College students' attitudes towards green hotel practices

2013

Elvis Perez
University of Central Florida

Find similar works at: http://stars.library.ucf.edu/honortheses1990-2015

University of Central Florida Libraries http://library.ucf.edu

Part of the Hospitality Administration and Management Commons

Recommended Citation

http://stars.library.ucf.edu/honortheses1990-2015/1451

This Open Access is brought to you for free and open access by STARS. It has been accepted for inclusion in HIM 1990-2015 by an authorized administrator of STARS. For more information, please contact lee.dotson@ucf.edu.
COLLEGE STUDENTS’ ATTITUDES TOWARDS GREEN HOTEL PRACTICES

by

ELVIS PEREZ

A thesis submitted in partial fulfillment of the requirements
for the honors in the major program in hospitality management in the Rosen College
and in the Burnett Honors college
at the University of Central Florida
Orlando, Florida

Spring 2013

Thesis Chair: Dr. Tammie Kaufman
ABSTRACT

This research was conducted to discover college students’ attitude towards green hotel practices and will be helpful to the hospitality industry to help focus their marketing efforts. Based on the survey correlations between variables it appears that the people who use green practices at home are more aware of green practices when staying at a hotel. Implementing green practices into hotels will help the environment and also create a positive brand image and loyalty from guests. The movement of “Green” benefits everyone: the employer, the employees, and the guests.
## Table of Content

ABSTRACT ............................................................................................................................. ii

LIST OF TABLES................................................................................................................... iii

CHAPTER 1 – Introduction ..................................................................................................... 5

CHAPTER 2 – Literature Review .......................................................................................... 7

CHAPTER 3-Methodology ..................................................................................................... 11

CHAPTER 4 – Research Findings ......................................................................................... 14

CHAPTER 5 – Discussion ....................................................................................................... 19

Appendix – Survey .............................................................................................................. 23

REFERENCES......................................................................................................................... 38
List of Tables

Table 3.1 Students participation in green practices at home  
Page 29

Table 3.2 Opinion of green hotel practices  
Page 30

Table 3.3 Experience with green hotel practices  
Page 32

Table 3.4 Correlations between green practices and opinions  
Page 34

Table 3.5 Correlations between student’s opinions on and experience with green hotel practices  
Page 37

Table 3.6 Correlations Between Respondent's Green Practices  
Page 17
CHAPTER 1 Introduction

Many people view that the planet is rapidly fading due to the amount of toxic waste and pollution that have been released into the environment and believe that it is time for humans to take the necessary steps toward a greener earth to help future generations. Because of this view, many corporations have become more environmentally friendly. The hospitality industry worldwide is starting to implement green practices into most of their facilities to benefit the planet and reduce their expenses. It is up to the next generation of leaders to begin making the changes necessary for a greener tomorrow. It is important for hotel managers to understand that going green will help the environment and increase revenue and employee retention rates (Murray, 2008). According to “Business Green Magazines,” over a third of US workers would rather work for a green company (Murray, 2008). The “Green” concept serves a marketing component to attract green travelers and it also help with brand image and reputation. This research focuses on unique traits of the Millenial’s perspectives on the environment, green practices from industry leaders, and their willingness to pay for green lodging.

Based upon previous reports, the Millennials are the next generation of leaders in the hospitality industry. This population was born around the 1980s to late 1990s. The Millenial population is also known as “Digital Natives”. About 40% of these population are college students who are expected to change careers at least three times during their lifetimes (Thurman, 2010). Research also shows that social networks are a big influence on the Millennials. About three-fourths of this population have created and use social networks on a daily basis. According to Sally Kane (2012), Millennials want to be involved and included in activities and are always
seeking new challenges. An article from USA Today (2006) stated that 61% of Millenials felt personally responsible for making a difference in the world and two-thirds disclosed that they wanted their employers to be green. Also, over two-thirds of Millenials will trust a company more if it’s socially/environmentally responsible (Sharon, 2006). They have heard about environmental threats, such as global warming and hurricane Katrina in their childhood years; hence, Millenials are a very environmentally conscious generation.

Because Millenials are very environmentally conscious, many companies have started implementing green practices to target this new generation of consumers. However, it is very hard for organizations to come up with a consistent green definition. The definition of “green hotels” is very diverse. According to the Green Hotel Association (2012), environmentally friendly hotels are defined as “environmentally-friendly properties whose managers are eager to institute programs that save water, save energy and reduce solid waste—while saving money—to help protect our one and only earth.” Going green includes recycling, less paper use, saving energy, digital copies, green building practices, being educated about the environment and more.
CHAPTER 2 Literature Review

Explanations of Environmental Perspectives

The hospitality industry is very diverse; it is comprised of employees and guests from many different cultures. It is important to know that not all ethnicities have the same green perceptions; some are more environmentally friendly than others. According to Kahn (2002) minorities, especially the Hispanics, are more environmentally friendly than other ethnicities. In their research, Mohai and Bryant (1998) discovered that African Americans were more green conscious than Caucasians.

Researchs shows that ethnicity is not the only demographic factor that will help companies understand their consumers and employees. Another demographic influence is the level of education of the individual, which might impact his or her green perceptions. According to Keaveney and Parthasarathy (2001), consumers with a high level of education express more environmental intentions than those of lower education and income. Those with high level of education expect more from a product or service. Also, highly educated people are more environmentally responsible because they are more exposed to green information than lower educated people (Klineberg, 1998). Regarding different perspectives according to age, Van Liere and Dunlap (1980) found that younger people were more likely to adopt green attitudes because environment degradation has been an issue since they were born and they perceived that the problem will worsen. Based upon the research that indicates that Millennials are more environmentally conscious than any other generation, it seems logical that hotel managers should start employing more green practices in their hotels to attract the younger guests. This is
even more important because younger guests are not only current guests, but they will be the future guests as well.

Green Practices from Industry Leaders

According to the Department of General Services (2012), the hospitality industry is “greening” their facilities to target more generations, cultures, and green travelers. Not only do hoteliers help the environment when they go green, but they also decrease energy costs and receive tax savings. Going green brings many benefits to hoteliers; by turning into a green facility, a hotel can reduce operational expenses up to 30 percent (Farricelli, 2012). The decision of going green will benefit the hotelier but also the guests.

Large hotels chains such as Marriott and Hyatt hotels have gone green. Recently, Marriott partnered with vendors to include shower heads that only use 2.5 gallons of water per minute versus 6.5 or 10 gallons per minute. They also installed energy-efficient light bulbs and began recycling in every department. Marriott is engaging their employees in supporting the move toward going green. They have created a green committee of individuals for each department to help green every department of the hotel (Marriott Worldwide, 2012). Hyatt has implemented sensors that will keep lights off in rooms whenever guests are not present. They also have a waste management plan in each department. Some Hyatts hotels provide their employees with discounts to use public transportation as part of their green plan. Their Food and Beverage department is minimizing food waste by donating their food to local food banks.
(Hyatt, 2012). Other large companies in the industry are starting to shift their practices into greener ones as well.

Willingness to pay for green

Today’s society is more environmentally conscious than many years ago. Research has shown that travelers are now seeking hotels that have made a commitment to becoming green. Part of the rationale for going green is to cater to frequent travelers (Millar 2012.) Travelers report having the perception that green certified hotels are more expensive than non green certified hotels. However, according to Professor Michelle Millar from the University of San Francisco (2012), travelers have the perception that green hotels are more expensive because manufactured green items such as organic food, clothing, cars, and paper cost more. However, there is no difference in room rates between certified and non-certified hotels in Chicago and San Francisco. Hotel industry experts suggest that travelers prefer to pay less for green hotels because they know that hotels are saving money by using green practices (Millar, 2012). The hotel industry understand that guests would prefer to stay in green hotels. Based upon this finding, it would be advisable for the hotel industry to not alienate guests by charging them more when the cost to the hotel is less (Millar, 2012).
Summary

Due to increased environmental degradation and because of interest in the cost savings to the bottom line companies are going green. Senior leaders of the hospitality industry know that Millennials and highly educated people are environmentally conscious and might base their hotel selection on how green a hotel is. Going green will benefit the hotelier by reducing expenses, the employee by providing a healthier work environment, and the guest by offering healthier living quarters. In conclusion, going green has macro and micro benefits for a hotel; it will improve their brand/reputation, and increase retention.
CHAPTER 3 Methodology

Purpose of the Study

The purpose of this research was to better understand the Millenial generation’s attitudes towards the environment and green hotel practices. A better understanding of this relationship will be helpful to the hospitality industry in focusing their marketing efforts. This research was conducted to discover college students’ attitude towards green hotel practices. It is a replication of Millar and Baloglu (2008), “Hotel Guests’ preferences for Green Hotel Attributes.” This study focuses on the relationship between college students and the following three variables:

1. Environmentally friendly activities performed at home by college students.
2. College students’ attitude toward green hotels practices
3. College students likelihood of spending more or less for a room at a green hotel.

The population was a convenience sample of college students at the University of Central Florida in Orlando, Florida. The sample includes students from the Rosen College of Hospitality Management as well as students enrolled in classes on the main UCF campus.

Survey Development

The survey used in this study was a modified version of the one used by Millar and Baloglu (2008). It was modified to include questions involving willingness to stay an willingness to pay for green hotel rooms. There was one relevant question that was mistakenly not included on the questionnaire “Whether a student would be more or less likely to stay at a hotel that
offered green practices”. This was included in the proposal and accidentally left off of the survey.

Summary of Survey Measures

The survey is located in the appendix and consist of 4 sections. The first section of the survey include a series of questions regarding the respondents’ demographics and travel experience. The sample characteristics included gender, class level, employment status, age group, amount of hours worked per week, major and nationalities. Participants were asked to select the appropriate answer that best fit their profile. The second part of the survey asked the respondent a series of questions regarding their green practices at home. Respondents were asked to select their answer using the response pattern from (5= Very Often 4=Often 3=Neither often or Not Often =2Not very often 1=Never). The third part of the survey asked the respondent a series of questions regarding their opinion of hotel green practices including general operating practices such as recycle bins, and energy efficient light. Respondents were asked to indicate their opinion in regards to the successful implementation of those green practices in a hotel room. The fourth part of the survey included questions regarding the experience of the participant with green hotel practices. Both parts 3 and 4 used the response pattern: (5= Strongly Agree 4= Agree 3=Neither Agree or Disagree 2=Disagree 1=Disagree.) The fifth part includes one question regarding participants likelihood to stay at green hotels.

The survey was administered in two classes. One was a history class on main campus and one in a hospitality class on Rosen campus. The students were given surveys in class with
the directions that the responses are anonymous, participation was voluntary, and they would not be required to complete the survey.

Data Collection and Analysis

Data were collected in the Spring semester 2013 after approval of research by IRB. Data were analyzed utilizing SPSS. The appropriate statistical techniques were used to determine college students’ attitude towards green hotel practices. Demographic and travel information, practices at home information, opinion of hotel green practices, and experience with green hotel practices were analyzed utilizing percentages and mean scores. Willingness to pay more or less for hotels that offered green practices was analyzed utilizing percentages. Pearson’s correlation analysis was utilized to look for relationships between a students’ green practices at home and their opinion of hotels that have green practices. It was also utilized to determine if there was a relationship between a students’ opinion of and experience with green hotel practices. Discriminant analysis was utilized to determine if there were differences between a student’s gender and their opinion of green practices offered by a hotel as well as a student’s major and their opinion of green practices offered by a hotel.
CHAPTER 4 RESEARCH FINDINGS

Sample Description:

The data was collected at the University of Central Florida during the last week of February 2013. One hundred and fifteen surveys were distributed to students in two classes and all surveys were returned, resulting in a 100% response rate. One of the classes was a history class located at the University of Central Florida main campus, where we collected 78 surveys and the other class was a hospitality management class located at the UCF Rosen College campus where we collected 72 surveys. Forty percent of the participants were males and sixty percent were females. Most of the participants were in their late teens and early twenty’s. Sixty percent were employed and 40 percent were unemployed. Of those employed, most were working between 21 to 30 hours per week. Forty-eight percent of the participants were hospitality management majors while 52 percent were non hospitality management majors.

Green Practices at Respondent’s Home

When respondents were asked about their current green practices at home, the most frequently reported green practices were recycling plastic bags (54%, Mean=4.18). The least frequently reported green practice was the use of low water fixtures (52%, Mean=2.37). More than half of the participants reported using energy efficient light bulbs ‘very often or often.’ Most of the participants stated that they do not use cloth bags for shopping (see Table 3.1).
Opinion of green hotel practices:

On the second part of the survey, students were asked about their opinions on green hotel practices. Based on the survey results most students strongly agreed with the following green practices at hotel: sheets changed upon request, key cards to turn power on, and energy efficient light bulbs. Most of the participants did not support low shower heads in hotel bathrooms. This could be because guests are not willing to sacrifice their leisure time. Most of the participants were neutral to refillable shampoo dispenser in hotel bathrooms (see Table 3.2).

Experience with a green hotel:

The third part of the survey students were asked about their experience with green practices offered by hotels. Most of the participants stated that they have experienced recycle bins (rank1) and sheets changed upon request(rank 2). Most of the participants have also experienced energy saving light bulbs in guest rooms (rank 3). Students have had the least amount of experience finding low flow showerheads in their hotel rooms (See Table 3.3). Seventy-four of the participants said that they should be charged lower rates for room that offers environmentally friendly practices while 19% said they were willing to pay more.
Relationships

There are 13 significant relationships at the .01 level between a person’s green practice and opinion of green hotel practices. There are also 10 significant relationships at the .05 level. The table below (3.6) illustrates the significant relationships at both the .01 level and at .05 level.
Table 3.6 Correlations Between Respondent’s Green Practices and Hotel Green Practices

<table>
<thead>
<tr>
<th>Respondent's Personal Green Practices</th>
<th>Hotel Green Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Towel Re-use</td>
</tr>
<tr>
<td>Use cloth shopping bags</td>
<td>.264**</td>
</tr>
<tr>
<td>Recycle paper</td>
<td>.256**</td>
</tr>
<tr>
<td>Reuse plastic bags</td>
<td></td>
</tr>
<tr>
<td>Organic groceries</td>
<td></td>
</tr>
<tr>
<td>Use energy efficient light bulbs</td>
<td>.296***</td>
</tr>
<tr>
<td>Low flow water fixtures</td>
<td></td>
</tr>
<tr>
<td>Recycle cans and bottles</td>
<td></td>
</tr>
</tbody>
</table>

* p > 0.05

** p > 0.01
Table 3.5 Comparison of Student’s Opinions and Experiences.

As presented in table 3.5 there are 7 significant relationships at the .01 level between a person’s green practices and their observation of green hotel practices. There is one significant relationship at the .05 level. The only two correlations that were not significant include a student’s opinion of energy saving light bulbs in guest rooms and their experience with this practice. The other is a students’ opinion of energy saving light bulbs in the bathroom and their experience with this practice. The other variables show significant correlations in that the higher their opinion they have with this practice the more likely they are going to experience it.

Discriminant Analysis.

To see if there were any differences between the current green practices in which respondents participated, their opinion of green hotel practices, respondents’ experiences with green hotel practices their major and their gender discriminate analysis was utilized. The discriminate analysis between major and a student’s opinion of green practices offered by a hotel showed no significant difference (.604). The discriminate analysis between a students’ gender and a student’s opinion of green practices offered by a hotel showed no significant differences (.453).

Summary

Based on the survey correlations between variables, it appeared that the people who use green practices at home were more aware of green practices when staying at a hotel. Most of the students stated that they recycled cans, bottles, and bags at home and were in favor of energy efficient light bulbs and many other key green hotel practices.
CHAPTER 5 Discussions

More than half of the participants were recycling cans bottles and bags and were using energy efficient light bulbs but were not buying organic foods. This might be because of the high prices on those organic items and the low income level of the participants (college students). Based on the results, most participants were in favor of environmentally friendly practices, but did not observe most of these practices in hotels. Comparison of data from the participant’s opinion on green practices and participants’ experiences with green practices suggests that most of the participants employ green practices but did not find them in the hotels they stayed at. For example, 88% of the participants stated that they would like to have key cards to turn power on and off, but only 43% of those observed this green practice in hotels.

There were some significant relationships found between students’ green practices and their opinions of green practices offered by hotels. Re-use of plastic bags and the use of cloth bags for shopping were the most frequently reported student green practices. The relationship between a student’s experiences with green practices offered by hotels and their opinions about these practices presented many significant relationships.

Conclusion

There were positive opinions about green practices for hotels, but the level of experience with these practices was lower. It appears as if students are saying “I am green friendly and support it, but when I stay at a hotel I do not see these practices.” Hotel managers need to take a closer look at guest opinions on green practices and see that they are shifting more into having
a positive feeling about green practices. Based on this research, practices that do not interfere with their enjoyment of their stays rank higher (recycling bins) than of that of (low flow shower heads).

Management needs to understand that millennials are more environmentally friendly than past generations. However, since they are more value conscious, any perceived hotel savings should be passed on to them. Management should make sure that the environmental practices are apparent to millennials, since they are the current and future guests and leaders of the industry. The current leaders of the hospitality industry should continually measures the traveling population to ensure that they are including features that appeal to them and to attract employees, and to create a positive public image. The green movement has a positive impact on the environment and the company.

The sample was a convenience sample of college students. This study is considered a pilot study and the findings should not be generalized to the rest of the college population. This study should be replicated to see if there is consistency in the findings. Also, the sample should be allowed to rank order the green practices so managers can better understand their priorities.

Based on the research the millennial generation is a very environmentally friendly generation that will be the next generation of hotel guests and managers. The leaders of the hospitality industry should start making the changes necessary to become a greener hospitality industry. Implementing green practices into hotels would help the environment create a positive brand image, and increase loyalty from the guests. The movement of “Green” benefits everyone: the employer, the employees, and the guests.
Appendix: Survey

Survey Part One: This part will include questions regarding demographics and travel experience.

For the following put an X next to the appropriate answer.

1. Gender?
   ___ Male  ___ Female

2. Class Status (Year in College)?
   ___ Freshman  ___ Sophomore  ___ Junior  ___ Senior

3. Age Group?
   ___ 18-19  ___ 20-21  ___ 22-24  ___ 25-29  ___ Over 30  ___ Over 40
   ___ Over 50

4. Currently Employed?
   ___ Yes  ___ No

5. If Employed, How many hours per week do you work?
   ___ 1-10  ___ 11-20  ___ 21-30  ___ 31-40  ___ Over 40

6. Are you from the United States of America?
   ___ Yes  ___ No

7. Nights spent in a hotel on Average each year?
   ___ 1-2  ___ 3-5  ___ 6-8  ___ 9-11  ___ Over 12

8. What is your major? ______________________

Survey Part Two: How often do you participate in the following activities at home? Put an X next to the appropriate answer.
9. I recycle cans and bottles
   ___ Very Often   ___ Often   ___ Neither often or Not Often   ___ Not Very Often
   ___ Never

10. I recycle paper
    ___ Very Often   ___ Often   ___ Neither often or Not Often   ___ Not Very Often
    ___ Never

11. I re-use plastic bags
    ___ Very Often   ___ Often   ___ Neither often or Not Often   ___ Not Very Often
    ___ Never

12. I use energy efficient light bulbs
    ___ Very Often   ___ Often   ___ Neither often or Not Often   ___ Not Very Often
    ___ Never

13. I buy organic groceries
    ___ Very Often   ___ Often   ___ Neither often or Not Often   ___ Not Very Often
    ___ Never

14. I use low flow water fixtures
    ___ Very Often   ___ Often   ___ Neither often or Not Often   ___ Not Very Often
    ___ Never

15. I use cloth bags for shopping
    ___ Very Often   ___ Often   ___ Neither often or Not Often   ___ Not Very Often
    ___ Never
Survey Part Three: What is your **Opinion** of the following green hotel practices? Put an X next to the appropriate answer.

16. Sheets changed upon request
   ____Strongly Agree  ____Agree  ____Neither Agree nor Disagree  ____Disagree
   ____Strongly Disagree

17. Occupancy Sensors
   ____Strongly Agree  ____Agree  ____Neither Agree nor Disagree  ____Disagree
   ____Strongly Disagree

18. Key Cards to turn power to the room on and off
   ____Strongly Agree  ____Agree  ____Neither Agree nor Disagree  ____Disagree
   ____Strongly Disagree

19. Energy Saving light bulbs in the sleeping area
   ____Strongly Agree  ____Agree  ____Neither Agree nor Disagree  ____Disagree
   ____Strongly Disagree

20. Energy saving bulbs in the guest bathroom
   ____Strongly Agree  ____Agree  ____Neither Agree nor Disagree  ____Disagree
   ____Strongly Disagree

21. Towel re-use program
   ____Strongly Agree  ____Agree  ____Neither Agree nor Disagree  ____Disagree
   ____Strongly Disagree
22. Recycle Bins

___Strongly Agree  ___Agree  ___Neither Agree nor Disagree  ___Disagree
___Strongly Disagree

23. Low Flow Toilets

___Strongly Agree  ___Agree  ___Neither Agree nor Disagree  ___Disagree
___Strongly Disagree

24. Low Flow Faucets

___Strongly Agree  ___Agree  ___Neither Agree nor Disagree  ___Disagree
___Strongly Disagree

25. Refillable shampoo dispensers

___Strongly Agree  ___Agree  ___Neither Agree nor Disagree  ___Disagree
___Strongly Disagree

26. Refillable soap dispenser

___Strongly Agree  ___Agree  ___Neither Agree nor Disagree  ___Disagree
___Strongly Disagree

27. Low Flow Showerheads

___Strongly Agree  ___Agree  ___Neither Agree nor Disagree  ___Disagree
___Strongly Disagree

Survey Part Four: What is your *Experience* with the following green hotel practices? Put an X next to the appropriate answer.
28. Sheets changed upon request
   ___Strongly Agree   ___Agree  ___Neither Agree nor Disagree  ___Disagree
   ___Strongly Disagree

29. Occupancy Sensors
   ___Strongly Agree   ___Agree  ___Neither Agree nor Disagree  ___Disagree
   ___Strongly Disagree

30. Key Cards to turn power to the room on and off
   ___Strongly Agree   ___Agree  ___Neither Agree nor Disagree  ___Disagree
   ___Strongly Disagree

31. Energy Saving light bulbs in the sleeping area
   ___Strongly Agree   ___Agree  ___Neither Agree nor Disagree  ___Disagree
   ___Strongly Disagree

32. Energy saving bulbs in the guest bathroom
   ___Strongly Agree   ___Agree  ___Neither Agree nor Disagree  ___Disagree
   ___Strongly Disagree

33. Towel re-use program
   ___Strongly Agree   ___Agree  ___Neither Agree nor Disagree  ___Disagree
   ___Strongly Disagree

34. Recycle Bins
   ___Strongly Agree   ___Agree  ___Neither Agree nor Disagree  ___Disagree
   ___Strongly Disagree

- 27 -
35. Low Flow Toilets
   ___Strongly Agree     ___Agree     ___Neither Agree nor Disagree     ___Disagree
   ___Strongly Disagree

36. Low Flow Faucets
   ___Strongly Agree     ___Agree     ___Neither Agree nor Disagree     ___Disagree
   ___Strongly Disagree

37. Refillable shampoo dispensers
   ___Strongly Agree     ___Agree     ___Neither Agree nor Disagree     ___Disagree
   ___Strongly Disagree

38. Refillable soap dispenser
   ___Strongly Agree     ___Agree     ___Neither Agree nor Disagree     ___Disagree
   ___Strongly Disagree

39. Low Flow Showerheads
   ___Strongly Agree     ___Agree     ___Neither Agree nor Disagree     ___Disagree
   ___Strongly Disagree

Survey Part Five: This part will include questions regarding likeliness to stay at green hotels. Put an X next to the appropriate answer.

40. Do you think you should pay more or less per night for a room that offers environmentally friendly Practices?
   ___More     ___Less
Appendix: Tables

Table 3.1
How often do you participate in the following activities at home?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Often</th>
<th>Often</th>
<th>Neither Often or Not Often</th>
<th>Not Very Often</th>
<th>Never</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle Cans&amp;Bottles</td>
<td>39%</td>
<td>25%</td>
<td>13%</td>
<td>9%</td>
<td>14%</td>
<td>3.67</td>
</tr>
<tr>
<td>Recycle Paper</td>
<td>19%</td>
<td>25%</td>
<td>16%</td>
<td>21%</td>
<td>19%</td>
<td>3.05</td>
</tr>
<tr>
<td>Recycle Plastic Bags</td>
<td>54%</td>
<td>28%</td>
<td>4%</td>
<td>10%</td>
<td>4%</td>
<td>4.18</td>
</tr>
<tr>
<td>Energy Efficient light bulbs</td>
<td>28%</td>
<td>26%</td>
<td>25%</td>
<td>13%</td>
<td>8%</td>
<td>3.53</td>
</tr>
<tr>
<td>Buy Organic Groceries</td>
<td>8%</td>
<td>17%</td>
<td>21%</td>
<td>27%</td>
<td>27%</td>
<td>2.52</td>
</tr>
<tr>
<td>Use Low Water Fixtures</td>
<td>5.2%</td>
<td>12.2%</td>
<td>30%</td>
<td>19%</td>
<td>33%</td>
<td>2.37</td>
</tr>
<tr>
<td>Use Cloth Bag for Shopping</td>
<td>11%</td>
<td>17%</td>
<td>12%</td>
<td>20%</td>
<td>39%</td>
<td>2.41</td>
</tr>
</tbody>
</table>
### Table 3.2
What is your opinion of the following green hotels practices?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree Nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheets Changed upon Request</td>
<td>48%</td>
<td>33%</td>
<td>9%</td>
<td>5%</td>
<td>5%</td>
<td>4.13</td>
</tr>
<tr>
<td>Occupancy Sensor</td>
<td>34%</td>
<td>33%</td>
<td>27%</td>
<td>3%</td>
<td>1%</td>
<td>4</td>
</tr>
<tr>
<td>Key Cards to turn power on and off</td>
<td>38%</td>
<td>39%</td>
<td>15%</td>
<td>4%</td>
<td>4%</td>
<td>4.04</td>
</tr>
<tr>
<td>Energy Saving Light Bulbs in bathroom</td>
<td>58%</td>
<td>31%</td>
<td>8%</td>
<td>0%</td>
<td>2%</td>
<td>4.45</td>
</tr>
<tr>
<td>Energy Saving Bulbs in Guest Room</td>
<td>57%</td>
<td>34%</td>
<td>6%</td>
<td>1%</td>
<td>2%</td>
<td>4.87</td>
</tr>
<tr>
<td>Tower re-use program</td>
<td>37%</td>
<td>21%</td>
<td>19%</td>
<td>16%</td>
<td>6%</td>
<td>3.67</td>
</tr>
<tr>
<td>Recycle Bins</td>
<td>64%</td>
<td>30%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
<td>4.58</td>
</tr>
<tr>
<td>Low Flow Toilets</td>
<td>39%</td>
<td>31%</td>
<td>25%</td>
<td>3%</td>
<td>2%</td>
<td>4.03</td>
</tr>
<tr>
<td>Low Flow Faucets</td>
<td>30%</td>
<td>35%</td>
<td>25%</td>
<td>8%</td>
<td>3%</td>
<td>3.81</td>
</tr>
<tr>
<td>Refillable</td>
<td>37%</td>
<td>26%</td>
<td>20%</td>
<td>10%</td>
<td>7%</td>
<td>3.75</td>
</tr>
<tr>
<td>Product</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Refillable Soap Dispenser</td>
<td>41%</td>
<td>32%</td>
<td>16%</td>
<td>5%</td>
<td>6%</td>
<td>3.97</td>
</tr>
<tr>
<td>Low Flow showerheads</td>
<td>22%</td>
<td>27%</td>
<td>20%</td>
<td>21%</td>
<td>10%</td>
<td>3.29</td>
</tr>
</tbody>
</table>
Table 3.3
What is your experience with the following green hotel practices?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree Nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheets changed upon request</td>
<td>26%</td>
<td>42%</td>
<td>24%</td>
<td>3%</td>
<td>4%</td>
<td>3.87</td>
</tr>
<tr>
<td>Occupancy Sensor</td>
<td>19%</td>
<td>24%</td>
<td>40%</td>
<td>10%</td>
<td>4%</td>
<td>3.45</td>
</tr>
<tr>
<td>Key cards to turn power on and off</td>
<td>21%</td>
<td>22%</td>
<td>36%</td>
<td>10%</td>
<td>10%</td>
<td>3.36</td>
</tr>
<tr>
<td>Energy Saving light bulbs in sleeping areas</td>
<td>26%</td>
<td>30%</td>
<td>35%</td>
<td>4%</td>
<td>3%</td>
<td>3.74</td>
</tr>
<tr>
<td>Energy saving bulbs in the guest room</td>
<td>26%</td>
<td>31%</td>
<td>34%</td>
<td>5%</td>
<td>2%</td>
<td>3.76</td>
</tr>
<tr>
<td>Towels re-use program</td>
<td>24%</td>
<td>35%</td>
<td>26%</td>
<td>5%</td>
<td>9%</td>
<td>3.60</td>
</tr>
<tr>
<td>Recycle Bins</td>
<td>34%</td>
<td>28%</td>
<td>30%</td>
<td>4%</td>
<td>3%</td>
<td>3.88</td>
</tr>
<tr>
<td>Low Flow Toilets</td>
<td>16%</td>
<td>30%</td>
<td>41%</td>
<td>8%</td>
<td>4%</td>
<td>3.48</td>
</tr>
<tr>
<td>Low flow faucets</td>
<td>13%</td>
<td>31%</td>
<td>40%</td>
<td>10%</td>
<td>4%</td>
<td>3.40</td>
</tr>
<tr>
<td>Refillable Shampoo Dispenser</td>
<td>15%</td>
<td>28%</td>
<td>34%</td>
<td>13%</td>
<td>9%</td>
<td>3.27</td>
</tr>
<tr>
<td>Refillable Soap</td>
<td>21%</td>
<td>23%</td>
<td>34%</td>
<td>12%</td>
<td>7%</td>
<td>3.40</td>
</tr>
<tr>
<td>Dispenser</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Low flow showerheads</td>
<td>11%</td>
<td>23%</td>
<td>37%</td>
<td>15%</td>
<td>10%</td>
<td>3.11</td>
</tr>
</tbody>
</table>
Table 3.4

Correlation between a student’s green practices and their opinion on hotel green practices and opinion on hotel green practices

<table>
<thead>
<tr>
<th>Green practices students participate in</th>
<th>Sheets Changed Upon Request</th>
<th>Occupancy Sensors</th>
<th>Key Cards to turn power on</th>
<th>Energy saving light bulbs in sleeping areas</th>
<th>Energy saving light bulb in guest bathroom</th>
<th>Towel re-use program</th>
<th>Pearson Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle Cans and Bottle</td>
<td>.033</td>
<td>.046</td>
<td>.120</td>
<td>.085</td>
<td>.083</td>
<td>.080</td>
<td>Pearson Correlation</td>
<td>Significance</td>
</tr>
<tr>
<td></td>
<td>.727</td>
<td>.629</td>
<td>.203</td>
<td>.366</td>
<td>.377</td>
<td>.402</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recycle Paper</td>
<td>.069</td>
<td>.092</td>
<td>.041</td>
<td>.018</td>
<td>-.056</td>
<td>.256**</td>
<td>Pearson Correlation</td>
<td>Significance</td>
</tr>
<tr>
<td></td>
<td>.465</td>
<td>.337</td>
<td>.660</td>
<td>.850</td>
<td>.551</td>
<td>.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-use Plastic Bags</td>
<td>-.005</td>
<td>.106</td>
<td>.100</td>
<td>.235</td>
<td>.111</td>
<td>.034</td>
<td>Pearson Correlation</td>
<td>Significance</td>
</tr>
<tr>
<td></td>
<td>.957</td>
<td>.268</td>
<td>.288</td>
<td>.012</td>
<td>.239</td>
<td>.721</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use Energy efficient light bulbs</td>
<td>.026</td>
<td>.037</td>
<td>.114</td>
<td>.405**</td>
<td>.032</td>
<td>.174</td>
<td>Pearson Correlation</td>
<td>Significance</td>
</tr>
<tr>
<td></td>
<td>.786</td>
<td>.698</td>
<td>.226</td>
<td>.000</td>
<td>.738</td>
<td>.065</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic Groceries</td>
<td>.119</td>
<td>.137</td>
<td>.193</td>
<td>.173</td>
<td>-.014</td>
<td>.250**</td>
<td>Pearson Correlation</td>
<td>Significance</td>
</tr>
<tr>
<td></td>
<td>.206</td>
<td>.150</td>
<td>.038</td>
<td>.066</td>
<td>.882</td>
<td>.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low flow water fixtures</td>
<td>.055</td>
<td>.183</td>
<td>.266**</td>
<td>.183</td>
<td>-.063</td>
<td>.112</td>
<td>Pearson Correlation</td>
<td>Significance</td>
</tr>
</tbody>
</table>
### Table 3.4 Cont

<table>
<thead>
<tr>
<th></th>
<th>Recycle Bins</th>
<th>Low Flow Toilets</th>
<th>Low Flow Faucets</th>
<th>Refillable Shampoo</th>
<th>Refillable Soap</th>
<th>Low Flow Showerheads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use cloth bag for shopping</td>
<td>-.034</td>
<td>.037</td>
<td>.126</td>
<td>.113</td>
<td>-.001</td>
<td>.264**</td>
</tr>
<tr>
<td></td>
<td>.716</td>
<td>.697</td>
<td>.180</td>
<td>.231</td>
<td>.988</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pearson Correlation-</td>
</tr>
<tr>
<td>Recycle Paper</td>
<td>0.214</td>
<td>0.054</td>
<td>0.147</td>
<td>.258**</td>
<td>0.153</td>
<td>.179</td>
</tr>
<tr>
<td>Green practices students</td>
<td>0.021</td>
<td>.569</td>
<td>0.116</td>
<td>0.005</td>
<td>0.103</td>
<td>.055</td>
</tr>
<tr>
<td>participate in Recycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pearson Correlation-</td>
</tr>
<tr>
<td>Cans and Bottle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-Significance</td>
</tr>
<tr>
<td>Re-use Plastic Bags</td>
<td>.328**</td>
<td>.245**</td>
<td>.209*</td>
<td>0.107</td>
<td>0.132</td>
<td>.189*</td>
</tr>
<tr>
<td></td>
<td>0.000</td>
<td>0.008</td>
<td>0.064</td>
<td>0.823</td>
<td>0.992</td>
<td>.196</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pearson Correlation-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-Significance</td>
</tr>
<tr>
<td>Use Energy efficient light</td>
<td>.296**</td>
<td>.184*</td>
<td>0.182</td>
<td>0.042</td>
<td>0.050</td>
<td>.138</td>
</tr>
<tr>
<td>bulbs</td>
<td>0.001</td>
<td>0.049</td>
<td>0.052</td>
<td>0.658</td>
<td>0.599</td>
<td>.142</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pearson Correlation-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-Significance</td>
</tr>
<tr>
<td>Organic Groceries</td>
<td>0.148</td>
<td>.202*</td>
<td>0.163</td>
<td>-0.038</td>
<td>0.001</td>
<td>.195*</td>
</tr>
<tr>
<td></td>
<td>0.114</td>
<td>0.031</td>
<td>0.081</td>
<td>0.687</td>
<td>0.996</td>
<td>.037</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pearson Correlation-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-Significance</td>
</tr>
<tr>
<td>Low flow</td>
<td>0.167</td>
<td>0.125</td>
<td>.212*</td>
<td>0.127</td>
<td>0.148</td>
<td>.221*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pearson Correlation-</td>
</tr>
</tbody>
</table>

- 35 -
<table>
<thead>
<tr>
<th>water fixtures</th>
<th>0.075</th>
<th>0.182</th>
<th>0.023</th>
<th>0.177</th>
<th>0.116</th>
<th>.018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use cloth bag for shopping</td>
<td>.252**</td>
<td>0.136</td>
<td>.278**</td>
<td>0.103</td>
<td>0.120</td>
<td>.235*</td>
</tr>
<tr>
<td></td>
<td>0.007</td>
<td>0.147</td>
<td>0.003</td>
<td>0.273</td>
<td>0.202</td>
<td>.011</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level
Table 3.5 Comparison of Student’s Opinions and Experiences

<table>
<thead>
<tr>
<th>Green Hotel practice</th>
<th>Pearson’s Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheets Changed Upon Request</td>
<td>.348**</td>
<td>.000</td>
</tr>
<tr>
<td>Occupancy Sensor</td>
<td>.482**</td>
<td>.000</td>
</tr>
<tr>
<td>Key Cards to turn power to the room on and off</td>
<td>.420**</td>
<td>.000</td>
</tr>
<tr>
<td>Energy Saving light bulbs in guest rooms</td>
<td>.300</td>
<td>.001</td>
</tr>
<tr>
<td>Energy saving bulb in bathroom</td>
<td>.073</td>
<td>.445</td>
</tr>
<tr>
<td>Towel Re-use Program</td>
<td>.688**</td>
<td>.000</td>
</tr>
<tr>
<td>Recycle Bins</td>
<td>.188*</td>
<td>.046</td>
</tr>
<tr>
<td>Low Flow Toilets</td>
<td>.424**</td>
<td>.000</td>
</tr>
<tr>
<td>Low Flow Faucets</td>
<td>.488**</td>
<td>.000</td>
</tr>
<tr>
<td>Refillable Soap Dispenser</td>
<td>.299**</td>
<td>.001</td>
</tr>
</tbody>
</table>
References


