad Z Z, Arifin T R T, Samsuri A S and Munir M F M B 2014 Intention to Visit Green Hotel in Malaysia: The Impact of Personal Traits and Marketing Strategy *International Journal of Business and Social Science 5*(7) 157-173

[3] Lindqvist J and Andersson M 2015 Travelling green: Variables influencing students' intention to select a green hotel (Dissertation) Retrieved from http://urn.kb.se/resolveurn=urn:nbn:se:hkr:diva-14980

[4] Han H, Hsu L and Sheu C 2010 Application of the Theory of Planned Behaviour to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management* 31(3) pp.325-334

[5] Chen M F and Tung P J 2014 Developing an extended Theory of Planned Behaviour model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management*, 36, pp. 221-230

[6] Green Hotels Association 2014 What Are Green Hotels Retrieved from http://www.greenhotels.com/whatare.htm

[7] Rahman I and Reynolds D 2016 Predicting green hotel behavioural intentions using a theory of environmental commitment and sacrifice for the environment *International Journal of Hospitality Management* 52 107-116. doi: 10.1016/j.ijhm.2015.09.007

[8] Eirini T and Antonia D 2014 "Do beliefs affect customers' intentions to choose green hotels?" *International Journal on Strategic Innovative Marketing* 1 51-60.

[9] Punitha S, and Rahman A 2011 Antecedents of Green Purchasing Behaviour among Malaysian Consumers *International Business Management 5*(3) 129–139

[10] Prayag G, and Ryan C 2012 Antecedents of Tourists' Loyalty to Mauritius: The Role and Influence of Destination Image Place Attachment Personal Involvement and Satisfaction Journal of Travel Research 51(3) 342–356 DOI: 10.1177/0047287511410321

[11] Isiyaka H A, Juahir H, Toriman M E, Azid A, Gasim B M and Kamarudin M K A 2015 Assessment of the Spatial Variation and Source Apportionment of Air Pollution Based on Chemometric Techniques: A Case Study in the Peninsular Malaysia Jurnal Teknologi 77:1 (2015) 33–44 | www.jurnalteknologi.utm.my

[12] Mustaffa N I H, Latif M T, Ali M M and Khan M F 2014 Source Apportionment of Surfactants in Marine Aerosols at Different Locations Along the Malacca Straits Environmental Science and Pollution Research 21(10): 6590-6602

[13] Poira Y, Reichel A and Biran A 2006 "Heritage Site Perceptions and Motivations to Visit" Journal of Travel Research 44: 318-26

[14] Chang M K 1998 Predicting unethical behaviour: A comparison of the theory of reasoned action and the theory of planned behavior *Journal of Business Ethics 17*: 1825-1834.

[15] Vallerand R J, Deshaies P, Cuerrier J P., Pelletier L G and Mongeau C 1992 Ajzen and Fishbein's theory of reasoned action as applied to moral behaviour: A confirmatory analysis Journal of Personality and Social Psychology 62(1) 98-109

[16] Ryu K and Jang S 2006 Intention to Experience Local Cuisine in a Travel Destination: The Modified Theory of Reasoned Action. *Journal of Hospitality & Tourism Research 30*(4) 507-516 doi: 10.1177/1096348006287163

[17] Han H and Kim Y 2010 An investigation of green hotel customer's decision formation: Developing an extended model of the theory of planned behavior *International Journal of Hospitality Management, 29*, 659–668

[18] Wu K S and Teng Y M 2011 Applying the Extended Theory of Planned Behavior to Predict the Intention of Visiting a Green Hotel African *Journal of Business Management* 5 17 pp. 7579-7587

[19] Teng YM, Wu K S and Liu H H 2013 Integrating altruism and the theory of planned behavior to predict patronage intention of a green hotel Journal *of Hospitality & Tourism Research* Vol 37 No 1 pp 1-18

[20] Lien C, Huang C and Chang H 2012 The influence of green consumption cognition of consumer on behavioural intention – a case study of the restaurant service industry *African Journal of Business Management* Vol 6 No 26 pp 7888-7895

[21] Chen A and Peng N 2012 Green hotel knowledge and tourists staying behaviour *Annals of Tourism Research* Vol 39 No 4 pp 2211-2216

[22] Mohd Suki 2015. Consumers environmental behaviour towards staying at a green hotel *Management of Environmental Quality: An International Journal 26* (1) 103-117 doi: 10.1108/meq-02-2014-0023

[23] Untaru E N, Epuran G and Ispas A 2014 A conceptual framework of consumer's pro-environmental attitudes and behaviors in the tourism context Bulletin of the Transylvania University of Braşov *Series V Economic Sciences 7*(2) 85-94

[24] Tan BC and Lau TC 2010 Attitude towards the Environment and Green Products: Consumers Perspective *Manage Sci Eng 4*(2): 27-39

[25] Hopper J R and Nielsen J.M 1991 Recycling as altruistic behavior: Normative and behavioral strategies to expand participation in a community recycling program. *Environment and Behavior 23* 195-220

[26] Vining J and Ebreo A 1992 Predicting recycling behavior from global and specific environmental attitudes and changes in recycling opportunities *Journal of Applied Social Psychology* 22 1580-1607

[27] Stern P and Dietz T 1994 The Value Basis of Environmental Concern *Journal of Social Issues 50*(3) 65-84 doi: 10.1111/j.1540-4560. 1994.tb02420x

[28] Haines R, Street M D and Haines D 2008 The influence of perceived importance of an ethical issue on moral judgment moral obligation and moral intent *Journal of Business Ethics 81* (2) 387–399.

[29] Lam S P 1999 Predicting intentions to conserve water from the theory of planned behavior perceived moral obligation and perceived water right Journal *of Applied Social Psychology 29* (5) 1058–1071

[30] Schlegelmilch B B, Bohlen G M and Diamantopoulos A 1996 The link between green purchasing decisions and measures of environmental consciousness *European Journal of Marketing 30*(5), 35-55

[31] Roberts J A 1996 Green consumers in the 1990 Profile and implications for advertising *Journal of Business Research 36* 217–231

[32] Takacs S A 2007 Barriers to environmental concern *Research in Human Ecology 14*(1) 26–38

[33] Ryan A and Spash C L 2008 Measuring awareness of environmental consequences Two scales and two interpretations Socio-economics and environment in discussion (SEED) working papers Canberra Australia Commonwealth Scientific and Industrial Research Organisation (CSIRO)

[34] Paco A F, Raposo M L and Filho W L 2009 Identifying the Green Consumer A Segmentation Study *Journal of Targeting Measurement an* diately following the last numbered section of the paper.