Journal of Tourism Insights

Volume 2 | Issue 2 Article 5

May 2011

Do Travelers Support Green Practices and Sustainable Development

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Introduction

An on-line survey of managers from the Resort Commercial Recreation Association member resorts inquired about their attitudes toward green or eco-friendly practices and also asked them to identify any green practices their resort had undertaken in the last year (Tierney 2008). The survey found overall strong motivational support by respondents, with 93% of responding resort managers in the USA and Caribbean agreeing it is "imperative for the resort industry to become more green." There were strong business incentives expressed by resort managers, with 69% agreeing a "large number of clients are asking about their green practices." An extensive list of green practices undertaken by respondent resorts was identified in the survey. These findings suggest there is broad-based support for green practices and more sustainable development among resort managers. However, several questions remain despite initial research: What is the level of traveler support for green or eco-friendly practices and sustainable development in the travel industry? Are travelers seeking out businesses that undertake green business practices? Could it be that the industry is ahead of consumers in the adoption of green travel practices?

The objectives of this research were to: Investigate consumers' attitudes toward environmentally responsible or green practices in the travel industry; identify any green practices consumers have undertaken recently while traveling; explore factors influencing traveler adoption of green practices; and provide implications for sustainable tourism development.

Literature

Since the middle of the twentieth century there has been a large increase in tourism around the world. In 1950, the World Tourism Organization recorded the number of international arrivals as 25 million people. By 1980, international arrivals had grown to 270 million people (Holden, 2000). Then between the years of 1992 and 2007, the number of international tourists (people who travel outside of their usual environment for more than 24 hours yet not more than one consecutive year) worldwide grew from 463 million to 903 million people (Chiesa, & Gautam, 2009; Honey, 2008). The United Nations World Tourism Organization (UNWTO) predicted that by 2020 there will be approximately 1.6 *billion* international travelers worldwide (United Nations World Tourism Organization, n.d.).

A growing number of tourists have led to increased impacts from tourism and interest by tourists in green or low impact travel practices. A 2009 national survey by PhoCus Wright showed 44% of USA travelers consider minimizing environmental impacts as an important factor when planning their travel (PhoCus

Wright, 2009). The hospitality industry has also been seeing changes in the interests of their clientele as an increasing number of hotels have adopted green practices. Some smaller upscale hotels are seeing 15-20% of their business coming because of green and sustainability efforts (Natz, 2008). About 69% of resort managers in USA and Caribbean agreed that a "large number of clients are asking about their green practices" (Tierney, 2008).

Research is increasingly showing that tourists are becoming more aware of sustainability practices and are making it an important factor when choosing a resort (Bricker, Sarnoff, & Schultz, 2009; Yesawich, 2009). "According to the World Tourism Organization, tourists are already beginning to avoid destinations with a bad environmental record, and a major vacation destination which declines in popularity course faces enormous economic losses" (Huffadine, 2000, p. 7). In fact, one study found that tourists are more likely to chose a hotel or resort if: it had recycling bins (67.5%), energy efficient lighting (69.4%), unoccupied guest rooms (65.6%), changed sheets only on request (58.9%), in-room displays printed on recycled paper (65.1%) (Honey & Krantz, 2007). These studies suggest consumers are becoming more supportive of green practices but, are they actually changing their travel behaviors and undertaking more green or eco-friendly practices?

Methods

Data were collected using a self-administered questionnaire. The survey instrument included questions on visitors' attitudes toward green practices, visitors' characteristics, and any eco-friendly practices respondents undertook during their travel in the last year. Questions were based on a survey from a recent study of green practices at resorts in the USA and Caribbean (Tierney, 2008). The introduction to the first question stated that "green practices could range from using/generating renewable energy, using lower CO_2 emission forms of transportation, recycling of wastes, water conservation, buying green products and supporting green organizations." Respondents were presented with 18 statements on green practices and were asked to indicate their agreement or disagreement with each of the statements on a 1-5 scale, with 5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, and 1=strongly disagree. The final part of the survey asked respondents to briefly describe three green or eco-friendly travel products or services they have purchased or used. Data were also collected on respondent age, formal education level, household income and current trip length. A convenience sample of visitors at the California Welcome Center (WC) at Pier 39 festival center attraction in San Francisco was collected during the third week of March 2009. Welcome Center visitors at Pier 39 were selected because WC visitors are similar in diversity to tourists visiting San Francisco and

California. This was an exit survey, where one adult from each exiting group was asked to participate. Surveys were administered by trained college students and WC staff. Visitors were offered a reusable tote bag as an incentive to participate.

Data analysis was undertaken to provide the basic descriptive information of means, frequencies and percentages. Cross tabulation was employed to determine differences among respondents' attitudes toward environmentally responsible business practices with regards to their socio-demographic profile. A chi-square test probability of .05 or less was considered to be a significant difference. Factor Analysis of attitudes towards green practices was undertaken. Statistical Package for Social Sciences (SPSS 16) was used for data entry, cleaning, and analysis. Responses to the open-ended question were content analyzed to determine if the product or service listed was travel related.

Results

The results are presented in four major subsections which provide and discuss: (1) characteristics of respondents; (2) respondents' attitudes toward green or eco-friendly practices in the tourism industry; (3) factors influencing respondents' attitudes toward green or eco-friendly practices in the tourism industry; and (4) green practices recently undertaken by respondents.

Characteristics of Respondents

A total of 267 Pier 39 Welcome Center respondents completed the survey. There was a broad mixture of age groups among respondents but 77.0% were between 25 and 54 years old, as shown in Table 1. Young adults (18-24) were under-represented in the data. Respondents resided in other states (38.9%), California (31.3%) and in other countries (29.8%). Local residents made up 12.1% of respondents, while state residents from other parts of California accounted for 19.2% (Table 1). There was a wide array of respondent household income with the most frequent level (31.2%) being $100,000-$199,999, while 11.2% had less than $35,000.

Table 1. Characteristics of Respondents

Characteristics Variables	N	Percentage
Age (n=204)		%
18-24	15	7.4
25-34	48	23.5
35-44	56	27.5

45-54	53	26.0
55-64	18	8.8
Over 64	14	6.9
Residence (n=265)		%
Local	32	12.1
Other CA	51	19.2
Other State	103	38.9
International	79	29.8
Household Income (n=170)		%
Less than $35,000	19	11.2
$35-49,999	16	9.4
$50-74,999	40	23.5
$75-99,999	34	20.0
$100-199,999	53	31.2
$200,000 or more	8	4.7

Respondents' Attitudes toward Green or Eco-Friendly Practices in the Tourism Industry

Respondents attitudes about green or eco-friendly practices and sustainability in the travel/tourism industry were determined by responses to 18 statements on green practices, with 5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, and 1=strongly disagree. The results are presented in Table 2 as a percentage breakdown of responses for all green practices attitudinal statements and a mean average score for each statement.

The majority of respondents agreed or strongly agreed that it was *"imperative that the travel industry become more green and eco-friendly"* (83.0%) and that "*our children's future depends on moving towards more green practices"* (76.1%). Almost 65% of respondents specified they *were personally committed to supporting green practices*. More than a half of respondents strongly agreed or agreed their "*family or friends encourage them to support green practices*" (54.0%), they "*cared if a travel company adhered to green practices'* (53.7%), and "*some green practices can save money while traveling*" (53.5%). In addition, 53.3% of respondents agreed or strongly agreed that *travel companies should contribute cash to local non-profits that support green practices*. Nearly half of respondents (48.9%) strongly agreed or agreed *they were willing to pay an additional 10% for green travel services*. Only 9.3% strongly agreed they were *NOT willing to pay any additional costs for green practices*. Over 37% (37.6%) of respondents agreed *they specifically seek out green service providers when they*

DOI: 10.9707/2328-0824.1014

plan travel. Approximately 25% of respondents (25.1%) strongly agreed or agreed to *have used a travel service provider in last year primarily because it employed green practices* (see Table 2).

About half (45.6%) of the respondents agreed a *lack of knowledge about which travel/tourism companies undertake green or eco-friendly practices was a major factor holding back their supporting green travel companies*. More than one third of respondents (33.7%) indicated they *were not familiar with green practices in the travel industry*. There were green skeptics. Over 39 agreed or strongly agreed that *the primary reason travel/tourism companies undertake green practices is government forcing them*, while 33.6% of respondents agreed or strongly agreed the *problem of global warming is not nearly as great as the media wants us to believe*. Nearly one third of respondents (31.5%) agreed or strongly agreed "*most green practices are just for public relations and have little real substance."* Nearly 30% of respondents (29.6%) agreed or strongly agreed that *travel/tourism should implement only those green practices that result in an immediate financial return.* Approximately 24% of respondents (24.2%) agreed or strongly agreed *the travel/tourism industry "needs to wait longer before we can justify implementing green practices*."

Factor analysis of respondent attitudes towards green practices resulted in the identification of four key factors that explained 51.1% of the variation in responses. Figure 1 shows the most explanatory factor was "Unwilling Green Skeptics." Other factors were "Believer But Unsure Which Provider;" "Willing to Pay More But Can Also Save;" and Peers and I Think It's Greenwash."

Table 2. Respondents' Attitudes towards Green Practices

Attitudes Towards Green Practices	n	Don't know	Strongly disagree	Disagree	Neither	Agree	Strongly agree	Mean*
		%	%	%	%	%	%	
Imperative travel industry become more green	250	.4	.0	3.6	12.8	35.2	48.0	4.26
Children's future depends on more green practices	243	2.1	2.5	6.2	132	29.6	46.5	4.05
I am personally committed to supporting green practices	247	2.8	2.8	8.9	20.6	36.0	28.7	3.70
My friends or family encourage me to support green practices	246	2.8	2.4	12.2	28.5	32.9	21.1	3.50
Travel companies should contribute cash to local nonprofits supporting green practices	240	5.4	2.5	10.8	27.9	38.3	15.0	3.36
Some green practices can save me money while traveling	245	8.2	4.5	9.8	24.1	37.6	15.9	3.26
Major factor holding me back from supporting green travel companies is not knowing which company undertake green practices	248	4.4	6.0	13.7	30.2	35.1	10.5	3.17
I would be willing to pay additional 10% for green travel services	239	5.0	6.3	17.2	22.6	36.8	12.1	3.16
I specifically seek out green service providers when planning travel	242	3.7	4.1	15.7	38.8	24.4	13.2	3.16
Prime reason travel companies do green practices is government forcing hem	244	8.2	4.5	18.0	30.3	27.5	11.5	2.99
I am not familiar with green practices	246	3.3	13.4	24.0	25.6	25.2	8.5	2.82
Most green practices are just for public relations and have no real substance	248	2.8	15.3	28.6	21.8	19.4	12.1	2.76
Travel companies should only do green practices that result in immediate $ return	243	5.3	8.6	29.6	26.7	21.8	7.8	2.74

DOI: 10.9707/2328-0824.1014

I am not willing to pay additional costs for green practices	247	2.0	14.2	32.0	25.9	16.6	9.3	2.69
I have booked/used a travel service provider in the last year primarily because it employed green practices	247	10.5	8.9	15.8	39.7	17.8	7.3	2.67
Global warming is not nearly as great as media says	247	2.0	27.9	24.3	12.1	17.4	16.2	2.64
I do not care if a travel company adheres to green practices	244	2.9	16.4	37.3	23.0	10.7	9.8	2.52
Travel industry should wait before starting green practices	244	3.3	25.0	25.8	21.7	17.2	7.0	2.45

*Scale: 0= Don't know, 1=Strongly disagree, 2=Disagree, 3=Neither disagree or agree, 4= Agree, 5= Strongly agree

Figure 1. Factor Analysis Results: Respondents Attitudes Towards Green Practices

F1 – Unwilling Green Skeptics (Variance Explained =19.4%)

I Don't Care if Travel Co Adheres To Green Practices	.86
Global Warming Is Not Nearly As Great As Media Says	.80
Travel Industry Should Wait Before Green Practices	.79
I Am Not Willing To Pay Additional Costs for Green Practices	.72
Green Practices Just For Public Relations, No Substance	.64

F2 – Believer But Unsure Which Provider (Variance Explained =18.9%)

I Am Personally Committed To Supporting Green Practices	.73
Do Not Know Which Companies Undertake Green Practices	.67
Imperative Travel Industry Become More Green	.66
Some Green Practices Can Save Me Money While Traveling	.65
I'd Be Willing To Pay Additional 10% For Green Travel Services	.63

F3 –Willing To Pay More But Can Also Save (Var. Explained=7.6%)	
I'd Be Willing To Pay Additional 10% For Green Travel Services	.46
Some Green Practices Can Save Me Money While Traveling	.44
F4 –Peers and I Think It's Just Greenwash (Variance Explained=5.2%)	
My Friends Or Family Encourage Me To Support Green Practices	-.45
Green Practices Just For Public Relations No Substance	.42
Total Variance Explained= 51.1%	

DOI: 10.9707/2328-0824.1014

Green or Eco-Friendly Practices Recently Undertaken by Respondents

Respondents were asked to briefly describe three green or eco-friendly travel products or services they had purchased or used (if any) in the last year. A substantial number of respondents (12.7%) were able to describe a green practices they undertook while traveling in the last year (see Table 3). Only 5.2% of practices cited were specific to the travel industry.

Table 3. Purchased/Used Green or Eco-Friendly Travel Products/Services in Last Year*

Purchased/Used Green Products (n=267)	N	Percentage
No, Don't know or Missing	233	87.3
Yes	34	12.7
Yes - Non-travel related	20	7.5
Yes - Travel specific green practices	14	5.2

* Responses were content analyzed to determine if it was travel related. Travel related responses mentioned a travel, lodging or recreation type application or use.

The most frequently mentioned types of green practices were: Solid waste reduction (30.9%), Green transportation (25.5%), Green procurement/toxic-free products (26.0%), Green services/programs (7.3%), Water conservation (5.5%), and Organic food (3.6%). Most identified green practices were low cost and required only small changes in consumer behavior, such as employing reusable shopping bags or water bottles. Other actions had considerable cost (buying carbon offsets for flights) or required a substantial change in behavior (took public transportation instead of private car). A complete list of green practices identified and influences of demographic characteristics on green travel attitudes is provided in Table 4.

Table 4. Reported Green or Eco-Friendly Product/Service Purchased/Used In Last Year*

Green Product/Service	N	Percentage
Solid Waste	**17**	**30.9**
Reusable grocery/tote bags	6	1.1
Use reusable water bottles	5	.9

Ceramic/metal plates/utensils rather than disposable ones	2	.4
Paper cups held onto	1	.2
Purchased used clothes	1	.2
Recycle bathroom soaps/materials at hotel	1	.2
Use less linen and toilet items in hotel	1	.2
Transportation	**14**	**26.0**
Use public transportation from airport	2	.4
Rent small vehicle not SUV	2	.4
Public transportation/bus instead of my own car	1	.2
Carpool to work or events	1	.2
Use cable car instead of driving	1	.2
Walk instead of driving	1	.2
Carbon footprint airline program	1	.2
Carbon neutral airline provider - regularly for business	1	.2
Look for destinations where not rental cars are required	1	.2
Electric bus	1	.2
Rent hybrid car	1	.2
Green Procurement/Use of Toxic-Free Products	**14**	**25.5**
Buy/use high post-consumer/recycled content products	6	1.1
Biodegradable soaps/detergent	5	.9
Green cleaning products	3	.5
Green Programs/Services	**4**	**7.3**
Use green services recommended by AAA	1	.2
Look for green hotels	1	.2
Cap adventures	1	.2
Community initiatives - whale watch (NZ)	1	.2
Water	**3**	**5.5**
Participate in hotel water conservation program	3	.5
Food	**2**	**3.6**
Buy/order organic food	2	.4

*Responses to the open-ended question were content analyzed to determine what type of product or service was listed. Respondents could list up to three green products or services (N=56).

Factors Influencing Respondents' Attitudes toward Eco-Friendly Practices

This section reports on significant differences among respondents' attitudes toward environmentally responsible business practices and their socio-demographic profile. About one in four respondents (25.1%) *agreed* they used a travel service provider in the last year primarily because it employed green practices. While these respondents included Californians, travelers from other states, as well as international travelers, respondents who reside locally and in-

DOI: 10.9707/2328-0824.1014

state were significantly more likely to have used a green travel provider than were residents of other states and countries (See Table 5).

Respondents who had household incomes of $75,000-$99,000 and more than $200,000 were significantly more likely to care about whether or not a travel/tourism company adheres to green practices than those with other household incomes (see Table 6).

The vast majority of respondents agreed that the travel industry must become more green or eco-friendly, but there were significant differences between income levels. Respondents who had household incomes of more than $200,000 were significantly more likely to disagree it is imperative for travel/tourism industry to become more green or eco-friendly than respondents in other household income categories (see Table 7).

Table 5. Have Booked/Used a Travel Service Provider in Last Year Primarily Because it Employed Green Practices, by Respondent Residence*

Attitudes Towards Green Practices	Booked/used Travel Services in Last Year Primarily because it Employed Green Practices					
	Don't know	Strongly disagree	Disagree	Neither	Agree	Strongly agree
	%	%	%	%	%	%
Local	12.5	.0	12.5	45.8	4.2	25.0
Other CA	2.1	6.2	12.5	47.9	22.9	8.3
Other State	10.1	12.1	17.2	35.4	19.2	6.1
Intl	16.0	9.3	17.3	38.7	16.0	2.7

* Chi square probability =.024 that differences in cell values are due to chance (N=246).

Table 6. Don't Care if Travel Company Adheres to Green Practices, by Respondent Household Income*

Household Income	I Don't Care If Travel Co Adheres To Green Practices					
	Don't know	Strongly disagree	Disagree	Neither	Agree	Strongly agree
	%	%	%	%	%	%
Less than $35,000	15.8	5.3	47.4	15.8	5.3	10.5
$35-49,000	.0	37.5	12.5	12.5	12.5	25.0
$50-74,000	.0	7.9	31.6	28.9	15.8	15.8
$75-99,000	.0	27.3	30.3	21.2	9.1	12.1
$100-199,000	.0	18.0	38.0	24.0	12.0	8.0
$200,000 or more	.0	25.0	37.5	12.5	12.5	12.5

*Chi square probability =.017 that differences in cell values are due to chance (N=164).

Table 7. Imperative Travel Industry Becomes More Green or Eco-Friendly, by Respondent Income*

Household Income	Imperative Travel Industry Becomes More Green/Eco-Friendly					
	Don't know	Strongly disagree	Disagree	Neither	Agree	Strongly agree
	%	%	%	%	%	%
Less than $35,000	5.3	.0	.0	10.5	47.4	36.8
$35-49,000	.0	.0	6.2	.0	25.0	68.8
$50-74,000	.0	.0	2.6	5.1	48.7	43.6
$75-99,000	.0	.0	.0	9.1	21.2	69.7
$100-199,000	.0	.0	3.8	28.8	23.1	44.2
$200,000 or more	.6	.0	12.5	.0	62.5	25.0

*Chi square probability =.002 that differences in cell values are due to chance (N=167).

Conclusions

A survey of visitors to the California Welcome Center at Pier 39 in San Francisco was administered to learn about their attitudes towards green or eco-friendly practices in the travel industry and if they had actually used/employed green practices during their travel in the last year. Results indicate that California Welcome Center visitors surveyed in the study were very supportive of the travel/tourism industry implementing green or eco-friendly practices. In addition, the majority said they are personally committed to undertaking green practices. But these travelers were relatively uncertain as to what green practices look like in the travel/tourism industry and which companies provided them. False claims and green-washing by some businesses are undermining public support for green practices, especially those with a higher cost and/or higher eco-benefits. Nearly half of the respondents were willing to spend at least 10% more to support green businesses. Respondents said they are actually changing their buying behavior toward green travel practices. About one in four respondents selected a travel service in the last year primarily because it used green practices. This indicates a potential competitive advantage for green travel businesses. There were no significant differences in respondent willingness to select green travel providers by age, household income or trip length. This suggests wide support for green travel/tourism businesses. However, a third of respondents were green skeptics and did not believe it is imperative to become more green or that global climate change is as pervasive as the media presents. Even though California residents were more likely to select green travel providers, the level of overall support and willingness to pay for green practices suggests there is a substantial national and world wide market for eco-friendly providers

Overall, the study findings suggest there is a very large support base for green practices and sustainable operations but many more will buy/support green practice providers with better information and clearly distinguishable alternatives. There is a significant market (over 1/3 of respondents) that specifically seeks green oriented businesses and would likely purchase green travel alternatives; but consumers want more trustworthy information on what are and who undertakes green practices.

DOI: 10.9707/2328-0824.1014

Combining other research about the travel industry and findings from this study about travelers suggests the industry is ahead of the consumer in adopting green practices, but this is quickly changing. Travelers want to be better informed and they need to be assured any additional funds and efforts on their part are being well spent to achieve the goals of true eco-friendly sustainable tourism. The travel/tourism industry should play an important role in facilitating the movement toward green practices by educating practitioners and consumers on viable green travel practices, being a creditable source of information on green practices and businesses that have made a substantial commitment to them.

Literature Cited

Bricker, K., Sarnoff, P., & Schultz, J. (2009, October 14). Parks, recreation, tourism: Sustainability, trends, resources and Challenges [PowerPoint slides]. National Recreation and Parks Association Congress. Salt Lake City, UT.

Chiesa, T. & Gautam, A. (2009, May). Towards a low carbon travel & tourism sector report. *World Economic Forum.* Retrieved on September 14, 2009 from ttp://www.unwto.org/media/news/en/pdf/LowCarbonTravelTourism.pdf.

Holden, A. (2000). *Environment and tourism* (pp. 14-16). London: Routledge.

Honey, M. (2008). *Ecotourism and sustainable development: Who own's paradise?* (2nd ed.). Washington, DC: Island.

Honey, M., & Krantz, D. (2007, December). *Global trends in coastal tourism.* Center on Ecotourism and Sustainable Development. Retrieved on Oct 6, 2009,from www.responsibletravel.org/resources/documents/reports/Global_Trends_in_Coastal _Tourism_by_CESD_Jan_08_LR.pdf.

Huffadine, M. (2000). *Resort design: Planning, architecture, and interiors* (pp. 6-52). New York: McGraw-Hill.

Naditz, A. (2008). In the Green; Eco-Friendly Hotels. *Sustainability: The Journal of Record*. April, 1(2): 119-123.

PhoCusWright, (2009, February). Going Green: The Business Impact of Environmental Awareness on Travel.

Tierney, P. (2008, November 10). Moving towards sustainable operations; What resort could and are doing. Resort and Commercial Recreation Association Conference. New Paltz, NY.

United Nations World Tourism Organization. (n.d.). *Tourism 2020 vision*. Retrieved Septr 29, 2009, from http://www.unwto.org/facts/eng/vision.htm

U.S. Travel Association. (n.d.). *Grand Hyatt Kauai resort & spa.* Retrieved on October 15, 2009, from http://travelgreen.org/files/Grand%20Hyatt%20Kauai%20Case%20 Study%2001-06-09.pdf

Yesawich, P. (2009). *Insights August 2009: Going green, but not willing to pay for it.* YPartnership. Retrieved on September 10, 2009, from http://blog.ypartnership.com/?p=288.

DOI: 10.9707/2328-0824.1014