MODELING THE CONSUMERS' MINDFULNESS ON THE SELECTION OF GREEN HOTELS: A SEM-PLS APPROACH

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ABSTRACT: *This study developed and validated an attitudinal model for the selection of green hotels in Malaysia. Variables such as attitude towards green hotels, subjective norms, and perceived green knowledge were measured to test their structural relationships with the selection of green hotels. The role of consumers' lifestyle was included to test the mediating effect between perceived green knowledge and the selection of green hotels. Self-administered questionnaires were distributed to 380 tourists in the State of Melaka from September to October 2016. Analysis of SEM-PLS revealed some interesting findings within the context of Malaysia. The consumers' attitude towards green and subjective norms has no direct influence on the consumers' selection of green hotels whereby the perceived green knowledge exerted a significant direct influence. The consumers' lifestyle, partially mediates the relationship between the perceived behavioural knowledge and the selection of green hotel. From the academic perspective, this research has a significant contribution in terms of explaining the importance of green knowledge and consumers' green lifestyle in shaping the consumers' decision to choose green hotels.*

Keywords: Green Hotels, Green Consumers, Green Attitude, Consumers' Lifestyle, Perceived Green Knowledge, Subjective Norms.

1. INTRODUCTION

The green hotel brings a new perspective to ecotourism industry. In the 1960s, the ecotourism was mainly designed for tourists who interested in the ecological conservation. Eco-tourists travelled to many countries and stayed in places located in the remote area to gain a feeling of getting closer to the natural environment [1]. Special access to the endangered environment provides an idea for them to share possible solutions about minimizing the adverse effect with others. The process of imparting the green knowledge later transformed into the social obligation among business organizations. Recently, with the notion of protecting the environment, green strategies also applied to the service industry such as hotels located in the city centre.

Realizing the great potential of a green hotel, the ASEAN tourism ministers had consensually agreed to enhance the application of ASEAN Green Hotel Standard [2]. This is in tandem with the new ASEAN Strategic Planning (ATSP) 2016-2025 which aims at a more responsible and meaningful tourism while maintaining the 'everything green' concept [2]. This also means hotels in ASEAN countries will be rated based on this standard to promote sustainable tourism practices.

There are eleven criteria evaluated by the green experts that cover all aspects of green practices in management, finance, operation and marketing department. For instance, the assessment focuses on the usage of green products, waste management, energy efficiency, noise pollution, environmental policy and collaboration with the community and local authorities [3]. As of 2016, 86 hotels in ASEAN countries received the green accreditation and ten of them are from Malaysia [4]. **Table 1** indicates the ten hotels in Malaysia who received the accreditation in 2016.

Table 1 the Green Hotels in Malaysia

State	Green Accredited Hotel
Pulau Pinang	The Shangri-La's Rasa Sayang Resort and Spa, Batu Feringhi
	Holiday Inn Resort, Penang
Kedah	Frangipani Langkawi Resort and Spa, Langkawi
Kuala Lumpur	The Shangri-La Hotel, Kuala Lumpur
	Mandarin Hotel, Kuala Lumpur
Pahang	The Zenith Hotel, Kuantan
Sarawak	Borneo Tropical Rainforest Resort, Sibuti
	Miri Marriot Resort and Spa, Miri
Sabah	Shangri-La's Tanjung Aru Resort and Spa, Kota Kinabalu
	Shangri-La's Rasa Ria Resort and Spa, Tuaran

Source: ASEAN (2016)

The main objective of this research is to discover the consumers' belief towards the selection of green hotels from the aspect of behavioural attitude, inner circle influences and existing knowledge. Apart from that, it also aims to investigate the extent of mediating effect on the selection of green hotels.

This research is significant since it brings into light relationships between the consumers' attitude towards green hotels and their decision to choose a green hotel [3]. Understanding the attitude is important to assist the hoteliers to be more sensitive to the consumers' needs and wants especially when it comes to the environmental impact [5]. Meanwhile, the influence of family and friends provide interesting research findings because it shows how the word of mouth and influential power play its role within the context of Malaysia [6]. Knowing by its high context and close knitted society, the situation in Malaysia is different from other countries but how effective the sentiment of green being communicated may generate a great idea for hoteliers to design better green promotional activities in the future.

This research also adds a new perspective to the green marketing literature from the context of how consumers' lifestyle mediates the relationship between consumers' perceived green knowledge and decision to choose the green hotel as a place to stay.

2.   LITERATURE REVIEW

Green hotels usually do more than the conventional practices in terms of energy consumption, waste management and make a serious effort to embark on the environmentally friendly practices to promote a more responsible tourism industry [5]. To-date, there is a growing concern among hoteliers to go for a green accreditation as part of their corporate social responsibility and business strategy. However, the sustainability of the hotel industry is very much depending on the support from customers.

Attitude towards Green Hotels

Consumer's attitude can be different from one to another. It shows a favourable or unfavourable belief about performing a particular behaviour [7]. Previous studies have shown the increasing number of consumers who have a positive attitude towards green products and ready to perform purchasing tasks at any point in time [8]. Consumers also portrayed a positive attitude towards environmental protection and willing to participate in activities related to conservation and green movement [9]. Delightful customers also demonstrate a strong tendency to return back to the hotel in the future [6]. In addition to that, consumers will response positively towards hotels who manage their energy consumption and waste according to the international standard [10]. The attitude tends to be more positive when the hotel has a strong reputation, clean image, excellent service and competent in handling consumers' problem [11]. As a consequence, the consumers will have an intention to return to the hotel and share the delightfulness through social media and word-of-mouth. Therefore, it can be hypothesized that:

H1: Consumers' attitude towards green hotels has a significant effect towards the decision to select the green hotel.

Subjective Norms

Consumers have family members, friends and community around them. These inner circles play a vital role to shape an individual's belief to perform a particular behaviour or vice versa [7]. Consumers will do something that is similar to the opinion of peoples around them. This also means the family members, friends and community may influence others to follow them while at the same time put on pressure for a specific purpose [6]. Previous studies related to green marketing have shown a significant relationship between social influence and consumers' decision to purchase green products. Thus, the next hypothesis is developed:

H2: There is a significant relationship between subjective norms and the consumers' selection of green hotels.

Perceived Green Knowledge

The basic concept of perceived behavioural control is the degree of individual's access to the resources or opportunities to perform a particular behaviour [7]. Knowledge about green is part of the resources for green behavioural action. Due to the fast development of communication technology and information system, consumers have unlimited access to the information about green [12]. The formal education system

from primary school until tertiary level gives a proper education about green to the students. Mass media also actively promotes the green lifestyle. In the meantime, advertisement and campaign show the potential risk to the environment due to irresponsible activities [13]. Previous studies have discovered that consumers' knowledge about green has a significant impact on their intention to come back to the hotel in the future [6]. Green knowledge associated with hotel's green commitment and reputation also plays an important role to increase the consumers' intention to stay in the hotel. Hence, it can be hypothesized that:

H3: Consumers' perceived green knowledge has a significant effect on the selection of green hotels.

Consumers' Lifestyles

Consumer's lifestyles is a pattern in which an individual spends money and time due to a specific interest and opinion [14]. This construct put into consideration the element of personality and values. It relates to the next course of action based on the experience and knowledge which they have in hand [14]. It can be interpreted as when consumers have sufficient knowledge about green, the value of green hotels can be seen. Consumers who are not aware of the environmental protection or totally ignore the importance of green lifestyle may have a different perspective towards the green hotel. Perhaps this is due to some reasons such as they tend to ignore the value of green when there are too many different types of knowledge gaps in their mind. Some of the consumers have an insufficient knowledge about green hence making them difficult to practice green lifestyle which in the end reflects their support towards the green hotel. Such misperception may pose a major barrier to the success of green hotel in the future. Therefore, it can be hypothesized that:

H4: Consumers' lifestyle mediates the relationship between consumers' perceived green knowledge and the selection of green hotels.

Based on the literature, **Figure 1** illustrates the research framework underpinning this study. The framework symbolizes the paths which explain the relationship between independent, mediating and dependent variables.
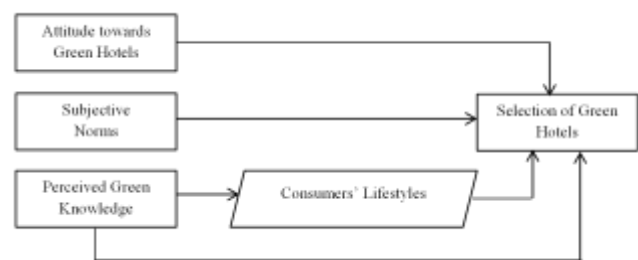
Figure 1 Proposed research framework underpinning the study

3.   RESEARCH METHODOLOGY

An appropriate methodology for data collection and analysis is important to produce results that are reliable and valid [15]. This research focuses on analyses that are relevant to achieve the objective.

The Sampling Design and Study Setting

Self-administered questionnaires were distributed to 380 tourists in the State of Melaka. Melaka is well renowned for its historical city status conferred by the UNESCO World

Heritage. The convenience sampling technique has been used as a method of collecting the data because this approach is convenient, accessible to the researchers and require a low budget. Data were collected from September to October 2016. The researchers' interference was kept at a very minimal in a non-contrived setting to avoid bias in response. A total of 367 valid responses were obtained for this study and the percentage of response was 96.5 percent %.

The Development of Measured Items

The measured items were adapted and modified from past studies related to green marketing discipline. It consists of the independent variables such as attitude towards green hotels, subjective norms, perceived green knowledge and green lifestyles using a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The Method of Analysis

Data obtained from the questionnaire were then analysed using SMARTPLS 2.0 to investigate the relationship between independent and dependent variables and to validate the proposed research framework. Within the context of Structural Equation Modelling – Partial Least Square (SEM-PLS), interpretation of results were done based on the range of acceptable value as recommended by [16]. The selection of green hotels, attitude towards green hotels, subjective norms, perceived green knowledge and green lifestyles were modelled as reflective constructs. The centre of attention was given to the results related to Indicator's Outer Loadings, Composite Reliability (CR), Average Variance Extracted (AVE), and Discriminant Validity [16].

4. ANALYSIS & FINDINGS

Thorough analyses have been conducted to understand how consumers' perceived things related to green and finally decides on green hotels choice.

Table 2 Results of the proposed conceptual model using SMARTPLS

Construct	Composite Reliability (> 0.708)	Average Variance Extracted (> 0.50)
Attitude Towards Green Hotels	0.8372	0.6321
Subjective Norms	0.8746	0.6995
Perceived Green Knowledge	0.8564	0.6658
Consumers' Lifestyle	0.8923	0.7347
Selection of Green Hotels	0.8542	0.6619

Table 2 indicates the indicator's factor loadings, composite reliability (CR) and the average variance extracted (AVE) for all reflective constructs. The findings are as follows:

Indicator's Factor Loadings. All indicator's factor loadings are greater than 0.708 hence indicating convergence validity of the measured items [16].

Composite Reliability. All composite reliability (CR) values are greater than 0.708 thus indicating the internal consistency reliability of the construct [16].

Average Variance Extracted (AVE). All average variance extracted (AVE) values are greater than 0.50, suggesting the convergence validity of the construct [16].

**Table 3 The Square Root of AVE and Latent Variable Correlations**

	AG	CL	GK	SG	SN
AG	**0.7950**				
CL	0.4868	**0.8571**			
GK	0.6288	0.4394	**0.8159**		
SG	0.5705	0.5072	0.7614	**0.8136**	
SN	0.6457	0.4017	0.8905	0.7306	**0.8364**

Table 3 indicates the final results of the Fornell-Larcker criterion assessment [16] with the square root of the reflective constructs AVE on the diagonal and the correlations between the constructs in the lower left triangle.

Discriminant Validity. All square root of the AVE are higher than the highest correlation with any other construct hence providing enough evidence for the constructs' discriminant validity [16].

Evaluation of the Structural Model

The aim of this study is to identify consumers' opinion about the selection of green hotels. The researchers have examined the relationships of the attitude towards green hotels, subjective norms, perceived green knowledge, and the mediating variable labelled as consumers' lifestyles towards the selection of green hotels. Based on the analysis, the model explained 56.3 percent of the variance in the selection of green hotels. **Figure 2** indicates the results of the structural model developed for this study.
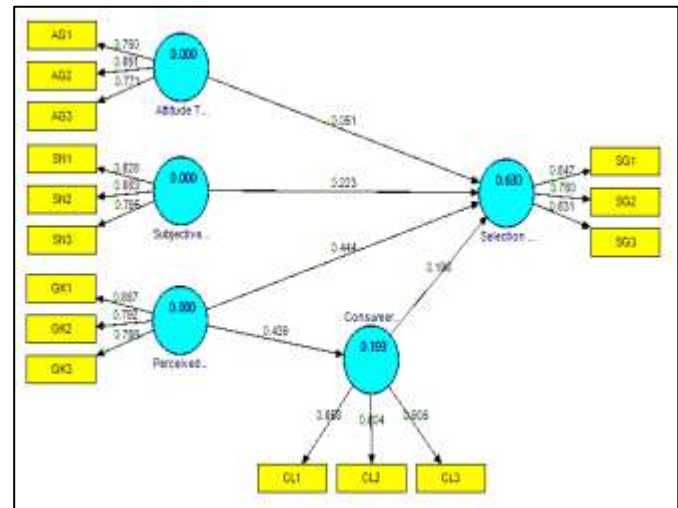
Figure 2 The Structural Model Path Analysis

Table 4: Structural Estimates of the Model

Direction	PC	T-stat	CI	β	*p*
AG → SG	0.051	1.230	4.128, 4.244	0.060	0.219
SN → SG	0.223	0.346	3.813, 3.966	0.029	0.730
GK → SG	0.444	7.365	3.889, 4.048	0.598	0.000
CL → SG	0.198	4.140	3.471, 3.633	0.168	0.000

The first hypothesis (**H1**) proposed that consumers' attitude towards green hotels has a significant effect towards the decision to select the green hotel. However, there is not enough evidence to support the hypothesis (PC = 0.051, T-statistic = 1.230, CI = 4.128, 4.244, and p = 0.219). Therefore, **H1** is not supported.

The second hypothesis (**H2**) hypothesized that there is a significant relationship between subjective norms and the consumers' selection of green hotels. Analysis has shown that, there is not enough statistical evidence to support the hypothesis. The p-value is greater than 0.05 while the T-statistic value is lower than 1.96 (T-statistic = 0.346, CI = 3.813, 3.966, and p = 0.730). Subjective norms (SN) also indicates the lowest beta value that explains the consumers' selection of green hotels (β = 0.029). Thus, **H2** is not supported.

The third hypothesis (**H3**) suggested that the consumers' perceived green knowledge has a significant effect on the selection of green hotels. Analysis indicated that, perceived green knowledge has a significant effect on the consumers' selection of green hotels (PC = 0.444, T-statistic = 7.365, CI = 3.889, 4.048, and p = 0.00). Perceived green knowledge (GK) also portrays the highest beta value that explains the consumers' selections of green hotels (β = 0.598). Hence, **H3** is supported.

Test of the Mediating Effect

It is interesting to understand the role of consumers' lifestyle on the selection of green hotels. A systematic test helps to bring to light the extent of the relationship. The researchers divided the mediating analysis into two stages: Direct model and Indirect model. **Table 5** indicates the results of the analysis of mediation effect.

Table 5: The standardized indirect effect of the selection of green hotel

Direction	β	T-Stats (BS)	*p*
Direct Model			
GK → SG	0.561	2.690	0.00
Indirect Model			
GK → SG	0.444	2.183	0.00
GK → CL → SG	0.086	1.961	0.04

Note: BS = Bootstrapping

The fourth hypothesis (**H4**) assumed that consumers' lifestyle mediates the relationship between consumers' perceived green knowledge and the selection of green hotels. Bootstrapping technique was applied to identify the significance level. Analyses have shown that, the consumer's lifestyles (CL) significantly mediate the relationship between consumers' perceived green knowledge (GK) and the selection of green hotels (SG) (T-Statistics > 1.96 and p < 0.05).

To test the extent of the mediation effect, further analysis was done by assessing the value of the standardized Beta between GK and SG. It was found that the direct effect decreased its strength (β = 0.561 to 0.444) but still significant (T-statistics > 1.96). This indicates that the consumers' lifestyles (CL) **partially mediate** the relationship between perceived green knowledge and consumers' selection of green hotels. Therefore, **H4** is supported.

5. DISCUSSION

The researchers developed and validated an attitudinal model for the selection of green hotels in Malaysia. As mentioned earlier, the study aimed at modelling the consumers' mindfulness to select a green hotel as a place to stay while travelling. Variables such as attitude towards green hotels, subjective norms, and perceived green knowledge were measured to test their direct relationships with the selection of green hotels. The empirical analysis was conducted to understand the role of consumers' lifestyles as a variable that mediates the relationship between perceived green knowledge and consumers' selection of green hotels.

Within the context of Malaysia, the study revealed that the consumers' attitude towards green has no direct influence on the consumers' selection of green hotels. This result suggests that consumers who portrayed a positive attitude on the environmental protection, activities related to conservation and green movement do not necessarily reflect the choices of green hotel as a place to stay. This finding was also discussed by [9] which revealed that green practices did not significantly contribute to the consumers' attitudinal behaviour.

This study also discovered that subjective norm has no influence on the selection of green hotels. The findings reveal that family members, friends and community may not necessarily influence the consumers to follow their opinion to stay in green hotels. This result is similar to the assertion made by [5,6] where people who are important to the consumers were found to be not significantly affecting their intention to stay at a green hotel.

Perceived green knowledge exerted a significant direct influence on the consumers' selection of green hotels. This finding is consistent with a study conducted by [6] which found that knowledge about green obtained from various types of resources has a significant influence on the green behavioural action. Our study also emphasizes on the importance of consumers' green knowledge as a catalyst for the consumers' lifestyle. Later the consumers' lifestyle, though it is not applicable at most of the time, is still important as a supportive mechanism for the selection of green hotels.

6. CONCLUSION & RECOMMENDATIONS

Results from this study portray a different perspective of Malaysian consumers' perception towards green hotels. An empirical investigation on the mediating effect confirmed that at most of the time, the lifestyle partially mediates the relationship between perceived green knowledge and the selection of green hotels. Another unique finding is the consumers' attitude towards green environment does not necessarily mean that they will choose the green hotel as a place to stay while travelling. The influence of subjective norms has become less effective within the context of Malaysia. This may be due to the reason that recently Malaysians are becoming more concern about false and misleading claims in the social media and advertising. This study also found that, comprehensive information about green and its benefit to the environment and societal well-being is very crucial.

Such findings have an impact on the hotel industry from the aspect of the marketing mix. Green hotels should also take advantage of the dispersion of social media such as Facebook, Instagram, Pinterest and Twitter to share their initiatives and pledge about keeping the world safe for everyone. From the academic perspective, this research has a significant contribution in terms of explaining the importance of green knowledge and consumers' green lifestyle in shaping the consumers' decision to choose green hotels. However, the model only explained 56.3 percent of the variance in the selection of green hotels. That means there are still other factors that can be further explored by future researchers such as green involvement and green commitment. The current data were collected from the consumers in Melaka. In the future, it is proposed that this kind of research should be conducted in a wider geographical area for generalizability of the findings.

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