Are Tourists’ Environmental Behavior Affected by Their Environmental Perceptions and Beliefs?

Nichola Anastasia RAMCHURJEE1a, Suresha S.a

a University of Mysore, Department of Environmental Science, Mysore, 570 005, Karnataka, India

Abstract: The key to eliminating environmental problems depends mainly on how much individuals are motivated to change their consumer behaviors and participate in more environmentally responsible practices. The purpose of this research is to examine if tourists’ environmental behaviors are affected by their environmental perceptions and beliefs and how these concepts influence tourists to engage in environmentally responsible behaviors while visiting Hassan, Karnataka India. Random sampling utilizes a structured questionnaire for this investigation. The questionnaire consisted of four sections with 335 participants. The results showed that some tourists engage in positive environmental behaviors. It also revealed that the tourists largely held positive environmental beliefs and perceptions, and are aware of the concerns for the environment, however, they are not ready to transfer their environmental beliefs into their behavioral practices. Their main aim when on vacation is to experience the destination and activities offered, relax and enjoy the cultural atmosphere and to generally “have a good time”.

Key words: behaviour, environmental beliefs, perceptions, ecotourism, consumer’s behaviour

1. Introduction

Many concerns for the environment has increased significantly, while at the same time, societies’ beliefs and behaviors toward the environment have also changed drastically. According to (Dunlap and Scarce, 1991; Howell and Laska, 1992) even with this increased awareness of the problems existing in the environment, human activities are still often the cause of these problems (Welsch and Kuhling, 2009), but yet individuals frequently fail to choose behaviors that will help lessen these impacts on the environment. In other words, there is an absence of environmental ethics as tourists do not transfer their environmental beliefs into their consumer behavior. This has led researchers in attempting to understand this disconnect between environmental awareness and pro-environmental behaviors, further, numerous gaps

1 Coresponding author: Nichola Anastasia RAMCHURJEE, Email: nichola.ramchurjee@yahoo.com
exist in the studies of the environmental concerns and environmentally responsible behaviors.

To understand environmental responsible behavior, a definition that describes the behavior that protects the environment is required. In 2002, Kollmuss and Agyeman defined pro-environmental behavior as that exhibited by an individual who engages in actions to minimize any negative impact on the natural and built world. Likewise, according to Meijers and Stapel (2011), they proposed that an individual who seriously considers future consequences of his actions is more likely to behave sustainably and make sustainable choices.

From previous studies, we can see the emergence of environmentally-conscious tourists, often referred to ecotourists or responsible tourists, whose increased concern for the environment, causes them to be more environmentally conscious towards their purchases and behavior. This issue is evident through the greater availability of “green products” such as green hotel choices (Han et al., 2010; Park and Boo, 2010), more fuel efficient and environmentally friendly vehicles, and businesses and organizations implementing environmental programs. Many individuals are taking initiative at home through recycling/reusing, conservation of energy by being more conscious about air conditioning and heating.

However, there is a question as to whether they carry their sustainable behavior with them while on vacations. A number of factors affecting tourism behavior were identified, including an individual’s age, nationality, travel experience as well as their values, attitude, and knowledge. From the perspective of tourism businesses, it is relevant to know whether the sustainability initiatives are of importance for tourists and whether they will affect tourist choices of products.

2. Literature review

According to Sharples (2001), there has been a permanent change in consumers’ attitudes and in 1994, Witherspoon’s research, confirmed this result. In Witherspoon’s study, up to one half of those who claim to embrace green values never transfer these beliefs into their consumer behavior. Mihalic (2001), acknowledged the same results. According to her, there is a difference between the declarative and actual environmental sensitivity for tourist demand, which is the difference between environmental awareness and environmental behavior. Environmental awareness is much greater seen in tourists’ non-environmental behavior. However, she noticed that the problem lies in the absence of environmental ethics that should be aimed towards environmental behavior.

Barr (2007) expounded that in order to help improve environmental problems, environmental concern must have significant impacts to a degree to which
individuals are motivated to change their behavioral practices. From review of the literature, we found reports of positive relationships between environmental concern and ecologically responsible behaviors including but not limited to recycling (Simmons and Widmar, 1990; Straughan and Roberts, 1999); an association between renewable energy sources and environmental concern (Joskow, 1996), consumers’ willingness to pay more for renewable energy and green products (Bang et al., 2000; Xiao and Dunlap, 2007), individuals’ willingness to engage in environmentally friendly behavior (Mostafa, 2007) and to make sacrifices in their habits regarding environmental effects, and thus affects pro-environmental behaviors (Fujii, 2006; Oreg and Katz-Gerro, 2006). However, most research on pro-environmental consumers concluded that despite the large number of consumers who expressed concerns about environmental problems, only a few are willing to make sacrifices in their personal lifestyles.

At the same time, there is a large body of contradictory research indicating that tourists tend to behave irresponsibly while on vacations and that environmental concern only plays a minor, if any, role in the decision making process of a tourist (Fairweather, Maslin and Simmons 2005; Lubbert, 2001). Dolnicar and Leisch (2008) and (Miao and Wei, 2012), conducted studies on tourists’ obligation to protect the environment and their results showed that 92% of the respondents felt morally obligated to behave in an environmentally friendly manner at home, while the average pro-environmental behavior on vacation was only 25% of that at home. Wearing et al., (2002) surveyed tourists on an eco-tour, where most explained that while at home they engaged in a range of ‘modest’ green behaviors, such as recycling and donating to environmental organizations, but not one considered preservation in their eco-tour purchase decision. When asked why they participated in environmentally friendly behavior at home and not on vacation, the general response was “I don’t know.” Wearing et al., (2002) suggested that being in a different environment might account for why people do not practice their usual routines.

Sharpley (2001) also pointed out that tourists are under time and pressure constraints when booking holidays, which lead to people ignoring irrelevant information, and that sustainability and eco-labels in the current tourism marketplace are in the category of irrelevant information because they are not essential to the tourist’s experience. Similarly, Becken (2004) argued that holidays are taken for personal benefits, making environmental risks caused by travel to be underestimated by tourists, and changes in travel behavior for environmental reasons are not likely to happen, because tourists feel free of responsibilities when they are on vacation. Lubbert’s (2001) research also found that although tourists hold positive environmental attitudes, they did not feel environmentally responsible
when on vacation. A possible explanation as to why many tourists do not feel that they have to act environmentally friendly in a holiday destination is because they want to experience the destination and what it has to offer, even if the activity or entertainment is not pro-environmental. According to Fairweather et al., (2005), visitors may be unwilling to change their travel behavior to achieve environmental benefits, particularly if it would interfere with their enjoyment or not coincide with their travel goals and so while on vacation, people want to enjoy themselves and tend to not take care of the environment.

The review of existing literature on tourists’ environmental beliefs and behaviors shows conflicting results, indicating on one hand an increase in tourists' environmental concerns, and on the other hand, tourists’ tendency to be more careless while on vacations when compared to their behavior at home. In order to reconcile these two streams of literature, the present study aims to investigate tourists’ perceptions and beliefs and whether they are willing to transfer their environmental perception and beliefs into their consumer behaviors. This study proposes two questions (1) what can the authorities in Hassan district do to promote environmentally responsible behaviors from tourists? (2) Do good-at-home reuse and recycle habits follow tourists on their vacation?

3. Data and method

3.1. Data collection
In order to investigate tourists’ environmental behavior, perceptions and beliefs, quantitative data were collected by administering questionnaires to tourists in Hassan district, Karnataka. The sample survey for this study was conducted from May 2011-January 2012, and consisted of tourists who stayed more than three days and were 18 years and older. A total of 350 questionnaires was distributed and there were usable 335 questionnaires (95.7%).

3.2. Instruments
The questionnaire consisted of four sections. Each latent construct was measured using multiple items, mostly adapted from previous literature. The first section collected information on the demographics of the tourists including age, gender, occupation, education and nationality (country/state of origin). Many studies have suggested that tourists from different nationalities have different values and behaviors towards the environment. Tourists’ Environmental Behaviors were listed as the second section. A list of eleven items was compiled based on prior studies into environmental behavior (Corraliza and Berenguer, 2000; Trumbo and O’Keefe, 2001; Johnson, Bowker, and Cordell, 2004) and included questions about the length of stay
in Hassan, transportation used, and frequency of participation in a list of environmentally-friendly activities. It was measured using a four point Likert scale ranging from (4) ‘always’ to (1) ‘never’. The third section, focused on information concerning the environmental perceptions of the tourists. In this section, eight environmental perception items were assessed using a five point Likert scale with 1 representing ‘strongly disagree’ and 5 representing ‘strongly agree’. This section contained questions about the tourists’ interpretation of information to understand the environment. The last section, examined the relationship between Tourists’ Environmental Beliefs and tourists’ environmentally-friendly behavior and Tourists’ Environmental Perception and tourists’ environmentally-friendly behavior.

3.3. Readability test

For the present study, 27 items were formulated where 11 items represent environmental behavior, 8 items corresponds to environmental perceptions and beliefs respectively. After the tool was developed, a draft copy of the tool was prepared and was tested for readability by the investigator so as to ensure that the items of the tool did not have double barrel questions, the items were not contradicting in nature and also further to ensure that there was no repetition of any items with similar meanings.

3.4. Measurement validity

Content Validity is based on the extent to which a measurement reflects the specific intended domain of content (Carmines and Zeller, 1991). It refers to the conceptualization of the statements for developing the scale for the study. If the researcher has focused too closely on only one type or narrow dimension of a construct or concept, then it is conceivable that other indicators are overlooked. In such a case, the study lacks content validity. An estimate of content validity of a test is obtained by thoroughly and systematically examining the test items to determine the extent to which they reflect and do not reflect the content domain.

3.5. Reliability

Reliability is the extent to which a test or procedure produces similar results under constant conditions on all occasions. Factor analysis was performed prior to further analysis. The original principal component analysis solution was rotated using the varimax procedure. Three factors of Tourists’ Environmental Beliefs were identified based on Eigenvalues greater than one. Three underlying dimensions of environmentally relevant variables were derived from the factor analysis (Table 1). Cronbach’s alpha (Cronbach, 1951), a measure of internal consistency was tested
where a “high” value of alpha is often used as evidence that the items measure an underlying (or latent) construct (Ritter, 2010). Most of the Cronbach’s α for the data exceeded or were close to the minimum standard for reliability of 0.70 recommended by Nunnally & Bernstein (1994). The three factors explained 79.4% of the variance of the sample data.

An analysis of endogenous latent variables revealed four factors for Tourists’ Environmental Perception (Table 2). Most of the Cronbach’s α for the data exceeded or were close to the minimum standard for reliability of 0.70 recommended by Nunnally and Bernstein (1994). The four factors also explained 76.7% of the variance of the sample data.

**Table 1.** Factor Analysis of tourists’ environmental beliefs

<table>
<thead>
<tr>
<th>Tourists’ Environmental Beliefs Factors</th>
<th>Factor loadings</th>
<th>Eigen values</th>
<th>% variance explained</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotourism has negative impacts on the environment</td>
<td>0.847</td>
<td>3.947</td>
<td>35.881</td>
<td>35.881</td>
</tr>
<tr>
<td>The present generation should ensure that environment is maintained for future generations</td>
<td>0.817</td>
<td>2.108</td>
<td>19.160</td>
<td>55.041</td>
</tr>
<tr>
<td>Tourists have a responsibility to do what they can to protect the environment</td>
<td>0.855</td>
<td>1.313</td>
<td>11.940</td>
<td>66.981</td>
</tr>
<tr>
<td>I always look for environmental information about the destination visited</td>
<td>0.843</td>
<td>1.07</td>
<td>9.807</td>
<td>76.788</td>
</tr>
<tr>
<td>I am an environmentally conscious person</td>
<td>0.835</td>
<td>0.657</td>
<td>8.977</td>
<td>85.765</td>
</tr>
<tr>
<td>To maintain a healthy economy, we have to develop a ‘steady state’ economy where industrial growth is controlled</td>
<td>0.74</td>
<td>0.533</td>
<td>6.848</td>
<td>92.613</td>
</tr>
<tr>
<td>Humans need not adapt to the natural environment because they can remake it to suit their needs</td>
<td>0.768</td>
<td>0.43</td>
<td>5.482</td>
<td>98.095</td>
</tr>
<tr>
<td>There are limits to growth beyond which our industrialized society cannot expand</td>
<td>0.716</td>
<td>0.297</td>
<td>1.905</td>
<td>100.0</td>
</tr>
</tbody>
</table>

KMO = 0.788; Bartlett test = $\chi^2$ (28) = 1848, $p=0.000$; Explained variance=76.7%

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 5 iterations.

**Table 2.** Factor Analysis of tourists’ environmental perceptions

<table>
<thead>
<tr>
<th>Tourists’ Environmental Perceptions Factors</th>
<th>Factor loadings</th>
<th>Eigen values</th>
<th>% variance explained</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>The balance of nature is very delicate and can be easily upset.</td>
<td>0.804</td>
<td>3.296</td>
<td>41.196</td>
<td>41.196</td>
</tr>
<tr>
<td>Humans must live in harmony with nature in order to survive.</td>
<td>0.841</td>
<td>1.740</td>
<td>21.753</td>
<td>62.949</td>
</tr>
<tr>
<td>Man is severely abusing the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Plants and animals exist primarily to be used by humans.
The earth has limited capacity and resources.
To maintain a healthy economy, we have to develop a ‘steady state’ economy where industrial growth is controlled.
Humans need not adapt to the natural environment because they can remake it to suit their needs.
There are limits to growth beyond which our industrialized society cannot expand.

<table>
<thead>
<tr>
<th></th>
<th>0.848</th>
<th>1.313</th>
<th>16.407</th>
<th>79.357</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nichola Anastasia RAMCHURJEE, Suresha S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KMO = 0.766; Bartlett test = \(\chi^2\) (28) = 1291, \(p=0.000\); Explained variance = 79.4%

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 7 iterations.

4. Results and analysis

4.1. Demographic profile of the participants

A total of 335 participant usable questionnaires was obtained. Within this sample, a majority were males (57.6%) while 42.4% were females. The respondents had a good range in the age category. The age group 18-25 showed 29.6% of responses. Those in the age group of 26-33, accounted for 25.1%. The age group 34-41, made up 17.9% and 42-49 comprised 4.2%. The respondents between the ages of 50-57 showed 13.7%, while the age group 58-65 accounted for 13.7% and finally those respondents falling in the age group of 66-73 made up 2.7% of the survey. Many of the respondents 55.8% who were employed holds a Bachelor’s Degree or higher. Education is traditionally viewed as a function of the amount of schooling received (e.g., high school versus university levels of education).

A total of 13 countries were listed as the country of origin for foreign visitors. The largest group of respondents was from Europe, accounting for 60.4% of the sample representing eight different European countries. 4.8% represents visitors from South America. Participants coming from North America accounted for 28.4%, 3.6% of the sample were Chinese and 2.8% were from Iran. Figure 1a shows the Countries of Origin of Foreign Tourists. In this survey, domestic visitors accounted for 25.4% originating from nine different states (Figure 1b).
However, in this survey domestic visitors accounted for 25.4% originating from nine different states (Figure 2).

4.2. Environmental behavior of tourists

Tourists' environmental behavioral scores were computed based on the responses to eleven behavior related questions after coding the answers according to the following structure: response of ‘always’ was assigned 4 points; response of ‘often’ was allotted 3 point, response of ‘sometimes’ was given 2 point, and response of ‘never’ was given 1 point. The tourists' environmental behavior score was calculated as the sum of all the points for behavior given to each particular structure of individual respondents. The majority of the respondents reported that they ‘always’ engage in the following activities: I actively recycle household items and waste at home, I conserve energy at home (e. g. energy efficient fridge), but according to
(Virginiatech, 2010), 80% of respondents conserved energy at home, as compared to 40% who saved energy while at a hotel, I recycle /reuse plastic bags, I recycle aluminum cans and I collect and recycle used paper (e. g. Newspaper, Magazine Articles) as seen in a study conducted by (Baker and Davis, 2010). Some of the participants were ‘often’ involved in the following actions: I actively pursue nature based activities during leisure/holiday time, I refuse excess packaging when I buy products, I participate in conservation projects in my home area, I use biodegradable packaging to plastic packaging, and I recycle aluminum cans. The respondents ‘sometimes’ or ‘never’ pursue the following activities: I use aerosol sprays, I use public transportation instead of a car. Overall, the tourists’ choices of behavioral statements while staying in Hassan are I actively pursue nature based activities during leisure/holiday time, I refuse excess packaging when I buy products, I recycle aluminum cans, I actively recycle household items and waste at home and I conserve energy at home (e. g. energy efficient fridge). For all those beliefs the mean responses were significantly higher than the mid-point of the scale at confidence level α=0.01.

The study shows that a large number of tourists are environmentally conscious and pursue environmentally responsible behaviors at home, which can be seen from activities such as recycling and reusing plastic bags, aluminum cans, household items and waste materials and conservation of energy as seen in the study conducted by (Dolnicar and Leisch, 2008; Wearing et al., 2002). The list of environmental behaviors, their means, standard deviations, and coefficients of variation and the percentage of respondents who agreed are reported in Table 3.

The percentages of responses of agreement, neutral or disagreement with the behavioral statements are presented in Table 4. A majority of the respondents felt uncertain regarding their behavior to the negative impacts of tourism on the environment. About one third of them (32.4%) indicated that they are neutral to the statement while 25.5% of the participants disagreed with the statement. 42.1% of the tourists agreed that tourism has negative impacts on the environment. It is surprisingly alarming and distributing that a large number of the respondents feel neutral about the negative impacts of tourism on the environment. Statements such as I participate in conservation projects in my home area, I refuse excess packaging when I buy products and I actively pursue nature based activities during leisure/holiday time indicate how important the role education plays in environmental behavior. Many authors argued that education is a critical component of the ‘ecotourism’ experience (Alcock, 1991; Oliver, 1992; Bramwell and Lane, 1993) and that environmental awareness through education and training are important to the achievement of sustainable tourism (Johnson, 1998). Within the tourism industry,
ecotourism is commonly seen as a platform for environmental education of tourists (Tisdell and Wilson, 2000).

All the participants in the study stayed in Hassan for more than three days, and were engaged in all activities offered and explore the ecotourism sites. One of the tourist activities with high potential to generate environmental problems is the choice of local transportation, which contributes to increasing air pollution, congestion, noise and risk of accidents in the region (OECD, 2002; European Commission, 2004). From the data, the participant trip information showed that a majority of the visitors traveled by car from one ecotourism site to another because of the long distances between each site, but once at that particular site, they used bicycle or walking as their primary modes of transportation. By observation, some of the tourists refuse/reuse plastic bags and extra packaging (Sustainable Travel International, 2015).

Table 3. Tourists’ environmental behavior

<table>
<thead>
<tr>
<th>Tourists’ environmental behaviour</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error</th>
<th>Variance</th>
<th>95% confidence interval for Mean</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>I recycle /reuse plastic bags.</td>
<td>335</td>
<td>2.880**</td>
<td>1.122</td>
<td>0.061</td>
<td>1.259</td>
<td>2.760 - 3.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I actively recycle household items and waste at home.</td>
<td>335</td>
<td>2.970**</td>
<td>1.036</td>
<td>0.057</td>
<td>1.074</td>
<td>2.860 - 3.080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use aerosol sprays.</td>
<td>335</td>
<td>2.130</td>
<td>1.012</td>
<td>0.055</td>
<td>1.025</td>
<td>2.020 - 2.240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I collect and recycle used paper (e.g. Newspaper, Magazine Articles).</td>
<td>335</td>
<td>2.750*</td>
<td>1.060</td>
<td>0.058</td>
<td>1.123</td>
<td>2.640 - 2.860</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I recycle aluminium cans.</td>
<td>335</td>
<td>2.810**</td>
<td>1.098</td>
<td>0.060</td>
<td>1.205</td>
<td>2.690 - 2.920</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use public transportation instead of a car.</td>
<td>335</td>
<td>2.470</td>
<td>1.034</td>
<td>0.057</td>
<td>1.070</td>
<td>2.360 - 2.580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I conserve energy at home (e.g. energy efficient fridge).</td>
<td>335</td>
<td>2.900**</td>
<td>1.042</td>
<td>0.057</td>
<td>1.085</td>
<td>2.790 - 3.010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I use biodegradable packaging to plastic packaging.</td>
<td>335</td>
<td>2.640*</td>
<td>0.924</td>
<td>0.050</td>
<td>0.854</td>
<td>2.540 - 2.740</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I actively pursue nature based activities during leisure/holiday time.</td>
<td>335</td>
<td>2.790**</td>
<td>0.695</td>
<td>0.038</td>
<td>0.483</td>
<td>2.720 - 2.870</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I refuse excess packaging when I buy products.</td>
<td>335</td>
<td>2.810**</td>
<td>0.812</td>
<td>0.044</td>
<td>0.660</td>
<td>2.720 - 2.890</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I participate in conservation projects in my home area.</td>
<td>335</td>
<td>2.620*</td>
<td>0.835</td>
<td>0.046</td>
<td>0.697</td>
<td>2.530 - 2.710</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*α=0.05 **α=0.01
4.3. Tourists’ environmental perception

According to Schacter (2011), perception is the organization, identification and interpretation of sensory information in order to represent and understand the environment. Figure 2 shows the analysis of the Tourists’ Environmental Perceptions. A majority of the participants (60.9%) strongly agreed or agreed to perception indicators such as: Humans must live in harmony with nature in order to survive (73.1%), To maintain a healthy economy, we have to develop a ‘steady state’ economy where industrial growth is controlled, (72.8%), Man is severely abusing the environment (70.4%), The balance of nature is very delicate and can be easily upset (67.5%) and The earth has limited capacity and resources (66.0%). Respondents (20.2%) felt uncertain regarding the negative perceptions and their effects on the environment indicating that they were neutral to all the perception indicators. Over one-fifth of the respondents (18.8%) indicated that they strongly disagree/disagree with the environmental perceptions indicators such as: Humans need not to adapt to the natural environment because they can remake it to suit their needs (48.0 %) and plants and animals exist primarily to be used by humans (31.3%).

4.4. Tourists’ environmental beliefs

In evaluating foreign tourists’ demographics with their environmental beliefs, the study showed that Americans (57.0%) were more environmentally friendly in their beliefs. This was followed by the English (40%), then the Canadians (39.4%), Danes...
(31.9%), Swedes (26.9%), Swiss (25.4%), Spanish (22.7%), Germans (22.4%),
Italians and the French (21.2%) respectively, followed by tourists from Iran (15.5%),
and then Chinese and Brazilians having (14.6%) respectively and finally Argentinians
(12.2%) having friendly environmental beliefs. In comparing gender to beliefs, more
males (37.9%) than females (22.4%) had positive environmental beliefs. This could
be due to the fact that there were more male tourists than female tourists. The results
from the age category and environmental beliefs showed that participants aged 18-
25 had the most positive environmental beliefs. Findings for occupation and
environmental beliefs revealed that more people who are employed had
environmentally friendly beliefs and tourists having a Bachelor’s Degree and higher
(52.4%) proved that they held more environmentally friendly beliefs. According to
Knapp, 2000 education is the key to changing individual behavior towards the
environment by producing environmentally literate and responsible citizens. Thus
having an awareness of the environment through education should lead to the
adoption of more responsible environmental attitudes/behavior by tourists (Orams,
1997). Kuhlemeier et al., (1999) stated there is a weak relationship between
environmental knowledge and environmental attitudes and behavior, and that
environmental behavior is more strongly connected with a willingness to make
sacrifices than attitude. Some studies revealed that knowledge does not automatically
lead to environmental action or pro-environmental behavior (Jensen, 2002).

When asked what the authorities in Hassan district can do to promote
environmental awareness and responsible behaviors, the tourists responded that
having more highly trained skilled tour guides possessing knowledge about the
environment, the history of culture and traditions and availability of green products.
Environmental educational materials such as pamphlets, brochures and posters are
useful and can prompt tourists to practice their do-good behaviors while vacationing.
Continuous education, environmental awareness and other sustainability practices
should be implemented in order to further promote good environmental behavior.
This can be done through effective communication methods and promotional
campaigns. The tourists were willing to adhere to no plastic zones and they were
willing to be more conscientious in their everyday uses of materials that can affect
the environment such as, turning off the TVs, taps, lights and air conditioning units
when leaving their hotel rooms to promote environmental sustainability. According
to a study of tourists who visited Niagara Falls, Tartaglia and de Grosbois (2009)
found that respondents were strongly engaged in a number of activities, such as
turning off TV when not in hotel room, turning off light when not in hotel room and
taking short showers instead of bath.
4.4.1. The relationship between tourists’ environmental behavior and tourists’ environmental perceptions

The correlation coefficient between the environmental behavior and environmental perceptions is -0.463, significant at the 0.05 level. This correlation
coefficient showed that there was a negative relationship between tourists’ behavior and their perceptions indicating that as tourists’ environmental behavior increased their environmental perceptions decreased or as their environmental behavior decreased their environmental perception increased, Table 5.

4.4.2. The relationships between tourists’ environmental behavior and tourists’ environmental beliefs

From Table 5, the correlation between environmental behavior and environmental beliefs is 0.245 at 0.05 significant level. This shows that there is a direct positive influence on tourists’ behavior suggesting that tourists who are more environmentally aware possess more interest in safeguarding the environment.

Table 5. Construct inter-correlations, means and standard deviations

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Means</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourists’ Environmental Behavior</td>
<td>1.00</td>
<td></td>
<td></td>
<td>3.60</td>
<td>1.70</td>
</tr>
<tr>
<td>Tourists’ Environmental Perceptions</td>
<td>-0.43</td>
<td>1.00</td>
<td></td>
<td>1.12</td>
<td>0.96</td>
</tr>
<tr>
<td>Tourists’ Environmental Beliefs</td>
<td>0.245</td>
<td>-0.455</td>
<td>1.00</td>
<td>3.93</td>
<td>0.80</td>
</tr>
</tbody>
</table>

p<0.05

5. Conclusions

The results confirm the findings of previous researches about positive and negative environmentally friendly behaviors. Tourists’ personal lifestyles and benefits far outweighed their environmental behaviors and friendly attitudes. Overall, the results showed that majority of the tourists practice positive behaviors when they are at home and only some of the tourists were in agreement with the behavioral statements. Statements such as I actively recycle household items and waste at home and I conserve energy at home revealed that the tourists are conscientious about their activities at home. However, statements such as I never use public transportation, does not correspond with their actions while on vacation, in that they use bicycle or walking as their primary modes of transportation for short distances showing that there are some activities tourists will engage in to promote friendly behaviors. However, other actions such as recycling/reusing bags and other materials, conserving energy such as turning off TVs, taps, lights and air conditioners and taking baths instead of showers, the tourists showed not concerns until they were asked about these behaviors by the author. In other words, it was seen that the tourists feel more responsible for the environment where they live and are willing to make a bigger effort to maintain a good living environment in their immediate
surroundings. They do not feel obliged to behave in the same way when they are on vacation. Two possible reasons are that they feel vacation time is supposed to be worry-free, selfish time which should be free of responsibilities, and that the infrastructure is not available in the vacation context/environment to enable them to maintain their usual levels of environmentally friendly behaviors.

The most common activity followed by the tourists was that they actively pursued nature based activities during leisure/holiday time. According to their environmental perceptions, their understanding was that humans must live in harmony with nature in order to survive while that of the environmental beliefs were that they always looked for environmental information about the destination visited, this showed that some tourists are responsible about the destinations they are visiting and are environmentally conscious.

The present paper argues that people have intrinsic reasons for not behaving in a responsible manner, which is associated to attitudes, suitability and personal preferences. Concerns between motivations for tourist/vacation choices and environmental awareness have the potential to hinder sustainable behaviour. The effectiveness of measures aimed at changing tourist behaviour depends on individual’s beliefs and perceptions.

The inconsistencies in behaviors across contexts as noted in earlier studies and displayed in this study seem to be predominantly caused by intrinsic factors other than environmental considerations. However, the balance between environmental awareness and environmentally friendly behaviour is far and difficult to attain when on holiday. The study showed that the tourists are environmentally conscious at home and must implement such behaviors in their travels. From their behaviors, it can be seen that the tourists are aware of the impacts of their activities on the environment and in some way are willing to change their behaviors only if it does not interfere with their holiday.

To achieve sustainable tourism, both the tourism industry and authorities share the challenge of providing incentives for tourists to adopt sustainable behaviours when on vacation. The authorities need to create the environments in which sustainable tourism behaviors are developed and maintained, while providing the necessary infrastructure to secure easy access by tourists at each destination.

References


31. Oliver, J., 1992. All things bright and beautiful: are tourists getting responsible adult environmental education programmes? in Weiler, B. (Editor), Ecotourism
Incorporating the Global Classroom. International Conference Papers, Canberra: Bureau of Tourism Research, p. 54–60.


