ISSN (Print): 0974–6846 ISSN (Online): 0974–5645

Hotel Guest's Perception and Choice Dynamics for Green Hotel Attribute: A Mix Method Approach

Vivek Kumar Verma* and Bibhas Chandra

Department of Management Studies, Indian School of Mines, Dhanbad-826004, Jharkhand- India; vivekverma@ms.ism.ac.in, Chandra_bibhas@yahoo.co.in

Abstract

Background/Objectives: The overall purpose of this study is to determine what influences hotel guests' intentions to stay at green hotels and engage in green programs while staying at the hotel. Methods/Statistical analysis: Data were collected from 168 respondents staying in selected Indian hotels using judgmental sampling by employing both qualitative (word association test) and quantitative (questionnaire survey) methods. The analysis was performed by descriptive statistics and multivariate analysis of variance in Statistical data analysis tool (SPSS, Version 20.0). Findings: The results reveal that green attributes such as energy efficient light bulbs in guest rooms, recycle bins in the room as well as hotel lobby, and green certification were perceived favorably. However, some of them like towel reuse program, refillable shampoo dispensers and sheets changed upon request raises some doubt in the consumers mind, were not perceived favorably. Further, a new possible definition of a green hotel is developed to contribute to the present literature. Applications/Improvements: The results will provide hoteliers with an indication about which attributes they could or should encourage in order to attract travelers that are concerned about the environment. As the movement of greening the hotels will continue to grow, the attributes need to be updated cordially.

Keywords: Environmentally Friendly, Green Attributes, Green Hotel, Hotel Selection, Word Association

1. Introduction

There is a growing trend towards preserving our natural reserves by means of sustainability and eco-friendly practices. The hotel industry consumes extensive amounts of fuel, energy, water and other nonrenewable resources. According to Manaktola and Jauhari¹, the environment is the major recipient of negative impact created by the construction and operation of the hotel and their facilities. Negative impacts include the extensive amount of laundry that hotels do, the waste produced, heated swimming pools and robust chemical products used by housekeeping departments². A study by Bohdanowicz³ also agreed that hotels are not only resourced intensive and that waste generation is one of the most visible effects on the environment. The industry has vowed to reduce their impact on the environment by means of greening the hotels. This vow has led to the result that over the past decade green programs have grown from an emerging trend to becoming a vast fixture within the hospitality

industry. As more hotel guests are becoming increasingly concerned regarding the environment and environmentally friendly products1, it is crucial for the lodging industry to explore this concept of green hotels in more detail. Robinot and Giannelloni 4 stated that greening services and operations are becoming more widely embraced and environmentally friendly attributes now considered to be a basic measure of a hotels services. Hotels that willingly provide ecofriendly attributes are oftentimes referred to as either green hotels or environmentally friendly hotels. Several hotels may have many environmental attributes in place, while many other hotels may have just a few. The question then arises which hotel is truly a green, or environmentally friendly hotel? It is important for hotel managers to understand the needs and wants of their guests before producing the product and services because merely going green is not enough⁵ and what specific factors they look for when selecting a hotel⁶. Hotel selection, with a heavy emphasis on attributes of hotel and guest rooms, is a prominent research

^{*}Author for correspondence

topic in the tourism literature⁷. Although travelers today have many hotel choices to select hotels such as location within walking distance of one another or personal service and/or amenities. A significant amount of literature has been published on hotel attributes, however, less importance has been given to particular ecofriendly attributes the hotel guest might prefer. While some hotel guests are interested in green products¹, Kasim⁸ reported that neither domestic nor international tourists in Malaysia prefer more environmentally friendly room amenities. Large soap dispensers instead of personal sized soaps, towel reuse programs, and more energy efficient air conditioning alternatives were not preferred by these tourists even if the tourists considered themselves to be environmentally conscious people. As a result, it is quite unclear what specific attributes the hotel guest might choose. The purpose of this exploratory study is twofold in nature. Primarily, by using qualitative research methods, the researchers will effort to explore the understanding of a green hotel. The secondary purpose addresses the scarcity of research about what specific attributes a guest might prefer by recognizing a list of environmentally friendly attributes in the guest room of an environmentally friendly hotel. This research will be helpful to those hotel marketers that wish to attract new travelers, or hit into a niche market, i.e. the green consumer. The results will provide hoteliers with an indication about which attributes they could or should encourage in order to attract travelers that are concerned about the environment. Hotels will be able to use the research to create more effective marketing tools regarding their green practices. Hoteliers will not only expand the demographics of these prospective guests but also which specific environmentally friendly hotel attributes they care about. Although the overall purpose of this study is to determine what influences hotel guests' intentions to stay at green hotels and engage in green programs while staying at the hotel (ex. towel reuse programs). The collected data were of two different kinds viz. closed-ended responses and open-ended responses. Analysis of both kinds of responses has been presented separately. Finally, findings have been discussed and conclusions were drawn with the future direction of research and its social implications.

2. Theoretical Background

2.1 Hotel Selection

Hotel selection and attributes that are imperative to travelers have been extensively researched using a variety of methods9. A hotel room can be viewed by consumers as a combination of various attributes¹⁰, and consumers make decisions amongst various hotel attributes before deciding their final selection¹¹.According to the study by (Miller¹²), 78 percent of the respondents reported that they either "always" or "occasionally" search for natural information when choosing a destination. Weaver and Oh13 found in their study on a sample of 433 American business travelers that convenience, good reputation, friendly staff, cleanliness and safety and security facilities were the most preferred factors in hotel selection. A study conducted by Griffen et al. 14 to explore the differences between business hotel guests staying at luxury and mid-priced hotels and found price to be the most important discriminator in selection. Dube and Renaghan¹⁵ found the top five hotel selection criteria in a business trip setting as location, brand name and reputation, physical property, value for money and guestroom design, while the top five attributes creating value during the stay were identified as guest-room design, physical property, interpersonal service, functional services, and food & beverage related services. A meta-analysis of hotel attributes after reviewing 21 studies by Dolnicar and Otter¹⁶ confirmed, cleanliness as the top priority, followed by hotel location. However, none of those attributes were related to environmental attributes of a hotel. Lockyer⁷ conducted a study to investigate the factors that influence the selection of hotel accommodation by guests. The focus group conversation identified four main areas that affect the selection of hotel, are location, price, facilities and cleanliness and found that price was the most important factor in accommodation selection According to study by Lewis¹⁷, the top choice-determining factors of business travelers were cleanliness, location, price, food quality and level of service.

According to the study on tourists to Penang Island, Malaysia, Kasim⁸ found that tourists were found knowledgeable and cared about the environment but they did not consider a hotel's environmental strategy as a foundation for their hotel choice. Travelers were keen to accept rooms with water and energy saving features, recycling bins, fire-safety features, and information on local ecotourism places8. Rivers et al.18 revealed that a hotel's location is a crucial factor which strongly affects a tourist's hotel choice decision. A study conducted by Miller and Baloglu¹⁹ found that recycle bins in guest rooms energy saving lighting green certification were well accepted by guests but attributes such as refillable soap and shampoo dispenser were not received favorably. In the Mexican study, Berezan et al.20 found that sustainable practices such as energy saving light bulb, purchasing from the local market, distributor, and green supply chain had significant positive impact on overall satisfaction. In addition hotel guest's intention to return to a hotel was imparted by only three variables: light bulbs, recycle, and dispenser. Results also show that relative importance of green practices was perceived differently between nationalities. This suggests that energy saving light bulbs, occupancy sensors, keycard, and water saving devices in public spaces, dispenser, and towel reuse policy were perceived differently by Mexicans compared to Americans and other nationalities. A study by Baruca and Civre²¹ on 1520 hotel guests in 10 different hotels to investigate different factors which represents the reasons for consumer decision making in hotel selection and segmentation of hotel guests based on hotel attributes found that typical attributes such as recommendations and personal experiences and location were most important in the decision making process in hotel selection. The hospitality industry has adapted programs such as recycling waste and water, towel re-use programs, linen exchange programs, ecofriendly bathroom amenities especially toiletries, energy-efficient lighting, and Green Accreditations in a direction to run more sustainably²². Travellers often refer online hotel review sites before making their hotel purchases²³.

2.2 Green Hotel Practices

Hotels that are nature concerned and environmental friendly by saving the energy, water, and other materials in a way that cause no harm to the environment and society in future. Green hotels frequently called ecofriendly hotels, Eco lodges, or environmentally friendly hotels, are defined by very different means. Green hotels are "environmentally-friendly properties whose managers are eager to institute programs that save water, energy and reduce waste while saving money to help protect our environment²⁴. A hotel can reduce its negative impact on the environment which also make it difficult to specifically define a green hotel. A green hotel can be defined as the hotel that operates in a responsible way towards society, community, the local culture, and the surrounding environment. According to Watkins²⁵, green hotels are those that show concern for the environment. One hotel may have very established linen re-use programs and waste management systems while another has also taken widespread steps to reduce energy consumption by installing various energy saving appliance in lobby and hotel rooms. Anyone can be confused while choosing between hotels

that which one is eco- friendly. To avoid confusion various, certification programs have developed levels of greenness (e.g. Green Globe and Ecotel). A hotel that only participates in waste management practices may be considered to be at the very basic level while those hotels having more broad measures would be at higher levels. While the issue of environmental protection in continuously rising, now consumers expectation is more than just linen and towel reuse programs but not limited to energy conservation practices, efficient waste management, and water conservation activities^{26,27} and also they want hotels to be more socio-environmentally accountable. Although there are a lot of practices followed by hotels to decrease the impact on the environment, it is essential which practices or attribute is important for consumers to stay in a green hotel.

3. Methodology

Based on studies commenced in the past as well as our thoughtful consideration of the subject, a structured online questionnaire was developed for gathering data from the respondents. Data was collected from 200 hotel guests conveniently from 4 star and 5 star hotels located in Varanasi, Uttar Pradesh, India. Recently Varanasi has been included in Kyoto cooperated smart city program that will help preserve environment with the use of cutting edge technology provide the motive for this study. The online self-administered survey incorporated a blend of qualitative and quantitative questions over three sections. The first section of the survey included demographic questions such as gender, age, education level (doctorate, professional degree, graduate degree and postgraduate), occupation status (full time working, employed, unemployed, students and others) and monthly income. The second section includes two open-ended questions, first being, "write three words come to your mind when you think of green or ecofriendly hotel". Since a hotel can decrease its negative effect on the environment in many ways which also make it difficult to specifically define a green hotel. Open-ended questions in this section are used that allowed the respondents to think free about their answers as opposed to having them agree or differ with previous definitions for future environmental issues. Second open-ended question being "How many nights they stayed (approximately) in hotel, motel, resorts etc.", in the year 2014. The third section of the survey asked respondents to rate the importance using a five-point scale (1 = strongly disagree, 5 = strongly agree) to know the inclination towards ecofriendly attributes in a hotel room. The questionnaire was adopted from the study of Gustin and Weaver², Miller & Baloglu¹⁹, with minor modification on the wording.

3.1 Data Analysis

Analysis of both open ended questions "write three words come to your mind when thinking of green or ecofriendly hotel "and "How many nights they stayed (approximately) in hotel, motel, resorts etc.", began with compiling a list of all the responses elicited by participants. After completion of the list, the same words or similar words were merged together. For example, in assessing the responses to the green hotel question, the word sustainable was merged with environmentally friendly, green, and Eco-Friendly. From this combined list, the researchers were able to count the frequency easily for each word elicited. Statistical data analysis tool (SPSS, Version 20.0) was used for all quantitative data analysis. Moreover, means and frequencies for all green hotel room attribute with demographic statistics were also compared. Variances in preferences were examined on the basis of gender, age, education, and nights spent in hotels (approximately). Multivariate Analysis of Variance (MANOVA) was used as it is a tool used to examine the differences between group means. The group means are then compared to one another as they relate to the dependent variable. The dependent variables are the 10 green attributes (Use of Energy Saving Light Bulbs in the room, Refillable Shampoo Dispensers instead of individual bottles, on request sheets changed (for stays up to three nights), towel Re-Use program, Recycling Bins in the guest room, Occupancy Sensors to control lighting in the room, Key Cards that turn power to the room on and off, green certification, organic food on the menu, conventional energy sources for overall lighting in hotel or rooms). The independent variables having qualitative nature were Age, Gender, Education, and "Number of Nights spent approximately in a hotels, motels, resorts etc., in last one year.

3.2 Results

In total, 168 complete surveys were collected from the respondents. Maximum no of the respondents were male (64.3%) with many of the participants between the ages of 15-24 (7.7%), 25-44 (52.9%), 45-64(35.1%), or >65 (4.3%). Most all of the contributors had some sort of college education, as 15.5% stated graduation degree, 39.9%master's degree while 29.2% having a professional degree and 15.5% said they are Doctorate. A majority of

respondents (54%) indicated that they had spent between more than 15 nights and among them 22.6 % have stayed more than eleven nights in a hotel in 2014 (ref. Table 1). The variety of occupations has been reported. Most of the respondents were involved with business/hotel industry other occupations stated by hotel guests were software industry professional, professors, real estate, consultant, aviation industry, project manager and event managers.

3.2.1 Open-Ended Responses

A variety of responses were provided by participants in response to the question "what three words come to mind when you think of a green hotel". Local purchasing, ecofriendly certification, and recycling were some words that elicited from the mind of some participants. Energy efficient was, however, most often cited (43). Environmental/ecofriendly friendly was mentioned 28

Table 1. Respondents Demographics

Respondents	Frequency	Percentage (%)		
Demographics				
Age	13	7.7		
15-24 years old	89	53.0		
25-44 years old	59	35.1		
45-64 years old	7	4.2		
Greater than 64 years old Total	168	100.0		
Gender	108	64.3		
Male	60	35.7		
Female	168	100.0		
Total				
Educational Level	24	14.3		
Bachelor's Degree(67	39.9		
Graduation)	51	30.4		
Master's degree (post-	26	15.4		
graduation)	168	100.0		
Professional degree/				
diploma				
Doctorate degree				
Total				
Nights Spent in Hotels	16	9.5		
1-5 nights	26	15.5		
6-10 nights	38	22.6		
11-15 nights	88	52.4		
Greater than 15 nights	168	100.0		
Total				
Willingness to pay	50	29.8		
More	118	70.2		
Less	168	100.0		
Total				

times while recycling was mentioned (32) times. Other frequent words were waste recycling (27), Global warming (13), Cleanliness and hygiene (23), sustainable practices, water saving (25), conservation (26), green building (14), biodegradable (18), and pollution controlled (13). Not all respondents view positively towards green hotels, though. The word Expensive/Costly came to mind on more than one instance (21). Few of them claimed as Difficult to impose (12), false advertising (9) and other negative words included plain, lost luxury (6) and Unpleasant (8). Although the primary concern related to energy and water, the cost of energy alone was stated 26 times, in addition to climate change, global warming, and air quality, all combined 21 times.

3.3 Green Hotel Attributes

Energy efficient light bulbs in the guest room received the highest mean among the attributes selected (M= 4.34). This preference was followed closely by Green certifications (4.30) and recycle bins in the guest rooms (M = 4.27). While recycle bins in the hotel lobby received the mean score of (M=4.20), the refillable shampoo dispenser received the lowest mean score (M=3.14) followed by sheet changed upon request (3.89) and towel reuse program (M=3.37) closely. Table 2 shows the means and standard deviations for each attribute.

Table 2. Means and Standard Deviation for Each Green Room Attributes

Green Attributes	Mean Score	Std. Deviation
Energy Efficient Light Bulbs in Guest Rooms	4.34	.915
Green Certifications	4.30	1.000
Recycle Bins in the Guest Rooms	4.27	.800
Recycle Bins in Hotel Lobby	4.20	.887
Use of Non-conventional Energy Sources in Hotel	4.05	1.037
Waste recycling policy	4.01	1.044
Sheet Changed Upon Request	3.89	1.056
Organic Food on the Menu	3.70	1.043
Towel Reuse Program	3.37	1.339
Refillable Shampoo Dispensers	3.14	1.297

While energy efficient light bulbs received highest mean score, green certification of hotel received the most strongly agree responses (57%).recycle bins in the guest rooms and hotel lobby were also received well with 43.5% and 47.6% strongly agree responses respectively. comparatively based on the number of strongly agree and disagree responses, the two least popular green attributes were refillable shampoo dispensers (16.7%) and organic food in the menu (22%). Additionally, Table 2 presents the standard deviation for each attribute, based on mean scores from most preferred to least preferred. Table 3 exhibits for the distribution of responses, from strongly disagree to strongly agree across all green attributes.

3.4. MANOVA

Bartlett's test of sphericity ($\chi 2$ =420.6 with 55 d.f., p < .0001) showed that green hotel attributes and age are correlated with each other and, therefore, MANOVA is a suitable tool for data analysis. The overall MANOVA tests of Pillai's, Hotelling's T², and Wilks' Lambda were all significant (p < .0001). Additionally, from Bartlett's test of sphericity, green hotel attributes were found significantly correlated with Education and gender ($\chi 2$ =443.2 and $\chi 2$ =458.2, p < .0001, d.f., = 55), therefore asserting MANOVA is an appropriate tool for data analysis. All the tests (Pillai's, Hotelling's T², and Wilks' Lambda) were also significant for each independent variable (p < .0001). Post hoc tests for comparison whether variances are equal or not equal across groups were run either using Tamhane or Scheffe²8.

From the 10 green hotel attributes, the male's mean value for 8 of them was greater than the female's mean values. Males believed that all hotel rooms should have energy-efficient Light Bulbs (M=4.44) and recycle bins in the hotel lobby and in guest rooms (M=4.42 and M=4.31 respectively) while females were not so agreeable (M=4.17, 3.77 and 4.20, respectively). Women believed bathrooms should have refillable Shampoo Dispensers and "Sheets Changed upon request" only more than men. See Table 4 for detailed evaluations of the means and standard deviations based on gender.

4. DISCUSSIONS

In general, all hotels agreed that the majority of hotel guests perceive it as a necessity that a hotel contributes in environmental protection programs such as energy con-

Table 3. Frequencies for Each Green Room Attributes

		ongly ogree	Disa	igree	Net	ıtral	Ag	ree		ngly
Green Attribute(s)	#	%	#	%	#	%	#	%	#	%
Towel Reuse Program	17	10.1	39	23.2	16	9.5	56	33.3	40	23.8
Energy Efficient Light Bulbs In Guestrooms	0	0	2	1.2	27	16.1	51	30.4	88	55.4
Refillable Shampoo Dispensers In Bathrooms	18	10.7	46	27.4	26	15.5	50	29.8	28	16.7
Recycle Bins In Hotel Lobby	3	1.8	2	1.2	33	19.6	50	29.8	80	47.6
Sheets Changed Upon Request	2	1.2	24	14.3	19	11.3	68	40.3	55	32.7
Recycle Bins In Guest Rooms	2	1.2	3	1.8	16	9.5	74	44.0	73	43.5
Green Certifications	2	1.2	10	6.0	20	11.9	40	23.8	96	57.1
Organic Food On The Menu	8	4.8	12	7.1	40	23.8	71	42.3	37	22.0
Waste Recycling Policy	8	4.8	3	1.8	33	19.6	59	35.1	65	38.7
Non- Conventional Energy Sources	7	4.2	6	3.6	26	15.5	62	36.9	67	39.9

[#] Frequency,

Table 4. Based On Gender the Means Scores and Standard Deviations for Environmental Attributes

Environmental	Female		Male			
Attribute	Mean	Standard	Mean	Standard		
		Deviation		Deviation		
Towel Reuse Program	3.32	1.321	3.41	1.354		
Energy Efficient Light Bulbs in Guestrooms	4.17	.827	4.44	.752		
Refillable Shampoo Dispenser in bathroom	3.30	.997	3.06	1.420		
Recycle Bin in Hotel Lobby	3.77	.851	4.42	.868		
Sheets Changed Upon Request	3.98	.911	3.84	1.129		
Recycle Bins in Guest Rooms	4.20	.684	4.31	.859		
Green Certifications	3.85	.971	4.55	.890		
Organic Food on the Menu	3.42	.907	3.85	1.084		
Waste Recycling Policy	3.77	1.047	4.15	1.021		
Non- conventional Energy sources	3.75	1.230	4.21	.876		

servation and recycling to minimize the impact of resource consumption. As the prime concern of this study was to identify a list of green hotel attributes that customers would prefer to have in their room while staying in hotels. All the green hotel attributes were found to be favorable in this study and none of the attributes mean score was found smaller than neutral (neither agree nor disagree). Obviously from the result, it can be said that consumers' have a high interest in green hotel practices and this finding is supported by the study of Tierney et al.29. The attributes which are well received by the consumers were energy efficient light bulbs in guest rooms, recycle bins in the hotel room as well as a hotel lobby, green certifications and the use of non-conventional energy sources. This drives hotel developers to think that hotel guests will prefer these attributes favorably in their hotel or hotel rooms during their stay. None of the attributes should be integrated or implemented all at once, hotel operators or designers should first implement the most visible and preferable attribute to the consumer (i.e., in this case first start with changing the light bulbs to efficient ones). Only after other important practices are implemented.

Although not all attributes were received favorably. The attributes that raise some doubts in the minds of consumers were refillable shampoo dispensers in bathrooms,

[%] percentage

organic food in the menu, towel reuse program, and sheets changed upon request. Unfavorableness of refillable shampoo dispensers also coincided with kasim8 and miller¹¹. Hotel guests have a tendency to equate refillable shampoo dispenser with it may not be clean and hygienic or they are unaware of what is in the dispenser. Also, from the hotel managers and developers perspective they found it difficult to be visually attractive. Because of these apprehensions together cause that there are not many dispensers are in the hotel rooms. Hoteliers must advertise the advantage of using refillable shampoo containers or dispensers and educate them about the detrimental effects of using multiple bottles of shampoo on the atmosphere. By providing this education, hotel consumers can become potential and smart buyers of the green hotel product and services. In total, the participants (25-44 years of age group) of the survey appeared to be more inclined in favor of green hotel or hotel room attributes than the matured one respondents (45 years old and older). The main reason of this favorableness of young consumers is that environment has become a very important issue today, whereas, in past, the impact on the environment have not gained so much attention. The environmental concern is becoming deep-rooted in the young consumers as they may be more worried about their future. This creates both prospect and a challenge for hotel operators. The opportunity, because younger generations appear to be more interested in green hotel room attributes resulting as a potential target market for hotel designer and developers seeking to environmentally concern guests segment. On the contrary, travelers above 45 years, includes the very beginning of baby booming population, predicted to be a major travel population as they retire. The major challenge for hoteliers will be how to inform these imminent prospective tourists about, and make them understand and to accept green hotel room attributes. As the majority of hotel customers were from business and working class stayed more than 15 nights (52 %) from which 32 % considers that they want green practices in their rooms while travelling. Indian hotel consumer's perception pertaining to inconvenience such as high cost and lost in luxury have a significant impact on their willingness to pay for the green practices, as only 29.8 % guest were willing to pay for the same. However, hotel guests positive perceptions towards green practices do not necessarily drive their willingness to pay for a hotel's green practices³⁰. This study also found that the most educated people will more incline towards green practices in hotels. The hotel consumers elicited a

variety of answers (positive to negative) about the three words that first came to their mind when presented the word "green hotel". After several unsuccessful efforts to integrate all of the words into a definition of a green hotel, the researchers decided to label "green hotel" using maximum number of the quoted words by respondents:

"A green hotel is a green certified, environmentally focused operation that incorporates and endorses energy efficient practices, conserve energy and water, and recycling activities, simultaneously providing hotel guests with an ecological, clean, pollution free and healthy product or service."

The above-identified practices can be implemented easily to hotels providing different levels of green hotel attributes. The given definition also provides the importance of environmental education. It is not only important for the hoteliers to implement these practices but also to endorse and informs the guest about these practices to involve them. The major concern for the hotel consumers in India was energy conservation followed by water saving features and recycling. As the continuously rising demand for the energy, with the growth of industries and population all over the world, the cost of energy and water will also be an issue. When there is a discrepancy between the demand and supply for the energy and fuel, hotel developers or marketers may not be able to operate efficiently. So this provides an opportunity for them to decrease the energy usage, and to use the alternate sources of power. Results show that most of the hotel consumers are aware of green hotel certification for environmental protection but it is unclear that whether they consider it as a choice criteria in a hotel stay. Currently, there are many certifications available for hotels such as LEED, ECOTEL, GREEN GLOBE, and ISO14000 etc... As soon as hotels will implement these green practices into their environmental strategy, the better they can position to gain a competitive advantage in future.

Conclusions/Future Research/ Limitations

The overall purpose of this study is to determine what influences hotel guests' intentions to stay at green hotels and engage in green programs while staying at the hotel (ex. towel reuse programs). The results of this study provide a list of green practices which will help hotel marketers and developers to develop specific marketing campaigns that drive towards their green consumers. Additionally by understanding the environmental attributes, hotel marketers and designers will have a new description of green hotel and again they can use this to their benefits by tapping into the niche market, i.e. the younger consumers. This study will also provide the picture of issues especially environmental concern that will face by hotel managers in near future.

Due to the scarcity of the green hotel attribute research, this study allows researchers to develop future projects related to environmental or green hotel attributes. A future study could investigate the environmental attributes role in the selection of hotels to stay by potential consumers. The segmentation on the basis of environmental concern could possibly be done in future which provides hoteliers a direction to better serve their customers demands. Also, hotel guests in the study were not very open to sheets changed upon requests or refillable shampoo dispensers. Further research that enquires into the reason may help hoteliers to come up with alternatives that will be acceptable to guests. Finally, the list developed is to be validated by incorporating into other studies investigating different populations, such as leisure, business, or travelers. As the movement of greening the hotels will continue to grow, the attributes need to be updated cordially.

Many of the respondents of this study were architect and designers working for hospitality industry therefore they may have the knowledge of the green attributes and that in turn affect the level of agreement with the attributes in the study. To increase the positive impact on the environment, policies and strategies must be motivated enough for companies which sincerely adopt green practices³¹. This study comprises a small sample size therefore, the results cannot be applicable to general travelling population besides providing landmarks for further research. Another weakness of this research is the lack of control over the participants desire to answer unbiased. The respondent's tendency to attain socially desirable status may have a strong influence on the responses of questionnaire³².

6. References

- Manaktola K, Jauhari V. Exploring consumer attitude and behavior towards green practices in the lodging industry in India. International Journal of Contemporary Hospitality Management. 2007; 19(5):364–77.
- Gustin ME, Weaver P. Are hotels prepared for the environmental consumer? Journal of Hospitality and Tourism Research. 1996; 20(2):1–14.

- 3. Bohdanowicz P. Environmental awareness and initiatives in the Swedish and Polish hotel industries-survey results. International Journal of Hospitality Management. 2006; 25(4):662–82.
- 4. Robinot E, Giannelloni J-L. Do hotels' "green" attributes contribute to customer satisfaction? Journal of Services Marketing. 2010; 24(2):157–69.
- Leena NF, Jaykumar V, Isaac SS. Assessing CRM practices in hotel industry: a look at the progress and prospects. Indian Journal of Science and Technology. 2015; 8(S6):82–90.
- 6. Lockyer T. Business guests' accommodation selection: the view from both sides. International Journal of Contemporary Hospitality Management. 2002, 14(6):294–300.
- 7. Lockyer T. The perceived importance of price as one hotel selection dimension. Tourism Management. 2005; 26(4):529–37.
- 8. Kasim A. Socio-environmentally responsible hotel business: do tourists to Penang Island, Malaysia Care? Journal of Hospitality Leisure Marketing. 2004; 11(4):5–28.
- 9. Dolnicar S. Business travelers' hotel expectations and disappointments: A different perspective to hotel attribute importance investigation. Asia Pacific Journal of Tourism Research. 200; 7(1):29–35.
- Jannach D, Gedikli F, Karakaya Z, Juwig O. Recommending hotels based on multi-dimensional customer ratings. Proceedings of the International Conference in Helsingborg, Sweden; 2012. p. 320–31.
- 11. Goldberg SM, Green PE, Wind Y. Conjoint analysis of price premiums for hotel amenities. Journal of Business. 1984; 57(1):111–32.
- 12. Miller GA. Consumerism in sustainable tourism: A survey of UK consumers. Journal of Sustainable Tourism. 2003; 11(1):17–39.
- 13. Weaver PA, Oh HC. Do american business travellers have different hotel service requirements? International Journal of Contemporary Hospitality Management. 1993; 5(3):16–21.
- 14. Griffin RK, Shea L, Weaver P. How business travelers discriminate between mid- priced and luxury hotels: an analysis using a longitudinal sample. Journal of Hospitality and Leisure Marketing. 1996; 4(2):63–75.
- 15. Dube L, Renaghan LM. Creating visible customer value: how customers view best-practice champions. Cornell Hotel Restaurant Administration Quarterly. 2000; 41(1):62–72.
- 16. Dolnicar S, Otter T. Which hotel attributes matter? A review of previous and a framework for future research. Proceedings of 9th Annual Conference of Asia Pacific Tour Association; 2003. p. 176–88.
- 17. Lewis C. Isolating differences in hotel attributes. Cornell Hotel and Restaurant Administration Quarterly.1984; 25(3):64–77.

- 18. Rivers MJ, Toh RS, Alaoui M. Frequent-stayer programs: the demographic, behavioral, and attitudinal characteristics of hotel steady sleepers. Journal of Travel Research. 1991; 30(2):41–5.
- 19. Millar M, Baloglu S. Hotel guests' preferences for green guest room attributes. Cornell Hospitality Quarterly. 2011; 52(3):302–11.
- 20. Berezan O, Raab C, Yoo M, Love C. Sustainable hotel practices and nationality: The impact on guest satisfaction and guest intention to return. International Journal of Hospitality Management. 2013; 34(Sep. 2013):227–33.
- 21. Baruca PZ, Civre Z. How do guests choose a hotel? Academica Turistica. 2012; 5(1):75–84.
- 22. Lee S, Heo CY. Corporate social responsibility and customer satisfaction among US publicly traded hotels and restaurants. International Journal of Hospitality Management. 2009; 28(4):635–37.
- 23. Kim AKJ, Airey DW, Szivas E. The multiple assessment of interpretation effectiveness: Promoting visitors' environmental attitudes and behavior. Journal of Travel Research. 2011; 50(3):321–34.
- 24. Green hotel association. 2007. Available from: http://www.greenhotels.com/index.php#a. [Cited 18 JUL 2015].

- 25. Watkins, E. Do Guests Want Green Hotels? Lodging Hospitality. 1994; 50(40):70–2.
- 26. Heisterkamp M. Guests expect more from green programs. hotel & motel management: green focus. 2009. Available from: http://www.HotelWorldNetwork.com/heisterkamp. [Cited 2015 JUL 15].
- 27. Wolff C. Second nature. Lodging Hospitality. 2008. Available from: http://www.lhonline.com. [Cited 18 JUL 2015].
- 28. Hair J, Black WC, Anderson RE, Bablin BJ. Multivariate data analysis. Pearson Education: New Jersey; 2006.
- 29. Tierney P, Hunt M. Do travelers support green practices and sustainable development. Journal of Tourism Insights. 2011;2(2):1–16.
- 30. Kang KH, Stein L, Heo CYH, Lee S. Views on environmentalism and consumers' willingness to pay for environmental sustainability in the hotel industry. International Journal of Hospitality Management. 2012; 31(2):564–72.
- 31. Dhanda U, Gupta S. Exploring the Go Green Mantra in India. Indian Journal of Science and Technology. 2015; 8(S4):247–58.
- 32. Ones DS, Viswesvaran C, Reiss AD. Role of social desirability in personality testing for personnel selection: The red herring. Journal of Applied Psychology. 1996; 81(6):660–79.