

The Intention of Hotel Guests' to Engage in Green Activities

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ABSTRACT

The importance of hotel industry in the economic sector is undeniable. It is believed one of the greatest contributions to the country's income. Though the industry gave positive impact on the economic system, it is also poses potential danger to the environments as it uses up huge quantities of resources like water, land, electricity and others. Perhaps what is interesting to hotels is by practicing green environment to create a new consumers' perception of these green practices. Therefore, the purpose of the study was to identify what influences hotel guests' intention to engage in green activities while staying at the hotel by focusing on environmental concern. By using a self-administered questionnaire, 380 questionnaires were distributed based on the average occupancy rate at 4 selected green hotels in Kuala Lumpur. However, only 180 questionnaires were accepted to undergo the statistical analysis. Through Pearson correlation analysis, the finding indicated that there was a relationship between environmental concern and intention to engage in green activities and the relationship is positive. Thus elaborates the variable is liable for hotels to practice green environment and to educate the consumers towards the importance of green activities.

KEYWORDS: Engage, Hotel, Guests' Intention, Green, Environmental, Consumer.

INTRODUCTION

The importance of hotel operations in the hospitality industry is undeniable, especially in the economic sector. It is been stated that the average cost paid for a hotel room night in Malaysia in 2010 was US\$118, representing a 17% increment over 2009 [1]. The statistic shows that the hotel industry in Malaysia has evolved quickly and gave impact to the Malaysian economy. However, the hotel managers should view the impact on the environment too, since hotel industry consumes huge amount of resources like water, electricity and solid earth.

Nowadays, there are consumers who becoming more aware about environmental matters and start looking for green products and information. The hotel industries had no exception to the desire from guests who searching information about green practices. In sum, many consumers are becoming more cultivated and thus their interest in environmentalism is increasing and they are more cognizant of the need to protect the environment [2]. As a result of consumers' concern pertaining to the environment, hotels should take advantage of guests' demands and conform to their needs and want in order to maintain a competitive benefit [3]. According to [4], it shows that 78% of the respondents' would search for environmental information when choosing a destination. About 69% of these respondents reported that they were sometimes influenced by environmental information about companies and destinations. The study concluded that consumers are becoming more demanding concerning products and services that are more environmentally friendly.

Moreover, as hotel guests are becoming more concerned about the environment and environmentally friendly products [5], it is important for the lodging industry to learn the concept of green hotels in more details. Most of hotel companies are taking green initiatives based on the environmental information. Perhaps what is most interesting to hotels is the consumers' perception of these green practices. Hotels need to identify if consumers intend on choosing hotels based on their green practices, and if they want to involve in the hotels' green initiatives. It is crucial for hotels to decide what role they are going to play in environmental conservation. By surveying consumers on their concern for the environment and on what specific constructs influence their intentions to stay at green hotels or engage in green programs, hotels can tailor their intentions to introduce more environmentally friendly practices based on these findings.

As the lodging industry gave a great impact on the Malaysian economy, it is also poses potential danger to the environment. The industry gave negative impact to the environment by consuming huge amounts of resources like water and electricity, which potentially damaging to the surrounding environment [6]. In [2, 7-8] added that hotels are considered major consumers of water as well as energy. One large hotel can use several million gallons of

water annually, including all the chemicals and detergent that the hotel uses for laundry services and other purposes.

Medium sized hotels with 50-100 rooms use an average of 250 litres of water per person daily which costs an estimated \$346 million annually. Hotels also spend a large amount of waste disposed. It has been found that some large hotels incur a \$250,000 or more expense from waste disposal alone [9]. Therefore, many hotels are trying to find new ways to reduce the amount of waste that they have by becoming greener and more environmentally friendly [10]. Hotels also depending on natural resources in order to function such as availability of a clean environment, water and energy resources [3-4]. As a whole, the use of energy consumption in lodging industry is increasing [11].

There has been more pressure during recent years for hotels to improve their consumption patterns. Many hotels are looking ways to reduce their environmental impact as well as finding competitive advantages to be green. The hospitality industry was being pressured by many forces to become more environmentally friendly [4, 12]. The most important forces were by consumers, environmental regulations, and managerial concern [13]. In fact, the majority of hotel employees in some countries such as Sweden and Poland are reported to have serious environmental concern pertaining on how the hotels affect the environment [2]. These countries are already acknowledging the importance of going green. Therefore, it is vital for the hotels in Malaysia to follow in order to meet consumer demand, become more environmentally friendly and stays competitive in the huge industry.

In [14] mentioned that while some hotel guests are interested in green products, in [15] reported that neither domestic nor international guests in Malaysia prefer more environmentally friendly room amenities. The green initiatives such as large soap dispensers instead of personal sized soaps, towel reuse programs and more energy efficient air conditioning alternatives were not preferred by these guests even if they considered themselves to be environmentally conscious people. The result of the study shows that the respondents were more concerned with local culture, food and quality of employees than with the hotels' environmental efforts. The overall study concluded that even if guests are environmentally conscious, they are less environmentally friendly when traveling.

There is contradicting evidence pertaining whether there was a demand for hotels to become a more environmentally concern or not. In addition, there is also a gap in empirical research pertaining what affects consumers' intention to engage in green behavior. The goal of the study was to fill the gap by determining the predictors that influence hotel guests' intention to participate in green activities at the hotel. Then, the market of green consumers can be identified and hotels may make financial decisions associated with going green as well as marketing decisions based on the findings.

Based on the overall purpose of the study in identifying what influences hotel guests' intention to engage in green programs while staying at the hotel (e.g. reuse towel program), one factor had been chosen. After a careful examination of the current body of literature, environmental concern had been identified that was believed to influence intention to engage in green activities. Therefore, the following objective of the study was to examine the relationship between environmental concern and intention to engage in green activities.

As the intention of the study is to identify what influences hotel guests' intention to engage in green programs while staying at the hotel. The qualitative approach through a multi-method interview is considered the most suitable approach as it gives in depth information about issues under investigation. As argued by [5], multi- method interviews provide a unique opportunity to uncover rich and complex information from an individual through face to face interaction. However, it was felt that the use of the method was considered time consuming and needed a large budget. In addition, it would also be difficult for the researcher to interview a large number of respondents face to face throughout the period of study. Based on these constraints, the researcher decided to opt for a descriptive design by using a survey. It consisting of a self-administered questionnaire as the method would also reach many respondents and provide significant meaningful result [1]. This means that the process was to survey the guests who are staying at the hotel.

MATERIALS AND METHOD

The selection of Kuala Lumpur as an area to conduct the study is where Kuala Lumpur is one of the fastest growing locations for hotels, and these selected green hotels are located in Kuala Lumpur. According to [16], Kuala Lumpur is the highest number of incoming supply of hotels and rooms in the country. Thus, it is worth to conduct the study in the area since the results of the study were beneficial for future hoteliers to concentrate on green hotel. Addition to that, they also can offer attention to the predictors that contribute more to intention of guests to participate in green activities as part of marketing strategy.

The target population of the study was the hotel guests' who were staying at green hotels in Kuala Lumpur. There were 4 green hotels in Kuala Lumpur to be included in the study. In determining the sample size for data collection, the estimated total population of hotel guests was determined. In order to obtain the total population, the average occupancy rate for Kuala Lumpur was determined as well as total number of hotel room at the selected hotel.

According to [17], the average occupancy rate for hotels in Kuala Lumpur was 68.6%. After some calculation with a total number of 4 selected green hotel in the area, the total population of respondents for the study was 51304 respondents. Therefore, a table proposed by [18] was used in order to determine sample size and 381 respondents were selected to be included in the study. On the other hand, the decision also was made based on Roscoe's rules of thumb [19]. It indicated that a sample size larger than 30 and less than 500 are appropriate for most research. In line with Roscoe's rule of thumb, 381 total respondents were expected to be collected from the above mentioned hotels.

Environmental Concern

The New Ecological Paradigm (NEP) scale was a commonly used scale that measures environmental concern [20]. The scale was revised to provide more clarity [21]. The revised scale consisted of 5 dimensions such as balance of nature, eco-crisis, antiexemptionalism, limits to growth and antianthropocentrism (human domination). However, in [22] were able to keep Cronbach's alpha above minimum guidelines while condensing the scale from 5 dimensions to 2 which are balance and human domination. Thus, the current research used the abbreviated NEP scale. The items are also used Likert scale which ranging from 1 as strongly disagree to 5 as strongly agree.

RESULTS AND DISCUSSION

The questionnaire used as an instrument to collect the data in the study. About 500 questionnaires were distributed based on the 4 selected green hotels in Kuala Lumpur. Out of 500 questionnaires, researcher managed to obtain 190 who respond. However, only 180 questionnaires that can be used in the study due to in completed questionnaires and unusable answers. This concluded that the final response rate was 47%, which was an acceptable response rate for the study [23].

Reliability Analysis

The Cronbach's alpha coefficient value of all variables in the study revealed a range of coefficient value from 0.81 to 0.86 accordingly. The dependent variable of intention to engage in green activities scale had a high reliability coefficient of 0.86 as compared to the independent variables of environmental concern with 0.81. The values indicate that items from the same dimension have good internal consistency.

Descriptive Statistics and Analysis

The demographic characteristics of gender, marital status, age, highest level of education completed and monthly income level were included in the study in an effort to provide a descriptive profile of the respondents. Out of 180 respondents, more than half (61.1%) of respondents were female while less than 40% (38.9%) reported were male. The results also show that, more than half (52.2%) of the respondents were married and 47.8% of respondents were reported as single. This is in line with the age range of respondents which the highest range comes from age between 31-35 years old. This is probably where at this age, most people married and have a family. Moreover, the results from the survey show that 39.4% of the respondents were age range between 31-35 years old. The least (2.2%) respondents were ranging from 46 and above. From the study, most (37.8%) of the respondents had completed their bachelors degree. The least (0.6%) respondent completed a Phd as their highest education level. Out of 180 respondents, 38.9% were reported to have monthly income level RM3001 to RM4000 which make the most respondents' income level of the average. The least (3.3%) were reported to have monthly income level RM5001 and above.

In this section, some analyses were considered to answer the research objectives by looking at the mean scores rated by the respondents. The main purpose of descriptive analysis was to examine if all continuous variables in the study model were normally distributed. Mean (M) and standard deviation (SD) were used to summarize Likert scale data which relate to the respondents' answers in the analysis. The mean scores were used in order to verify the degree of agreement of the variables. A mean score of 2.99 or below was termed as low, mean scores which ranging from 3.00 to 4.99 was classified as moderate and mean scores of 5.00 and above were termed as high.

Intention to Engage in Green Activities

There were 6 items to predict the guests' intention to participate in green activities. The 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree were given to respondents to rate. The respondents were asked to mark only one point that is considered best represent their thoughts. The mean score reported in this section were displayed in Table 1.

The ranges of mean score for this section were ranging from 2.64 to 3.82. As shown in the Table 1, the lowest rated for intention to participate in green activities were 'I am willing to pay more to stay at a green hotel' (M=2.64, SD=1.23). From the result, it shows that most respondents probably were not willing to pay extra in order to stay at the green hotel. Meanwhile, 'I am willing to stay at a green hotel when travelling' (M=3.82, SD=1.

03) was considered the highest mean score in this section. The respondents as generally were feeling neither willing to stay at the green hotel when travelling and maybe if they were given other options which suit them better, they probably will not go for green.

Table 1: Intention to engage in green activities

Items	N	Mean	Std. Deviation
I am willing to stay at a green hotel when travelling	180	3.82	1.03
I plan to stay at a green hotel when travelling	180	3.49	1.18
I will make an effort to stay at a green hotel when travelling	180	3.13	1.28
It is acceptable to pay a premium to stay at a hotel that engage in green practices	180	3.04	1.17
I am willing to pay more to stay at a green hotel	180	2.64	1.23
Valid N	180		

Environmental Concern

Table 2 shows the environmental concern among the respondents. It can be seen that the range of mean score for this section lies between 3.04 to 4.02. 'Human was meant to rule over the rest of the nature' (M=3.04, SD=1.35) was the lowest mean score while the highest was 'if things continue on their present course, we will soon experience a major ecological catastrophe' (M=4.02, SD= 0.86). It can be said that most respondents were generally neither agree nor disagree with whether human were meant to rule the rest of nature. Generally, they admitted that if the current situation, environmental problem continues, it will produce major ecological problems sooner or later.

Table 2: Environmental concern

Items	N	Mean	Std. Deviation
The balance of nature is very delicate and easily upset	180	3.69	0.92
When humans interfere with nature, it often produces disastrous consequences	180	3.78	0.97
Humans are severely abusing the environment	180	3.69	1.10
The so-called ecological crisis facing humankind has been greatly exaggerated	180	3.56	1.07
If things continue on their present course, we will soon experience a major ecological catastrophe	180	4.02	0.86
Human have the right to modify the natural environment to suit their needs	180	3.18	1.28
Humans were meant to rule over the rest of nature	180	3.04	1.35
Valid N	180		

Pearson Correlation Analysis

In order to ensure those independent variables have at least some relationship with the dependent variable, the correlation must above 0.3. Based on Table 3, it shows the relationship between independent variable (environmental concern) with the dependent variable (intention to participate in green activities) since the value was more than 0.3. Therefore, the environmental concern has a relationship with the intention to participate in green activities and the relationship was positive.

Table 3: Pearson correlation

	Intention to Engage	Environmental Concern
Intention to Participate	0.47	0.46
Environmental Concern	0.48	0.37

On the basis of the research finding, there was a relationship between environmental concern and intention to engage in green activities and the relationship was positive. This is not surprising as previous research which used similar measurement scale indicate that environmental concern became a significant predictor of intention to engage in green activities [24-25] and even in the actual green behavior [26].

The current research gives few implications for hotels which includes effect on hotels' marketing and communication practices. The result implies that if a person aware and real concern about how their actions affect the environment, it will encourage them to choose a green hotel or participate in green initiative while staying at the hotels. The hotel industry could use the finding to educate their guests pertaining the issue and how their actions in the hotel could affect the environment. The hotels' operators might educates their guests regarding on specific measures that they can do at the hotels, and how these measures will affect the rainforests, animals or environment for their children, grandchildren and for the future generation as a whole.

Since the environmental concern is an internal concern, it makes difficult for hotels to increase a guests' environmental concern without overloading them with information. Marketing materials could be developed and distributed to educate the guests about specific result their actions would have. For example, let guests know when they are participating in green initiatives, they are actually saving the better world for the next generation. These materials might increase guests' awareness about the green issue in hotels. It is probably difficult for hotel to raise environmental concern, but at least the guests will be informed the outcomes of their actions.

Another way a hotel could implement the finding by targeting the people who are already has commitment and action in order to save the planet. Thus, the customer base can be built with those groups. This means that a hotel can form alliances with these groups and make them stay at the green hotel. Rationally, these groups will support the alliances by choosing to stay at green hotels and engage in green initiatives during their stay.

CONCLUSION

The objective of the study had been achieved since the environmental concern has a relationship with intention to engage in green activities. According to the previous literature review, even there is no increasing demand for green hotels, it is still beneficial for hotels to being green. Therefore, even guest does not choose hotel based on the hotel's environmental record, there is still a chance for guest to decide to engage in green initiatives at the hotel. Hotels which achieved the status of green hotel may impact the bottom line by appealing to a niche market. The guest who demands for the niche market probably willing to pay premium price to get the product [27]. According to [28], there are certain criteria that need to be concerned when pricing a product within the hospitality industry such as demand, competitors and cost. The potential benefits and costs must be considered before hotels want to become green and change the room pricing structure.

In conclusion, hotel guests' intentions to engage in green activities can be increased if guests have a high level of environmental concern. In addition, the hotel may use the results of the study to customize marketing materials for their properties.

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REFERENCES

1. Hotels.com, 2014. The hotels price index: Review of global hotel prices January-December 2013. Retrieved from http://press.hotels.com/en-gb/files/2014/03/HPI-FY2013-UK_Web.pdf.
2. Bohdanowicz, P., 2005. European Hotelier's Environmental Attitudes: Greening the Business. *Cornell Hotel and Restaurant Administration Quarterly*, 46 (2): 188-204.
3. R. Cavana, Brian L. Delahaye and U.Sekeran, 2001. *Applied business research: Quantitative and qualitative methods*. John Wiley & Sons.
4. Miller, G.A., 2003. Consumerism in Sustainable Tourism: A Survey of UK Consumers. *Journal of Sustainable Tourism*, 11 (1): 17-39.
5. Manaktola, K. and V. Jauhari, 2007. Exploring Consumer Attitude and Behavior Towards Green Practices in the Lodging Industry in India. *International Journal of Contemporary Hospitality Management*, 19 (5): 364-377.
6. Hu, H.H., H.G. Parsa and J. Self, 2010. The Dynamics of Green Restaurant Patronage. *Cornell Hospitality Quarterly*, 51 (3): 344-362.
7. Kasim, A., 2004. Socio-Environmentally Responsible Hotel Business: Do Tourists to Penang Island, Malaysia Care? *Journal of Hospitality & Leisure Marketing*, 11 (4): 5-28.
8. E. Babbie, 2015. *The practice of social research*. Cengage Learning.
9. Don A.Dillman, Jolene D. Smyth and L. Melani, 2010. *Internet, mail, and mixed-mode surveys: The tailored design method*. Wiley & Sons.
10. David M. Stipanuk, 2006. *Hospitality facilities management and design*. American Hotel & Lodging Association.
11. Lynes, J.K. and D. Dredge, 2006. Going Green: Motivations for Environmental Commitment in the Airline Industry. A Case Study of Scandinavian Airlines. *Journal of Sustainable Tourism*, 14 (2): 116-138.
12. Malaysian Association of Hotel Owners, 2007. *Constitution of the Malaysian association of hotel owners*. Retrieved from <http://www.maho.org.my/aboutus/MAHO%20CONSTITUTION.pdf>.
13. Barrows, C.W., 1993. Pricing and Profits: Marketing for Maximization. *Journal of Restaurant & Foodservice Marketing*, 1(1): 75-88.
14. Stipanuk, D.M., 2001. Energy Management in 2001 and Beyond: Operational Options that Reduce Use and Cost. *The Cornell Hotel and Restaurant Administration Quarterly*, 42 (3): 57-70.
15. Czap, N.V. and H.J. Czap, 2010. An Experimental Investigation of Revealed Environmental Concern. *Ecological Economics*, 69 (10): 2033-2041.
16. Foster Jr, S.T., S.E. Sampson and S.C. Dunn, 2000. The Impact of Customer Contact on Environmental Initiatives for Service Firms. *International Journal of Operations & Production Management*, 20 (2): 187-203.

17. Tourism Malaysia, 2008. Malaysia hotel and room supply 2010/2011. Retrieved from http://corporate.tourism.gov.my/images/research/pdf/2011/hotel_roomsupply/HOTEL_ROOMSUPPLY_2010-2011.pdf.
18. Cordano, M., S.A. Welcomer and R.F. Scherer, 2003. An Analysis of the Predictive Validity of the New Ecological Paradigm Scale. *The Journal of Environmental Education*, 34 (3): 22-28.
19. Bohdanowicz, P., 2006. Environmental Awareness and Initiatives in the Swedish and Polish Hotel Industries-Survey Results. *International Journal of Hospitality Management*, 25 (4): 662-682.
20. Claver-Cortes, E., J.F. Molina-Azorin, J. Pereira-Moliner and M.D. Lopez-Gamero,2007. Environmental Strategies and Their Impact on Hotel Performance. *Journal of Sustainable Tourism*, 15(6): 663-679.
21. Dolnicar, S., 2010. Identifying Tourists with Smaller Environmental Footprints. *Journal of Sustainable Tourism*, 18 (6): 717-734.
22. Dunlap, R.E. and K.D.V. Liere, 2008. The" New Environmental Paradigm". *The Journal of Environmental Education*, 40 (1): 19-28.
23. Dunlap, R.E., K.D.V. Liere, A.G. Mertig and R.E. Jones,2000. Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. *Journal of Social Issues*, 56 (3): 425-442.
24. Graci, S.andR. Dodds, 2008. Why Go Green? The Business Case for Environmental Commitment in the Canadian Hotel Industry. *Anatolia*, 19 (2): 251-270.
25. Jackson, A.E., 2010. Hotel guests' intentions to choose green hotels, Master dissertation, University of South Carolina.
26. Krakovsky, M., 2008. Less Wash, More Dry. *Scientific American*, 299 (5): 28-29.
27. Krejcie, R.V.and D.W. Morgan,1970. Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30 (3): 607-610.
28. Torres, E.N. andS. Kline,2006. From Satisfaction to Delight: A Model for the Hotel Industry. *International Journal of Contemporary Hospitality Management*, 18 (4): 290-301.