

ENVIRONMENTALLY FRIENDLY BEHAVIOUR OF THE TOURISTS WHO USES HOT AIR BALLOON AND THEIR ATTITUDE TOWARDS AIR POLLUTION

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Annotation. Recreational activities taking place at natural destinations have the utmost importance for the consciousness of individuals about the environment. Individuals taking part in those activities come into close contact with environmental problems and experience them personally. This experience also reflects in their behaviour. The aim of this study is to investigate environmentally conscious behaviour of the visitors who use hot air balloons. It also sought to determine visitor attitude towards air pollution which is the main source value. Therefore, 500 questionnaires distributed to visitors and out of the total 386 were considered to be valid for this study. In determining the effect of demographic variables T-test and one-way variance analysis applied to the hypotheses. As a result, there were significant differences between environmentally friendly behaviour and the entire demographic variables. Also, the attitude of the visitors towards air pollution is found to be quite significant.

Keywords: Recreational activities, environmentalism, environmentally friendly behaviour, air pollution

INTRODUCTION

Natural resources on earth are a part of nature and formed as a result of natural developments of thousands of years with the invisibility that has not disturbed humans. Moreover, these types of resources called renewable and while most of them change within the natural processes whereby enabling societies and cultures to still exist today; the remaining used to provide for human needs.

However, natural resources used by humans as if they were infinite led immense destructions in nature consequently. Moreover, ever-increasing human demands along with the increase in population caused ongoing damage to natural resources. Household waste, waste from the types of equipment used for supplying the daily needs of people and industrial waste, in particular, are the primary causes of such damage. Nature is indispensable for tourism. Protection of nature and reducing the damaging environmental impacts of recreational activities in nature has the utmost importance for the future of tourism and increased income in tourism.

Tourism establishments and tourism regions use natural resources extensively in order to create a demand in the field. Although such usage benefits the tourism sector, it also generates some pressure on environmental factors. If necessary measures are not taken, this pressure would lead to natural resources to encounter irreversible problems continuously.

Surely, to overcome such pressure is beyond the problem of only tourism establishments and decision making of the government tourism offices. Visitors planning a travel programme to provide for their various needs and desires should also take some precautions in their holidays as well as in their daily lives.

LITERATURE REVIEW

The developing sensitivity for environmental problems and protective behaviours towards preventing such problems manifest itself in the positive attitude towards the environment or various behaviour and consuming habits. This protection system is crucially important to sustain these types of natural resources for future generations. In this context, there has been an increase in environmentalist consumers lately. The majority of these consumers going beyond worrying about the protection of the environment see themselves more environmentalists by their interest related to the effects of the whole process from production to consumption.

Environmentalism indicates the desire for the protection of the environment's inherent and exclusive value and its sustainability against human demands and pressure. As indicated by Ay and Ecevit

(Ay & Ecevit, 2005) increase in the emerging environmentalist tendencies of the consumer groups and also in the market value had a positive impact on environmentalist behaviour. This pioneering consumerist group who is sensitive about the environment start to buy eco-friendly and quality products rather than consume too much, behave morally and environmental consciously. Such developments lead to the development of environmentally friendly behaviour.

In his work, Kirk described environmentally friendly behaviour as an activity in which an individual or a group participate in an activity to reduce environmental problems or abolish them altogether and strengthen the implementations for pushing green outcome. Also, Kirk stated that individuals would ensure the protection of the current state of nature and contribute positively for nature to be able to provide for and sustain future generations.

Vaske and Kobrin explained that individuals who act responsibly in natural resource environment also tend to make themselves and their friends more conscious about the environment and its protection on a daily basis. Environmental consciousness of individuals on a daily basis, manifest itself in other sectors too. The factors particularly such as technological advance, increased education levels of the individual, transculturation, increased income and free time manifest themselves in environmentally friendly behaviour of the consumers, in food and beverage consumption, in travelling as well as in their holiday and their participation of cultural activities.

Open-air recreational activities, with its increased significance in the market, enable individuals to interact with nature and, therefore to relax physically and psychologically; are performed primarily in forests, undamaged and pristine nature. Those individuals who are taking part in recreational activities and interact with natural resources would recognize environmental problems, react to them and behave in a way to reduce the impact of these problems on a personal level.

There are many factors in the literature which play the shaping role in environmentalist behaviour. Environmentalist consumer (Neuner, 2000), environmental knowledge (Tosunoğlu, 1993), environmental value, environmental consciousness (Hungerford & Volk, 1990), environmental anxiety, environmental sacrifice (Iwata, 2002), attitudes towards the place attachment (Brownlee et al., 2014), personal norms (Schwartz, 1977), and subjective norms are some of the components which determine environmentalist behaviour. Regardless of the factors or emotions that determine such behaviour, behavioural change for protecting the environment and continuity of that behaviour will profit both the natural resources and environment that make use of these resources.

METHODOLOGY

Kapadokya which this study took place is home to a unique natural formation called “Fairy Chimneys”. The study is to examine environmentally friendly behaviour of visitors who visit the destination to ride hot air balloon and their attitude towards air as the main source value of the activity.

The method used in the study is a quantitative research method while questionnaires used to collect data. The questionnaires consist of two sections. In the first section, to determine the visitor characteristics, questions asked are; the permanent country of residence, gender, age, marital status, income, number of visits and education. The second section included questions about environmentally friendly behaviour and attitudes towards air pollution. A series of valid and reliable measurements used to prepare the chart. The benefited works to determine environmentally friendly behaviour of visitors participated in the activity are of Miller, Merrilees and Coghlan (2015), while the work of Zhang and others (2015) are used to measure the attitudes towards air pollution.

The academics assessed and finalized the expressions in the charts. The research has 17 questions which comprise 11 environmentally friendly behaviour questions, and 8 questions for attitudes towards air pollution. In the study; five-point, Likert-type scale used for determining environmentally friendly behaviour which consisted of (1) strongly disagree, (2) agree, (3) neutral, (4) agree and (5) strongly agree. For attitude towards air pollution, several factors regarding tourism and air pollution are contrasted. In this section, visitors are asked to make a choice between tourism related expressions (cost, free time, security, tourism products, the popularity, distance of the destination) and air pollution.

The field of study is Kapadokya/Göreme National Park which is in Central Anatolia within the borders of Nevşehir and Kayseri (Somuncu, 2009). Kapadokya is where nature and history blend together. The region’s formation is the result of the eruption of ash and lava from Erciyes, Hasan and Güllü Mountains and the erosion of the soft strata by rain and winds for millions of years (Yılmaz et al., 2009).

Then rain seeping into cracks, with hot and cold weather together with winds causing soft tuff to wear off, the cap-shaped cones are formed from the basalt rock. These unusual and interestingly shaped stones called ‘Fairy Chimneys’. As a result of these geological formations being suitable for the use of natural homes; many tumuluses, caves and underground cities emerged through the years (Berkmen, 2015). Additionally, there are also frescoes and decors and pioneering works of the Byzantium Empire in the field (Demirçivi, 2017). Göreme National Park and Kapadokya (Nevşehir) included in the World Heritage List in 1985 both as a cultural and a natural heritage.

Research population comprises visitors who visited Cappadocia region and ride hot air balloon. In the activity, 500 questionnaires distributed in April and October 2018 and out of total of 386 valid questionnaires are evaluated. The validity of the chart used in the questionnaires assessed accordingly. Also when the data validity assessed, environmentally friendly behaviour scale Cronbach alpha value became 0, 86. A high level of validity range is apparent in consideration with the values.

FINDINGS AND DISCUSSIONS

Table 1 indicates the descriptive statistics of participants in the study which aimed at evaluating environmentally friendly behaviour of recreational visitors who visited Kapadokya which is within the borders of Nevşehir city and their attitude towards air pollution.

Table 1

Descriptive Statistics of Visitors

Age	N	%	Income	N	%
17-25	37	9,6	Low	11	2,8
26-35	149	38,6	Middle	233	60,4
36-45	142	36,8	High	127	32,9
45 and above	51	13,2	Very High	13	3,4
Total	379	98,2	Total	384	99,5
Gender			Marital Status		
Woman	195	50,5	Married	192	49,7
Man	186	48,2	Single	186	48,2
Total	381	98,7	Total	378	97,9
Education Level			Country of Living		
High School	37	9,6	Turkey	58	15,0
Collage	96	24,9	Europe	157	40,7
Faculty	185	47,9	Asia	88	22,8
Master	66	17,1	Australia	36	9,3
Total	384	99,5	South America	12	3,1
Number of visit			Nort America	20	5,2
1	318	82,4	Africa	0	0
2	16	4,1	Antarctica	0	0
3 and above	2	0,5	Total	371	96,1
Total	336	87,0			

According to the descriptive statistics of the people who visited Cappadocia and ride hot balloon, 50% are women and, 48,2% are men. In this activity which people from all ages participated, the majority were between the ages 26-35 (38,6%) and 36-45 (32,9%). When looked at the educational background 65%

were university or masters graduate. Thus, it reveals that people who participated in the activity have a higher educational level.

Visitors of that study whom about half were married and, another half single were from middle income (60,4%) and high income (32,9%). Also, the most significant statistics were in the visitors' permanent country of residence. Visitors from five continents preferred Kapadokya for hot air balloon ride activity. If we also include Turkey, 55,7% of the visitors were from European countries. Moreover, Asia with 22,8% visitors living in Cappadocia came as the second continent in the statistics. Additionally, Kapadokya was the meeting point for visitors from Australia (9,3%), North American (5,2%) and South American (3,1%) continents for this activity.

Factor analysis applied to the data set to determine the environmentalist behaviour of the visitors in Cappadocia. It is conducted to determine whether there is a relationship between the measurable and observable variables in the chart and whether these variables which have a relationship when matched, generate new data formations, and also identification of minor and major factors (Bartholomew et al., 2011), (Yong & Pearce, 2013). When KMO and Barlett tests of the chart observed, values showed that the sample of study is within the limit of acceptable (Sarmiento & Costa, 2017). The data examined with Varimax rotation. Among the eigenvalues only evaluated data was above '1' (one). Moreover, chart expressions whose communalities were below 0,500 and which split into more than one factor and loaded onto both factors omitted from the analysis. As a result of factor analysis, the establishment of factors and related data presented on Table 2.

Table 2

Factor Analysis Results of Environment-Friendly Behavior Statements of Visitors

Eco-Friendly Behavior	Communalities	Factor Loadings
Recycling and Saving		
I recycle paper products.	0,748	0,865
I recycle plastic products.	0,789	0,886
I recycle glass products.	0,769	0,870
I save water.	0,630	0,719
I only use air conditioning in extreme temperatures.	0,543	0,733
Waste Management		
I buy less food to reduce waste.	0,541	0,551
I encourage others to be environmentally friendly	0,557	0,680
I walk where possible	0,531	0,669
I buy organic food products	0,599	0,773
I use public transport where possible	0,550	0,738

When the expression in the environmentally friendly behaviour chart 'I switch lights off when not in use', which considered to reduce reliability, eliminated; the value of Cronbach Alpha found 0,858. Environmentally friendly behaviour divided into two sub-dimensional factors and 'Recycling and Saving' factor explains 44,92% of the total variance and 'Waste Management' factor of 17,63%. Considering the estimated answers of the visitors, they agreed less with recycling and saving, whereas they answered 'I agree' (\bar{X} 3,91) to the expressions of waste management. Concerning their environmental consciousness; they agreed quite positively to the expressions related more with transportation, food waste and encouraging others in environmental problems. One of the most important ways to deal with environmental problems is recycling and saving. However, environmental consciousness found low considering the estimated visitor answers participated in hot air balloon activity.

This study examined the possible relationship between the visitor demographics such as gender, age, education, income and permanent country of residence and 'environmentally friendly behaviour' of the participants.

H1: There is a significant difference in the relationship between visitor gender and environmentally friendly behaviour.

According to the results of the T-test, there is a significant difference ($p=0,02<0,05$) between visitor gender who visit Kapadokya for the hot air balloon ride and environmentally friendly behaviour. This result is similar to the outcomes of the works of Plavsiz (2013) and Soylu et al. (2018). The data indicate that female visitors (\bar{X} 3,81) behave more environmentally friendly in comparison to their male counterparts (\bar{X} 3,60). Thus, the H1 hypothesis relating to gender accepted.

H2: There is a significant difference in the relationship between visitor age and environmentally friendly behaviour.

To determine if there were any differences between visitor age group and environmentally friendly behaviour one-way variance analysis (ANOVA) applied to the data set. According to the analysis results, a significant difference ($p=0,00<0,05$) found between visitor age and environmentally friendly behaviour. In literature, so many works demonstrate that age has an effect on environmentally friendly behaviour, environmentally conscious behaviour or environmentally friendly consumption (Vining & Ebreo, 1990), (Yahya et al., 2015). When the variations in the age group considered, visitors whose 'age were 46 and above' demonstrated more environmentally friendly behaviour (\bar{X} 4,03) than others. This result shows parallelism to the work of Roberts (1996) which state older individuals are more ecologically conscious and demonstrate more environmentally friendly behaviour compared to younger individuals. Thus, H2 hypothesis is accepted.

H3: There is a significant difference in the relationship between the visitor's level of education and environmentally friendly behaviour.

According to one-way variance analysis (ANOVA), there is a significant difference ($p=0,00<0,05$) between the visitor's level of education and environmentally friendly behaviour. Roberts and Bacon (1997), Bamber and other (2009) ve Ramly and other (2014) used the level of education as a category in their studies for understanding environmentally friendly behaviour. Moreover, Ramnly et al. concluded that the level of education affects consumerist behaviour. Diamantopoulos and other (2003) indicated that individuals higher-level of education affect their participation in environmentally friendly activities positively.

In this study, environmentally friendly behaviour of visitors whose education level were undergraduate, Masters or Doctorate found to be high (\bar{X} 3,76 ve \bar{X} 3,95). It is very important that families educate individuals morally. But, also increase in the level of education results in them being more conscious towards the environment. More knowledge about the environment would enable individuals to take responsibility in some environmental problems and enable them to demonstrate appropriate behaviours accordingly. As per these evaluations, our H3 hypothesis accepted.

H4: There is a significant difference in the relationship between visitor income and environmentally friendly behaviour.

As a result of the analysis, there is a significant difference ($p=0,00<0,05$) between visitor income and environmentally friendly behaviour. Boztepe (2012), Lynn (2014), and Al Mamun and other (2018) concluded in their studies that the level of individual income effects environmentally friendly behaviour.

Whereas Boztepe stated individuals with high- income, Al Mamun stated individuals with low-income demonstrate environmentally friendly behaviour in their concern for the environment. Likewise in this study, visitors with high-income and low-income responded highly positive to the expressions of environmentally friendly behaviour. The average visitors in that category are \bar{X} 4,11 and \bar{X} 3,87 respectively. According to the results, the H4 hypothesis accepted.

H5: There is a significant difference in the relationship between visitor's permanent country of residence and environmentally friendly behaviour.

In the study visitor responses to the permanent country of residence are classified under the heading of 'continent'. According to the analysis, there is a significant difference ($p=0,00<0,05$) between their permanent country of residence and their environmentally friendly behaviour. Therefore our H5 hypothesis accepted.

The continents which visitors lived were; Europe (N=215), Asia (N=88), Australia (N=36), North America (N=20) and South America (N=12). When considering estimated responses to the country of residence, visitors who were living in Australia (\bar{X} 4,29), North America (\bar{X} 4,28) and South America (\bar{X} 3,90), demonstrate more environmentally friendly behaviour. Visitors who live in Turkey were 58 people. When the average is considered Turkey demonstrated the least environmentally friendly behaviour (\bar{X} 3,40) along with the visitors who were living in European countries (\bar{X} 3,65).

Göreme National Park and Kapadokya (Nevşehir) included in the World Heritage List in 1985 both for its cultural and natural heritage. Additionally, Göreme in the 7th and 8th centuries gained religious value when Christians fled from various threats and settled in the region (Yıldız & Kılıç, 2016). These are only some of the reasons that attract visitors to the area. Four archaeological sites in Cappadocia were among Turkey's top ten most visited archaeological sites in 2014 with over 2 million visitors. Therefore, Cappadocia is the meeting point of visitors who are travelling there for cultural, natural and religious reasons.

Additionally, Cappadocia is one of the unique places where hot balloon ride activity takes place. Lately, the balloon became a primary attraction of the region.

The study sought to define the evaluated visitor responses about air as the main source of this activity. Therefore, the visitor decisions when encountered with traditional tourism factors and air pollution which is one of the environmental problems of today became one of the research questions.

Visitors asked to compare cost, security, free time, touristic product and popularity and distance of the destination. The results of the visitor selections have shown in Figure 1.

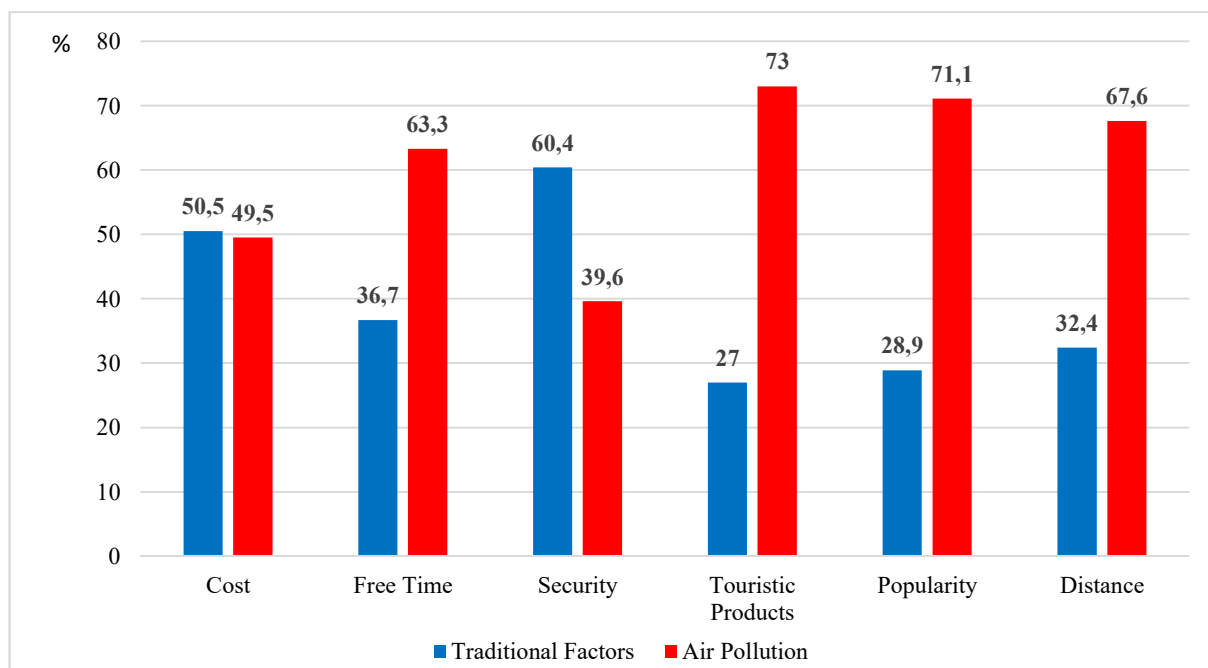


Figure 1. Percentage of the Visitor Answers in Terms of Their Priority in Traditional Tourism Factors and in Air Pollution

Figure 1 revealed significant results for the attitudes towards air pollution. Except for cost and security, air pollution stated as the priority. Also, visitor preference in four factors resulted in over 60% in favour of air pollution. Other six traditional factors when compared to air pollution were 50,5% for cost, 36,7% for free time, 60,4% for security, 27% for touristic products, 28% for popularity and finally 32,4% for the destination distance.

CONCLUSION AND RECOMMENDATIONS

It is essential that individuals take responsibility for environmental problems and perform environmentally protective behaviours. It is also beneficial both for us and others who use these natural resources if learning and developing behaviours related to environmental problems take place accordingly. Especially governments which strive to secure economic freedom and also the tourism sector which is ultimately dependent on natural resources, must protect these values and work towards ensuring new ones.

According to the analysis results, visitors who ride hot air balloon at Kapadokya demonstrate environmentally friendly behaviour such as recycling glass, plastic and paper. Additionally, guests explained that they use public transport and consume organic food. In this study, all our hypothesis were to determine whether there is a relationship between visitor demographic variables such as gender, age, income, education and permanent country of residence and their environmentally friendly behaviour which considered to be ($p < 0,05$) at the level of being significance.

It is significant that visitors who live in Australian and American continents, with the very low and high-income, have undergraduate or Master's degree and over 46 years old demonstrated a tendency towards environmentally friendly behaviour. While there were mostly positive responses to air pollution, the visitor responses dropped below 40% when the two factors which are security and cost in relation to air pollution mentioned. However, in contrast to these two categories, it is significant that attitudes towards air pollution were 49,5% and 39,6%. These outcomes demonstrate that air pollution would affect visitors' destination choice and travel plans.

Nevertheless, this study has some limitations. It is due to the short period in which the data was collected, the low number of participants, and the choice of one particular activity for the study. Selecting different activities which use air source value or conducting research in different fields of research would expand the study and enable more accurate generalisations.

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