Segmentation of the Spanish domestic tourism market

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A common goal in tourist sector planning is assessment of the demand for a given destination or destination type. For effective development of a marketing mix it is very useful to first categorize the tourist population into homogenous groups, or segments. The principal aim of the present study was to categorize the Spanish adult population as regards tourism preferences. A conjoint analysis procedure was used to characterize subjects on the basis of preferences for hypothetical destinations showing different attribute combinations, and cluster analysis was then used to identify subject groups on the basis of these preferences. Our results indicate the existence of 8 well-defined subject groups. The characteristics of these groups were explored on the basis of questionnaire data, using analysis of residuals to identify statistically significant associations.

Segmentacion del mercado turístico doméstico español. Un objetivo común en la planificación del sector turístico es evaluar la demanda de un determinado destino o de un tipo de destino. Para el desarrollo efectivo de una acción de marketing resulta de gran utilidad categorizar, en primer lugar, a la población de turistas en grupos homogéneos o segmentos. El principal objetivo del presente trabajo consistió en categorizar a la población adulta española con relación a sus preferencias turísticas. Para caracterizar a los sujetos en base a sus preferencias por hipotéticos destinos, se utilizó el análisis conjunto obteniendo diferentes combinaciones de atributos; posteriormente, se hicieron análisis cluster para identificar grupos de sujetos, en base a sus preferencias. Los resultados obtenidos muestran la existencia de 8 grupos de sujetos bien definidos. Se exploraron las características de estos grupos utilizando datos de cuestionario y empleando análisis residuales para identificar asociaciones estadísticamente significativas.

The decision to travel to a given holiday destination is a complex process involving elements of very different types (Moutinho, 1987; Rodríguez and Agulló, 2002). One of the key steps in evaluating why people choose different destinations is to understand their tastes, and their preferences for the individual elements of each destination. Preferences for specific destinations develop as a result of the individual's perceptions of the benefits of each (Marzo, Martínez-Tur, Ramos and Peiró, 2002). When an individual is selecting a holiday destination, he or she will evaluate the benefits offered by each of the alternatives available, and base his or her final choice on these evaluations. A tourist destination - like any other product or service - can thus be conceptualized as a set of attributes. The importance accorded to each attribute will vary among individuals and among market segments.

One of the techniques that has proved most useful for analysing consumer preferences is conjoint analysis (Luce and Tukey, 1964; Green and Rao, 1971; Green and Krieger, 1991), defined by Green and Srinivasan (1978) as «any decompositional method that estimates the structure of a consumer's preferences given his/her overall evaluations of a set of alternatives that are prespecified in terms of levels of different attributes» (pp. 104). In the context of tourism, the basic goal of conjoint analysis is to characterize the structure of subjects' preferences for different destinations, in terms of the different attributes of those destinations. Detailed explanations of the application of conjoint analysis in marketing research can be found in Green and Srinivasan (1978, 1990), Varela (2000) and Varela and Braña (1996). Briefly, the technique extracts two indices, namely partial utilities and relative importances. Partial utilities are indications of the importance of a given level of a given attribute for a given subject or group of subjects: thus for example the level «beach» of the attribute *destination type* might have a partial utility of 1.55, while the level «mountains» might have a partial utility of –2.03, indicating that «beach» would be much more preferred than «mountain». Relative importances are normalized assessments of the importance of a given attribute within the total utility rating, expressed as a percentage: thus for example the attribute *destination type* might account for 25% of the overall decision.

In using conjoint analysis to investigate preferences for different tourist destinations, two main approaches can be followed (Picón and Varela, 2000; Rial, Varela, Braña and Levy, 2000).

a) Segment the subject sample *a priori* on the basis of demographic and psychographic characteristics (e.g. age, sex, marital status, region of residence, life-style, values, etc.), then perform separate conjoint analyses for selected subgroups of interest, with subsequent comparison of preferences.

b) Perform individual conjoint analyses for each subject, and then perform cluster analyses to group subjects on the basis of partial utilities for each level of each attribute; in other words, *post hoc* segmentation.

This latter approach enables objective identification of subject groups defined in terms of their preferences as regards tourists destinations, and is that used in the present study.

The principal aim of the present study was to derive a categorization of the Spanish adult population in terms of preferences as regards tourist destinations. Categorizations of this type facilitate detailed analysis of the demand for particular destinations, and provide an objective basis for decision-making as regards both investment aimed at improving particular attributes and marketing aimed at particular segments of the population.

Method

Sample

Taking the study population to be all people aged over 25 years and resident in mainland Spain, we obtained a sample of 883 subjects by a random selection procedure with stratification by age, sex and region (estimated sampling error ± 3.3%, p= q= 50%, confidence level 95%, k= 2). In each of 24 cities in the 15 regions of mainland Spain, a random routes procedure was used to select subjects, who were interviewed in their homes. Sample control was by telephone repeat of 20% of the interviews.

Procedure

Following a pilot study with both tourists and tourist industry professionals, we selected those 6 attributes that best define holiday destinations in Spain as perceived by Spanish tourists: destination type (city, country, beach), gastronomy, distance from home, nightlife, art and culture, and climate. In each case we defined 3 levels (see Table 1). Given the large number of types that would result from consideration of all attribute x level combinations (3^6), preferences were directly determined for an orthogonal fraction of the complete factorial design, namely 18 types plus an additional 2 types used to validate the analysis. Each type represented a hypothetical destination with a specified combination of attribute levels (i.e. a full profile). The 20 types were presented as cards to the subject, who was asked to physically order them according to preference. To standardize the sample as regards «time of year», the task was presented to subjects as follows: «*Imagine that in the next few months you plan to go on holiday, and that just at the moment you're planning and deciding between different alternatives. We' - re now going to give you a series of stimulus-cards each represen - ting a different tourist destination: your task is to order them ac - cording to preference*».

Additionally, each subject was asked to complete a questionnaire with questions relating to basic sociodemographic characteristics, ideal holiday characteristics, and the last holiday taken.

Data analysis

We first performed a conjoint analysis for each subject, thus obtaining individual-subject partial utilities (u_i) for each level of each attribute. These 18 partial utilities for each subject (6 attribu-

tes x 3 levels) constituted the input for a first exploratory hierarchical cluster analysis, with linkage by Ward's method. We initially considered a range of cut-offs, giving 4 - 10 groups, but as the basis for interpretation of our data selected the 8-group solution. We then calculated the mean partial utilities for each group, and performed a second cluster analysis, by the k-means method, taking the means for the 8 groups as the starting centre of each cluster. K-means cluster analysis is generally considered to be the most robust of the methods offered by the SPSS package, as long as the user pre-specifies the number of clusters to be extracted and the starting centre for each (so that an initial agglomerative analysis is necessary) (Punj and Stewart, 1983).

Once we had defined the 8 groups, we characterized each as regards responses to the 12-item questionnaire about basic sociodemographic characteristics, ideal holiday characteristics, and last holiday taken. The response categories for each of the 12 items are listed in Table 4. First, we cross-tabulated questionnaire responses in each group. We then applied analysis of residuals (Haberman, 1973) to the resulting cross-classification, with the aim of identifying those observed cell values which differed significantly from the values expected assuming that response to that item was unaffected by group. ($R_{ij}= O_{ij} - E_{ij}$, where O_{ij} is the observed value and E_{ij} the expected value). Before significance testing, the residuals were standardized and adjusted following the procedure recommended by Haberman (1973). The greater the absolute magnitude of the residual for a given cell value, the stronger the association between the two categories defining that cell, being significant (p= 0.05) when the residual is higher than ± 1,96.

Results

Identification of subject groups

As noted, agglomerative cluster analysis suggested the existence of 8 well-defined subject groups, on the basis of the individual-

Table 1
Attributes considered in the conjoint analysis, showing the levels of each

Attribute	Level
Destination type	Urban
	Nature/Mountain
	Beach
Gastronomy (variety and quality)	Excellent
	Average
	Poor
Entertainment and night-life	Lots
	Average
	Almost none
Art and culture	Excellent
	Average
	Poor
Climate	Almost always sunny
	Sometimes sunny, sometimes rainy
	Almost always rainy
Distance from home	Less than 3 hours' journey
	Between 3 and 6 hours' journey
	More than 6 hours' journey

subject partial utilities of the different levels of each attribute ($e_{res\text{-}caled} \approx 7$). Subsequent application of k-means cluster analysis, with these 8 groups as starting clusters, confirmed that they were well differentiated (see Tables 2 and 3).

Figure 1 shows the mean relative importance (w_i) accorded to each attribute by subjects in each of the eight groups. Groups 2, 5, 6, 7 and 8 are characterized by the high relative importance of *destination type* (*beach*, *nature*, *urban*). Group 1 is characterized by the high relative importance of *nightlife*. Group 3 is characterized by high relative importance of *art and culture* and *gastronomy*. Group 4 is characterized by the high relative importance of *sunny climate*.

Despite the apparent similarity of groups 2, 5, 6, 7 and 8, detailed analysis of the mean partial utilities (u_i) for each level of the attribute *destination type* (i.e. *beach, nature, urban*) reveals that they are in fact very different (see Figure 2).

Subjects in group 2 strongly prefer urban destinations (mean $u_i = 5.2$), and reject nature and beach destinations (mean $u_i = -2.6$ and -2.7, respectively). Subjects in groups 5 and 7 prefer beach destinations (mean $u_i = 5.4$ and 5.3, respectively), but those in group 5 reject urban destinations (mean $u_i = -5.3$), whereas those in group 7 reject nature destinations (mean $u_i = -5.4$). Subjects in
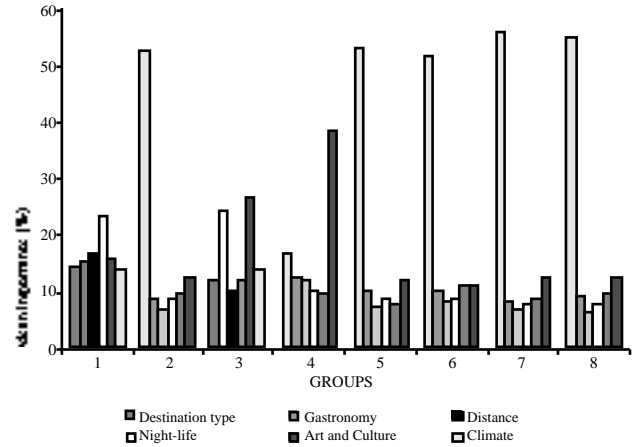

Figure 1. Mean relative importance accorded to the six attributes by subjects in each of the eight groups identified by conjoint analysis and clustering
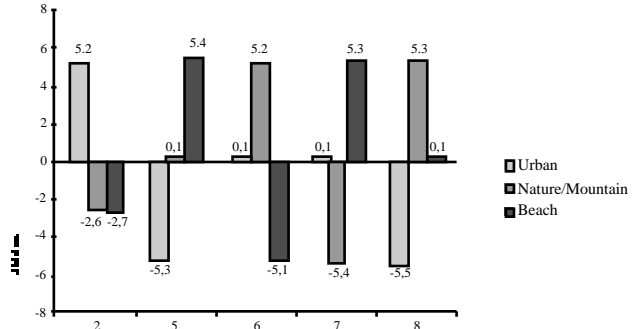

Figure 2. Mean partial utilities of three levels of the attribute destination type for subjects in Groups 2, 5, 6, 7 and 8 (i.e. those groups in which destination type was the most important attribute)

Table 2
Distances between cluster centres after k-means clustering

Cluster	Distances between final cluster centres							
	1	2	3	4	5	6	7	8
1		7.097	6.228	6.909	8.037	7.922	8.016	8.320
2	7.097		7.881	9.018	13.479	9.781	9.931	13.621
3	6.228	7.881		6.139	8.739	8.165	9.184	8.534
4	6.909	9.018	6.139		7.928	9.123	8.781	8.181
5	8.037	13.479	8.739	7.928		12.787	7.600	7.591
6	7.922	9.781	8.165	9.123	12.787		14.890	7.467
7	8.016	9.931	9.184	8.781	7.600	14.890		13.229
8	8.320	13.621	8.534	8.181	7.591	7.467	13.229	

Table 3
Results of F tests assessing variability in the 18 levels of the 6 attributes (see Table 1) among the 8 groups obtained by k-menas clustering

	ANOVA					
	Cluster		Error			
	Cuadratic mean	df	Cuadratic mean	df	F	Sig.
Urban	1,132.247	7	1.623	875	697.587	.000
Nature/Mountain	1,168.970	7	2.161	875	540.984	.000
Beach	1,202.045	7	2.145	875	560.374	.000
Excellent	71.810	7	1.592	875	45.103	.000
Average	9.440	7	1.500	875	6.294	.000
Poor	112.956	7	1.963	875	57.556	.000
Lots	24.426	7	1.662	875	14.699	.000
Average	6.307	7	1.071	875	5.890	.000
Almost none	23.229	7	1.909	875	12.166	.000
Excellent	93.104	7	1.858	875	50.098	.000
Average	4.883	7	1.228	875	3.976	.000
Poor	135.662	7	1.822	875	74.470	.000
Almost allways sunny	160.379	7	1.608	875	99.739	.000
Sometimes sunny, sometimes rainy	5.607	7	1.074	875	5.219	.000
Almost always rainy	205.996	7	1.711	875	120.380	.000
Less than 3 hours' journey	4.456	7	1.405	875	3.171	.003
Between 3 and 6 hours' journaey	4.828	7	1.044	875	4.626	.000
More than 6 hours' journey	12.470	7	1.344	875	9.277	.000

groups 6 and 8 prefer nature destinations (mean u_i= 5.2 and 5.3, respectively), but those in group 6 reject beach destinations (mean u_i = -5.1), whereas those in group 8 reject urban destinations (mean u_i = -5.6).

In what follows, we refer to these different groups - i.e. market segments - with short descriptive labels, namely «City seekers» for group 2, «Non-urban beach seekers» for group 5, «Non-green beach seekers» for group 7, «Mountain enthusiasts» for group 6, and «Countryside lovers» for group 8. The remaining groups can be labeled in view of the attribute to which they accorded greatest importance: «Nightlifers» for group 1, «Culture seekers» for group 3, and «Sun seekers» for group 4.

Characterization of groups

To further characterize each group (i.e. each market segment), we analysed the results of the questionnaire on sociodemographic characteristics and holiday preferences. First, we cross-tabulated the results of this questionnaire by group, and then used analysis of residuals (Haberman, 1973) to identify responses that differed significantly from those expected assuming no effect of group (see Table 4).

Analysis of residuals has rarely been used in studies of this type, and perhaps merits specific comment. Most studies of consumer preferences consider cross-tabulation data alone: thus for example we might examine the cross-tabulated data for Group 1, and find that most subjects in this group prefer to take their holidays in summer. This information is of interest *per se*: but analysis of residuals allows us to take the analysis one step further, and to consider the relative strength of this preference (see Haberman, 1973). In the case of this particular example, we will very probably find that summer is the ideal holiday time for most people in *all* groups. Analysis of residuals allows us to assess whether any one group shows a particularly frequent (or particularly infrequent) preference for summer. Likewise, we can identify a relatively frequent preference for e.g. Easter, even if Easter is a minority preference within the group. When analysis of residuals is applied to the full cross-tabulation, we thus have a powerful tool for identifying those preferences that best characterize a given subject group with respect to the others (see Table 4).

Group 1: Nightlifers (13% of the total)

This group is of course characterized by the high importance accorded to «nightlife» (discos, parties, nightclubs, bars, etc.), but is otherwise rather heterogeneous. The most frequent ideal destinations for subjects in this group were the Canary Islands (12.7%) and the Caribbean (12.7%), and the ideal holiday period was summer (46.9%). The predominant age-group is 25 - 34 years (43.1%), with men and women being equally frequent. Most subjects were resident in Central Spain (27.3%) or Catalonia (25.5%), had education to primary level (39.1%), were married or cohabiting (53.6%) or single (36.4%), and wage-earners (45.5%). Their last holidays had been to Galicia (19.3%), Andalucia (12.8%) or Valencia (11.9%), in summer (66.4%), with friends (33.6%) or family (31.8%). Analysis of residuals indicated that the following characteristics were significantly more likely than expected assuming no effect of group: ideal destination Canary Islands or Caribbean, not Andalucia; ideal holiday dates Christmas and winter, not summer; age 25 - 34 years, not 35 - 44 years; region of residence Catalonia or Central Spain, not Andalucia or Northern Spain; educational level not high school; marital status single; last holiday destination Galicia, with friends.

Group 2: City seekers (8% of the total)

Unlike the previous group, this group was rather homogeneous. The most frequent ideal destinations were Europe (21.1%) and Galicia (12.7%). The ideal holiday period is summer (41.2%), although spring was also popular (20.6%). The predominant age-group was 25 - 34 years (43.1%), with more men than women (53.5%). Most subjects were resident in Northern Spain (23.9%), Central Spain (19.7%) or Andalucia (19.7%), had education to high-school level (38.0%), were married (66.2%), and were wage-earners (46.5%). Their last holidays had been to Galicia (16.9%), Andalucia (15.5%) or the European Union (14.1%), in summer (64.8%), for short periods (1-6 days 26.1%, 7-9 days 4.6%), and with family (49.3%). Analysis of residuals indicated that the following characteristics were significantly more likely than expected assuming no effect of group: ideal destination Madrid, Galicia or European Union; ideal holiday dates autumn, not summer; region of residence Northern Spain, not Valencia-Murcia; last holiday during a long weekend, not with friends.

Group 3: Culture seekers (19% of the total)

This group comprised subjects who accorded particular importance to art and culture and to gastronomy. The linking of these two attributes is interesting, suggesting that these subjects view them as part of a «culture and traditions» whole. The most frequently cited ideal destinations for subjects in this group were Europe (15.3%) and Andalucia (10.0%). The ideal holiday period is summer (51.3%). The predominant age-group was 35 - 44 years (34.9%), both men and women. Most subjects were resident in Catalonia (22.9%) or Northwest Spain (21.8%), had received education to high-school level (41.3%), were married (64.7%), and were wage-earners (44.0%). Their last holidays had been to Andalucia (18.9%), the European Union (15.5%) or the Valencia region (12.4%), in summer (69.8%), on trips of varied duration (1-6 days 21.0%, 7-9 days 22.2%, 15-19 days 21.0%), with family (40.2%) or partner (33.5%). Analysis of residuals indicated that the following characteristics were significantly more likely than expected assuming no effect of group: ideal destination «rest of world» locations, not Caribbean; age 35-44 years; region of residence Northwest Spain or Catalonia, not Valencia-Murcia or Northern Spain; educational level beyond primary; occupational status civil servant; last holiday in Europe, not Castilla La Mancha or Murcia, not during a long weekend.

Group 4: Sun seekers (13% of the total)

The most frequent ideal destinations for subjects in this group were «none in particular» (13.8%) and Andalucia (11.2%). The ideal holiday period was summer (67.0%). The predominant age-group was 45 - 54 years (33.6%), both men and women. The predominant region of residence was Madrid (19.0%), and the predominant educational level was high-school (46.1%). Most subjects were married (73.3%), and a high proportion were wage-earners (43.1%). Their last holidays had been to Andalucia (20.2%), the Valencia region (14.0%) or Catalonia (13.2%), in summer

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Table 4
Residuals (standarized and adjusted) of the cross-tabulation of the questionnaire results for each of the eight groups. Bold type indicates residuals that are significantly different (*p*= 0.05) from those expected given no effect
of group

Standardized and adjusted residuals	GROUPS							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
IDEAL HOLIDAY PERIOD AND DESTINATION								
IDEAL PERIOD								
Easter	1.72	.31	1.08	-1.23	-1.55	-.05	1.18	-1.26
Summer	**-2.54**	**-2.25**	-1.67	**2.08**	**5.34**	-.43	**2.77**	**-3.49**
Long weekends	.73	-.94	-.75	-1.24	-1.35	1.14	.12	**2.49**
Weekends	-.65	-.51	-.85	-.67	.87	-.56	-.54	**2.72**
Christmas	**2.15**	-.12	1.39	.26	-1.70	-.38	-1.65	-.35
Winter	**2.71**	.08	-.47	-.13	-1.38	1.74	**-2.23**	-.18
Spring	-.90	1.86	-.14	-.51	**-2.00**	.81	-.01	1.50
Autumn	-1.02	**3.94**	1.26	-1.60	-1.45	-.49	-.93	.71
More than one of above	-.97	.47	.12	-1.08	-1.85	.11	.24	**3.16**
None in particular	1.88	-1.13	1.12	.36	-.89	-1.21	**-2.17**	1.23
IDEAL DESTINATION								
Andalucia	**-2.02**	-1.40	.66	1.02	.08	-1.76	3.81	-.45
Aragon	-1.19	-.66	-.77	-1.26	**-2.06**	**4.19**	-1.52	**3.68**
Asturias	.13	-1.25	-.13	-1.47	-1.29	**3.61**	-1.39	1.91
Balearics	.88	-.88	-1.16	.75	**3.05**	-1.09	-.34	-1.55
Canary Islands	**3.09**	-.69	-1.21	-.45	**3.41**	**-2.46**	.08	**-2.15**
Cantabria	-1.08	.25	-.58	1.47	**-1.97**	.75	.87	.77
Castilla-La Mancha	.15	.61	-.33	-1.03	-.07	-.86	.50	1.19
Castilla y León	-1.32	1.11	-.23	.36	-1.48	1.84	-1.09	1.19
Catalonia	1.14	-.03	-.13	.49	.09	-1.48	-1.39	.94
Valencia region	-1.02	-1.35	-1.58	-.18	**3.88**	-.49	**3.55**	**-2.58**
Extremadura	-.53	-.42	1.10	-.55	-.60	1.95	-.44	-.56
Galicia	-.05	**2.74**	.58	-1.06	-1.02	.67	-1.74	.20
Madrid	1.50	**3.48**	-.09	-1.30	-1.42	-.05	-1.05	-.42
Murcia	-.85	-.66	1.18	.46	1.54	-.73	-.70	-.88
Navarra	-.85	-.66	-1.09	.46	-.95	**2.33**	-.70	1.76
Basque Country	-1.20	.23	-.75	-1.24	.42	1.14	**2.35**	-.31
La Rioja	-.53	**2.18**	1.10	-.55	-.60	-.46	-.44	-.56
European Union	-.11	**2.76**	1.88	-.32	**-2.11**	-.52	.43	-1.64
Rest of Europe	1.15	1.26	.20	-1.71	-1.87	**3.31**	-1.38	-.37
North Africa	.32	.98	1.06	.24	-.77	.73	-1.14	-1.43
Caribbean	**2.11**	.71	**-2.59**	-1.10	**2.67**	**-2.78**	**3.94**	**-2.26**
America	-.05	.41	.45	.29	-1.01	1.14	-1.50	.24
Rest of world	-.19	-1.15	**2.74**	.21	-.17	-.19	-.68	-1.36
Generic (beach, etc.)	-1.95	**-2.23**	-.13	**2.20**	.85	-.06	-.72	1.41
None in particular	.40	-1.44	.47	1.07	-1.36	-.86	**-2.44**	**3.38**
SOCIODEMOGRAPHIC PROFILE								
AGE								
25-34 years	**2.47**	.29	-1.70	**-2.12**	-.43	1.10	-1.47	**2.19**
35-44 years	**-2.01**	-.50	**2.12**	.70	-1.08	.06	-1.14	1.23
45-54 years	-.49	-.02	-.77	**2.93**	.45	-.08	.24	**-2.14**
55-69 years	-.13	.27	.45	-1.52	1.37	-1.39	**3.00**	-1.86
SEX								
Male	-.27	.57	-.08	-.07	-1.66	**2.24**	-1.82	1.32
Female	.27	-.57	.08	.07	1.66	**-2.24**	1.82	-1.32
RESIDENCE								
Catalonia	**2.57**	-1.65	**2.35**	**-2.01**	**-2.44**	**2.09**	-1.05	-.24
Central Spain	**3.24**	.75	-1.63	-1.12	1.43	-1.51	-.34	-.67
Madrid	1.03	-1.76	.52	1.02	-.83	**-2.90**	-.46	**2.56**
Andalucia	**-3.99**	1.37	1.40	.13	.73	-.65	.58	.33
Valencia/Murcia	1.25	**-2.17**	**-4.46**	.70	1.53	**4.60**	-1.10	.33
Northern Spain	**-3.66**	**3.55**	**-2.99**	.31	.26	-.52	**5.29**	-.39
Northwest Spain	-1.37	.44	**4.93**	1.31	-.59	-1.21	**-2.54**	**-2.23**
EDUCATION								
None/Primary	1.20	-.56	**-2.14**	-.45	**3.65**	**-2.74**	1.77	-.80
High-school	**-2.00**	-.12	.77	1.75	-1.51	**2.58**	-.87	-.46
University	.91	.73	1.44	-1.43	**-2.23**	.09	-.94	1.36

Table 4
Residuals (standarized and adjusted) of the cross-tabulation of the questionnaire results for each of the eight groups. Bold type indicates residuals that are significantly different (*p*= 0.05) from those expected given no effect
of group *(continuación)*

Standardized and adjusted residuals	GROUPS							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**

SOCIODEMOGRAPHIC PROFILE (continuación)

MARITAL STATUS

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Single	**2.18**	-.18	-.04	**-2.03**	-.91	.01	-1.28	**2.13**
Married/Cohabiting	**-2.42**	.40	.20	**2.23**	.50	.69	.11	-1.63
Separated	1.05	-1.29	.66	-.07	.00	-.94	.28	-.09
Widowed	-.14	.80	-1.10	-.77	.86	-.73	**2.41**	-.79

OCCUPATIONAL STATUS

Student	1.87	-.77	.47	.28	-1.02	.09	-.94	-.22
Self-employed	-.76	1.47	-1.06	1.23	.67	.19	-1.63	.08
Wage-earner	.08	.24	-.31	-.46	-.73	-.23	-.62	**2.04**
Civil servant	-.19	-1.38	**2.89**	-1.08	**-2.22**	.78	-.35	1.01
Retired	.09	.16	-1.71	1.01	1.12	-.23	**2.48**	**-2.32**
Housework	-1.44	-.31	.56	.48	1.20	-.77	1.50	-1.36
Unemployed	1.44	-.15	-.41	-1.67	1.12	.51	.11	-.86

TOURISTIC BEHAVIOUR

LAST HOLIDAY DESTINATION

Andalucia	-1.27	-.35	.71	.87	-.23	-.69	.18	.51
Aragon	-1.40	1.31	.40	-.90	-1.16	.95	-.28	1.37
Asturias	1.89	.05	.20	-1.32	-.38	-1.61	-.83	1.70
Balearics	1.14	1.19	-.97	-1.47	1.47	-.35	.35	-1.01
Canary Islands	1.06	-.68	1.45	-.06	.02	-.95	.29	-1.55
Cantabria	-1.25	-1.47	-.85	1.74	-.96	1.21	.62	1.09
Castilla-La Mancha	-.17	.48	**-2.09**	-.96	-.50	**3.48**	.33	.42
Castilla y León	.30	-.88	.30	-.39	-1.75	1.53	-.34	1.27
Catalonia	-.17	-.49	-1.71	1.78	.13	-.50	.93	.30
Valencia region	-.25	-1.47	-.10	.43	1.14	-1.92	**3.58**	-1.44
Extremadura	-.93	-.73	1.92	.26	-1.04	.60	.66	-.97
Galicia	**2.85**	1.62	-1.05	-.91	-.59	.98	**-2.17**	-.35
Madrid	.01	-.27	-.05	.67	.39	-.45	.50	-.84
Murcia	-1.62	-1.27	**-2.09**	.45	1.49	.23	.33	**2.52**
Navarra	-.12	.34	-.62	-.18	-.35	.16	-.95	1.77
Basque Country	-.61	-.12	.89	.13	-.11	-.30	-1.18	.89
La Rioja	-.53	**2.18**	-.69	-.55	1.37	-.46	-.44	-.56
European Union	-.20	1.33	**2.79**	-.73	-.32	-1.20	-1.44	-.79
Rest of Europe	.01	.66	-.05	-.08	-1.01	**2.99**	-1.27	-.84
North of Africa	.01	1.59	-.69	-.08	-.31	-.45	-1.27	1.38
Caribbean	-.34	.33	1.81	-1.09	1.85	-.70	-.63	-1.78
America	-.07	-.75	.10	1.03	.10	-.26	.54	-.80
Rest of world	-.34	-.99	-.09	-.40	1.11	.99	.02	-.42
Generic (beach, etc.)	-.53	-.42	-.69	1.55	-.60	-.46	-.44	1.52
Don't know/No reply	-.24	-.94	-.75	-.30	.42	**2.22**	.12	-.31

LAST HOLIDAY DATES

Easter	-.45	-1.56	.30	**-2.32**	-.97	**2.74**	1.40	1.12
Summer	-1.07	-1.14	-.28	1.91	1.75	-1.11	.81	-1.18
Long weekends	-.25	**1.99**	.77	-1.95	**-1.97**	.53	.25	1.10
Weekends	1.55	-.09	**-2.70**	**2.87**	-.90	-.40	-.86	.85
Christmas	-.34	-1.34	.67	-.41	-.04	.84	-1.42	1.54
Rest of the year	1.27	1.94	1.06	-1.24	.37	-.98	-1.20	-1.32

LAST HOLIDAY DURATION

1-6 days	-.66	.74	-.52	1.53	**-2.34**	.43	-.38	1.59
7-9 days	.57	-.14	-1.02	-.44	1.32	-.21	.96	-.86
10-14 days	.82	1.17	.50	-1.68	-.27	.12	-1.28	.63
15-19 days	.28	-.74	.05	.77	-.50	-1.17	**2.63**	-1.19
20 or more days	-1.05	-1.02	1.26	-.41	1.92	.95	**-2.36**	-.09

LAST HOLIDAY WITH...

Partner	-1.62	.98	-.18	.37	.71	-1.30	.34	.72
Family	**-2.18**	1.41	-.33	**2.32**	.38	.62	-.31	-1.62
Friends	**4.82**	**-2.07**	.35	**-2.37**	**-2.76**	1.40	.14	.49
Alone	.06	-1.47	.44	-1.63	**2.02**	-.86	-.26	1.06

(78.3%), generally on short trips (<6 days 28.2%) with family (51.3). Analysis of residuals indicated that the following characteristics were significantly more likely than expected assuming no effect of group: ideal destination «none in particular»; ideal holiday dates summer; age 35-44 years, not 25-34 years; region of residence not Catalonia; marital status married; last holiday during a weekend, not at Easter, with family, not friends.

Group 5: Non-urban beach seekers (15% of the total)

This group comprises subjects who choose beach destinations and reject city destinations. The most frequent ideal destinations for subjects in this group were the Caribbean (13.3%) and the Canary Islands (12.6%). The ideal holiday period was generally summer (79.2%). The predominant age-group was 25-34 years (31.1%), with a slight predominance of women (56.3%). The predominant regions of residence were Central Spain (20.7%), Valencia/Murcia (18.5%) and Andalucia (16.3%). The predominant educational level was primary or below (47.8%). Most subjects were married (65.9%), and a high proportion were wage-earners (42.2%). Their last main holidays had been to Andalucia (16.5%) or the Valencia region (15.8%), in summer (77.0%), generally on short trips (7-10 days 30.0%) with family (42.9%). Analysis of residuals indicated that the following characteristics were significantly more likely than expected assuming no effect of group: ideal destinations Balearics, Canary Islands and Valencia region, not European Union, Cantabria or Aragon; ideal holiday dates summer, not spring; region of residence not Catalonia; educational level low (no schooling or primary only); occupational status not civil servant; last main holiday not during a long weekend or for a short period (1-6 days); last main holiday alone, not with friends.

Group 6: Mountain enthusiasts (10% of the total)

This group comprises subjects who choose «nature» and mountain locations and reject beach locations. The predominant ideal destinations for subjects in this group were Asturias (11.9%) and the Pyrenees (9.5%). The ideal holiday period was generally summer (52.5%), though also spring (16.3%). The predominant age-group was 25-34 years (38.1%), with marked predominance of men (61.9%). The predominant regions of residence were Valencia/Murcia (31.0%) and Catalonia (25.0%). The predominant educational level was high-school (51.8%). Most subjects were married (67.5%), and a high proportion were wage-earners (43.9%). Their last main holidays had been to Galicia (14.8%) or Andalucia (14.8%), in summer (65.5%), generally on fairly short trips (<10 days 48.8%), with family (44.6%). Analysis of residuals indicated that the following characteristics were significantly more likely than expected assuming no effect of group: ideal destinations Asturias, Aragon, Navarra (all regions with high mountains) and non-EU European countries (notably Switzerland), not Canary Islands or Caribbean; sex male; region of residence Catalonia or Valencia/Murcia, not Madrid; educational level high-school, not primary only; last main holiday in non-EU Europe, at Easter.

Group 7: Non-green beach seekers (9% of the total)

This group comprises subjects who choose beach destinations and reject «green» destinations. The most frequent ideal destinations for subjects in this group were Andalucia (20.3%) and the Caribbean (19.0%). The ideal holiday period was generally summer (67.1%). The predominant age-group was 55-69 years (27.8%), with predominance of women (59.5%). The predominant region of residence was Northern Spain (29.1%). The predominant educational level was no schooling or primary only (43.0%). Most subjects were married (64.6%), and a high proportion were wage-earners (41.8%), though also retired (15.2%) and «housewives» (17.7%). Their last main holidays had been to Valencia (25.6%) or Andalucia (17.9%), in summer (74.7%), generally on fairly short trips (about 15 days 32.5%), with family (39.7%) or with partner (35.9%). Analysis of residuals indicated that the following characteristics were significantly more likely than expected assuming no effect of group: ideal destinations Andalucia, Valencia region or the Caribbean, though also the Basque Country, not «none in particular»; age 55-69 years; region of residence Northern Spain, not Northwest Spain; marital status widow or widower; occupational status retired; last main holiday in Valencia region, not Galicia, for 15-19 days.

Group 8: Countryside lovers (13% of the total)

This group comprised subjects who choose rural destinations and reject urban destinations. The most frequent ideal destination for subjects in this group was «none in particular» (11.9%). The ideal holiday period was summer (40.0%) or spring (18.2%). The predominant age-group was 25-34 years (41.5%), with predominance of men (55.9%). The predominant region of residence was Madrid (23.7%). The predominant educational level was high-school (36.8%). Most subjects were married or cohabiting (57.3%), and a high proportion were wage-earners (53.8%). Their last main holidays had been to Andalucia (19.0%) or Galicia (10.3%), in summer (66.1%), generally on fairly short trips (<6 days 28.4%), with family (34.5%). Analysis of residuals indicated that the following characteristics were significantly more likely than expected assuming no effect of group: ideal destination «none in particular», not Canary Islands, Valencia region or the Caribbean; ideal holiday dates weekends and long weekends, at «any time of year», but not summer; age 25-34 years, not 45-54 years; region of residence Madrid, not Northwest Spain; marital status single; occupational status wage-earner, not retired.

Discussion and conclusions

Conjoint analysis is one of the most effective tools for market segmentation, and this is certainly true in the context of tourism. This technique allows subjects' overall holiday preferences to be broken down into their constituent elements, facilitating identification of the key attributes of a given destination, and assessment of the relative importance accorded to the different attributes by different subject groups. Since holiday destination preferences are of course as varied as people themselves, categorization of subjects on the basis of their preferences is likely to be of great value to decision-makers in the tourism sector.

Market segmentation on the basis of conjoint analysis involves segmentation of the sample either *a priori* on the basis of preselected criteria (e.g. sociodemographic characteristics) or in view of clustering of subjects on the basis of preferences as evaluated by the conjoint analysis itself. In the present study we opted for *post hoc* segmentation, categorizing subjects in view of the preferences they reported. Our results indicate that eight well-differentiated ty-

pes of Spanish tourist can be distinguished, each with different sociodemographic and behavioural characteristics. One of our most interesting findings is that the classic «sun and beach» segment can in fact be divided into three well-defined subgroups: i) subjects who accord great importance to the beach (this study's Groups 5 and 7; 24% of the total); ii) subjects who accord great importance to sunny weather (this study's Group 4; 13% of the total); and iii) subjects who accord great importance to nightlife (this study's Group 1; again 13% of the total). In Spain, these three characteristics (sun, beach and nightlife) are offered by the Canary Islands and the Mediterranean coast, and these destinations remain the most popular, despite the growing popularity of other types of tourism.

The growing popularity of «sun-independent» tourism is certainly confirmed by our present results. Cultural tourism (group 3) accounts for 19% of the national demand, while countryside tourism (group 8) accounts for 13% and mountain tourism (group 6) for 10%. Despite this strong demand, and in contrast to the situation with sun and beach tourism, no Spanish destinations have yet been able to position themselves in the Spanish market as prototypical of these different types of tourism. For example, when subjects were asked to report the precise destination of which they were thinking as they ordered the 18 stimulus cards, it is interesting to note that the two destinations mentioned most frequently by the mountain enthusiasts (Asturias and the Pyrenees) together made up only 21% of the total (cf. 39% for the corresponding destinations in group 7, 25% in group 1). The responses of countryside lovers was even more markedly nonspecific: 22% did not report any particular preferred destination. These findings suggest that one of the key goals of tourist-sector decision makers in Spain should be to more effectively promote their area or region, with the aim of achieving an identification between that region and one of the new holiday demands.

As shown in this paper, market segmentation can become a powerful managerial tool. To divide a heterogeneous population of tourists into more homogeneous segments is useful not only to describe the structure of the market, but also to discover new tendencies and business opportunities. Our results show the increasing need to diversify the supply of products and services offered by a region, in order to best satisfy tourist needs. This is specially important in mature markets, like the Mediterranean Spain, where the «sea, sun and beach» offer alone does not seem to be enough to keep loyalty levels. But our results also show that the northern regions of the country have now an opportunity to position themselves as the «green» prototypical destination on Spanish tourists' minds. Building up a solid and definite brand image of the place should be one of the cornerstones on the strategic plans of these areas.

Finally, the present study demonstrates the great value of statistical techniques of this type for market segmentation in the tourist sector. Apart from conjoint analysis for investigating the structure of individuals' preferences, in the present study we also used a two-stage cluster analysis to identify subject groups on the basis of preferences as evaluated by the conjoint analysis. This two-stage procedure (first agglomerative clustering, with linkage by Ward's method; then iterative k-means clustering) is considerably more reliable than conventional single-stage procedures. In addition, we have used an analysis of residuals technique for segment profiling on the basis of questionnaire data; this technique provides additional information over and above that obtained by direct examination of questionnaire responses from subjects in each group.

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