

SEGMENTATION OF THE TOURISM MARKET USING THE IMPACT OF TOURISM ON QUALITY OF LIFE

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ABSTRACT

Quality of life (QOL) has become a central issue of concern in peoples' lives and the research on this topic has largely increased in the past decades. However, some studies on QOL only adopted objective indicators and QOL research is still very scarce in some fields of study such as tourism. Additionally, in tourism, the majority of the studies on QOL focus on assessing the QOL of residents of destinations and neglect segmentation based on QOL as a tool for market segmentation.

The aim of this study is to overcome some previously referred to limitations and, specifically: (i) to measure visitors' perceptions of tourism impact on their QOL by adopting subjective indicators; and (ii) to segment visitors based on perceptions of tourism impact on their QOL.

Study results reveal that tourism is likely to have a more positive impact on the psychological and social domains of QOL and that QOL is a good basis for segmenting the tourism market. Visitors perceiving more positive tourism impacts in their QOL differ from others on several features such as motivations to travel, travel group, interaction with local residents and satisfaction with the trip.

KEYWORDS

Quality of life (QOL), Tourism, Impact, Segmentation, WHOQOL.

RESUMO

A qualidade de vida (QV) tornou-se uma questão central na vida das pessoas e a pesquisa sobre este assunto aumentou consideravelmente nas últimas décadas. No entanto, alguns dos estudos que têm sido realizados sobre QV adotaram apenas indicadores objetivos e a pesquisa sobre QV é ainda muito escassa em algumas áreas de estudo, como por exemplo no turismo. Além disso, a maioria dos estudos que têm sido realizados no turismo sobre QV focam-se na avaliação da qualidade de vida dos residentes de destinos e negligenciam a segmentação baseada na QV como uma ferramenta para segmentação de mercado.

O objetivo deste estudo é colmatar algumas das limitações anteriormente referidas e, especificamente: (i) medir a perceção dos visitantes do impacte do turismo na sua QV através da adoção de indicadores subjetivos; e (ii) segmentar os visitantes com base nas perceções do impacte do turismo na sua QV.

Os resultados do estudo revelam que o turismo é suscetível de ter um impacte mais positivo sobre os domínios psicológico e social da QV e que a QV é uma boa base para a segmentação do mercado turístico. Os visitantes que percecionam mais impactes positivos do turismo na sua QV diferem dos restantes visitantes em diversas características, tais como motivações para viajar, composição do grupo de viagem, interação com os residentes locais e satisfação com a viagem.

PALAVRAS-CHAVE

Qualidade de vida (QV), Turismo, Impacte, Segmentação, WHOQOL.



1. INTRODUCTION

Health and other constructs related to quality of life (QOL), such as well-being and welfare have been issues of high concern and the focus of many researches (Constanza et al., 2006; Sirgy et al., 2006; Pukeliené and Starkauskiené, 2009). However, for a long time, QOL has not been investigated as a concept in itself (Sirgy et al., 2006). This reality is changing, and a high increase in the research on QOL is noticed, particularly in the last decades (Álvarez et al., 2010; Chen and Yao, 2010; Constanza et al., 2006; Fleck et al., 1999; Skevington et al., 2004). Despite the growing interest on this topic, research on this field has sometimes relied in the quantitative measurement of QOL (Constanza et al., 2006; Sirgy et al., 2006), and focused on some specific fields of interest (e.g. medicine, psychology) (Constanza et al., 2006; Pukeliené Starkauskiené, 2009). The extension of research on QOL to other fields of study and the use of subjective measures of QOL, are important, both for having a deeper knowledge on this construct, and for identifying policies that may increase QOL. Additionally, segmentation based on QOL is still not much used.

The QOL is still a widely neglected topic in the tourism field and the majority of the few studies of QOL done in this field focus on the QOL of the residents of tourism destinations (Andereck et al., 2007; Andereck and Nyaupane, 2011; Cahhabra and Gursoy, 2009; Perdue et al., 1999). Few studies (Dann, 2001; McCabe et al., 2010; Michalkó et al., 2009; Moscardo, 2009; Neal et al., 1995, 1997, 1999; Neal, 2000) analyzed the QOL of tourists. The present research intends to overcome these limitations and extend previous research in the field of tourism by: (i) measuring the perceptions of visitors regarding the tourism impacts in their QOL; and (ii) doing a cluster segmentation of these visitors based on their perceptions of tourism impacts on their QOL.

2. TOURISM AND QUALITY OF LIFE

The QOL is a complex multidimensional construct, difficult to define. The World Health Organization (WHO) considers that the QOL corresponds to the "individuals' perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals,

expectations, standards and concerns" WHOQOL Group, 1995). According to Constanza et al. (2006), QOL refers to the extent to which people's needs are met and to which people are satisfied or dissatisfied in various life domains. Bearing in mind these definitions, QOL may also be considered as the satisfaction perceived by individuals with several domains of their life, considering their needs and expectations. According to Neal (2000) QOL studies are frequently either objective or subjective. While objective QOL studies focus on social indicators (e.g. age, income and crime rate), subjective QOL studies attempt to measure the satisfaction individuals perceive to have during their lives. As Constanza et al. (2006) state, once QOL involves perceptions of satisfaction, in order to assess the QOL, both objective and subjective indicators are required.

There are already several instruments designed to assess QOL that incorporate subjective indicators, such as the World Health Organization QOL-100 (WHOQOL-100) (originally developed by the WHO to assess QOL) or short versions of it (e.g. WHOQOL-BREF) (Chen and Yao, 2010; Fleck et al., 1999; Skevington et al., 2004), the Health-Related QOL (HRQOL) (Chen and Yao, 2010) and the Multicultural QOL index (MQLI) (Álvarez et al., 2010). The original WHOQOL instrument and its short versions are the instruments more widely used to measure this construct.

The above referred instruments and further research undertaken reveal the existence of several domains in the scope of the QOL. A physical domain of QOL is usually identified in these instruments (Álvarez et al., 2010; Pukeliené and Starkauskiené, 2009), including the absence of diseases and features such as having energy, the opportunity to sleep and rest and, also, capacity to work (Fleck et al., 1999; Skevington et al., 2004). Sometimes, this domain extends to encompass abilities in terms of personal mobility and the independence associated to it (Abdel-Ghany, 1977; Skevington et al., 2004). There is also a psychological dimension of QOL which is much related to emotions, to good or bad feelings, selfesteem, and ability to learn and concentrate, among other features (Chen and Yao, 2010; Pukeliené and



Starkauskiené, 2009). It is also possible to distinguish a social domain of the QOL (Abdel-Ghany, 1977; Chen and Yao, 2010), which is related to social interactions established with other people and social support. Other features of the QOL are associated to the environment where individuals live, work and interact (Abdel-Ghany, 1977; Fleck et al., 1999), namely, economic conditions, financial resources, security, infrastructures and equipments people have access to, namely the home environment conditions, transportations, health services and recreation and leisure opportunities.

Hence, well-being and QOL do not only depend on financial matters. Tourism has an important impact on QOL. Despite various researchers, in the past, identified several ways through which leisure and tourism affect QOL (Neal et al., 2004), few studies provide detailed information about the relationship between tourism and QOL (McCabe et al. 2010; Michalkó et al., 2009; Moscardo, 2009). On the other hand, few studies analyse the role of leisure and tourism in enhancing the QOL of travellers. In this domain, a literature review about this topic permitted to identify the studies carried out by Dann (2001); McCabe et al. (2010); Michalkó et al. (2009); Moscardo (2009); Neal et al. (1995, 1997; 1999); and Neal (2000); as studies where the impact of tourism on QOL of travellers is analysed. Despite the relevance of the first type of studies in planning and managing tourism, the second type of studies are also important for identifying policies that may increase the QOL of visitors, being the focus of this research.

Neal et al. (1999) develop a model and a measure in order to capture the effect of tourism services on travellers' QOL. Moscardo's (2009) study presents a qualitative analysis of the impacts of tourism on the QOL of individual tourists. On the other hand, Michalkó et al. (2009) analyse the relationships between travelling and happiness and the effect of household's size, education, age, income level and travelling habits/participation in tourism on the subjective QOL. Dann (2001)'s paper focus on the effect of the tourism experience on the QOL of the senior market. Recently, McCabe et al. (2010) analyse the relationship between well-being, QOL and holiday participation among low-income families in the UK. These studies highlight that tourism may have both positive (e.g. improved

health; improved human capital; improved selfesteem, improved social capital) and negative impacts (e.g. opportunity costs, disruption of social networks and feelings of incompetence generated by negative travel experience) on QOL of individual tourists.

The question of "how to measure the impact of tourism on QOL" has been analysed by several researchers in leisure and tourism (e.g. McCabe et al., 2010; Neal, 2000) and different scales to measure the impact of tourism on QOL of travellers have been used. Of all these scales, the WHOQOL BREF, used by McCabe et al., (2010) to measure the impact of tourism on QOL of low-income families, is considered a consistent scale to measure the impact of tourism on QOL, because it has already been widely adopted in fields other than tourism and the scale includes the most important domains of QOL influenced by tourism (physical, psychological, social and environment).

3. EMPIRICAL RESEARCH

3.1. METHODOLOGY

In order to assess the tourism impact on tourists' QOL, a survey of adult consumers of tourism products was carried out. As the objective of this empirical study was to analyse the impact of the consumption of tourism products on tourists' QOL, the residents in a city located in the Centre of Portugal – Aveiro – were selected. methodology is similar to the approach used in the majority of the studies undertaken in this field (e.g. Alexander et al., 2010; Michalkó et al., 2009; Neal et al., 2004). The population of the present study corresponds to the residents of Aveiro who had done at least a tourism trip in the last 3 years. Aveiro is a city located in Portugal, with about 55,305 inhabitants (INE, 2002). Due to the impossibility of surveying all the population, and taking into consideration the potential influence of gender and age on the perceptions of tourism impacts on QOL, a quota sampling approach, based on gender and age, was adopted. To identify the quotas, data published by INE was used as reference.

The questionnaire was elaborated based on literature review and included questions on travel experience, motivations to travel, travel behaviour,



perceptions of tourism impact on the QOL, satisfaction with trips, and socio-demographics. Respondents were asked to report the number of tourism trips undertaken in the last 3 years either in Portugal or to foreign countries. As remarked before, only people who had done at least one trip in the last 3 years qualified to answer the questionnaire. In order to answer questions on motivations to travel, travel behaviour, perceptions of tourism impact on the QOL and satisfaction with trips, respondents were asked to focus on the tourism trips undertaken in the last 3 years. Respondents had to report whether some motivations had been important for undertaking the trips, by using a 5-point Likert type scale from 1 "strongly disagree" to 5 "strongly agree". As far as travel behaviour is concerned, respondents should report how frequently they travelled to specific destinations (e.g. beach destinations), they travelled with some counterparts (e.g. friends), they undertook some activities (e.g. visiting museums), and interacted with local residents, always using a scale ranging from 1 "never" to 5 "very frequently".

In order to assess the perceptions regarding tourism impacts on the QOL, 25 items incorporated in the WHOQOL instrument were selected from the literature (Fleck et al., 1999; Skevington et al., 2004). The majority of them (24) corresponded to specific facets of QOL, whether the other referred to the improvement of QOL as a whole. The selection of the items was based on the tourism potential to improve the several facets of the QOL. Respondents should indicate whether they agreed that tourism trips undertaken in the last 3 years had improved the several features of QOL included in the questionnaire, by using the same 5-point Likert type scale adopted in the motivations' questions. One item was used as a holistic measure of satisfaction with the tourism trips. Respondents expressed their satisfaction in a 5-point scale ranging from 1 "very unsatisfied" to 5 "very satisfied". Finally, questions about the sociodemographic profile, referred to age, gender, nationality, marital status, education, economic status, number of people in the household and average monthly household income. questionnaires were administered personally to residents, by researchers, in the street, during

March and April of 2010. In order to analyze the data obtained through the questionnaires, several univariate and bivariate and multivariate data analysis were undertaken.

3.2. DISCUSSION OF RESULTS

Impact of tourism on QOL of the travellers

A total of 337 completed questionnaires were obtained. In order to segment the respondents based on their perceptions of the tourism impact on their QOL, dimensions of the above referred perceptions needed to be identified. Taking into consideration that several researches have already identified domains of the QOL, the domains identified in one study on this field - Skevington et al.'s research (2004) - were taken as a reference in the present study. In order to see if the same dimensions could be found in the present study, Cronbach's alpha was used to assess the reliability of each dimension. The same dimensional structure was identified. The four dimensions identified have a considerably good reliability (table 1) and were designed, similarly to what happened in Skevington et al.'s research (2004), the physical, psychological, social relationship and environment domains of the perceptions of tourism impacts on QOL. As it may be observed, the impacts of tourism on QOL are more positive in the psychological and social domains of QOL, remarking that tourism may have a very important influence in people's life by leading to good feelings, positive emotions and interactions that are considered, by visitors, as fruitful and positive. The physical QOL domain is the one where tourism seems to have less positive impact.

Segmentation of the travellers based on the perceptions of tourism impacts on their QOL

After having identified the four domains that represent the impact of tourism on QOL of the travellers, these variables were used to identify similar groups according to their perceptions of impact of travel experience on their QOL. A hierarchical cluster analysis of the respondents using the domains of tourism impacts on QOL previously identified was carried out. The Wards' method and the squared Euclidean distance were used. It was considered that the three cluster solution should be used, following the data from the agglomeration schedule and the literature reviewed. Chi-square and



Anova analyses, including post-hoc Scheffe tests, were computed in order to characterise the clusters and detect differences among them in terms of tourism impact on their QOL, socio-demographic profile, motivations, travel behaviour and trip

satisfaction. The three clusters identified clearly show significant differences among them concerning the impact of tourism on overall QOL and in all domains of QOL (Table 2).

Table 1: Travellers' perceptions concerning tourism impacts on their QOL

Domains	Impact of travel experience	N	Average	St.	Average	Cronbach
of QOL			(items)	Error	(domains)	alpha
	To decrease my physical pains	326	2.132	1.310		
	To decrease my dependence on medication	326	1.794	1.176		
	To increase my energy	326	3.595	1.164		
Physical	To incrase my opportunities to sleep and rest	327	3.254	1.327	2.832	0.841
	To increase my abilities to perform daily living activities	326	3.120	1.243		
	To increase my work ability	327	3.058	1.256		
	To improve my mobility	327	2.835	1.298		
	To increase my positive feelings	327	3.569	1.186		
Psychological	To increase my satisfaction with my body image	325	2.954	1.320		
	To increase my ability to concentrate	326	3.123	1.271	3.285	0.822
	To decrease my negative feelings	327	3.214	1.349		
	To increase my self-esteem	325	3.406	1.207		
Social	To improve my personal relations	328	3.582	1.133	3.166	0.618
Relationship	To increase the support from my friends	326	2.742	1.355		
	To increase my opportunities to be in a healthier	325	3.514	1.185		
	environment					
	To increase my opportunities to expand my knowledge	327	3.893	1.123		
Environment	To increse my security	326	2.905	1.299		
	To increase my financial resources	327	2.352	1.314		
	To increase my access to information	326	3.307	1.230	3.028	0.862
	To improve my access to transports	326	2.380	1.268		
	To improve my home environment	327	3.110	1.329		
	To improve my access to health services	326	2.233	1.280		
	To increase my opportunities for doing leisure and	328	3.524	1.231		
	recreation activities					

Based on these results, the clusters were designed as: cluster 1 - "low tourism impact on QOL"; cluster 2 - "medium tourism impact on QOL" and cluster 3 - "high tourism impact on QOL". The cluster 1 - "low tourism impact on QOL" represents 31% of the sample and corresponds to those visitors who recognise the lowest positive impacts of tourism on all domains of their QOL and in their overall QOL. The cluster 2 - "medium tourism impact on QOL" - is the biggest segment, representing 44% of the sample, and includes visitors for whom the impact of tourism on the QOL is not very relevant. However, to these travellers, perceptions of tourism impacts on their QOL are higher than the perceptions of tourism impacts of the travellers belonging to the cluster 1. Finally, the cluster 3 - "high tourism impact on

QOL", although being the smallest group, representing only 25% of the total sample, includes the travellers who perceive the tourism impacts on their QOL as more positive (Table 2).

The sample interviewed in this study is quite balanced in terms of gender. Most of those interviewed have high literacy levels (about 70% of the respondents possess secondary education or more) and are employed.

The chi-square results presented in Table 3 show no statistically significant differences among the three clusters identified in terms of some features of the socio-demographic profile, namely in terms of gender, marital status, education level and economic status. In order to find out if there was differences among



groups concerning certain features of the sociodemographic profile (age and household income per capita), travel motivation and travel behaviour, Oneway Anova tests were performed, after all assumptions of this statistical test have been tested. The results presented in the Table 4 show no statistical significant differences among groups concerning age and household income, were found.

Table 2: Significant differences among clusters of travellers concerning perceptions of tourism impacts on their QOL

Impact of travel experience			One-Way Anova			
on QOL	Total	Cluster 1 "Low tourism impact on QOL"	Cluster 2 "Medium tourism impact on QOL"	Cluster 3 "High tourism impact on QOL"	F	Sig.
	N = 328	N =100	N =145	N = 83		
Domains of QOL						
Physical	2.831	1.864a	2.917 ^b	3.848c	341,813	0,000
Psychological	3.285	2.173^{a}	3.456 ^b	4.323c	396,430	0,000
Social Relashionship	3.166	2.133^{a}	3.155 ^b	4.434 ^c	302,194	0,000
Environment	3.028	2.098^{a}	3.053 ^b	4.103c	478,142	0,000
Overall QOL	3.613	2.67a	3.759 ^b	4.494 ^c	80,079	0,000

Note: Scheffe Test, a - Subset 1 (for alpha = 0.05); b - Subset 2 (for alpha = 0.05); c - Subset 3 (for alpha = 0.05)

Table 3: Significant differences among clusters concerning socio-demographic profile (Pearson Chisquare tests)

			Clusters		Pearson Ch	-
Socio-demographic profile	Total	Cluster 1 "Low tourism impact on QOL"	Cluster 2 "Medium tourism impact on QOL"	Cluster 3 "Hihg tourism impact on QOL"	Value	Sig.
	N = 328	N =100	N =145	N = 83		
Gender						
Male	47.0%	49.0%	42.8%	51.8%	1.978	0.372
Female	53.0%	51.0%	57.2%	48.2%		
Education level						
1st Cycle	12.0%	11.1%	9.0%	18.1%		
2 nd Cycle	6.1%	6.1%	5.6%	7.2%		
3rd Cycle	13.2%	8.1%	15.3%	15.7%	11,392	0.180
Secondary	39.0%	46.5%	35.5%	36.1%		
Superior	29.8%	28.3%	34.7%	22.9%		
Marital status						
Single	41.0%	37.8%	45.8%	36.6%		
Married	45.1%	53.1%	39.6%	45.1%	6,568	0.161
Other	13.9%	9.2%	14.6%	18.3%		
Employment						
Employee	47.3%	44.0%	48.3%	49.4%	0.639	0.727
Other	52.7%	56.0%	51.7%	50.6%		



In order to facilitate the comparison and the characterisation of the clusters of visitors regarding other features Principal Component Analyses (PCAs) of both, motivations and activities undertaken during the trip, were carried out.

Regarding the PCA of the 19 motivation items included in the questionnaire, only one item was excluded from the analysis due to its low communality.

Four motivation dimensions were identified:

- Knowledge: "to learn/expand knowledge", "to know other cultures", "to interact with local people", and "to meet new people";
- Novelty: "to carry on different activities", "to have an experience that involves surprise", "to have an experience that involves thrills/taking risks", "to experience new things", "to feel free to do what one wants", "to be in a different environment";
- Escape: "to avoid everyday responsibilities", "to be in a calm environment", "to rest", "to be close to nature";
- Socialization: "to be with relatives", "to develop one physical abilities", "to be with friends", "to learn more about oneself".

When activities undertaken during the trip were factor analysed using a PCA, 5 dimensions of activities emerged:

- Cultural activities: "visiting historic sites", "visiting monuments", visiting museums", "visiting historic villages", "participating in cultural events", "visiting gardens", and "visiting theatres";
- Nature activities: "walking in walking trails", "observing nature", "visiting protected areas", and "bicycle riding";
- Training activities: "participating in training courses", and "participating in seminars/congresses/conferences";
- Recreation activities: "visiting shopping centers", "visiting amusement parks", and "going to the beach";

 Nightlife animation activities: "visiting casinos", and "going to nightlife animation places".

Both PCAs presented good indicators concerning KMO, communalities, factor loadings and variance explained, according to the suggestions of Hair et al. (1998). The clusters identified in this research are significantly different in terms of travel motivation. For visitors of the cluster 3 ("high tourism impact on QOL") increase knowledge, novelty, escape and socialization are more important, while for travellers of cluster 1 ("low tourism impact on QOL") all travel motivations above mentioned assume less importance.

Regarding tourism activities carried out in tourism destinations, the results of One-way Anova tests reveal that travellers belonging to the cluster 3 ("high tourism impact on QOL") carried out more frequently cultural activities, nature activities and nightlife animation activities than travellers belonging to the cluster 1 ("low tourism impact on QOL").

Finally, travellers belonging to clusters 2 and 3 are those who contact more frequently with visitors, revealing a positive relationship between host-tourist interaction level and the impact of tourism on QOL of travellers.

Additionally, it is also interesting to note that there are the travellers more satisfied with their travel experience who feel higher positive impacts of tourism on QOL (Table 4).

As far as type of tourism destination visited is concerned, the results of One-way Anova only reveal statistical significant differences among clusters concerning countryside and mountain destinations, with travellers who feel higher positive impacts of tourism on their QOL visiting more frequently this kind of tourism destinations (Table 4).

The heterogeneity among clusters concerning composition of travel group is another interesting result of this study. The results presented in the Table 4 show that travellers belonging to the cluster 3 ("high tourism impact on QOL") travel more frequently with friends and in package tours.

All the statistical significant differences among clusters concerning travel behaviour, identified in



this study and presented in the Table 4, provide important outcomes in order to identify the travel

characteristics that have a more positive impact on QOL of travellers.

Table 4: Significant differences among clusters concerning socio-demographic profile, motivations, travel behaviour and trip satisfaction (One-way Anova tests)

0 . 1			One-Way			
Socio-demographic profile and travel behaviour	Total	Cluster 1 "Low	Clusters Cluster 2 "Medium	Cluster 3	And F	Sig.
		tourism impact	tourism impact	tourism impact		
		on QOL"	on QOL"	on QOL"		
		N =100	N =145	N = 83		
Socio-demographic profiles						
Age	41,91	42,12	41,19	42,89	0,27	0,77
Household income per capita	1782,09	1703,30	1944,23	1596,67	1,82	0,10
Motivations						
Knowledge	0,002	-0.320a	-0.008a	0.421 ^b	13,110	0,000
Novelty	0,004	-0.245a	0.152 ^b	$0.048^{a,b}$	4,794	0,009
Escape	-0.005	-0.219a	0.007a	0.237 ^b	4,652	0,010
Socialization	0,004	-0.238a	-0.108a	0.504 ^b	14,836	0,000
Number of trips					•	-
Number of domestic trips	4,261	2,820	3,951	6,530	1,958	0,143
Number of international trips	1,863	1,273	2,322	1,775	2,743	0,060
Type of tourism destinations						
Frequency of travel to beach destinations	3,642	3,720	3,517	3,768	1,092	0,337
Frequency of travel to countrysed	2.520	2 2 42 2	2.500	2 025		0.00
destinations	2,529	2.242a	2.500a	2.927 ^b	6,627	0,002
Frequency of travel to urban destinations Frequency of travel to mountain	3,494	3,380	3,622	3,405	1,210	0,299
destinations	2,093	1.694a	2.286 ^b	2.237 ^b	7,462	0,00
Tourism activities carried out	2,070	1.071	2.200	2.207	7,102	0,00
Cultural activities	0,001	-0.286a	0.071 ^b	0.235b	6,597	0,002
Nature activities	0,009	-0.214a	-0.005a	0.319b	6,283	0,002
Training activities	0,009	-0.214° -0.091	0,003	0,134	1,072	0,343
Recreation activities	0,006	-0.099	-0.007	0,163	1,475	0,230
Nightlife animation activities	0,001	-0.234a	0.199 ^b	-0.066a,b	5,681	0,004
Travel group	0,001	-0.234	0.177	-0.000	3,001	0,00-
Frequency of travel with family	3,649	3,510	3,614	3,879	1,666	0,193
Frequency of travel with friends	3,186	2.770a	3.375 ^b	3.361 ^b	6,634	0,002
Frequency of travel alone	1,966	1,880	1,889	2,205	1,617	0,200
Frequency of travel in package	2,181	1.920a	2.146 ^a	2.561 ^b	4,489	0,012
Social contact	2,101	1.720"	2,170"	2,301	7,707	0,01
Tourist-host interaction level	2 260	3.091a	3.448 ^{a,b}	2 5 <i>6</i> 1b	4 562	0.01
Satisfaction with travel experience	3,368	3.0914	3.44ð ^{a,0}	3,561 ^b	4,562	0,01
•		4 222			# 0.cc	0.00
Overall satisfaction	4,233	4.082a	4.214 ^{a,b}	4.451 ^b	5,369	0,00

Note: Scheffe Test, a - Subset 1 (for alpha = 0.05); b - Subset 2 (for alpha = 0.05); c - Subset 3 (for alpha = 0.05)

4. CONCLUSIONS AND IMPLICATIONS

This paper clearly shows that there is a limited understanding of the relationship between tourism and QOL. However, in recent years, several researchers have revealed interest in analysing this

relationship, namely in the perspective of the hosts. Besides the present study is a small case study, it raises important issues within tourism research about the impact of tourism on QOL of the travellers.



This research supports that tourism enhances QOL of the travellers, being the psychological and social relationships domains of QOL, the domains more positively influenced by travel experience. In addition, it also highlights that the tourism market is heterogeneous concerning the perceptions of tourism impacts on QOL of travellers. The clusters identified in this study show that the travellers who feel highest positive impacts of tourism on their QOL travel more frequently to increase knowledge, to know other places and people and to socialise, travel more frequently to countryside and mountain destinations, travel more with friends or in package tours, undertake cultural and nature activities more frequently and interact more with communities. Besides, they are also the travellers more satisfied with their travel experiences. Some of the results that emerged of this research corroborate other researches in this field (e.g. Neal, 2000). On the other hand, the findings of this study are of utmost importance to managers in the tourism industry. The analysis of perceptions of tourism impacts on QOL helps in the planning, policy and decision making processes of the tourism industry.

Due to the methodology adopted in this study, where respondents had to refer to past travel experiences and to the impact of these experiences on their QOL, some bias may have occurred as, for example, the perceptions of the tourism impact on QOL may have been underestimated. However, as the travel experience may not have immediate effect on all domains of tourists' QOL, in line with other studies (Alexander et al., 2010; Michalkó et al., 2009; Neal et al., 2004), it is considered that the methodology adopted in this study is appropriate in order to achieve the objective of this research.

Despite the contributes of this research, its scope is limited in terms of scale and concerning the factors that influence the impact of tourism on QOL of individual tourists analysed. The restrict character of the sample in terms of geographical scope may not reflect the opinions of the Portuguese travelling population and, in this study, only some factors that influence the impact of tourism on QOL of individual tourists were analysed. Hence, many other factors which could influence the impact of tourism on QOL (e.g. length of stay and personality of tourists) may be considered in future research. In order to expand the knowledge in this topic, some

research projects are suggested. Further studies can be carried out using the scale employed in this research to measure the tourism impact on QOL of travellers. In addition, in order to validate the results here obtained, it would be important to conduct this kind of studies with other groups of travellers. Finally, future research using longitudinal design to provide a better notion of how and why tourism influences the QOL of individual tourists must be carried out.

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