ANOTHER LOOK AT FACTORS DETERMINING TOURISTS´ SATISFACTION: DESTINATION KNOWLEDGE AND VACATIONAL ACTIVITIES

Trabajo de Fin de Máster de Dª Iveta Cutáková

Máster Universitario en Gestión y Dirección de Empresas e Instituciones Turísticas

Universidad Politécnica de Cartagena (UPCT)

Tutor: Dr. Andrés Artal Tur

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1. Introduction

The tourism sector has become one of the main wealth generating activities in the world economy. At the beginning of the 21st century, this sector accounts yet for more than 10% of the world GDP (World Travel and Tourism Council). Moreover, the Mediterranean coast is one of the world´s leading markets for sun and sand tourism in recent times. Forecast studies carried out by WTO estimate that international tourist arrivals to the Mediterranean coast will amount to 346 millions in 2020 (in 2000 around 200 million foreign visitors per year). Inside this geographical area, Spain is the second country in the world in terms of tourism revenues (61.628 million of USD in 2008), just beside the USA. France has the third position with 55.600 million in the same year. As well Spain is occupying the third position in terms of total tourist arrivals, in 2010 received a total of 52.7 million international tourists, a 1% increase from 2009. This allows us to consider 2010 as the year of the tourism recovery, since it breaks with two consecutive years of decline, reaching number of arrivals higher than in 2004. It has been possible in a context of economic crisis and selected international externalities affecting the Spanish tourist activity, as Icelandic volcano ashes in the first part of the year forced to cancel many flights, the conflict of drivers, which reached its peak in December and weather inclemency that have forced even the closure of certain European airports during the month of December (IET, Balance del Turismo 2010). Tourism activities have become an important source of wealth for the national economy, providing more than 11 per cent of total GDP and employment compared to the slightly percentage in the EU aggregate (UNWTO, 2009). As one should expect, Southern EU countries, particularly those in the Mediterranean, show a similar development of their tourism sector.

As we have shown, tourism activities are increasingly important in driving Southern European countries and, of course, in Spain. Nowadays, tourism activities spill over all around the globe. Several products are yet well established and consolidated as sun and sand

supply, but others are now configuring new growth experiences in cities (cultural, urban, gastronomic, etc.), country-side destinations (hunting, nature, birds sight, etc.), and in other locations, increasingly attracting the attention of private and public agents as a source of welfare for their societies (Lim, 1997). Unlike most other products, a tourist destination is a mixture of products and experiences that combine to create a unique experience (Murphy, Pritchald, & Smith, 2000). Given the relevance of such product in generating wealth and welfare, competition is becoming increasingly strong in this sector of the economy. Destinations compete in terms of improving their supplies, providing better infrastructures for the visitors and developing new sensations for the tourist. Therefore, at this point, information on main advantages characterizing our destination is a key point for both public and private agents belonging to the sector. Sustainability of the product, and on a wider basis for the entire supply, depends on a correct management of such destination´s assets.

Tourism is an activity comprising supply and demand characteristics as every market activity. Supply-side destination studies comprise the analysis of different aspects, such as the development of infrastructures, natural advantages, existence of different tourist products that even complement each other, then making the destination increasingly attractive for the visitor. Demand-side studies increasingly include the use of detailed data sets containing more and more characteristics linked to the tourist profile. Those can be quantitative ones, as their age, marital status, sex, etc., but qualitative ones are becoming the most important in this type of studies. These features of the visitor allow the researcher to observe important aspects of the individual that finally determine their holiday choices.

This paper then is directed to start a research line for the Spanish Mediterranean destinations following such demand-side approach. Given the ambitious character of the investigation, we will focus in this study on characterizing the main profiles of tourists visiting such sun and sand destinations, together with observing the existence of some

differences between defined groups of tourists, according to their individual profiles and visiting destinations.

In this paper we are going to start by focusing on the psychological variables of tourists that affect their satisfaction when they are traveling around the Spanish Mediterranean coast. This study explores the relationship between the perceived overall satisfaction levels and the tourist profile features, together with the features of the trip. Our main objective is to take a stock of the subjective features of tourism, given its relevance for destinations´ revenue and sustainability.

The remainder of the study is organized as follows. The first part includes a wide description of the data set to be employed in the present study. In the second part, the profile of the tourists who come to visit The Mediterranean coast including the Balearic Islands during the years 2004-2009 is estimated (origin, age, income level, the length of stay, accommodation type, etc.). In the third part, an ordered logit model is carried out in order to identify factors explaining overall satisfaction of the visitors. In doing so, we will compare the most important segments of tourists appearing in the sample and then observe if there are interesting differences between them in terms of factor influencing declared satisfaction, given the destination they visit or their own individual characteristics. We also observe relationships between declared satisfaction, intention of repeating the visit and activities the tourist develops in the destination. Finally, the last part includes the conclusions of the investigation and point to the natural future research extensions of this study.

2. Literature review

Overall satisfaction is the extent of overall pleasure or contentment left by the visitor, resulting from the ability of the trip experience to fulfill the visitor´s desires, expectations and needs in relation to the trip. (Ching-Fu Chen, DungChun Tsai, 2006) Although tourist satisfaction is a personal judgment, it does provide crucial direct information about a destination's performance (Zairi, 1996; Kozak, 2004). This matter can be especially important when different destinations are compared, because for example, a higher proportion of tourists of a certain nationality in a specific destination can cause the average opinion of a destination to be biased. The study of M. Kozak (2000) attempts to present the findings of a self-administered survey carried out among British and German tourists visiting Mallorca and Turkey. The prime objective of the study was to determine whether there are differences between satisfaction levels of two nationalities visiting the same destination and show the importance of cultural differences that have significant effect on tourist behavior. Findings demonstrated that British tourists were more satisfied with almost all individual destination attributes than their German counterparts. It seems obvious that nationality might have a significant effect on consumer or tourist behavior.

"Motivation is the need that drives an individual to act in a certain way to achieve to the desired satisfaction" (Beerli and Martín, 2004, p. 626). In practice, all human behaviors are motivated even though the choices to satisfy needs can depend on other psychological variables (Crompton, 1979). More complex models have the advantage of allowing a better understanding of tourist behavior since more variables and their interactions can be taken into account. In fact, despite the use of more comprehensive models, so far, they have left unspecified the main personal characteristics (socio-demographic and motivational) of the more potentially loyal and satisfied tourists, with these type of variables just recently being included in marketing and consumers studies of tourism destinations. The study of Correia,

Oom do Valle and Moco (2005) offers an integrated approach to understanding tourist motivation and attempts to extend the empirical evidence on the relationship between the push and pull motivations in order to determine to what extent these motivating factors will contribute to the overall perception of the destination. The theoretical model is tested with a structural equation modeling procedure (Joreskog and Sorbom, 1986). The relationships among specific push motives, pull motives and perceptions are more deeply explored with the application of a categorical principal components (CATPCA). This was the first time that structural equation modeling and CATPCA were combined in order to explain costumer behavior. It is shown that special attention must be given to the activities to be offered because tourists do not understand leisure as "doing nothing". Knowing why people travel the way they do may lead to the offer of appropriated attractions and activities to the right tourist. These findings suggest that the destination marketing must be focus on push motives to enhance the destination's competitiveness. .

The study of the influential factors of destination loyalty is not new to tourism research. The overall satisfaction that tourists experience for a particular destination is also regarded as a predictor of the tourist's intention to prefer the same destination again (Oh, 1999; Kozak and Rimmington, 2000; Bowen, 2001; Bigné and Andreu, 2004; Alexandros and Shabbar, 2005; Bigné et al., 2005). In marketing and tourism analyses, repeat visits have generally been regarded as desirable (Oppermann 2000b) because, among other things, it is thought, first, that the marketing costs needed to attract repeaters are lower than those required for first-time tourists; second, a return is a positive indicator of one's satisfaction; third, an inertial attitude of high repeaters increases their likelihood to return (Oppermann 1998)

In the literature on tourism, most of the studies concerning consumer satisfaction use discrete ordinal data, considering them to be continuous. For example, Tonge and Moore

(2007, Table 5) calculated the sample means of satisfaction and importance measures and found that the gap between the two means was statistically significant. Kozak (2001a) and Yu and Goulden (2006) make the same use of ordinal data as do Tonge and Moore (2007). Many studies employ structural equation models, which include factor analysis, for analyzing tourist satisfaction (see, for example, Pizam, Neumann, & Reichel, 1978, and more recent studies by [Silvestre et al., 2008], [Sirakaya et al., 2004] and [Thompson and Schofield, 2007]). Further, Qu and Ping (1999) consider a logistic model for estimating the likelihood of going on a cruise in Hong Kong and use tourist satisfaction data as explanatory variables. These analyses often use the values of ordinal data themselves. A first conclusion from these studies is that there is a wide range of socio-demographic variables and other resources that have a significant and consistent correlation with the subjective satisfaction expressed by the individuals themselves (Krueger and Schkade, 2007).

3. The data set

Along the study, we compile a detailed data set, this being one of the strongest points of the present research. The study is based on the Tourism Expenditure Survey, EGATUR onwards, built by the Spanish Institute of Tourism Studies (IET) that is the statutory body in charge of the preparation, compilation and assessment of statistics, information and data relating to the tourism sector.[1]

Several filters have been applied to the data set. The sample that was finally used comprised a total of 124,410 observations, characterizing foreign tourists visiting the Spanish Mediterranean coast (including Catalonia, Valencia, Murcia region, Andalusia and Balearic Islands) and participating in leisure holidays through the years 2004-2009 compiling

[1] We publicly want to acknowledge the great cooperation always received from this centre.

information on socio-demographic profiles of visitors (gender, age, studies, occupation, and so on) and features of the trip as the length of stay, travel experience, accommodation, activities developed during the stay, among others.

We then exploit such rich dataset by employing STATA 11.1. The cross-sectional surveys is used, tourists are different each year. The sample means are presented in Table 1.

Table 1 *Sample descriptive statistics*

	Variable	Mean	S.D.
Dependent variable			
Overall satisfaction	OSAT(0-10)	8.460	1,120
	OSAT (0,1,2)	1,420	0,560
Independent variables			
sex	man	0,650	0,480
	woman	0,350	0,480
age	less24	0,080	0,270
	bt2544	0,460	0,500
	bt4564	0,360	0,480
	more65	0,100	0,300
studies	prim	0,090	0,290
	sec	0,420	0,490
	sup	0,480	0,500
occupation	occup	0,800	0,400
	retir	0,140	0,340
	njob	0,010	0,080
	stud	0,060	0,230
income	low	0,060	0,230
	medium	0,670	0,470
	high	0,280	0,450
company	alone	0,150	0,360
	couple	0,500	0,500
	family	0,230	0,420
	friends	0,120	0,320
origin	france	0,210	0,410
	benelux	0,100	0,310
	great_brit	0,350	0,480
	germany	0,130	0,330
	italy	0,070	0,260
	r_eu	0,090	0,290

	america	0,040	0,190
	r_world	0,010	0,110
pvisits	pv_0	0,160	0,360
	pv1_3	0,210	0,400
	pv4_9	0,230	0,420
	p_10	0,410	0,490
stay	sstay (1-3)	0,160	0,370
	mstay(4-6)	0,270	0,440
	lstay (+7)	0,570	0,500
activities	sport	0,140	0,340
	culture	0,620	0,490
	gastronomy	0,940	0,240
	amenities	0,360	0,480
	d_trips	0,420	0,490
	fam_visits	0,130	0,340
destination	andalusia	0,210	0,410
	balearic	0,150	0,360
	catalonia	0,440	0,500
	valencia	0,180	0,380
	murcia	0,020	0,150
year	y2004	0,140	0,340
	y2005	0,170	0,370
	y2006	0,180	0,380
	y2007	0,210	0,410
	y2008	0,210	0,410
	y2009	0,110	0,310
accommodation	hot	0,490	0,500
	pr_fam	0,350	0,480
	rent	0,080	0,280
	cam_o	0,080	0,270
transport	flights	0,730	0,440
	ocar	0,260	0,440
	rcar	0,010	0,080
	other	0,000	0,060
Observations	124.410		

A first look at our results reveals that foreign tourists arriving to Spanish Mediterranean coast come mainly from the United Kingdom, France and Germany. The total number of visitors from Europe is about 95%. Among male tourists, those aged 25-44 years

account for the largest share. The greatest share of the tourists most commonly travel with their couples and families. Tourists have majorly secondary or upper education level and they perceive a median income. Catalonia and Andalusia are visited by at least half of all travelers to the Spanish Mediterranean in our sample. The mean of transport employed to travel to Spain is closely related to the distance to the destination. If we analyze it by country of origin, it is seen how this behavior is similar for practically all countries, because, in at least seven out of ten arrivals, flying is the most method used travel to Spain. Only for tourists arriving from France and Portugal, bordering countries, the car is used more than the aero plane (IET, Informe anual 2010). International visitors predominantly choose hotels as their type of accommodation, followed by stays in their own propriety or some of their relatives. Another feature of the observed tourist profile is the high degree of loyalty of those who visit these areas. It should be noted that the majority has already visited Spain before, and a very high percentage, 41%, have been in Spain for ten times or more. The annual frequency of such travel is not very high, it means less than once a year. International visitors participate in a wide range of attractions and activities while in the Spanish Mediterranean coast. We decided to create five main groups, each one including similar types of activities. The groups defined are sport (including golf, sailing, other water sports, hunting, hiking, adventure sports), culture, gastronomy, amenities (spa, thematic parks, casinos, clubs and discos), day trips and family visits. Clearly the most pursued activities are those of culture and gastronomy, what reflects main advantages historically linked to this coast. Generic activities such as land-based sightseeing, cultural performances and scenic/natural attractions are the most popular between them, closely followed by gastronomy, including gastronomical activities, hotelerie, bars and cafes. The majority of the travelers reveal to be highly satisfied with their trip, with an average 8.4 out of 10.

4. Econometric issues

The need to better understand the role of tourist satisfaction as a destination asset, leads us to analyze as hypothesis if there are significant differences in the profiles and reviews these tourists make after their trips, and how tourists´ activities determine subjective judgments of the visitors. The null hypothesis proposes the existence of homogeneity, that is, no significant differences with respect to a particular variable of study (in our case this is the declared satisfaction) among groups or segments defined by explanatory or control variables. We will try to find out if the rating declared by the tourist varies depending on his/her own characteristics, as destination knowledge, familiarity, or even the place of the visit, and if we can observe some correlations that clearly depend on the features of the trip. The aim of this part of the study is to statistically test for these hypotheses, providing new evidence of factors influencing the satisfaction of tourists visiting these destinations.

Data related to visitors' satisfaction is usually recorded by using a likert scale with only a limited set of possible responses or categories. As a result, the available satisfaction measure is characterized to be an ordinal variable and, being this the case, it is appropriate the use of an ordered logit specification in order to relate tourists' satisfaction and potential explanatory variables.

The basics of the ordered logit model are as follows. Let's assume that the exact degree of satisfaction attained by individual *i* (denoted by y_i^*) is related to a set of covariates x_i (including socio-demographic characteristics, length of the stay, type of accommodation, etc) by the following relationship:

$$y_i^* = x_i\beta + \grave{o}_i,$$

where β is a vector of coefficients which capture the relationship between every explanatory variable and the level of satisfaction; $\grave{o}_i$ is an error term. However, instead of observing directly the exact degree of satisfaction y_i^*, the survey data only provides us data on the response categories where this variable fall. In the ordered logit framework it is assumed that the following scheme determines the mapping between the (unobserved) level of satisfaction and the item selected in a likert (N+1)-item scale, represented by the variable y_i (which, consistently is a discrete variable which has a limited number of distinct values, say 0,1, 2,…,N):

$$y_i = \begin{cases} 0 & if\ y_i^* \le \mu_1 \\ 1 & if\ \mu_1 < y_i^* \le \mu_2 \\ 2 & if\ \mu_2 < y_i^* \le \mu_3 \\ \vdots & \\ N & if\ \mu_N < y_i^* \end{cases}$$

Thus, the probability of choosing a given category *j (j=0,1,2,...,N)* by the individual *i* is given by

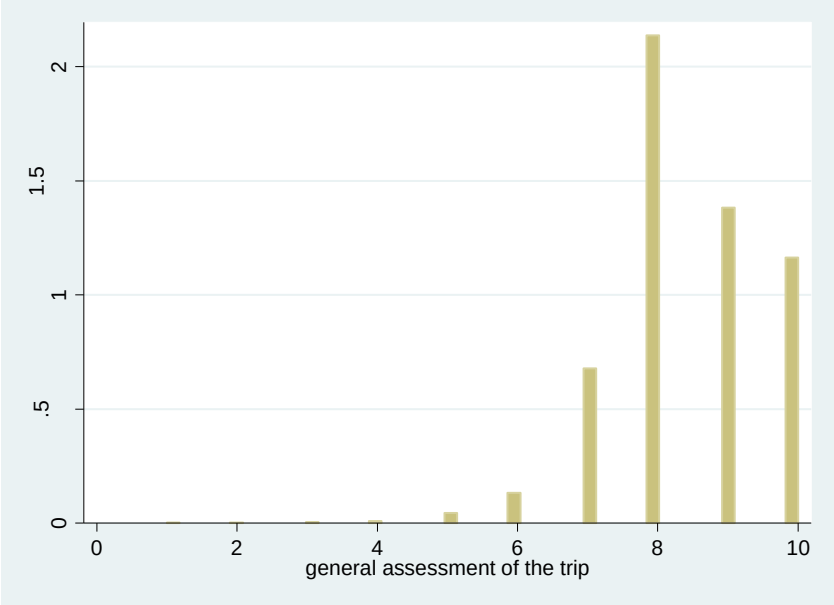
$$\Pr(y_i = j \mid x_i) = \Pr(\mu_j < y_i^* \le \mu_{j+1} \mid x_i) = \Pr(\mu_j - x_i\beta < \grave{o}_i \le \mu_{j+1} - x_i\beta \mid x_i),$$

and it is straightforward to derive explicitly this probability if the error term $\grave{o}_i$ is distributed according to a logistic distribution, as the conditional logit specification does. Finally, the coefficients in β can be estimated by maximum likelihood.

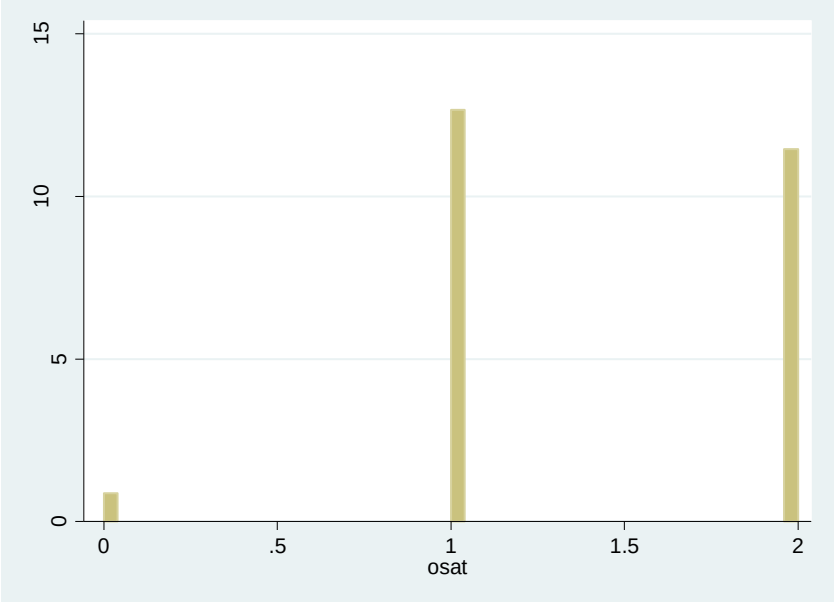
The database employed along the present study (EGATUR) includes just one general question regarding tourist overall satisfaction levels. This variable was assessed at 10-item Likert scale in the survey, further recoded into 3-item Likert scale in order to both easing interpretation of our results and taking into account the fact that there are too few observations in some categories. As a consequence, the dependent variable in this part of the

research is a categorical variable representing three levels of overall tourists' satisfaction labeled as "*dissatisfied*" (y=0), "*average*" (y=1), and "*satisfied*" (y=2).

Graph 1 *Distribution of the raw overall satisfaction*



Graph 2 *Distribution of the codified overall satisfaction*



With respect to the set of explanatory variables, they can be grouped into two broad categories. The first group of covariates would include "*socio-demographic characteristics*"

of the tourist, such as sex, age, degree of studies, occupation, income and country of origin. The second group would include those variables defining "features of the trip" such as company, travel experience, length of stay, accommodation, kind of transport employed and pursued activities along the vacations. Additionally, some other variables should be included in the specification to capture fixed effects: destination visited, year of the visit, etc. All our explanatory variables are recoded into dummy variables taking the values 0 and 1. The selection of these variables was performed taking into account the information contained in the survey that we use as reference database. Our reference category is a "man, between 25-44 years old, from United Kingdom, with education superior and medium income level, traveling with his couple, have been visited Spain more than ten times, length of stay more than seven days, stay in hotel, travel by plain, enjoy Spanish gastronomy and came to Catalonia in 2007".

Finally, the model estimates will allow us to statistically test the following research hypotheses relative to the determinants of the overall satisfaction of the tourist:

Research hypotheses:

H1: *The socio-demographic characteristics* of the tourist don´t influence his/her overall satisfaction. This is a traditional hypothesis of demand models based on questionnaire data (Goodall and Ashworth 1988; Weaver, McCleary, Lepisto and Damonte 1994; Woodside and Lysonski 1989; Zimmer, Brayley and Searle 1995). This hypothesis validates the socioeconomic characterization of the questionnaire respondents.

H2: *Travel experience* with the destination doesn´t influence overall satisfaction. Festinger (1954) stated that satisfaction in relation to the destination influences future choices. Beerli and Martı´n (2004) established that sun-and-sand destinations with a good image enjoy a high level of repeaters. Some studies show that the revisit intention is explained by the number of previous visits (Mazurki, 1989; Court and Lupton, 1997; Petrick et al., 2002). In addition,

research on destination loyalty demonstrates that one of the most decisive factors in a further visit to a destination by tourists is their satisfaction with previous stays there (Alegre & Cladera, 2006; Appiah-Adu, Fyall, & Singh, 2000; Baker & Crompton, 2000; Bigne, Sánchez, & Sánchez, 2001; Caneed, 2003; Kozak & Rimmington, 2000; Kozak, 2001, 2003; Yoon & Uysal, 2005).

H3: *The length of stay* in the destination doesn´t influence overall satisfaction. (See studies of Money and Crotts, 2003; Gokavall, Baher and Kozak, 2007).

H4: *The activities developed during the travel* do not influence overall satisfaction. The study of Correia, Oom do Valle and Moco (2005) offers an integrated approach to understanding tourist motivation and attempts to extend the empirical evidence on the relationship between the push and pull motivations in order to determine to what extent these motivating factors will contribute to the overall perception of the destination. It is shown that special attention must be given to the activities to be offered because tourists do not understand leisure as "doing nothing". Knowing why people travel the way they do may lead to the offer of appropriated attractions and activities to the right tourist. These findings suggest that the destination marketing must be focus on push motives to enhance the destination's competitiveness. Kozak (2003) also concluded that destination attributes influence future behavioral intentions and satisfaction.

H5: *Accommodation* of the tourist does not influence overall satisfaction.

5. Results for the Spanish Mediterranean coast

The empirical analysis is performed in blocks. In the first part, we study the impact of full sample of explanatory variables, as socio-demographic variables on the satisfaction of

tourists and variables including the feeling of the importance of the features of the trip as the travel experience, the length of stay, activities realized during the trip, accommodation, the relevant year (years 2004-2009), the incidence of the destinations (Catalonia, Valencia, Murcia, Andalusia, the Balearic Islands), and so on.

In the second block, we are getting more information from some interesting variables of the model and segments of tourists are chosen. Our main segments of tourists are rich (with high level of income) and poor people (with low level of income), tourist experiencing their first visit in Spanish Mediterranean coast and tourist that have visited these destinations more than ten times, and the third segments are tourists with a short stay (1-3 days) and a long stay (more than 7 days). Because each tourist segment has different expectations and perceptions, we are trying to find which factors increase and decrease the probability of choosing the level 2 of satisfaction (satisfied tourist). Therefore, such differences in attitudes and behavior focus on the importance of destination management in exploring the feature of each customer group, segmenting tourism markets and releasing new marketing strategies which are appropriate for each market.

5.1 Full sample of explanatory variables

In the first category of variables we analyze the relationship of the overall satisfaction with a wide range of socio-demographic variables and the variables of the features of the trip, that show a rejection of the null hypothesis of equality in the overall assessment by the same. Last three columns present the marginal effects calculated after ordered logit regression for all explanatory variables (except the reference category). An increase in the coefficient necessarily decreases the probability of being in the lowest category (y=0) and increases the probability of being in the highest category (y=2). The results are presented in Table 2.

Table 2 *Ordered logit model and marginal effects for outcomes 0, 1, and 2*

	VARIABLES	Coeff.	z	0	1	2
sex	woman	0.193***	[0.0127]	-0,006	-0,042	0,048
age	less24	-0.0287	[0.0289]	0,001	0,006	-0,007
	bt4564	0.0215	[0.0142]	-0,001	-0,005	0,005
	more65	0.167***	[0.0291]	-0,005	-0,037	0,042
studies	prim	-0.312***	[0.0229]	0,011	0,065	-0,076
	sec	-0.251***	[0.0129]	0,008	0,054	-0,062
occupation	retir	0.0135	[0.0241]	0,000	-0,003	0,003
	njob	-0.116	[0.0744]	0,004	0,025	-0,029
	stud	0.131***	[0.0335]	-0,004	-0,029	0,033
income	low	-0.162***	[0.0276]	0,005	0,035	-0,040
	high	0.0719***	[0.0142]	-0,002	-0,016	0,018
company	alone	-0.0661***	[0.0183]	0,002	0,014	-0,016
	family	0.124***	[0.0153]	-0,004	-0,027	0,031
	friends	0.167***	[0.0201]	-0,005	-0,037	0,042
origin	france	-0.465***	[0.0213]	0,016	0,097	-0,113
	benelux	-0.358***	[0.0213]	0,012	0,075	-0,087
	germany	-0.217***	[0.0194]	0,007	0,046	-0,053
	italy	-0.187***	[0.0250]	0,006	0,040	-0,046
	r_eu	-0.171***	[0.0222]	0,006	0,036	-0,042
	america	0.262***	[0.0344]	-0,007	-0,058	0,065
	r_world	-0.100*	[0.0563]	0,003	0,022	-0,025
pvisits	pv_0	-0.178***	[0.0205]	0,006	0,038	-0,044
	pv1_3	-0.146***	[0.0181]	0,005	0,031	-0,036
	pv4_9	-0.188***	[0.0163]	0,006	0,040	-0,046
stay	sstay	-0.276***	[0.0184]	0,009	0,058	-0,068
	mstay	-0.0826***	[0.0148]	0,003	0,018	-0,020
activities	sport	0.162***	[0.0179]	-0,005	-0,036	0,040
	culture	0.0902***	[0.0134]	-0,003	-0,020	0,022
	amenities	0.109***	[0.0129]	-0,003	-0,024	0,027
	d_trips	-0.00357	[0.0127]	0,000	0,001	-0,001
	fam_visits	0.125***	[0.0191]	-0,004	-0,027	0,031
destination	andalusia	-0.211***	[0.0180]	0,007	0,045	-0,052
	balearic	-0.00552	[0.0210]	0,000	0,001	-0,001
	valencia	0.591***	[0.0192]	-0,015	-0,132	0,147
	murcia	0.173***	[0.0428]	-0,005	-0,038	0,043
year	y2004	-0.218***	[0.0207]	0,007	0,046	-0,054
	y2005	-0.237***	[0.0188]	0,008	0,051	-0,058
	y2006	-0.203***	[0.0185]	0,007	0,043	-0,050
	y2008	-0.0929***	[0.0178]	0,003	0,020	-0,023
	y2009	-0.0300	[0.0221]	0,001	0,007	-0,007

accommodation	pr_fam	0.142***	[0.0162]	0,001	-0,031	0,035
	rent	0.113***	[0.0226]	-0,003	-0,025	0,028
	cam_o	0.0809***	[0.0239]	-0,002	-0,018	0,020
transport	ocar	-0.219***	[0.0208]	0,007	0,047	-0,054
	rcar	0.231***	[0.0724]	-0,006	-0,051	0,058
	other	-0.167	[0.109]	0,005	0,036	-0,041
Constant		-3.692***	[0.0327]			
Constant		-0.0880***	[0.0291]			
Observations		124402				
Log Pseudolikelihood		-98073,644				
AIC		196243.3				
BIC		196710.4				
Prob > chi2		0.0000				

*Robust standard errors in brackets ***p*<0.01, ** p<0.05, *p<0.1

With regard to the direct impact of ***socio-demographic variables*** on the probability of being satisfied, the null of ***Hypothesis 1*** is rejected, since there are differences in an assessment of the trip.

Gender: However, gender is positive, but according to available studies the differences between men and women are very small (Theodossiou (1998) and Gerdtham and Johannesson (2001)). The results for Spain are consistent with the above; the fact of being woman slightly increases the probability of answering that she is satisfied (level 2).

Age: Estimations show that being a tourist belonging to the over 65 group increases the probability of being satisfied with respect to the reference category 25-44 years old. However, the coefficients of the age groups less than 24 and between 45-64 years are not statistically significant.

Education is negative, but statistically significant. The probability of answering "satisfied" increases with the level of studies completed with respect to the higher education category.

Occupation: The fact of being student increases the probability of answering as being "satisfied". On the other hand there are no differences due to occupation in regard to subjective satisfaction of retired people and people without job, the results are not statistically significant.

Income level: Overall satisfaction increases with income (at a decreasing rate). People with low-income level have probability to assign their satisfaction as "bad" with respect to the reference category "medium income" level.

Nationality: Tourists from Great Britain have more probability to be satisfied than the rest of the Europe. The significant bad assessment showed tourists from France and Benelux. This is an important result for this type of destination, showing that distance significantly influences the satisfaction. America shows superior probability to be satisfied than tourists with the European origin, even the British tourists, but we dispose of too few observations in our sample. Rest of the world is similar to the reference category, there are no significant differences.

Travel experience: The analysis of the relationship of the previous experience with the probability of being satisfied results in the rejection of the null of ***Hypothesis 2***. In our results is shown that higher number of previous visits to these destinations tends to make tourists more satisfied. Although it's curious that the group of 4-9 previous visits tends to show more probability to be worst assessing than the group of the first visitors, but the difference is really small. On the other side, people that have visited the Spanish Mediterranean more than ten times, and therefore with a greater knowledge of the destination declare to be the most satisfied. The returning effect is important in this market, given that travel experience is found to be positive and statistically significant (Aguilo´, Alegre and Sard 2005).

Length of stay: Overall satisfaction is positively related with the length of stay. Longer stay tends to make people more satisfied and therefore we reject the null of ***Hypothesis 3***.

The activities developed during the travel: Realization of some activities during their holidays also shows some effects. The null of *Hypothesis 4* is rejected, as sport, culture, amenities and family visits are statistically significant positive motives, confirming previous research (Costa and Manente 1995). However, the group of day trips is negative and statistically insignificant. Specifically, those who practice sport, visit their families and enjoy amenities appear to be more satisfied than others.

***Accommodation*:** This is another important issue in this research, given that one of our aims was to focus on the differences in satisfaction determinants between destinations where a large number of tourists come to hotels versus destinations where an important complex of apartments and villas for rent complement this accommodation supply. In our case, we find that those who stay in hotel, in general, are significantly less satisfied than those staying in their propriety, rented type of accommodation or camping. It can be explained by higher expectations of tourists that stay in hotels, and surely by the lack of knowledge in choosing accommodation in that particular destination.

Valencia and Murcia region are evaluated better than the reference category Catalonia, while foreign tourists visiting Andalusia have a higher probability of showing more dissatisfied. Tourists who come with their couple are the reference category, so we can observe that traveling alone reduces the overall satisfaction with the travel. Coming with family or friends is positive and statistically significant result.

5.2 Getting more information from some interesting variables of the model

The most relevant segments that show significant differences in assessing the satisfaction were chosen. Our main segments of tourists are rich (with high level of income) and poor tourists (with low level of income), tourist experiencing their first visit in Spanish Mediterranean coast and tourist that have visited these destinations more than ten times, and the third segments are tourists with a short stay (1-3 days) and a long stay (more than 7 days). The observation of the tourists ´segments perceptions will help us to improve available information about the destination´s characteristics, meanwhile will complete information collected below. Firstly, we employed ordered logit regression for the sample of rich people and then for the sample of poor people. Secondly, we use mfx command to obtain the marginal effects evaluated at the mean, for the third outcome (level 2 = satisfied). Finally, the most significant explanatory variables were compared. This consideration is made only for those variables that are appropriate, since in other cases, such as age or sex does not make sense. Results are presented in Table 3.

Table 3 *Significant differences between segments*

		Income level		Travel experience		Lenght of stay	
VARIABLES		rich/poor	poor/rich	pv0/pv10	pv10/pv0	sstay/lstay	lstay/sstay
sex	woman		*				*
studies	prim			*			-
	sec	--			*		-
occupation	retir						
	njob						
	stud				+		
income	low						
	high			+		+++	
company	alone						
	family	*					
	friends		*		+		

pvisits	pv_0						
	pv1_3						
	pv4_9						*
stay	sstay	*		-			
	mstay			-			
activities	sport		+	+			+
	culture						+
	amenities		+	++		*	
	d_trips						
	fam_visits			*		*	
accommodation	pr_fam		+++				+
	rent						
	cam_o				*		
transport	ocar				--		
	rcar						
	other						
Fixed effects							
Origin dummies		*YES*	*YES*	*YES*	*YES*	*YES*	*YES*
Year dummies		*YES*	*YES*	*YES*	*YES*	*YES*	*YES*
Destination dummies		*YES*	*YES*	*YES*	*YES*	*YES*	*YES*
Observations		**34.380**	**7.091**	**19.462**	**51.442**	**20.407**	**70.868**

(+++/---): *high positive/negative impact* ; (++/--): medium *positive/negative impact* ; (+/-): *low impact*.

Rich people with secondary education assess their trip more negatively than poor people. They have more probability to evaluate their trip as "satisfied" when they come with family and to evaluate it as "dissatisfied" when they stay just 1-3 days. Longer they stay in the destination, decrease the probability to be unsatisfied. If they have previous experience with the destination, value better.

If we compare the poor to the rich tourists who said they were more satisfied (group 2), staying in their proprietary or family´s place usually improves satisfaction with the

journey. This is closely associated with an importance that plays family visits, practicing sport activities and amenities (spa, theme parks, and casinos). Slightly differences in a positive assessment of the trip between poor and rich people showed poor women coming with friends.

In the case of first visitors the relevant factors for evaluate very good are high income level, sport activities and amenities. Factors like short stay (1-3) and medium stay (4-6 days) reduce the probability to be satisfied. Tourists that repeated their visit more than ten times and have more probability to declare themselves as satisfied in comparison with first visitors are students, coming with their friends and staying in camping. What decreases their level of satisfaction is the fact of using their own car for coming to destination.

When the tourist stays at destination just 1-3 days the high level of income is much more important than for tourists with longer length of stay to assess their trip as "satisfied". Tourists from Great Britain have more probability to be satisfied than the rest of the world. Foreign tourists staying more than seven days in destination have more probability to be dissatisfied if they have primary and secondary education and more probability if they enjoy culture and sport activities.

Those with more experience, affordability, destination knowledge, longer stay in the destinations, participating in cultural and sports activities, amenities (as spa, theme parks, casinos, discos) during their visit, are those who see their expectations fulfilled more widely, therefore are those that show greater loyalty to the destination and declare a higher satisfaction averages.

6. Conclusions

Employing a sample of more than 120,000 questionnaires about foreign tourists arriving to the Spanish Mediterranean coast, in this study we have analyzed the role played by trip characteristics and tourists ´profiles in explaining the perceived level of satisfaction within their vacational experience.

Main factors improving satisfaction of tourists appear to be those that provide greater knowledge on destination characteristics. These include places to be visited, accommodation to choose, activities to be developed and leisure supply in general. The origin of tourists, the year of visit and other variables related to the destination of knowledge accumulated by visitors, as experience in coming to this particular destination, property of one apartment or villa in the place, etc., hardly improve the perception of satisfaction of the tourist for every destination in the sample.

The econometric results are statistically valid and economically important, since they uncover significant and heterogeneous responses which vary according to the tourists´ socio-demographic profiles, as well as trip features, among other factors. In summary, these results will help us to improve our knowledge of tourists´ attitudes and perceptions affecting their vacational choices, allowing in this way policymakers and tourism economic agents to tailor policies aimed at increasing tourist satisfaction, repeated visitation and fidelization actions for these important holiday destinations. The results are equally important to improve marketing tools in other EU southern locations, opening interesting knowledge-transfer activities with those vacational areas.

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