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# Tourist Loyalty is All About Prices, Culture and the Sun: A Multinomial Logistic Regression of Tourists Visiting Athens

Frangos C.C.<sup>a,\*</sup>, Karapistolis D.<sup>b</sup>, Stalidis G.<sup>b</sup>, Fragkos Constantinos<sup>c</sup>, Sotiropoulos I.<sup>d</sup>  
and Manolopoulos, I.<sup>e,\*</sup>

<sup>a</sup>Technological Educational Institute of Athens, Dept. of Business Administration, 122 10, Greece

<sup>b</sup>Technological Educational Institute of Thessaloniki, Dept. of Business Administration, Greece

<sup>c</sup>University College London, Dept. of Medicine, U.K.

<sup>d</sup>Technological Educational Institute of Thessaloniki, Dept. of Agricultural Development, Thessaloniki, Greece

<sup>e</sup>Technological Educational Institute of Epiros, Dept. of Auditing and Finance, Preveza, Greece

## Abstract

The objective of the paper is to identify the predictive factors of a tourist's loyalty to the tourist destination of the capital of Greece, Athens. A sample survey was carried out among the members of a random sample of 461 tourists to Athens. The questionnaire included sections about satisfaction from Athens, Image of Athens, Image of Greece, Loyalty to Athens as a destination, Word of Mouth for travelling to Athens, Demographics and questions about intention for repeat tourist visits to Athens. The methods of analyzing the data were I. Exploratory Factor Analysis (EFA) of the Image of Athens and Image of Greece, obtained during a tourist's visit, respectively. The first (EFA) about Image of Athens revealed three factors: (a) The Natural Environment and Behavior of city's population towards tourists. (b) Historical Monuments, Weather and the Mediterranean cuisine and (c) Quality of city's accommodation and other services. The second (EFA) about Image of Greece obtained during a visit revealed two factors (a) Historical Monuments and Culture (b) Natural Environment and Entertainment. II. The sections on Image of Athens and Greece had Cronbach's Alpha coefficients 0,713 and 0,71 respectively. III. Logistic Regression with Dependent variable: Loyalty of tourist visitor to Athens, which revealed the following statistically significant independent factors which influence positively loyalty to destination: Satisfaction from price of trip, Cleanness of Athens, Prices of products and Services, Historical Monuments and Natural Beauty. Of interest is the second Logistic Regression with dependent variable: Word of Mouth of the repeat visitor to Athens for visiting the city, which revealed two statistically significant independent variables: Satisfaction from price of trip and the Sunny Natural Environment of Athens and Greece. Hence, there is a differentiation in the nature of factors which influence the first-time and the repeat visitor to Athens in his decision to spread the word encouraging the prospective visitors to Athens: The first-time visitor is impressed with the price of

\* Corresponding author. Tel.: +306944162376, +302102833756.

E-mail address: [cfragos@teiath.gr](mailto:cfragos@teiath.gr)

the trip, the Historical Monuments and the Sunny natural environment of Athens whereas the repeat visitor considers as more important variables the price of the trip and the Sunny Natural Environment of Athens and Greece generally.

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*Keywords:* Loyalty to Tourist Destination; Athens, Factor Analysis; Logistic Regression; Sunny Greek Natural Environment

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## 1. Introduction

The sector of Tourism in the Economy of Greece is one of the few sectors that is competitive at a global level. The 2013 Report of The Association of Greek Tourism Enterprises confirms that Greek Tourism contributes 16,4% to the GDP of Greece, covers 51,2% of the trade balance sheet, employs 1 in 5 residents or nearly 800.000 people and generates 34 billion Euro total demand.

Customer satisfaction, Destination image and Tourism Marketing Information are important aspects in successful tourism management and destination marketing. An important portion of income from Tourism comes from the amount of money spent by the repeat tourists. Tourism destination loyalty is the tendency of a tourist to be a repeat visitor to a particular destination and to recommend this destination to others. (Darnell and Johnson, 2001; Jayraman et al, 2010). In this paper we shall examine empirically the predictive factors of tourist loyalty to a particular Greek destination, the city of Athens.

In Chapter 2 we present a Literature Review on the subject of tourist destination loyalty. In Chapter 3 we present the results of a sample survey among 461 tourists visiting Athens. In Chapters 4, we apply Descriptive Statistical techniques, Factor Analysis, Reliability Analysis,  $\chi^2$  Tests and Logistic Regression in order to analyse the results. Finally, in Chapter 5 we discuss our findings and we draw the appropriate conclusions.

## 2. Literature Review

### 2.1. Customer satisfaction and tourist loyalty

Tourist Satisfaction from the products, services, culture and sightseeing of a particular destination is developing into Destination Loyalty according to (Frangos et. al.,2014). The climate,history ,hotels and food of a particular destination are important prerequisites for tourists' positive impression and resulting loyalty, according to (Rajesh,2013; Coban 2012). According to (Rajesh, 2013) satisfaction is the buyers' cognitive state of being adequately or inadequately rewarded for the sacrifices he has undergone. According to (Kozak and Rimmington, 2000) tourist satisfaction is considered one of the prime variables to sustain competitive business in the tourist industry because it affects the consumption of goods and services ,the choice of destination and, generally, the loyalty to tourist destination. According to research papers by ( Oliver, 1981;Oliver, 1999) "Satisfaction is defined as the judgment that a product or service itself, provided(or is providing) a pleasurable level of consumption-related fulfilment, including levels of under and over-fulfillment".

### 2.2. Destination image and tourist loyalty

Destination Image has been one of the crucial areas of tourism research for more than half a three decades. Destination Image is defined as "an expression of knowledge, impressions, prejudices, imaginations and emotional thoughts an individual has of a specific place".

### 2.3. Destination loyalty

Oliver's (1999) definition of loyalty emphasizes two different aspects of loyalty ,the attitudinal and the behavioral concept: "Loyalty is defined as a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future , thereby causing repetitive same-brand or same-brand-set purchasing,

despite marketing efforts to cause switching behavior”. The determinants of customer loyalty are the following: customer satisfaction, customer experience, value, service quality or performance, product superiority, personal fortitude , social bonding and synergy, price, risk, brand name, demographics, habits and history of brand usage.

2.4. Sample surveys on the effect of destination image on destination loyalty

Artuger et al (2013), have carried out sample surveys trying to determine the effect of Destination Image on Destination loyalty.

2.5. Tourist marketing and destination image management: future directions

Oliver (1999) stresses the importance of Destination Marketing Organizations(DMOs) for the effective Marketing of a particular tourist destination. In the marketing literature during the past decade, three areas hav emerged,which could stimulate customer loyalty: branding, integrated marketing communications (IMC) and customer( or visitor) relationship management (CRM).

2.6. Conceptual Models explaining the influence of Destination Image and Tourist Satisfaction on Destination Loyalty

The research papers of Chi (2010) and Rajesh (2013) contain conceptual models for expressing the influence of destination image and visitor satisfaction on destination loyalty. In this paper, we shall adopt the model of Rajesh (2013) in formulating our research hypotheses, which is illustrated in the following figure.

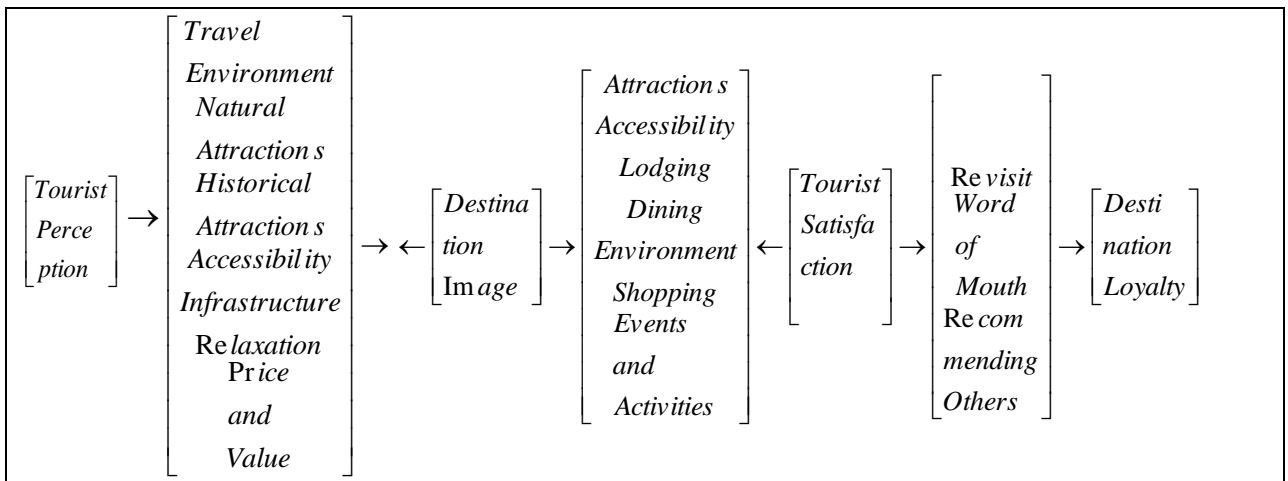


Fig. 1. Influence of Tourist Perception, Destination Image and Tourist Satisfaction on Destination Loyalty.

3. Research hypotheses

Our purpose is to investigate empirically the following Research Hypotheses (RH):

RH1: A significant factor of Destination Loyalty is the satisfaction from Destination Image regarding the city of Athens and especially its price of products, services , culture and the sunny natural environment.

RH2: The Age of a tourist as well as the Service Quality of the facilities of Athens as a tourist destination (hotels, shops, natural attractions, security, nightlife,) is strongly associated to tourists’ satisfaction from the destination and, hence influences heavily their decision to revisit the city.

## 4. Methods of investigation

### 4.1. Construction of questionnaire and survey sampling

In order to investigate empirically whether or not the research Hypotheses RH1 and RH2 are true, we have constructed a questionnaire which has been distributed among 461 randomly selected tourists visiting Athens. The questionnaire includes the following Sections: Tourist Perception regarding Athens, destination image regarding Athens, destination image regarding Greece, tourist satisfaction from visiting Athens and destination loyalty. The respondents were 237 men and 224 women. 215 respondents were 10-35 years of age and 246 were 36-65 years of age. The tourists were residing mainly in Germany, France, England, United States and Italy.

### 4.2. Statistical analysis

#### 4.2.1. Chi-Square Tests for the influence of Gender on the Degree of Loyalty to the touristic destination of Athens

The following figure 2 shows the influence of Gender on the degree of loyalty of tourists to the city of Athens .

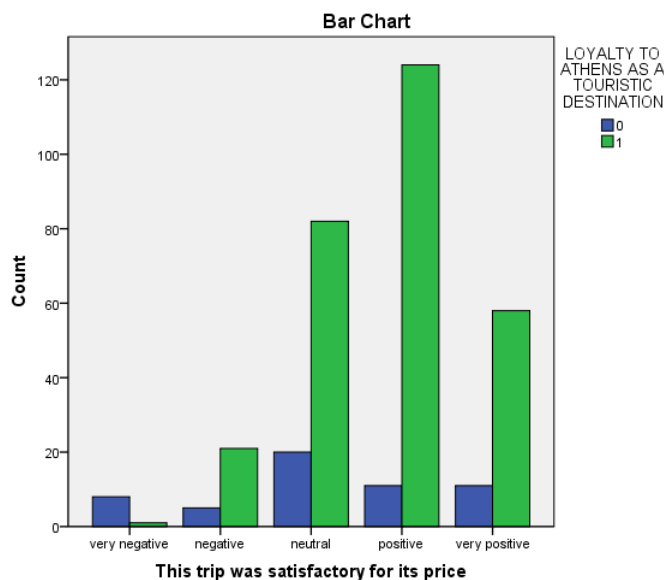


Fig. 2. Tourist loyalty to Athens for men (1: man) and women (0: woman)

The  $\chi^2$  test has shown that 53,4% of men tourists were loyal to the tourist destination of Athens as opposed to 6,4% of women tourists who were loyal to the same destination. For this test, we found: Pearson Chi-Square Statistic=42,68 with 4 degrees of freedom and p-value<0,005. The test was statistically significant at the 0,005 level of significance.

#### 4.2.2. T-tests for the equality of mean opinions for the trip and the Archaeological attractions of Athens and Greece with respect to men and women tourists

In Table 1, the results of the statistically significant t-tests are presented. The tests have shown that men tourists were attracted by the Archaeological Monuments of Athens whereas women tourists were attracted by the natural beauty of Athens and were paying particular attention to the improvement of their social status with the tourist trip to Athens.

Table 1. t-tests for the equality of means of men and women tourists

Variable	t-statistic	df	Significance
This trip will improve my social status	-2,899	366	0,004
Item that most attracted you during visit: Visiting Museums and Archaeological places	2,312	213	0,022
Image of Greece obtained during your visit regarding: The opportunities for exploring nature	-2, 298	355	0,022

4.2.3. Factor analysis regarding factors which influence the opinion of a tourist regarding Greece and Athens in particular.

We performed Exploratory Factor Analysis (EFA) for the investigation of the main factors which determine the image of Athens to the Tourist. The Test KMO (Kaiser-Meyer-Olkin) of Sampling Adequacy is 0,773. The test Bartlett for Sphericity is statistically significant. The magnitude of the sample is sufficient (461). Hence, the assumptions of EFA are satisfied. We conclude from this EFA that there are three factors which determine the image of Athens to the Tourist. The 1st factor is called: Municipal services and Behavior of local people (Cleanness, Safety in the City, Natural Beauty, Friendliness of local people) and it counts for 30% of the total variance explained. The 2nd factor is called: History, Nature and Greek Cuisine.(Archaeological places, Nature and Greek food) and it counts for 12% of the total variance explained. The 3rd Factor is called Prices (Prices of Goods and Services, Entertainment) and it count for 9% of the Total Variance Explained. Additionally, we performed Exploratory Factor Analysis (EFA) for the investigation of the main factors which determine the image of Greece to the Tourist with similar to the first (EFA) results.

4.2.4. Reliability analysis.

We found that the Cronbach’s alpha coefficients for the two groups of constructs about the Image of Athens and Greece were 0,78 and 0,74,respectively,which is a satisfactory result showing that the questionnaire was complete.

4.2.5. Logistic Regression to explain the degree of Loyalty towards Athens.

Binary logistic regression was performed to assess the impact of a number of factors on the likelihood that respondents would report that they have favored a second visit to Athens. The model contained four independent variables (Satisfaction from price of trip, Image of Athens regarding culture and nightlife, Image of Greece regarding History, and Nature and Gender of tourist). The full model containing all predictors was statistically significant, ( $\chi^2(12,N=461)=52,462$ , p-valye<001), indicating that the model was able to distinguish between respondents who reported and did not report an attitude to revisit Athens. The model as a whole explained between (16,0 % )(Cox and Snell Chi-Squared) and (29,0%) (Nagelkerke R Squared ) of the variance in the attitude about a revisit to Athens, and correctly classified (89,1% ) of the cases. As shown in Table 2, all four independent variables made a unique statistically significant contribution to the model. The strongest predictor of reporting a favorable attitude towards a revisit to the tourist destination of Athens was satisfaction from the price of trip, recording an odds ratio of (2,25) and confirming the first and second research hypotheses, RH1 and RH2 respectively. This indicated that respondents who have been satisfied with the price of the trip were 2,25 times more likely to report an attitude to revisit Athens, than those who have not been satisfied with the price of trip. The following Table 2 summarizes the results of the logistic Regression:

Table 2. Summary of Logistic Regression Results. Explanation of Variables B2: Satisfaction from price of trip, D7: Culture and Nightlife in Athens, E4: History and Nature of Greece, Gender(1): Gender of tourist.

Variables	B	S.E.	Wald	df	sig	Exp(B)	Lower	Upper
B2			8,096	4	,088			
B2(1)	-2,136	1,385	2,380	1	,123	,118	,008	1,783

B2(2)	,502	,760	,437	1	,509	1,653	,373	7,330
B2(3)	-,262	,524	,249	1	,617	,770	,276	2,150
B2(4)	,812	,555	2,142	1	,143	2,252	,759	6,682
D7			17,521	4	,002			
D7(1)	-2,576	1,004	6,584	1	,010	,076	,011	,544
D7(2)	-2,333	,740	9,930	1	,002	,097	,023	,414
D7(3)	-1,699	,527	10,388	1	,001	,183	,065	,514
D7(4)	-1,105	,496	4,956	1	,026	,331	,125	,876
E4			14,808	3	,002			
E4(1)	19,209	40192,970	,000	1	1,000	2,201E8	,000	.
E4(2)	-2,007	,589	11,596	1	,001	,134	,042	,427
E4(3)	-1,280	,424	9,124	1	,003	,278	,121	,638
GENDER1(1)	-1,070	,455	5,529	1	,019	,343	,141	,837
Constant	4,067	,720	31,900	1	,000	58,391		

## 5. Conclusion

The results of our investigation confirm the truth of the two research hypotheses RH1 and RH2. The destination image and the destination satisfaction regarding Athens, influence the Destination Loyalty. An important research question is whether or not a second time visitor to Athens, has the same opinion about the city and its services, as a first time visitor to the same city. An important research topic is the investigation of the possibility for the creation of touristic attractions like festivals, exhibitions or excursions by sea to the Aegean Islands, and to the Archaeological places of Delphi and Olympia in order to increase the flow of tourists to Athens.

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