



## Residents' perspectives on tourism impacts of Portuguese World Heritage historic centers: Angra do Heroísmo and Évora

Perspetivas de residentes sobre os impactos do turismo em centros históricos portugueses Património Mundial: Angra do Heroísmo e Évora

Laurentina Vareiro

Polytechnic Institute of Cávado and Ave, School of Management, Campus do IPCA, 4750-810 Barcelos, Portugal, lvareiro@ipca.pt

Raquel Mendes

Polytechnic Institute of Cávado and Ave, School of Management, 4750-810 Barcelos, Portugal, rmendes@ipca.pt

### Abstract

The aim of this study is twofold. First, the study analyzes local community perspectives of the importance of the World Heritage Site (WHS) classification of the historic centers of Angra do Heroísmo and Évora. Second, the study analyzes local residents' perceived tourism impacts on the municipalities of Angra do Heroísmo and Évora. The methodology comprises quantitative research based on a self-administered survey applied to convenience samples of local residents of the two Portuguese municipalities in 2014. The main results reveal that local residents have a strongly positive perception of the WHS designation in both municipalities. With regard to the perceived tourism impacts, residents from Angra do Heroísmo have a stronger agreement about the impacts of tourism on their city than the residents of Évora, except for the negative social and cultural impacts. The comparison of the mean scores of these impacts across residents that live near and far from the historic centers reveals that the most valued and least valued impacts in the three categories of impacts (economic, social and cultural, and environmental) are common to all groups of residents. Nevertheless, residents living in or near the historic center of Angra do Heroísmo have higher means in the majority of tourism impacts (in all categories), with only one negative impact to concern the majority of respondents. Among the residents from Évora, residents living in or near the historic center have higher means in the majority of economic impacts but lower means in almost all social and cultural impacts. With regard to the environmental impacts, residents living in or near the historic center have higher means scores in the positive impacts and lower means scores in the negative environmental impacts.

**Keywords:** Portuguese historic centers, residents' perspectives, tourism impacts, world heritage.

### Resumo

O objetivo deste estudo é duplo. Em primeiro lugar, o estudo analisa as perspetivas da comunidade local sobre a importância da classificação como Património Mundial (WHS) dos centros históricos de Angra do Heroísmo e Évora. Em segundo lugar, o estudo analisa os impactos do turismo nos municípios de Angra do Heroísmo e Évora percebidos pelos seus residentes. A metodologia compreende a análise quantitativa com base num questionário autoadministrado aplicado a amostras de residentes dos dois municípios no início de 2014. Os principais resultados revelam que os residentes têm uma perceção fortemente positiva da designação como WHS, em ambos os municípios. No que diz respeito aos impactos percebidos do turismo, os residentes de Angra do Heroísmo manifestam uma concordância mais forte relativamente aos impactos do turismo na cidade do que os residentes de Évora, exceto para os impactos sociais e culturais negativos. A comparação das médias desses impactos entre os residentes que vivem perto e longe dos centros históricos revela que os impactos mais valorizados e menos valorizados nas três categorias de impactos (económicos, sociais e culturais, e ambientais) são comuns a todos os grupos de moradores. No entanto, os residentes que vivem no ou perto do centro histórico de Angra do Heroísmo tiveram médias mais altas na maioria dos impactos do turismo (em todas as categorias), com apenas um impacto negativo a preocupar a maioria dos inquiridos. Entre os residentes de Évora, os inquiridos que vivem no ou perto do centro histórico tiveram médias mais altas na maioria dos impactos económicos, mas mais baixas em quase todos os impactos sociais e culturais. No que diz respeito aos impactos ambientais, os residentes que vivem no ou perto do centro histórico tiveram maiores médias nos impactos positivos e menores nos impactos ambientais negativos.

**Palavras-chave:** Centros históricos portugueses, impactos do turismo, património mundial, perspetivas dos residentes.

### 1. Introduction

The World Heritage Site (WHS) certification by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) is widely considered a powerful tool for national tourism campaigns. It is commonly treated as a catholicon in promoting the tourism industry, which in turn may help to promote economic growth and development. Indeed, tourism development is generally considered an effective way to revitalize the economy of a destination. However, tourism relies heavily upon the local community's support for its development, which in turn is influenced by the residents' perspectives of tourism effects. Insight gained from the analysis of these perspectives may be important for policy-makers and tourism planners in the development of strategies with regard to the future management of the

certified sites and tourism development associated to them (Faulkner & Tideswell, 1997; Jackson, 2008).

This study has a twofold objective. First, it analyzes local community perspectives of the importance of the WHS classification of the historic centers of Angra do Heroísmo and Évora. Second, the study analyzes local residents' perceived economic, social and cultural, and environmental tourism impacts on the municipalities of Angra do Heroísmo and Évora. The methodology comprises quantitative research based on a self-administered survey applied to convenience samples of local residents of the two municipalities in the beginning of 2014. The local residents' perspectives of the level of importance of the WHS classification to the municipality and its impact in the increase of tourists is analyzed. The perceived economic, social and cultural, and environmental tourism impacts in



Angra do Heroísmo and Évora are then ranked and independent sample t-tests are used to investigate differences regarding tourism impacts between residents from both municipalities. Finally, using the same procedure (t-tests), differences regarding tourism impacts between residents that live near and far from the historic center of Angra do Heroísmo and between residents that live near and far from the historic center of Évora are examined.

This paper is organized in the following manner. After the introduction, the second section is dedicated to the literature review. The methodology used for empirical purposes is described in section three, while the estimated results are reported and discussed in the fourth section. The main conclusions are reported in the last section.

## 2. Literature review

### 2.1 World Heritage classification and tourism development

A World Heritage Site (WHS) is a place, such as a forest, mountain, monument or city, classified by United Nations Educational, Scientific and Cultural Organization (UNESCO) as a place of natural and/or cultural significance (Huang, Tsaur & Yang, 2012; Morales-Fernández & Lanquar, 2014). Hence, world heritages may be classified into three categories: natural heritages, cultural heritages, and mixed heritages (natural and cultural).

Natural and cultural certified heritages are widely considered as important tourism assets for the development of the tourism industry. The last decade shows an increase in the number of tourists in cities with certified heritage and a growing local economic development associated with the tourism industry (Marrero Rodríguez & Abdul-Jalbar, 2012; Morales-Fernández & Lanquar, 2014). Yang, Lin and Han (2010) consider that certified sites have two main advantages with regard to tourism. First, these sites are commonly used in marketing campaigns aimed at promoting national tourism. These campaigns may increase the international visibility of destinations and therefore attract more tourists. Second, countries that lack in resources to protect and maintain the certified sites are provided financial and technological aid by UNESCO for the preservation of these sites.

Yang *et al.* (2010) also consider the potential conflict between heritage preservation and tourism development. The WHS classification may attract an excessive number of tourists resulting in the destruction of the natural and cultural integrity of heritage sites that are not prepared to accommodate such a large number of visitors. Hence, the success of a heritage site must balance its preservation and visitation. Given the transversal nature of the sector, sustainable tourism development requires a multidisciplinary approach that must always consider the support of all tourism industry, including local and regional administration, and the involvement of local residents (Morales-Fernández & Lanquar, 2014; Rodrigues, Vieira, Marques & Teixeira, 2014).

### 2.2 Residents' perceptions of tourism impacts

The understanding of resident's attitudes and concerns towards tourism is an essential aspect of a sustainable

tourism sector (Ap, 1992; Ap & Crompton, 1993). This importance is derived from the fact that the overall success of tourism within a given destination relies heavily upon the local residents' support for tourism development (Yoon, Gursoy & Chen, 2001). Given that this support is affected by the perceived impacts of tourism, which may be both positive and negative, policy-makers and planners need to incorporate local communities' opinions into tourism development by continuously monitoring these opinions in order to maximize the benefits and minimize the adverse affects (Faulkner & Tideswell, 1997; Jackson, 2008). The trade-off between benefits and costs may be explained through the social exchange theory. According to this theory, residents' attitudes toward tourism and their subsequent support for its development are influenced by their evaluation of tourism effects. An exchange is evaluated based on the benefits and costs that result from that exchange. Hence, residents that perceive benefits from the tourism industry are likely to view it positively and support it, whereas residents that perceive costs are likely to evaluate it negatively and oppose to it (Ap, 1992; Andereck, Valentine, Knopf & Vogt, 2005).

Tourism induced impacts are usually grouped into three categories: economic impacts; sociocultural impacts; and environmental impacts (Liu & Var, 1986; Dogan, 1989; Ap, 1990; Andereck *et al.*, 2005; Kuvan & Akan, 2005; Jackson, 2008; Nunkoo & Ramkissoon, 2010). The economic impacts include positive elements such as tax revenue, increased jobs, and additional income, and negative elements such as tax burdens, inflation, and local government debt. The sociocultural impacts include positive elements such as resurgence in traditional crafts and ceremonies, increased intercultural communication and understanding, and negative elements such as increased crime rates and changes in traditional cultures. Among the environmental impacts are positive elements such as the protection of parks and wildlife, and negative elements that include crowding, pollution, wildlife destruction, vandalism, and litter (Andereck *et al.* 2005).

Different types of factors may influence residents' perspectives of tourism impacts. Based on a two-dimensional interface of tourism development/community, Faulkner and Tideswell (1997) and Fredline and Faulkner (2000) summarize these factors as extrinsic and intrinsic factors. The extrinsic factors are related to the characteristics of the location with regard to its role as a tourism destination. These comprise the nature and stage of the location's tourism development, the level of tourist activity, and the type of tourists the location involved. The intrinsic factors refer to characteristics of the members of the community that may affect variations in the tourism impacts within the community. Among other factors, these include socio-demographic characteristics of the resident population, such as age, gender, education, length of residency, and ethnicity, economic dependency on the tourism industry, and residential proximity to the tourism activity (Williams & Lawson, 2001; Kuvan & Akan, 2005; Jackson, 2008; Wang & Pfister, 2008; Nicholas, Thapa & Ko, 2009; Sharma & Dyer, 2009; Vareiro, Remoaldo & Cadima Ribeiro, 2013; Renda, Mendes & Oom do Valle, 2014).



As shown above, empirical research regarding residents' perspectives of tourism impacts is very well documented. However, there are still very few studies that focus the Portuguese case (Vareiro, Cadima Ribeiro, Remoaldo & Marques, 2011; Vareiro *et al.*, 2013; Renda *et al.*, 2014). The present study aims to contribute to the limited research regarding residents' attitudes towards tourism impacts.

### 3. Methodology

This study analyzes local community perspectives of the importance of the WHS classification of the historic centers of Angra do Heroísmo and Évora. It also measures the economic, social and cultural, and environmental tourism impacts on the municipalities of Angra do Heroísmo and Évora, perceived by local residents.

The municipality of Angra do Heroísmo is located within the Portuguese autonomous region of the Azores, on the southern coast of the island of Terceira. It covers an area of 239.0 km<sup>2</sup>, and has a population of 35 402 (INE, 2012). The municipality is composed of 19 parishes, and is seated by the city of Angra do Heroísmo. Founded in 1450, Angra do Heroísmo is the historical capital of the Azores and it is also the archipelago's oldest city. The central zone of the city was classified a WHS by UNESCO in December 1983.

Évora is a municipality located in the Alentejo region, in southern Portugal. Composed of 12 parishes, the municipality covers an area of 1,307.08 km<sup>2</sup>, with a total of 56 596 inhabitants (INE, 2012). The municipality is seated by the city of Évora, one of the most important historical cities in Portugal, with a strong cultural significance. Given its immense and varied historical and monumental heritage, the city is usually referred to as a "museum-city". The historic center of Évora was designated a WHS by UNESCO in November 1986, three years after the certification of the historic center of Angra do Heroísmo.

The WHS classification fostered not only the preservation of heritage, but also the promotion of tourism (Borges, Marujo & Serra, 2013). Indeed, the historic centers' certified heritage attracts visitors from all over the world, positioning Angra do Heroísmo and Évora as important tourism destinations in Portugal.

#### 3.1 Questionnaire and data collection

The questionnaire consists of three main sections. In the first section, information about the characteristics of the historic city center is collected. In the second section, respondents are asked to indicate to what extent they agree/disagree with statements about tourism impacts on their municipality using a five-point Likert scale (1=totally disagree; 2=disagree; 3=neutral; 4=agree; 5=totally agree). Various items are used to assess residents' perspectives of tourism impacts on their municipality. These items are based on previous empirical research (Williams & Lawson, 2001; Jackson, 2008; Sharma & Dyer, 2009; Jimura, 2011). In the final section, information on socio-demographic characteristics of the residents such as gender, age, residence, marital status, education, and occupation are collected.

In the beginning of 2014, a pre-test was carried out involving 10 graduate students with residence in Guimarães (a

Portuguese municipality with a historic center classified by UNESCO in December 2001). This exercise made it possible, among other things, to discover and correct any potential problems. Minor changes, mostly related to the clarity of the questions, were included in the final questionnaire.

Data for this study were collected using a self-administered survey applied to local residents of Angra do Heroísmo and Évora. Based on the purpose of this study, two public secondary schools, *Escola Secundária Jerónimo Emiliano de Andrade* and *Escola Secundária Gabriel Pereira*, located in the municipalities of Angra do Heroísmo and Évora, respectively, were used for constructing the survey samples. The questionnaires were mailed to the directors of two classes (an 11<sup>th</sup> grade class and a 12<sup>th</sup> grade class) selected by the headmaster of each school. The class directors distributed four questionnaires to each student of the selected classes. The student should answer one of the questionnaires, and family or friends that were residents in the city in analysis should fill in the remaining. The students were asked to return the filled in questionnaires within a two weeks' time schedule.

A total of 260 survey questionnaires were mailed in the beginning of 2014 (100 to Angra do Heroísmo and 160 to Évora). Only 193 questionnaires were returned, which reveals an approximate 75.7% response rate. However, six questionnaires were excluded: four due to a large percentage of missing values, and two due to not being from residents of the municipalities under analysis. A total of 187 questionnaires (71.9%) were analyzed in this study, 78 questionnaires from Angra do Heroísmo and 109 from Évora.

#### 3.2 Data analysis

The data analysis consisted of three stages. First the local residents' perspectives of the level of importance of the WHS classification to the municipality and its impact in the increase of tourists were analyzed. Second, residents' perceptions of the economic, social and cultural, and environmental tourism impacts were analyzed for both Angra do Heroísmo and Évora. Independent sample *t*-tests were used to examine the differences regarding tourism impacts between the residents in Angra do Heroísmo and Évora. Third, the same procedure (*t*-tests) was used to investigate if there are any differences in the tourism impacts perceptions of those who live near and far from the historic center, in both municipalities. The mean scores of the economic, social and cultural, and environmental tourism impacts were compared to understand what factors were perceived more important for residents considering the place of residence. Data were analyzed using the Statistical Package for the Social Sciences (SPSS), version 21.0.

### 4. Results

#### 4.1 Sample profile

Table 1 summarizes the socio-demographic profile of the survey samples. Most of the respondents are female (70.5% in Angra and 56.9% in Évora), and are mostly married in Angra (50%) and single in Évora (40.4%). The largest age cohort of respondents is the cohort aged between 15-24 years old (31.1% in Angra and 29.4% in Évora), followed by



the 45-64 years old (25.7%) cohort in Angra and by the 25-44 years old (25.7%) cohort in Évora.

**Table 1 - Samples profile**

	Angra (N=78)	Évora (N=109)
<b>Gender</b>		
Female	55	62
Man	23	47
<b>Age</b>		
15-24	23	32
25-44	15	28
45-64	19	25
65 and more	17	24
<b>Marital status</b>		
Single	26	44
Married	39	42
Divorced	6	8
Windowed	6	15
<b>Education</b>		
Primary	35	27
High school	34	50
Graduate school	6	27
<b>Place of residence</b>		
Near the historic center	35	79
Far the historic center	43	30
<b>Economic dependency on tourism</b>		
Yes	34	28
No	44	81

Source: Authors' own survey data.

In Angra do Heroísmo, a total of 46.7% of the survey respondents is endowed with basic education and only 8% with a higher education level. In Évora, 45.9% of the survey respondents is endowed with secondary education and 24.8% with higher education. The majority of the respondents (55.1%) lives far from the historic center of Angra do Heroísmo (more than a 3 km distance) and 72.5% lives in or near the historic center of Évora. A total of 56.4% of respondents in Angra and 74.3% in Évora do not depend, directly, from tourist activities.

#### 4.2 World Heritage Site classification

Residents were asked to rate the level of importance that the classification of the historic center as a WHS has for their municipality and also the impact in the increase of the number of tourists using a five-point Likert scale (1 = totally disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = totally agree). As shown in Table 2, the mean rating of the importance of the classification of the historic center was 4.68 for the municipality of Angra do Heroísmo and 4.40 for the municipality of Évora, indicating a strongly positive perception of the WHS designation. Almost 93% of the respondents in Angra and 85% of the respondents in Évora reported that the classification of the historic center as a WHS had effects on tourist attraction. This finding is consistent with previous case studies in which it has been observed that many people rate the WHS classification as having a positive impact on tourism development.

**Table 2 - Perceptions of WHS classification**

WHS Questions	Angra do Heroísmo N=78 (41.7%)		Évora N=109 (58.3%)		t	P-value
	Agree (%) <sup>1</sup>	Average scores <sup>2</sup>	Agree (%) <sup>1</sup>	Average scores <sup>2</sup>		
The classification of the historic center as a WHS is important for the municipality	94.8	4.68	89.0	4.40	2.700	0.008
The classification of the historic center as a WHS contributes to the increase in the number of tourists	92.4	4.47	84.4	4.32	1.321	0.188

Source: Authors' own survey data.

Notes: <sup>1</sup> percentage of respondents that agree are those that answered 4 or 5 on the 5-point likert scale; <sup>2</sup> scale ranges from 1=totally disagree to 5=totally agree.

#### 4.3 Tourism impacts

##### 4.3.1 Economic impacts

The results indicated in Table 3 show that there is strong agreement about the positive impacts of tourism on the economy of the city of Angra do Heroísmo. These include "increase in the number of tourist facilities" (87.2%), "improvement of local infrastructure" (70.5%), "increase in

the number of employment opportunities" (64.1%) and "increase in the quality of services" (56.4%). Forty nine percent of residents also recognized the fact that tourism "increases the variety of businesses". In terms of negative economic impacts, 65.4% of the respondents indicated that tourism has resulted in an "increase in the price of many goods and services" and 39.8% indicated that tourism is responsible for "increases in real estate".

**Table 3 - Residents' perceived economic impacts in Angra de Heroísmo and Évora**

Economic Impacts	Angra do Heroísmo (N=78)		Évora (N=109)		t	P-value
	Agree (%) <sup>1</sup>	Average scores <sup>2</sup>	Agree (%) <sup>1</sup>	Average scores <sup>2</sup>		
Increase in the number of tourist facilities	87.2	4.23	71.5	3.84	3.133	0.002
Improvement of local infrastructure	70.5	3.79	25.7	3.03	5.956	0.000
Increase in the price of many goods and services	65.4	3.76	56.9	3.55	1.410	0.160
Increase in the number of employment opportunities	64.1	3.64	36.7	3.09	3.518	0.001
Improvement in the quality of services	56.4	3.54	44.9	3.31	1.392	0.166
Increase in the variety of businesses	48.7	3.31	27.6	3.04	1.973	0.050
Increase in real estate	39.8	3.10	27.6	2.92	1.234	0.219
Too many resources on the promotion of tourism	26.9	2.97	16.5	2.74	1.528	0.128
Pressure on local services	28.2	2.69	18.3	2.61	0.490	0.625

Source: Authors' own survey data.

Notes: <sup>1</sup> percentage of respondents that agree are those that answered 4 or 5 on the 5-point likert scale; <sup>2</sup> scale ranges from 1=totally disagree to 5=totally agree.



In what regards Évora, it seems that residents do not believe in the positive economic impacts of tourism since means scores are lower in this municipality when compared to Angra. Only two statements had the agreement of most respondents, one positive (“increase in the number of tourist facilities”, with 71.5%), and one negative economic impact (“increase in the price of many goods and services”, with 56.9%). *T*-test results indicate that the mean scores of positive impacts are significantly higher in Angra than in Évora. With regard to the negative economic impacts, the differences are not statistically significant.

#### 4.3.2 Social and cultural impacts

Table 4 shows the perceived social and cultural impacts of residents of both municipalities. Although residents agree about the positive social and cultural contribution of

tourism to the city of Angra do Heroísmo, they do not seem to reveal any major concerns with regard to negative social and cultural impacts on the city. Consequently, the majority of residents revealed that tourism contributes to the “preservation of the local culture” (83.3%), the “encouragement of a variety of cultural activities” (71.8%), the “increase in the number of recreational activities” (67.9%), and the “increase in the cultural and educational experience” (64.1%). On the other hand, a mere 17.9% indicated that tourism “affects the traditional lifestyle”, 16.7% linked tourism with “increase in crime”, and 15.4% associated tourism to “increase in vandalism” in the city. These percentages are even lower in what regards “increase in prostitution”, “social conflicts”, and “increase in use of drugs”.

**Table 4 - Residents' perceived social and cultural impacts in Angra de Heroísmo and Évora**

Social and Cultural Impacts	Angra do Heroísmo (N=78)		Évora (N=109)		t	P-value
	Agree (%) <sup>1</sup>	Average scores <sup>2</sup>	Agree (%) <sup>1</sup>	Average scores <sup>2</sup>		
Preservation of the local culture	83.3	4.05	62.4	3.64	3.266	0.001
Encouragement of a variety of cultural activities	71.8	3.94	44.0	3.18	5.433	0.000
Increase in the number of recreational activities	67.9	3.85	33.9	2.97	5.630	0.000
Increase in the cultural and educational experience	64.1	3.77	30.2	3.04	5.350	0.000
Affects the traditional lifestyle	17.9	2.49	21.1	2.50	-0.107	0.915
Increase in vandalism	15.4	2.36	11.9	2.39	-0.178	0.859
Increase in crime	16.7	2.35	15.6	2.39	-0.242	0.809
Increase in prostitution	5.1	2.14	7.3	2.13	0.086	0.931
Social conflicts	5.1	2.00	25.7	1.96	0.281	0.779
Invasion of local residents' privacy	2.6	1.99	11.9	2.28	-2.244	0.026
Increase in use of drugs	5.2	1.91	12.0	2.23	-2.160	0.032

Source: Authors' own survey data.

Notes: <sup>1</sup>percentage of respondents that agree are those that answered 4 or 5 on the 5-point likert scale; <sup>2</sup>scale ranges from 1=totally disagree to 5=totally agree.

In Évora, the perception of positive social and cultural impacts is less evident than in Angra de Heroísmo. On the other hand, residents of Évora are more concerned with negative impacts than the residents of Angra. Hence, the only social and cultural impact that gathers the agreement of the majority of the residents is “preservation of the local culture”. The *t*-test results show that the mean scores of positive social and cultural impacts are significantly higher in Angra de Heroísmo. In relation to the negative social and cultural impacts, the mean scores are higher in Évora. However, these differences are not statistically significant.

#### 4.3.3 Environmental impacts

As evidenced in Table 5, residents from Angra do Heroísmo recognized positive impacts of tourism on the environment. Specifically, 75.7% recognized that tourism “reinforces the beauty of the municipality”, 66.7% agreed that tourism “contributes to the restoration of local buildings”, and 62.8% revealed that tourism “reinforces the conservation of local natural resources”. Nonetheless, more than ¼ of respondents believed that tourism “increased traffic congestion and related problems” and it is also responsible for the “increases in litter in the city”.

**Table 5 - Residents' perceived environmental impacts in Angra de Heroísmo and Évora**

Environmental Impacts	Angra do Heroísmo (N=78)		Évora (N=109)		t	P-value
	Agree (%) <sup>1</sup>	Average scores <sup>2</sup>	Agree (%) <sup>1</sup>	Average scores <sup>2</sup>		
Reinforcement of the beauty of the municipality	75.7	3.96	44.0	3.28	4.966	0.000
Restoration of local buildings	66.7	3.76	35.8	3.19	3.927	0.000
Conservation of local natural resources	62.8	3.73	38.5	3.23	3.722	0.000
Increase in traffic congestion and related problems	30.7	2.81	27.5	2.77	0.227	0.820
Increase in litter	25.7	2.77	22.0	2.64	0.848	0.398
Disturbance of peace and tranquility	2.6	1.88	7.3	2.14	-1.941	0.054

Source: Authors' own survey data.

Notes: <sup>1</sup>percentage of respondents that agree are those that answered 4 or 5 on the 5-point likert scale; <sup>2</sup>scale ranges from 1=totally disagree to 5=totally agree.

The majority of residents from Évora do not seem to agree about the environmental impacts of tourism. None of the statements has more than 50% of agreement. The top

positive and negative items are similar to Angra do Heroísmo. Although the environmental items had higher means scores in Angra do Heroísmo, *t*-test results indicated



that only positive impacts present differences statistically significant.

#### 4.4 Place of residence comparison on economic, social and cultural, and environmental impacts

The samples profile revealed that 44.9% (Angra) and 72.5% (Évora) of respondents live in or near the historic center.

Table 6 shows the comparison of mean scores of tourism impacts across residents that live near and far from the historic centers, in both municipalities. The comparison reveals how different positive and negative impacts were in relation to the place of residence of respondents, although the impacts most valued and least valued are common to all residents.

**Table 6 - Comparison of economic impacts by place of residence (near or far from the historic center)**

Economic Impacts		Angra do Heroísmo (N=78)		Évora (N=109)	
		Near	Far	Near	Far
Economic Impacts	Increase in the number of tourist facilities	<b>4.34</b>	4.14	<b>3.56</b>	3.53
	Improvement of local infrastructure	3.77	<b>3.81</b>	<b>3.05</b>	2.97
	Increase in the price of many goods and services	3.69	<b>3.81</b>	<b>3.56</b>	3.53
	Increase in the number of employment opportunities	3.46	<b>3.79</b>	<b>3.14</b>	2.97
	Improvement in the quality of services	<b>3.63</b>	3.47	<b>3.44*</b>	2.97
	Increase in the variety of businesses	<b>3.49</b>	3.16	<b>3.05</b>	3.00
	Increase in real estate	<b>3.20</b>	3.02	2.91	<b>2.93</b>
	Too many resources on the promotion of tourism	<b>3.14</b>	2.84	2.66	<b>2.97</b>
Social and Cultural Impacts	Pressure on local services	<b>3.06*</b>	2.40	2.44	<b>3.07*</b>
	Preservation of the local culture	3.97	<b>4.12</b>	<b>3.78</b>	3.27
	Encouragement of a variety of cultural activities	3.86	<b>4.00</b>	3.15	<b>3.27</b>
	Increase in the number of recreational activities	<b>3.97</b>	3.74	<b>3.00</b>	2.90
	Increase in the cultural and educational experience	<b>3.91</b>	3.65	2.96	<b>3.23</b>
	Affects the traditional lifestyle	<b>2.54</b>	2.44	2.33	<b>2.97*</b>
	Increase in vandalism	<b>2.40</b>	2.33	2.22	<b>2.83*</b>
	Increase in crime	<b>2.37</b>	2.33	2.29	<b>2.63</b>
	Increase in prostitution	2.09	<b>2.19</b>	2.04	<b>2.37</b>
	Social conflicts	<b>2.06</b>	1.95	1.87	<b>2.20</b>
Environmental Impacts	Invasion of local residents' privacy	<b>2.09</b>	1.91	2.23	<b>2.40</b>
	Increase in use of drugs	1.91	1.91	2.11	<b>2.53*</b>
	Reinforcement of the beauty of the municipality	<b>4.11</b>	3.84	<b>3.37</b>	3.03
	Restoration of local buildings	<b>3.97</b>	3.58	<b>3.27</b>	3.00
	Conservation of local natural resources	3.66	<b>3.79</b>	<b>3.25</b>	3.17
	Increase in traffic congestion and related problems	<b>3.00</b>	2.65	2.62	<b>3.17*</b>
	Increase in litter	<b>3.11*</b>	2.49	2.49	<b>3.03*</b>
	Disturbance of peace and tranquility	<b>1.97</b>	1.81	2.05	<b>2.37</b>

Source: Authors' own survey data.

Note: Numbers in bold correspond to the highest values observed for each impact; \* indicates  $p < 0.05$ .

The residents living in or near the historic center value the majority of economic impacts more than residents living far from the center, both in Angra do Heroísmo and Évora. T-test results indicate, however, that only "pressure on local services" presents differences statistically significant at the 0.05 level, for both municipalities and "improvement in the quality of services" presents differences statistically significant at the 0.05 level for residents of Évora.

With regard to social and cultural impacts, an interesting paradox is the fact that residents living in or near the historic center of Angra do Heroísmo value the majority of these impacts more than residents living far from the historic center, and in Évora the scenario is exactly the opposite. T-test results indicate, however, that only the negative impacts "affects the traditional lifestyle", "increase vandalism", and "increase in use of drugs" present differences statistically significant at the 0.05 level in Évora. These negative impacts are less perceived by residents living near the historic center of Évora than by residents living far from there.

Comparisons of environmental impacts by place of residence show that residents living in or near the historic center of Angra do Heroísmo had higher means scores in most impacts, except "conservation of local natural resources". However, t-tests show that these differences were statistically significant at the 0.05 level only for the impact "increase in litter". In Évora, residents living in or near the historic center had higher means scores in the positive impacts and lower means scores in the negative environmental impacts. However, t-test results indicate that only the negative impacts "increase in traffic congestion and related problems" and "increase in litter" present differences statistically significant.

## 5. Conclusion

The objective of this preliminary study was twofold. First, it aimed at analyzing local community perspectives of the importance of the WHS certification of the historic centers of Angra do Heroísmo and Évora. Second, it aimed at measuring tourism impacts on the municipalities of Angra do Heroísmo and Évora, perceived by local residents.



Specifically, the objective was to analyze economic, social and cultural, and environmental tourism impacts, as well as to discover significant differences in these impacts across the residents of the municipalities of Angra do Heroísmo and Évora (considering place of residence).

The main findings of this study reveal that local residents have a strongly positive perception of the WHS designation. The vast majority considers that the classification of the historic center as a WHS had a positive effect on tourist attraction.

Results indicated a strong agreement about the positive impacts of tourism on the city of Angra do Heroísmo and some concerns more related to economic and environmental impacts. However, only one item “increases in the price of many goods and services” had more than half of all respondents’ agreement. The residents of Évora are more skeptical about the positive tourism impacts, but also do not agree that tourism implies many costs with regard to their municipality.

The comparison of the mean scores of these tourism impacts across residents living near and far from the historic centers reveals that the most valued and least valued impacts in the three categories of impacts (economic, social and cultural, and environmental) are common to all residents. The residents living in or near the historic center of Angra do Heroísmo had higher means in the majority of tourism impacts (in all categories), with only one negative impact to concern the majority of respondents. Given this positive attitude, it is therefore no wonder that a large majority (85.9%) indicated that they would be in favor of increased tourism development. Among the residents from Évora, residents living in or near the historic center had higher means in the majority of economic impacts but lower means in almost all social and cultural impacts. In what regards the environmental impacts, residents living in or near the historic center had higher means scores in the positive impacts and lower means scores in the negative environmental impacts. T-test indicated, however, that only the two negative impacts “pressure on local services” and “increase in litter” present differences statistically significant at the 0.05 level, in Angra do Heroísmo, with higher mean scores for residents living in or near the historic center. Regarding Évora, there were significant differences between the mean ratings of one positive and six negative tourism impacts between residents living near and far from the historic center with the former group with higher means in terms of the positive impact “improvement in the quality of services” and the latter with higher means in terms of costs (“pressure on local services”, “affects the traditional lifestyle”, “increase in vandalism”, “increase in use of drugs”, “increase in traffic congestion and related problems”, and “increase in litter”).

The insight gained by the empirical analysis conducted in this paper may be an important policy tool for tourism planners and managers in the development of strategies with regard to the future management of the historic centers and tourism associated to them.

## References

- Andereck, K. L., Valentine, K. M., Knopf, R. C. & Vogt, C. A. (2005). Residents’ Perceptions of Community Tourism Impacts. *Annals of Tourism Research*, 32(4), 1056-1076.
- Ap, J. (1990). Residents’ perceptions: research on the social impacts of tourism. *Annals of Tourism Research*, 17(4), 610-616.
- Ap, J. (1992). Residents’ perceptions on tourism impacts. *Annals of Tourism Research*, 19(4), 665-690.
- Ap, J. & Crompton, J.L. (1993). Resident’s Strategies for Responding to Tourism Impacts. *Journal of Travel Research*, 32(1), 47-50.
- Borges, M. R., Marujo, N. & Serra, J. (2013). Turismo cultural em cidades património mundial: a importância das fontes de informação para visitar a cidade de Évora. *Tourism and Hospitality International Journal*, 1(1), 137-156.
- Dogan, H. (1989). Forms of adjustment: sociocultural impacts of tourism. *Annals of Tourism Research*, 16(2), 216-236.
- Faulkner, B. & Tideswell, C. (1997). A framework for monitoring community impacts of tourism. *Journal of Sustainable Tourism*, 5(1), 3-28.
- Fredline, E. & Faulkner, B. (2000). Host community reactions: a cluster analysis. *Annals of Tourism Research*, 27(3), 763-784.
- Huang, C., Tsauro, J. & Yang, C. (2012). Does World Heritage list really induce more tourists? Evidence from Macau. *Tourism Management*, 33(6), 1450-1457.
- INE (2012). *Censos 2011 resultados definitivos – Portugal*. Lisboa: Instituto Nacional de Estatística.
- Jackson, L. (2008). Residents’ perceptions of the impacts of special event tourism. *Journal of Place Management and Development*, 1(3), 240-255.
- Jimura, T. (2011). The impact of World Heritage Site Designation on Local Communities: a case study of Ogimachi, Shirakawa-Mura, Japan. *Tourism Management*, 32(2), 288-296.
- Kuvan, Y. & Akan, P. (2005). Residents’ attitudes toward general and forest-related impacts of tourism: the case of Belek, Antalya. *Tourism Management*, 26(5), 691-706.
- Liu, J. C. & Var, T. (1986). Resident attitudes toward tourism impacts in Hawaii. *Annals of Tourism Research*, 13(2), 193-214.
- Marrero Rodríguez, J. R. & Abdul-Jalbar, B. (2012). Turismo cultural y planificación del viaje: un estudio de caso. *Tourism & Management Studies*, 8, 41-47.
- Morales-Fernández, E. J. & Lanquar, R. (2014). El futuro turístico de una ciudad Patrimonio de la Humanidad: Córdoba 2031. *Tourism & Management Studies*, 10(2), 7-16.
- Nicholas, L., Thapa, B. & Ko, Y. (2009). Residents’ perspectives on a World Heritage Site: the Pitons Management area, St. Lucia. *Annals of Tourism Research*, 36(3), 390-412.
- Nunkoo, R. & Ramkissoon, H. (2010). Gendered theory of planned behaviour and residents’ support for tourism. *Current Issues in Tourism*, 13(6), 525-540.
- Renda, A. I., Mendes, J. & Oom do Valle, P. (2014). The destination is where I live! residents’ perception of tourism impacts. *Journal of Spatial and Organizational Dynamics*, 2(1), 72-88.
- Rodrigues, A. P., Vieira, I., Marques, C. P. & Teixeira, M. S. (2014). Apoio da comunidade residente ao desenvolvimento turístico sustentável: um modelo de equações estruturais aplicado a uma cidade histórica do Norte de Portugal. *Tourism & Management Studies*, 10(2), 17-25.
- Sharma, B. & Dyer, P. (2009). An investigation of differences in residents’ perceptions on the Sunshine Coast: tourism impacts and demographic variables. *Tourism Geographies*, 11(2), 187-213.
- Vareiro, L., Cadima Ribeiro, J., Remoaldo, P. & Marques, V. (2011). Residents’ Perception of the Benefits of Cultural Tourism: The Case of Guimarães. In A. Steinecke and A. Kagermeier (eds.), *Kultur als Touristischer Standortfaktor – Potenziale – Nutzung – Management, Paderborn Geographical Studies* (pp. 187-202), Institute series no. 23, Paderborn, Germany: University of Paderborn.
- Vareiro, L., Remoaldo, P. & Cadima Ribeiro, J. (2013). Residents’ Perceptions of Tourism Impacts in Guimarães (Portugal): A Cluster Analysis. *Current Issues in Tourism*, 16(6), 535-551.



Wang, Y. & Pfister, R. E. (2008). Residents' attitudes toward tourism and perceived personal benefits in a rural community. *Journal of Travel Research*, 47(1), 84-93.

Williams, J. & Lawson, R. (2001). Community Issues and resident opinions of tourism. *Annals of Tourism Research*, 18(2), 269-290.

Yang, C., Lin, H. & Han, C. (2010). Analysis of international tourist arrivals in China: The Role of World Heritage Sites. *Tourism Management*, 31(6), 827-837.

Yoon, Y., Gursoy, D. & Chen, J. S. (2001). Validating a tourism development theory with Structural Equation Modeling. *Tourism Management*, 22(4), 363-372.

**Article history:**

Received: 24 May 2014

Accepted: 15 November 2014