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## Perception of Green Hotels in the 21st Century

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## **Introduction**

Over the years, the focus on environmentally responsible behavior has grown dramatically from hardly being talked about to being a major concern for the travel and tourism industry (Gustin and Weaver, 1996). According to Vora (2007), 43 million U.S. travelers have indicated their worries for the environment. Practices such as saving water, saving energy, and reducing solid waste were three of the most common things green hotels were doing to help the environment. But, even more important than water usage and reducing paper waste were changes like eco-cuisine, energy efficient lighting, installing hinge activated lighting, and using electronics such as email and electronic check-in versus using paper (Wolff, 2008). These efforts had been continuously growing over the past few decades. Since 'green hotel' is a relatively new concept, it is interesting to explore the perception and attitude of consumers toward green hotel/resort concepts in the twenty-first century.

## **Literature Review**

### ***Green Hotel Practices***

Consumers no longer accept just linen and towel reuse programs as being enough green practices in the green hotel concept. It was found that consumers expected more from green hotels and required their practices to be even more socio-environmentally responsible. They wanted such things as energy efficiency, a proper waste division, procurement, and water conservation (Heisterkamp, 2009; Wolff, 2008). When Jan Gerston researched hotel water usage around College Station, Texas, she found that as much as 30 gallons of water per hotel room per day could be saved by foregoing fresh towels and bed linens (Gerston, 2002). According to Gerston (2002), replacing all toilets in public areas with ultra-low flush toilets would show a payback in 2.1 years and save 180,000 gallons of water per year. At another hotel, it was found that the installation of a \$200 solenoid valve on a 400-pound ice machine would render an annual water savings of 1.9 million gallons per year (Gerston, 2002). All of these changes combined would save billions of gallons of water each day if implemented in all hotels and motels in the hospitality industry.

While the green building was a fairly new concept to the hospitality industry, it had become a goal for many hoteliers and others in charge of building hotels. As local governments led the way toward Leadership in Energy Environmental Design (LEED) certification, many hotel properties and corporate offices strove for their own LEED certification for both personal and economic reasons (Heisterkamp, 2009). Many of the bigger cities had a growing mass of hotels competing for the LEED certifications so they would be considered a green hotel and had informed customers that these hotels weren't just saying it anymore, they meant business (Heisterkamp, 2009).

Another phenomenon about the green hotel concepts in Scotland is the belief that environmental action was not only the responsible thing to do, but it was also "the right thing to do" from both an individual and a business perspective (Tzschentke, et al., 2004). It seemed to some investors that becoming a "green" hotel was more of a cultural change that needed to be embedded in the culture of the hotel (Wolff, 2008). According to Tzschentke, et al. (2004), one

of the reasons behind the adoption of sustainable measures appeared to be ethics. By hotels using energy efficient light bulbs; low flow shower heads, faucets, and toilets; and asking customers to reuse linens and/or towels, they were saving energy, water, and money while slowing the destruction of the earth's resources and perhaps extending the time in which to find better alternatives.

### ***Consumer Cost or Reward for Using Green Hotels***

According to Jauhari and Manaktola (2007), consumers' attitudes and behaviors toward who should pay for these "green" changes in the hotel industry vary from one consumer to another. A study found that, "11 percent were willing to pay 25 percent of the costs, 40 percent felt hotels should pay 50 to 100 percent of the costs, and 40 percent felt that they could pay 4 to 6 percent more while staying at green hotels" (Jauhari and Manaktola, 2007). Research in the U.S. indicated that customers were not willing to pay extra to fund green policies (Kirk, 1995). According to Yesawich (2008), 8 out of 10 Americans claimed to be green by turning off lights and composting. Yesawich (2008) also stated that 4 out of 10 leisure travelers would pick an environmentally friendly hotel over one that was not. However, it seemed that only half were willing to pay more to the environmentally friendly hotel as compared to its non-green competitors. This reluctance to pay more led Yesawich to believe that the consumers only followed through with green practices because they felt it was more of an obligation besides being important for the environment (Yesawich, 2008).

There has also been some discussion as to whether or not consumers should be rewarded for using a green hotel over a normal hotel by providing benefits such as hotel reward points and discounts. A study in Scotland found that "71 percent of the respondents felt that they should be awarded more frequent guest reward points. These consumers expected rewards for patronizing "green" hotels (Tzschentke, Kirk and Lynch, 2004). With regard to this study, it was clear that the consumers in Scotland wanted something in return for their good deed of using a "green" hotel. However, it would be interesting to see if the feeling was the same with consumers in the United States. Thus, this study intends to explore consumers' perception on rewards for using green hotels.

Based on the above literature review, the perceptions of consumers in regard to green concepts varied from one part of the world to another. Hence, the main purpose of this study was to conduct a pilot study to investigate consumers' perceptions of "green" hotels in the United States. The objectives of this study included the following:

1. Explore consumers' perceptions of the actions taken by hotels to be considered green hotels.
2. Examine what consumers were willing to endure to patronize green hotels.

## **Methodology**

### ***Population and Sample***

The target population for this study was consumers in the Midwestern part of the United States due to time and financial constraint. Similarly, the sample selection for this study was a convenient sample due to time and financial constraint. Hence, the questionnaire was directly administered and collected.

### ***Instrument***

The instrument used in this study was adapted from review of literature. The questions were developed by the researcher and tested for reliability. A pilot study was used to establish the reliability of the instrument. The pilot study was conducted on hospitality students who are either junior, senior or graduate students. The common measure of reliability was the Cronbach's alpha and the usual criterion was a Cronbach's alpha coefficient of .70 (Harris and Ogbonna, 2001). A Cronbach's alpha of .93 was found for the study, indicating that the instrument was reliable with a high degree of internal consistency (Harris and Ogbonna; Hsu, et al., 2003). The instrument was made up of five parts: Part I was used to measure the importance of water conservation concepts at green hotels to consumers (this measurement was reliable with a Cronbach's alpha of 0.83); Part II was used to measure the importance of energy conservation concepts at green hotels to consumers (this measurement was reliable with a Cronbach's alpha of 0.81); Part III was used to measure the importance of waste reduction (this measurement was reliable with a Cronbach's alpha of 0.84); Part IV was used to measure consumers' attitudes and behaviors toward practicing the green hotel concepts (this measurement was reliable with a Cronbach's alpha of 0.84); and, Part V was used to collect consumers' demographic data.

Respondents were presented with 17 statements on the importance of water conservation, energy conservation and waste reduction and were asked to indicate the level of importance of each of the statements to them as consumers on a 1-5 scale, with 1 = Not Important, 2 = Rarely Important, 3 = Somewhat Important, 4 = Important and 5 = Very Important. Consumers' attitudes and behavior towards practicing the green hotel concepts was measured with 12 statements. Respondents were asked to indicate their agreement or disagreement with each of the statements on a 1-5 scale, with 1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Agree, 4 = Agree and 5 = Strongly Agree. The last part of the questionnaire is demographic questions such as age, gender, location, number of room nights at hotels per year, who should pay for the cost of going green and how much are they willing to pay per room for green hotel room as compared to non-green hotel room.

### ***Data Collection and Analysis***

Data was collected from a convenience sample participants in Texas and Arkansas States during spring break with the help of research assistants/mentees. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 17.0 for Windows, a product of SPSS, Inc. Descriptive statistics (e.g., mean) were used to analyze (1) the importance of the green hotel concepts to consumers, (2) explore what consumers were willing to endure to patronize green hotels, and (3) explore green practices (conservation methods) that consumers were more prone to endure.

## **Result and Discussion**

Of the 241 respondents that participated in this study, 36.10% were male and 63.90% were female. The age of the respondents ranged from less than 20 years to above 40 years of age, 30.71% were less than 20 years, 26.56% were between 21 and 25 years, 9.13% were 26 to 30 years, 11.62% were 31 to 40 years, and 21.4% were above 40 years old (see Table 1).

The first objective of this study was to explore consumers' perceptions of the importance of the actions taken by hotels to be considered green hotels. Table 2 shows that the perception of consumers when it came to the general importance of green hotel practices was that about 88% of those surveyed felt it was "somewhat to very important." However, about 12% felt that it was "rarely important" to "not important at all."

According to this study, 69.71% of the consumers felt that water conservation was “somewhat to very important”, 30.29% of the consumers felt that water conservation was “rarely important,” to “not important”.

**Table 1. Demographic profile**

Characteristics	Frequency (N=241)	Percentage (%)
Sex		
Male	87	36.10
Female	154	63.90
Age		
Under 20 years	74	30.71
21-25 years	64	26.56
26-30years	22	9.13
31-40 years	28	11.62
Above 40 years	52	21.58

In regard to energy conservation, 89.63% of the consumers in this study felt that it was “somewhat to very important” to conserve energy. Only 10.37% of the consumers felt that it was “rarely important” to “not important” to them. Waste reduction was the third conservation method that was discussed in this survey. Whereas, 85.06% of those surveyed felt that waste reduction was “somewhat to very important” to them, 14.94% of the respondents felt that it was “rarely important” to “not important” to them when it came to green hotels.

**Table 2. Consumers’ perceptions of a green hotel**

	Frequency	Percentage
<b>A. The importance of water conservation</b>		
Rarely important to not important	73	30.29%
Somewhat important to very important	168	69.71%
Total	241	100%
<b>B. The importance of energy conservation</b>		
Rarely important to not important	25	10.37%
Somewhat important to very important	216	89.63%
Total	241	100%
<b>C. The importance of waste reduction</b>		
Rarely important to not important	36	14.94%
Somewhat important to very important	205	85.06%
Total	241	100%
<b>D. The general importance of green hotel practices</b>		

Rarely important to not important	29	12.03%
Somewhat important to very important	212	87.97%
Total	241	100%

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Obviously the result of the first objective indicates consumers' interest in green hotel practices. This finding strongly supports a previous study by Tierney, Hunt, and Latkova, (2011). Thus, hoteliers need to understand this trend in the travel and tourism industry and find ways to adopt and capitalize on green hotel practices as an organizational culture. An innovative hotelier should recognize this trend and adopt hotel green practices as a strategic move towards a competitive advantage.

The second objective of this study was to explore what consumers were willing to endure to patronize green hotels. Table 3 showed that about 78% of the consumers in this study "somewhat agree", "agree" or "strongly agree" as a multiple night guest in a hotel to reuse their towel; 86.31% "somewhat agree", "agree" or "strongly agree" as a multiple night guest in a hotel to reuse their linen; 85.94% "somewhat agree", "agree" or "strongly agree" to prefer a low flow toilet (less water per flush) to high flow toilet in guest rooms; 58.09% of the consumers in the study "somewhat agree", "agree" or "strongly agree" to prefer low flow faucets to high flow faucets in guest rooms; and, 65.98% of the consumers in the study "disagree" or "strongly disagree" to prefer low flow showerheads to high flow showerheads in guest rooms. The result of this study indicates that consumers are willing to conserve water. However, they are not willing to let go with high flow showerheads in guest rooms. The reason for this particular observation is not clear. Given this outcome it will be very interesting to see if there is any significant difference between the impacts of low flow showerheads to high flow showerheads in guest rooms. One important and interesting finding was how many consumers would choose a "green" hotel over one that lacked green practices; 53.75% of the consumers surveyed said they would choose a "green" hotel over an alternative.

In regard to the cost of going green, about 46% of the consumers in this study believed that hotel owners should pay the initial cost of going green, and about 75% of the consumers were willing to pay less or the same amount per room in green hotels as compared to non-green hotels. The study also indicated that over 50% of the consumers in this study preferred guest reward points or some form of discount in order to support green hotels' water conservation practices. Contrary to results of past research (Susskind and Verma 2011), the majority of respondents in this study believed that a green hotel room should be priced the same or less than one that is not green. In fact, 50% of the respondents in this study preferred guest reward points or some form of discount in order to support green hotels. Hence, hoteliers need to be aware that guests have a perception that a green hotel might be more expensive than a non-green hotel. If that is the case, that perception could be impeding potential guests from patronizing green hotels.

**Table 3.** Consumers' behavior regarding socio-environmental responsibilities

<b>Socio-environmental responsibilities</b>	<b>Frequency</b>	<b>Percentage</b>
<b>A. As a multiple night guest in a hotel, I am willing to reuse my towel.</b>		
Disagree/Strongly disagree	52	21.58%
Somewhat agree/Agree/Strongly agree	189	78.42%
Total	241	100%
<b>B. As a multiple night guest in a hotel, I am willing to reuse my linen.</b>		
Disagree/Strongly disagree	33	13.69%
Somewhat agree/Agree/Strongly agree	209	86.31%
Total	241	100%
<b>C. I would prefer low flow showerheads in guest rooms to high flow showerheads.</b>		
Disagree/Strongly disagree	159	65.98%
Somewhat agree/Agree/Strongly agree	82	34.02%
Total	241	100%
<b>D. I would prefer low flow faucets in guest rooms to high flow faucets.</b>		
Disagree/Strongly disagree	101	41.91%
Somewhat agree/Agree/Strongly agree	140	58.09%
Total	241	100%
<b>E. I would prefer low flow toilet (less water per flush) in guest rooms to high flow toilet.</b>		
Disagree/Strongly disagree	58	24.06%
Somewhat agree/Agree/Strongly agree	183	85.94%
Total	241	100%
<b>F. I would choose one hotel over another, because it is considered "green."</b>		
Disagree/Strongly disagree	111	46.25%
Somewhat agree/Agree/Strongly agree	129	53.75%
Total	240	100%

**Conclusions, Implications and Limitation**

According to this study, consumers seemed ready to incorporate “green” hotels into their traveling excursions. Based on the results from this study, consumers had a positive perception of green hotels. This research discussed three main conservation methods that included water conservation, energy conservation, and waste reduction. The most important conservation method to the consumers surveyed was energy conservation (89.6%). Most travelers are willing to stay in green hotels. However, hoteliers should be prepared to come up with some form of incentive to motivate some consumers to support their green practices. In addition, hoteliers should adopt green practice as an organizational culture and find ways to promote their green practices as a competitive advantage. Although this study indicates that the majority of the guests are not willing to pay more for a green room, 25% of the guests are willing to pay more. A strategic hotelier should recognize this and price rooms competitively with adequate promotions to curtail the potential negative perceptions.

Some of the limitations of this study include the sample selection and the number of participants in the study. A random sample of consumers in various regions of the country could provide a more representative and generalizable result.



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