

THE WEIGHT OF TERRITORIAL FACTORS IN TOURISTS' ACCOMMODATION CHOICE: THE CASE OF RURAL TOURISM ON THE ISLAND OF LA PALMA

Authors

Flora M. Diaz-Perez
Carlos Fernandez-Hernandez
Victoria Jimenez-Gonzalez
University of La Laguna, Spain
e-mail: fdiazp@ull.es

Abstract

Tourism development is attributed in certain quarters a role as a sector that reduces regional imbalances, with some tourism policy systems viewing the promotion of tourism in depressed areas as a potential way of raising employment and income levels significantly. The present study examines the rural tourism market on the island of La Palma (Canary Islands) and its relationship with territorial factors and variables. Specifically, it attempts to establish the role played in tourists' accommodation location choice by territorial and related factors (for instance, the area of the island, proximity to the beach, hours of sunshine, etc) compared to other factors. A sample of 316 tourists who holidayed in rural tourism accommodation on La Palma during the period July-September 2007 was selected for this purpose. The methodology consisted of a preliminary analysis of the associations between the variables and their modalities, followed by a Multiple Correspondence Analysis (MCA). The results of the study allow us to conclude that the weight of territorial variables in the choice of destination and accommodation location can vary substantially depending on the market segment considered.

1. Introduction

Rural tourism has been promoted significantly as part of tourism policy on account of its contribution to the diversification of productive activities and to socioeconomic development in rural environments (Bote Gómez, 1988; Butler and Hall, 1998b; Fleischer and Felsenstein, 2000; Hall and Jenkins, 1998; Sharpley, 2002). Moreover, tourism is accorded a central role in rural development policy in areas facing economic restructuring processes and in the regeneration of depressed areas (Cavaco, 1995; Hall and Jenkins, 1998; Nylander and Hall, 2005).

Three main elements account for this central importance of rural tourism: a) its role as a local factor influencing wealth redistribution, b) its capacity to stimulate growth at micro-territorial level and c) its capacity to fix the population (Fernández Hernández, 2008; Pulido Fernández, 2008).

The present work analyses the rural tourism market on the island of La Palma (Canary Islands) and its relationship with territorial variables and factors. Specifically, it sets out to determine the role played in the choice of tourist accommodation location by territorial and related factors - area of the island, proximity to the beach, hours of sunshine, etc - compared to other factors, including the activities engaged in by the tourists. Identifying tourist behaviour patterns and the possibility of grouping tourists according to these patterns provides crucial knowledge for the definition of policies which, in turn, can play a part in development strategies pursued.

The importance accorded in the accommodation decision process to territorial factors and activities undertaken has implications for the attractiveness of territories in a context of open and increasing competition. Changing consumer patterns and the slowdown in demand growth in the sector make the need for innovation and competitive improvement even more important. Identifying the territorial variables driving rural accommodation choice also contributes to the priorities established for Spain's tourism sector: among others, (i) to attract international tourism, (ii) to develop unique experiences (Editur, 2007).

Market knowledge and the capacity for anticipation, thus enabling products tailored to new motivations to be offered, constitute a competitive advantage for product and destination managers. These elements contribute in particular to improved product planning. Consolidating a competitive tourism offer in a rural area requires a comprehensive knowledge of demand preferences. Territorial factors associated with product choice are demand-pull forces and present characteristics that help differentiate and position specific offers. Together with activities undertaken, territorial characteristics can serve as a basis for the development of new products capable of contributing greater value from the experiential perspective.

This work begins by reviewing some of the basic background to segmentation, particularly from the rural tourism perspective. This is followed methodologically by an analysis of the information obtained from a survey conducted with a representative sample of tourists who use rural accommodation. Finally, from the analysis of the results obtained we draw conclusions and suggest recommendations concerning the importance attached by rural tourists to territorial factors as part of the decision process.

2. Background

Broadly speaking, market segmentation aims to divide participants in the tourism market into subgroups, each with specific attributes and demanding different service packages. The objective is to identify groups of subjects that can be differentiated according to different needs, characteristics or behaviour (Kotler, 1980). Market segmentation studies have tended to use four different types of variables to segment markets: geographical; demographic and socioeconomic; psychographic; and behavioural segmentation (Kaynak and Kucukemiroglu, 1993).

According to Johns and Gyimóthy (2002), the most effective predictor of tourist behaviour is the behaviour itself, which is studied in behavioural segmentation. Logically, observed conduct cannot be evaluated as in an *a posteriori* study, although once it is catalogued and a certain degree of stability is assumed to be present it can be considered a basis for predicting the behaviour of future visitors.

Studies of market segmentation in rural tourism are recent (Albaladejo Pina and Díaz Delfa, 2005; Frochot, 2005; Kastenholz et al., 1999) and hence some uncertainty exists as regards the effectiveness of promotions aimed at rural tourists or indeed whether segmentation strategies are appropriate to the specific characteristics of the sector. Although rural tourism market studies commonly treat rural tourism as a single homogeneous segment, this form of tourism is practised by individuals whose different characteristics, needs and interests situate them in diverse groups (Lane, 1994; Roberts and Hall, 2001, Sharpley and Sharpley, 1997).

Among the behavioural aspects that differentiate tourists are the activities in which they engage while on holiday. In addition to rural, agricultural and craft activities, the extensive set of activities considered in the conceptualisation of rural tourism includes a wide range associated with sports, outdoor leisure and recreational activities, as well as those of an interpretative, cultural and educational nature, among others (Yagüe Perales, 2002). The activities of rural tourists during their stay can therefore be used as a market segmentation criterion which contributes to innovation and improved competitiveness.

The present article incorporates the role of territorial factors and variables into the analysis of rural tourism market segmentation. This incorporation represents an innovation with respect to previous rural tourism market segmentation studies.

3. Objectives and hypotheses

The objectives set for the present work are as follows:

- 1) To determine the relationship between territorial characteristics and the tourism accommodation offer in rural areas.
- 2) Within the overall group of territorial characteristics, to evaluate the following: climate, specifically in terms of hours of sunshine and light; distance to beaches and/or being close to nature or in a secluded location away from urban centres.

- 3) To ascertain the weight which the aforementioned territorial characteristics should have in new rural tourism products, in accordance with the expectations of La Palma's existing tourist markets, namely, Germany, the Netherlands, mainland Spain and the Canary Islands.
- 4) To draw up an action proposal for each of the above market segments.

The hypotheses posited are as follows:

H1.- The variables 'staying in a secluded area', 'hours of sunshine and light', 'being near a beach' and 'being close to nature' are a motivational component in the choice of rural accommodation location.

H2.- The market segment comprising German and Dutch tourists opts in particular for rural tourism offering longer hours of sunshine and light.

H.3.- The domestic segment (mainland Spaniards and Canarians) primarily opts for rural tourism in secluded areas.

H.4.- In terms of the activities undertaken, hiking allows us to segment the island's rural tourism market.

H.5.- The choice of a particular part of the island for accommodation allows the rural tourism market to be segmented by nationalities, with the German/Dutch segment preferring the west of the island and domestic tourists (mainland Spain and Canaries) choosing other parts.

4. Methodology

4.1 Variables

The study conducted is based on information gathered using a survey of a sample of 316 tourists who chose the island of La Palma (Canary Islands) for a holiday and stayed in rural accommodation establishments during the months of July-September 2007.

The variables considered for analysis were the activities undertaken, the factors influencing the choice of accommodation (including territorial factors), and the country of origin of the tourists.

4.2. Association analysis

As a first step, an analysis was performed of the associations between the studied variables and nationality. Those not presenting association were eliminated in order to reduce the amount of information.

4.3. Multiple Correspondence Analysis

A Multiple Correspondence Analysis (MCA) was then used to condense the original variables or modalities into a smaller number of 'dimensions' and thus be able to carry out an analysis using less information. Bearing in mind the objectives established for the work, it was considered more appropriate to use in the MCA only the variables for which an association with nationality was found to exist.

A Burt Matrix (symmetric) comprising 39 modalities based on the aforementioned variables was used for the analysis.

5. Results

5.1 Association analysis

The first step was to test for possible associations between the variables and nationality. An association was found to exist for the majority of the variables. In order to simplify the analysis we eliminated the variables for which no association with nationality was found, even if one did exist between these and other variables. The table below shows the variables which were eliminated and the association between them.

Table 1: Variables eliminated for non-association with nationality

P15.1	P16	P20
Climbing		Close to nature
	Try local gastronomy	Stay in secluded area
	Relaxation	Hours sunshine and light
		Stay in secluded area
	Others	Near beach
		Other reasons

Source: Compiled from survey data

The table below shows the association that exists between the variables and nationality

Table 2: Variables associated with nationality

P2	P15.1	P16	P20	Area	
Nationality	Swimming	Sports activities	Random		
	Swimming	Discover special spots			
		Rest			
	Swimming		Other reasons		
	Hiking		Visit monuments		
			Sports activities		
			Discover flora and fauna		
			Discover special spots		
	Diving	Sports activities	Hours sunshine and light	Area	
	Others	Take a dip/sunbathe	Hours sunshine and light		
			Random		
			Stay in remote area		
		Visit monuments		Good communications	
				Near beach	Area
				Hours sunshine and light	Area
				Stay in secluded area	
			Sports activities	Stay in secluded area	
			Dip/sunbathe	Stay in secluded area	
		Discover special spots		Near beach	
				Hours sunshine and light	
		Star-gazing	Close to nature	Area	

Source: Compiled from survey data

The main results of the associations can be summarised as follows:

- The percentage of Germans who practised ‘swimming’ as a sports activity is much lower than for the other nationalities.
- More than 70% of respondents across all nationalities practised hiking, except Canarians (below 65%).
- The percentage of tourists who went diving is low, although the figure is noticeably higher among mainland Spaniards than the rest.
- In terms of leisure and cultural activities, the behaviour of Germans presents several variations compared to the other nationalities, with markedly lower percentages in the following: visits to cultural parts, visits to monuments, sporting activities and discovering special spots.
- The behaviour of mainland Spaniards differs from that of the others, with noticeably higher percentages in the following: ‘visits to monuments’ and ‘take a dip’.
- With respect to the part of La Palma preferred by rural tourists for accommodation, clear differences can be seen according to nationality. Spaniards (both from the mainland and the Canaries) do not express a preference for a particular area, whereas the rest (German, Dutch and others) manifest a clear preference for the west of the island. Regarding other factors that can be associated with the part of the island chosen by rural tourists for their accommodation we can identify ‘hours of sunshine and light’, ‘being near the beach’ and ‘being close to nature’.

5.2. Analysis of variables presenting association

We will begin our descriptive analysis by looking at the variables which present an association with nationality.

- Nationality

The nationality accounting for the highest percentage of tourists is Spanish, with 48.7% of those surveyed, followed by German (38.14%) and, some way behind, Dutch (9.62%).

For the purposes of answering the hypotheses Spanish nationality has been broken down into mainland Spain (31.73%) and the Canary Islands (16.99%).

Table 3: Tourists according to nationality

Nationality	%
Germany	38.14
Mainland Spain	31.73
Netherlands	9.62
Others	3.53
Canaries	16.99

Source: Compiled from survey data

- Sports activities

In terms of sports activities, only 43% of the tourists surveyed said they had practised swimming and a mere 7.69% that they had gone diving. Conversely, 84.29% of respondents stated that they had hiked.

Table 4: Sports activities according to nationality

Sports activities	Nationality					%
	Germany	Mainland Spain	Netherlands	Others	Canaries	
Swimming No	73.95	46.46	33.33	45.45	54.72	57.05
Swimming Yes	26.05	53.54	66.67	54.55	45.28	42.95
	100.00	100.00	100.00	100.00	100.00	100.00
Hiking No	16.81	6.06	3.33	27.27	35.85	15.71
Hiking Yes	83.19	93.94	96.67	72.73	64.15	84.29
	100.00	100.00	100.00	100.00	100.00	100.00
Diving No	95.80	83.84	93.33	100.00	98.11	92.31
Diving Yes	4.20	16.16	6.67	0.00	1.89	7.69
	100.00	100.00	100.00	100.00	100.00	100.00

Source: Compiled from survey data

- Leisure and cultural activities

53.53% of tourists visited cultural parks, 64.1% visited monuments and 41.99% engaged in a sports activity. Higher figures were obtained for taking a dip (89.74%), discovering flora and fauna (73.08%), discovering special spots (75%), and stargazing (80.13%).

Table 5: Leisure and cultural activities according to nationality

Leisure and cultural activities	Nationality					%
	Germany	Mainland Spain	Netherlands	Others	Canaries	
Cult. park No	59.66	38.38	36.67	36.36	39.62	46.47

Cult. park Yes	40.34	61.62	63.33	63.64	60.38	53.53
	100.00	100.00	100.00	100.00	100.00	100.00
Monum No	47.90	22.22	40.00	36.36	32.08	35.90
Monum Yes	52.10	77.78	60.00	63.64	67.92	64.10
	100.00	100.00	100.00	100.00	100.00	100.00
Sp activ. No	83.19	38.38	33.33	18.18	60.38	58.01
Sp activ. Yes	16.81	61.62	66.67	81.82	39.62	41.99
	100.00	100.00	100.00	100.00	100.00	100.00
Dip No	10.92	3.03	20.00	18.18	15.09	10.26
Dip Yes	89.08	96.97	80.00	81.82	84.91	89.74
	100.00	100.00	100.00	100.00	100.00	100.00
Fauna and flora No	22.69	21.21	20.00	27.27	50.94	26.92
Fauna and flora Yes	77.31	78.79	80.00	72.73	49.06	73.08
	100.00	100.00	100.00	100.00	100.00	100.00
Special spots No	35.29	12.12	13.33	9.09	35.85	25.00
Special spots Yes	64.71	87.88	86.67	90.91	64.15	75.00
	100.00	100.00	100.00	100.00	100.00	100.00
Stars No	17.65	12.12	36.67	27.27	28.30	19.87
Stars Yes	82.35	87.88	63.33	72.73	71.70	80.13
	100.00	100.00	100.00	100.00	100.00	100.00

Source: Compiled from survey data

- Factors in destination accommodation choice

The factors influencing choice with the lowest percentages of tourists are ‘random’ (16.35%), ‘well communicated’ (15.71%), and ‘near beach’ (5.77%). The percentages in the remaining cases (‘sunshine and light’, ‘secluded area’, ‘close to nature’) are above 20%.

Table 6: Factors in destination accommodation choice

Factors	Nationality					%
	Germany	Mainland Spain	Netherlands	Others	Canaries	
Random No	94.96	68.69	83.33	90.91	84.91	83.65
Random Yes	5.04	31.31	16.67	9.09	15.09	16.35
	100.00	100.00	100.00	100.00	100.00	100.00
Communic No	79.83	84.85	80.00	81.82	96.23	84.29
Communic Yes	20.17	15.15	20.00	18.18	3.77	15.71
	100.00	100.00	100.00	100.00	100.00	100.00
Near beach No	93.28	94.95	86.67	100.00	98.11	94.23
Near beach Yes	6.72	5.05	13.33	0.00	1.89	5.77
	100.00	100.00	100.00	100.00	100.00	100.00
Sun and Light No	50.42	96.97	80.00	100.00	96.23	77.56
Sun and Light Yes	49.58	3.03	20.00	0.00	3.77	22.44
	100.00	100.00	100.00	100.00	100.00	100.00
Secluded area No	64.71	88.89	73.33	63.64	83.02	76.28
Secluded area Yes	35.29	11.11	26.67	36.36	16.98	23.72
	100.00	100.00	100.00	100.00	100.00	100.00
Nature No	68.07	83.84	56.67	54.55	83.02	74.04
Nature Yes	31.93	16.16	43.33	45.45	16.98	25.96
	100.00	100.00	100.00	100.00	100.00	100.00

Source: Compiled from survey data

- Preferred part of the island

Table 7: Area of choice for accommodation, according to nationality

Area	Nationality					Total
	Germany	Mainland Spain	Netherlands	Others	Canaries	
N+NE+E	8.40	43.43	3.33	18.18	47.17	25.96
W	91.60	56.57	96.67	81.82	52.83	75.00
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Compiled from survey data

As can be seen, Spanish holidaymakers (mainland and Canaries) are distributed in similar percentages in the North, North-East and East, whereas the other tourists (German and Dutch) primarily choose the West of the island (percentages above 80%).

Tables 8 and 9 give the results of the analysis of the variables associated with the area or zone of the island chosen by the tourists for their accommodation.

Table 8: Other variables associated with the chosen accommodation area (rows)

Modality (% in row)		AREA	
		N+NE+E	West
Practise sports activities	No	20.99	79.01
	Yes	32.82	67.18
Near beach	No	27.21	72.79
	Yes	5.56	94.44
Hours sunshine and light	No	32.64	67.36
	Yes	2.86	97.14
Near nature	No	29.44	70.56
	Yes	16.05	83.95

Source: Compiled from survey data

Table 9: Other variables associated with the chosen accommodation area (columns)

Modality (% in column)		AREA	
		N+NE+E	West
Practise sports activities	No	46.91	61.90
	Yes	53.09	38.10
Near beach	No	98.77	92.64
	Yes	1.23	7.36
Hours sunshine and light	No	97.53	70.56
	Yes	2.47	29.44
Near nature	No	83.95	70.56
	Yes	16.05	29.44

Source: Compiled from survey data

In all the modalities considered the row percentages are lower in the N+N+NE and higher in the West. However, a column analysis throws up differences within each zone between those who do not participate in the corresponding modality and those who do. For instance, the percentage of respondents who did not engage in a sports activity is higher among tourists staying in the west of the island than those in the N+N+NE.

In the other three modalities - 'near beach', 'hours of sunshine and light' and 'near nature' - the 'No' percentages are much higher than for 'Yes' in both the N+N+NE and the West.

5.3 Multiple Correspondence Analysis

As noted earlier, the analysis carried out was based on a symmetric Burt Matrix (Annex 1) comprising 39 modalities relating to the above variables. The main results using the first 22 dimensions are given in the table below:

Table 10: Dimensions obtained in the Multiple Correspondence Analysis

Dimension	Eigenvalue	Inertia	Proportion of inertia	
			Accounted for	Cumulative
1	0.1479	0.0219	0.2584	0.2584
2	0.1111	0.0124	0.1458	0.4042
3	0.0927	0.0086	0.1014	0.5056
4	0.0773	0.0060	0.0706	0.5762
5	0.0699	0.0049	0.0577	0.6339
6	0.0664	0.0044	0.0521	0.6860
7	0.0658	0.0043	0.0511	0.7371
8	0.0563	0.0032	0.0374	0.7745
9	0.0547	0.0030	0.0353	0.8098
10	0.0507	0.0026	0.0304	0.8401
11	0.0477	0.0023	0.0268	0.8670
12	0.0444	0.0020	0.0233	0.8902
13	0.0413	0.0017	0.0201	0.9104
14	0.0396	0.0016	0.0185	0.9289
15	0.0377	0.0014	0.0168	0.9457
16	0.0351	0.0012	0.0145	0.9602
17	0.0314	0.0010	0.0117	0.9719
18	0.0275	0.0008	0.0089	0.9808
19	0.0264	0.0007	0.0082	0.9890
20	0.0238	0.0006	0.0067	0.9957
21	0.0190	0.0004	0.0043	1.0000
22	0.0000	0.0000	0.0000	1.0000
Total		0.0847	1.0000	1.0000

Source: Compiled from survey data

It should be noted, to begin with, that in MCA the inertia or variance accounted for by each dimension or new variable tends to be very small given the large number of variables or modalities included. In our case, the fact that the first 15 dimensions account for no less than 94.57% of the original information can be considered a success.

Secondly, the chi square test of independence performed by the programme produces unequivocal results: with a significance level of 1% there is association between the variables considered and their modalities, given that the area to the right of the decision function (8562.6211) is equal to 0.

1. Analysis of modalities

To simplify matters, only the first three dimensions, which account for 50.56% of the original information, were considered. This percentage may seem low but it is not in an MCA with a high number of modalities.

Table 1 of the Annex shows the modalities considered, with the following data:

- Scores or distances to origin
- Contribution of each modality to the formation of each dimension
- Contribution of each dimension to the inertia of the points, which reflects the correlation between each dimension or new variable and the corresponding modality
- Inertia or weight of each modality

Table 11 below organises and interprets the information given in the previous table. To that end, the positive and negative sides of the three dimensions are indicated, including the modalities which are situated far enough from the origin and, in addition, are sufficiently correlated with one of the axes.

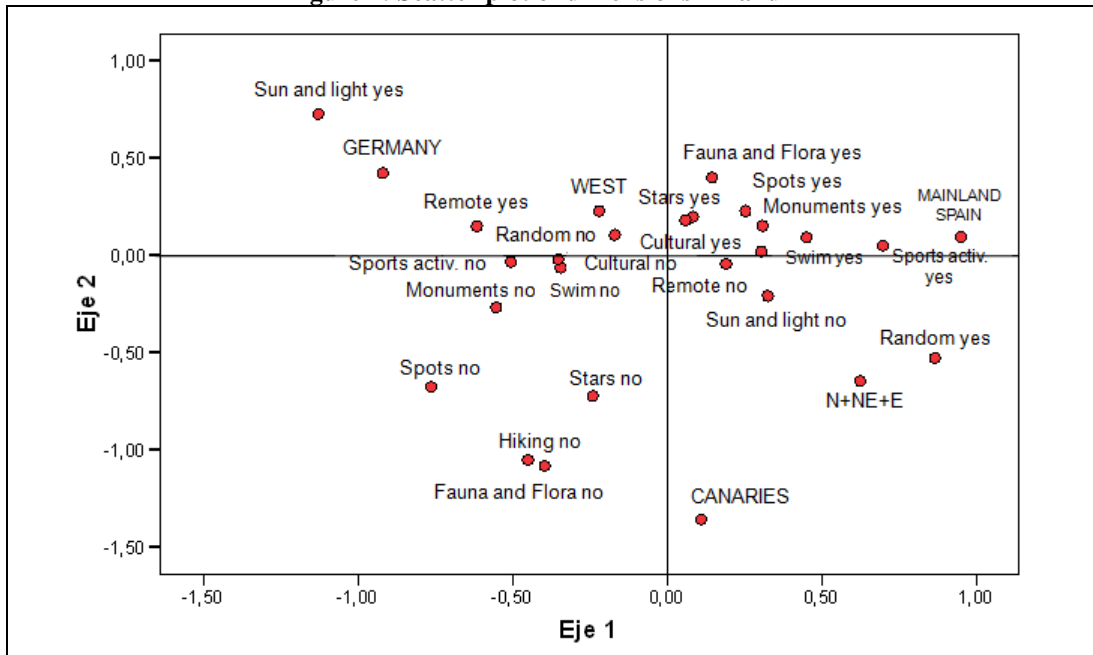
Table 11: Interpretation of factor information

-	+
Axis 1	
<u>GERMANY</u> <u>Sun and light yes</u> <u>Remote yes</u> Spots no Swim no Hiking no Cultural parks no Monuments no Sports activ. no Fauna and flora no Stars no <u>WEST</u>	<u>MAINLAND SPAIN</u> Swim yes Sport yes Random yes Cultural parks yes Monuments yes <u>Spots yes</u> Remote no Sun and light no <u>N+NE+E</u>
Axis 2	
<u>CANARIES</u> Random yes Hiking no Fauna no Spots no Stars no <u>N+NE+E</u>	Hiking yes Fauna yes <u>Spots yes</u> <u>Near beach yes</u> <u>Sun and light yes</u> Stars yes <u>WEST</u>
Axis 3	
Random yes <u>Sun and light yes</u> Remote no Nature no <u>N+NE+E</u>	<u>NETHERLANDS</u> Swim yes <u>Remote yes</u> <u>Nature yes</u>

Source: Compiled from survey data

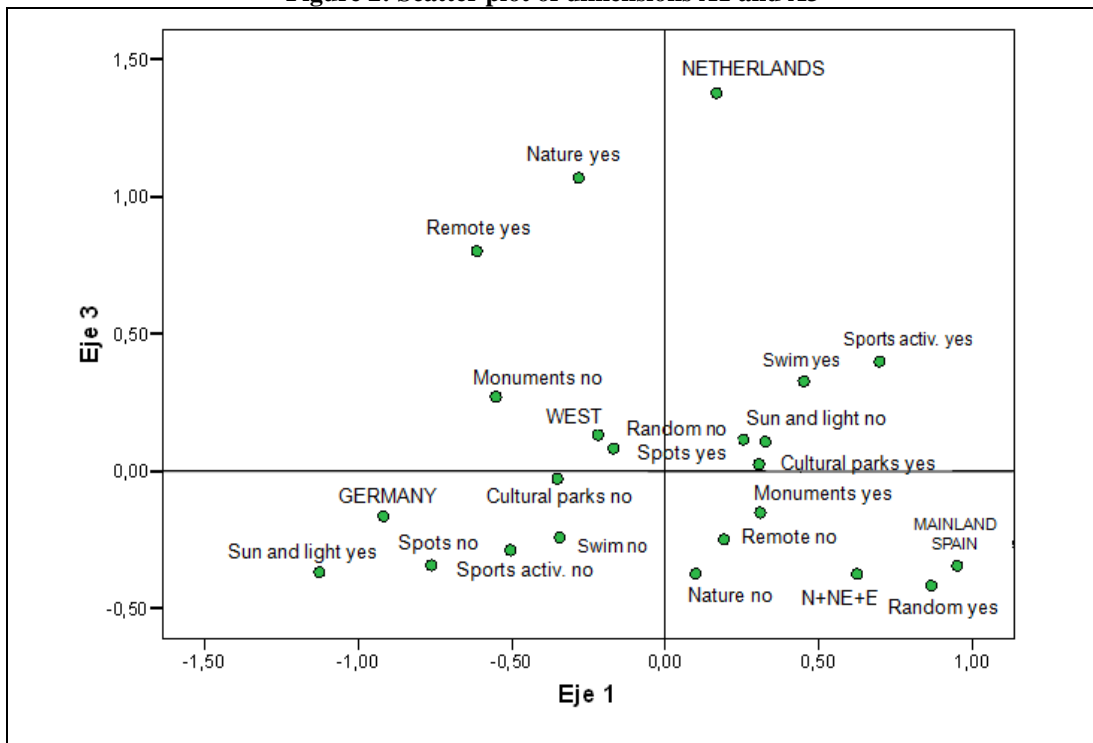
Given below are the scatter plots for the dimensions (two at a time):

Figure 1: Scatter plot of dimensions A1 and A2



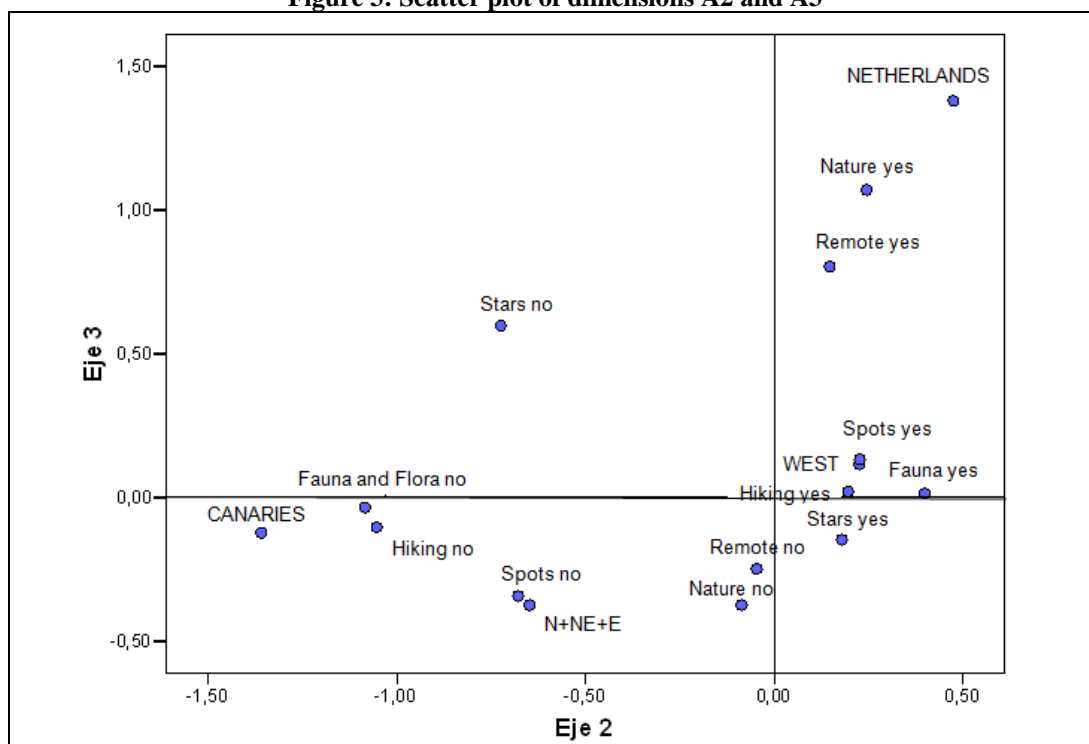
Source: Compiled from survey data

Figure 2: Scatter plot of dimensions A1 and A3



Source: Compiled from survey data

Figure 3: Scatter plot of dimensions A2 and A3



Source: Compiled from survey data

Based on the above tables and figures, the following summary can be provided:

1. Tourists from *mainland Spain* show on average a greater preference for swimming than other tourists, as well as for sporting activities generally. They are interested also in monuments, cultural parks and discovering special spots. With respect to the factors having a bearing on their choice of La Palma for a holiday, randomness is present to a higher degree than is the case with other tourists. Hence, the decision to holiday in La Palma is, on average, a random one as opposed to a reflection of a desire for sunshine and light, as occurs with Germans. In terms of the part of the island they choose to stay in, no clear preference is found given that they are *distributed almost equally between the two areas considered*.
2. *Canarian* tourists have no clear preference for a particular part of the island to stay and, like their mainland counterparts, are *distributed almost equally between the two areas considered*. On average, they show little clear interest in hiking, fauna and flora, star-gazing or discovering special spots. Moreover, randomness plays a large part in their choice of La Palma for a holiday.
3. *Dutch* tourists present similar behaviour to those from mainland Spain in that, on average, they tend to prefer swimming by way of sports activity. However, they differ from the latter due to their interest in *nature* and *secluded areas*. Like Germans, they have a clear preference for the *west* of the island.
4. *German* tourists tend not to visit for sports activities (swimming, hiking, etc) nor are they interested, on average, in cultural parks, monuments, stars and fauna/flora. To a greater degree than the rest, they cite as factors influencing their decision to holiday in La Palma *being near the beach, sunshine and light* and *secluded areas*. They express a clear preference for the *West* of the island.

Conclusions and Recommendations

Bearing in mind the proposed hypotheses, the following conclusions can be drawn:

Hypothesis H1 is fulfilled. In other words, the variables 'staying in a secluded area', 'hours of sunshine and light', 'being near a beach' and 'being close to nature' are a motivational component in the choice of rural accommodation location.

H2 is fulfilled, albeit partially: the market segment comprising German tourists largely opts for rural tourism associated with more hours of sunshine and light. For Dutch tourists, however, the differentiating territorial variable is the desire for a secluded location.

H3 is not fulfilled: the domestic segment (mainland Spaniards and Canarians) does not opt primarily for rural tourism in secluded areas. The relevant territorial variable in this case, for both mainland Spaniards and Canarians, is proximity to a beach.

With respect to activities undertaken, H4 is not confirmed. In other words, hiking does not allow us to segment the island's rural tourism market. The reason for this is that hiking is practised by the vast majority of tourists who stay in rural tourism establishments. However, the results obtained for other activities indicate very noticeable differences between certain segments; for example, mainland Spaniards are differentiated from other tourists by their participation in swimming, diving and sports generally.

Lastly, H5 - 'choice of a particular part of the island for accommodation' - is partially confirmed, given that although it enables us to segment the rural tourism market by nationalities, the segment comprising German and Dutch tourists expresses a clear preference for the west whereas mainland Spanish and Canarian tourists do not manifest a preference for a particular area.

In summary, two main groups of tourists can be differentiated in the island's rural tourism market.

- 1) Group one comprises Spaniards (mainland and Canaries), who are more interested in the type of activity to be undertaken in the destination than in territorial factors associated with the choice of a specific accommodation location.
- 2) Group two comprises German and Dutch tourists, who are more interested in the territorial factors than in the activities to be undertaken and express a clear preference for the west of the island.

The study carried out allows us to conclude that the weight of territorial variables in the choice of destination and accommodation location can differ considerably depending on the market segment. This conclusion deserves to be taken into consideration due to the specific implications for public policies. Given the understanding in some tourism policy systems that strengthening tourism in depressed areas can prove effective for increasing employment and income, the different potential segments of tourists and their preferences as regards territorial variables need to be considered in order to improve the efficiency of actions implemented. Accordingly, results optimisation will be achieved with some segments but not others.

Bibliography

- Albaladejo Pina, I. P. y Díaz Delfa, M. T. (2005): Rural tourism demand by type of accommodation, *Tourism Management*, vol. 26, pp. 951-959.
- Álvarez, J.A. (2006): Políticas y estrategias de innovación aplicadas a los destinos, en Díaz Pérez et alia. (2006): *Política turística: la competitividad y sostenibilidad de los destinos*, Ed. Tirant lo Blanch, Valencia.
- Bote Gómez, V. (1988): *Turismo en espacio rural. Rehabilitación del patrimonio sociocultural y de la economía local*, Editorial Popular, S.A., Madrid.

- Butler, R. W. y Hall, C. M. (1998): Conclusion: the sustainability of tourism and recreation in rural areas, en: Butler, R. W., Hall, C. M. y Jenkins, J. (ed.) (1998): *Tourism and recreation in rural areas*, John Wiley and Sons, Chichester, pp. 249-258.
- Carayannis, E.G. y Gonzalez, E. (2003). Creativity and innovation = competitiveness? When, how and why. *The International Handbook on Innovation*, Elsevier.
- Cavaco, C. (1995): Rural tourism: the creation of new tourist spaces, en: Montanari, A. y Williams, A. M. (ed.) (1995): *European Tourism: regions, spaces and restructuring*, John Wiley and Sons, Chichester, pp. 127-149.
- Desouza, K.C., Awazu, Y., Jha, S., Dombrowski, C., Papagari, S., Baloh, P. & Kim, J. (2008). Customer-driven innovation. *Research Technology Management*, 54(3), 35-44.
- Djellal, F. y Gallouj, F. (1999). Innovation indicators. Services and the search for reinnovation indicators: a review of national and international surveys *Science and Public Policy*, 26(4), 218-32.
- Editur (2007): Turismo 2020. Plan del turismo español horizonte 2020, Ediciones Turísticas, S.A., Madrid.
- Fernández Hernández, C. (2008): El turismo como factor de dinamización del medio rural, en: Fernández Hernández, C. y Martín Torres, M. F. (coord.) (2008): *Planificación y gestión del turismo rural: reflexiones desde la experiencia en Canarias*, Federación Canaria de Desarrollo Rural, Islas Canarias, pp. 37-79.
- Fleischer, A. y Felsenstein, D. (2000): Support for rural tourism: does it make a difference, *Annals of Tourism Research*, vol. 27, nº 4, pp. 1007-1024.
- Frochot, I. (2005): A benefit segmentation of tourists in rural areas: a Scottish perspective, *Tourism Management*, vol. 26, pp. 335-346.
- Hall, C. M. y Jenkins, J. M. (1998): The policy dimensions of rural tourism and recreation, en: Butler, R. W., Hall, C. M. y Jenkins, J. (ed.) (1998): *Tourism and recreation in rural areas*, John Wiley and Sons, Chichester, pp. 19-42.
- Hertog, P. den (2002). Co-producers of innovation: on the role of knowledge-intensive business services in innovation. In Cadrey, J. & Gallouj, F. (editors): *Productivity, innovation and knowledge in services* (247-50). Cheltenham: E. Elgar.
- Johns, N. y Gyimóthy, S. (2002): Market segmentation and the prediction of tourist behavior: the case of Bornholm, Denmark, *Journal of Travel Research*, vol. 40, nº 3, pp. 316-327.
- Kastenholz, E., Davis, D. y Paul, G. (1999): Segmenting tourists in rural areas: The case of North and Central Portugal, *Journal of Travel Research*, vol. 37, p. 353-363.
- Kaynak, E. and Kucukemiroglu, O. (1993). Foreign Vacation Selection Process in an Oriental Culture. *Asia Pacific Journal of Marketing and Logistics*, 5(1), 21-41.
- Kotler, P. (1980): *Principles of marketing*, Englewood Cliffs, Prentice-Hall, New Jersey.
- Lane, B. (1994): What is rural tourism?, *Journal of Sustainable Tourism*, vol. 2, nº 1-2, pp. 7-21.
- Nylander, M. y Hall, D. (2005): Rural tourism policy: European perspectives, en: Hall, D., Kirkpatrick, I. y Mitchell, M. (ed.) (2005): *Rural Tourism and sustainable business*, Channel View Publications, Clevedon, pp. 17-40.
- Pulido Fernández, J. I. (coord.) (2008): *El turismo rural: estructura económica y configuración territorial en España*, Editorial Síntesis, Madrid.
- Roberts, L. y Hall, D. (2001): *Rural tourism and recreation: Principles to practice*, CAB International, Wallingford.
- Sharpley, J. y Sharpley, R. (1997): *Rural tourism: an introduction*, International Thomson Business Press, London.
- Sharpley, R. (2002): Rural tourism and the challenge of tourism diversification: the case of Cyprus, *Tourism Management*, vol. 23, nº 3, pp. 233-244.
- Von Hippel, E. (1994). Sticky information and the locus of problem solving. Implications for innovation. *Management Science*, 40(4), 429-39.
- Yagüe Perales, R. M. (2002): Rural tourism in Spain, *Annals of Tourism Research*, vol. 29, nº 4, pp. 1101-1110.

ANNEX

Table 1: Distances to origin and contributions to inertia

Modality	Score in dimension			Inertia	Contribution					
					Of points to inertia of dimension			Of dimension to inertia of point		
	1	2	3		1	2	3	1	2	3
Germany	-0.9189	0.4219	-0.1652	0.0035	0.1209	0.0339	0.0062	0.7484	0.1185	0.0151
Mainland	0.9517	0.0929	-0.3458	0.0034	0.1079	0.0014	0.0227	0.6866	0.0049	0.0568
Netherlands	0.1668	0.4753	1.3778	0.0033	0.0010	0.0109	0.1094	0.0067	0.0412	0.2886
Others	0.3908	-0.1530	1.7364	0.0032	0.0020	0.0004	0.0637	0.0139	0.0016	0.1720
Canaries	0.1108	-1.3589	-0.1242	0.0033	0.0008	0.1568	0.0016	0.0052	0.5832	0.0041
Swim No	-0.3439	-0.0648	-0.2426	0.0017	0.0253	0.0012	0.0201	0.3195	0.0085	0.0996
Swim Yes	0.4513	0.0905	0.3265	0.0023	0.0329	0.0018	0.0274	0.3124	0.0094	0.1024
Hiking No	-0.4496	-1.0532	-0.1047	0.0032	0.0119	0.0871	0.0010	0.0816	0.3367	0.0028
Hiking Yes	0.0839	0.1961	0.0194	0.0006	0.0022	0.0162	0.0002	0.0820	0.3362	0.0027
Diving No	-0.0559	-0.0251	-0.0181	0.0003	0.0011	0.0003	0.0002	0.0896	0.0136	0.0059
Diving Yes	0.6722	0.2999	0.2153	0.0032	0.0131	0.0035	0.0021	0.0901	0.0135	0.0058
C. Park No	-0.3515	-0.0217	-0.0283	0.0019	0.0216	0.0001	0.0002	0.2437	0.0007	0.0010
C. Park Yes	0.3055	0.0186	0.0244	0.0017	0.0188	0.0001	0.0002	0.2440	0.0007	0.0010
Monu No	-0.5524	-0.2689	0.2701	0.0025	0.0411	0.0130	0.0157	0.3556	0.0633	0.0533
Monu Yes	0.3096	0.1504	-0.1514	0.0014	0.0231	0.0072	0.0088	0.3560	0.0631	0.0534
Sport No	-0.5053	-0.0350	-0.2889	0.0020	0.0556	0.0004	0.0290	0.6088	0.0022	0.1247
Sport Yes	0.6986	0.0481	0.3990	0.0028	0.0769	0.0005	0.0401	0.6092	0.0022	0.1245
Dip No	-0.7661	-0.9475	0.9357	0.0035	0.0226	0.0460	0.0538	0.1415	0.1626	0.1323
Dip Yes	0.0877	0.1082	-0.1071	0.0004	0.0026	0.0052	0.0062	0.1420	0.1622	0.1325
Fauna/FI No	-0.3958	-1.0839	-0.0357	0.0032	0.0158	0.1581	0.0002	0.1094	0.6164	0.0006
Fauna/FI Yes	0.1460	0.3992	0.0130	0.0012	0.0058	0.0582	0.0001	0.1097	0.6160	0.0005
Spots No	-0.7625	-0.6780	-0.3439	0.0032	0.0546	0.0574	0.0177	0.3782	0.2246	0.0482
Spots Yes	0.2544	0.2258	0.1145	0.0011	0.0182	0.0191	0.0059	0.3788	0.2243	0.0481
Stars No	-0.2397	-0.7244	0.5961	0.0029	0.0043	0.0521	0.0423	0.0320	0.2196	0.1240
Stars Yes	0.0596	0.1795	-0.1480	0.0007	0.0011	0.0129	0.0105	0.0322	0.2193	0.1242
Random No	-0.1688	0.1031	0.0814	0.0007	0.0090	0.0044	0.0033	0.2981	0.0835	0.0434
Random Yes	0.8672	-0.5297	-0.4183	0.0034	0.0461	0.0229	0.0171	0.2974	0.0834	0.0434
Commun. No	0.0121	-0.1399	0.1228	0.0006	0.0000	0.0082	0.0076	0.0018	0.1789	0.1150
Commun. Yes	-0.0643	0.7500	-0.6599	0.0031	0.0002	0.0442	0.0410	0.0017	0.1787	0.1154
Near beach No	0.0561	-0.0401	0.0576	0.0002	0.0011	0.0008	0.0019	0.1155	0.0442	0.0762
Near beach Yes	-0.9142	0.6526	-0.9424	0.0034	0.0181	0.0123	0.0307	0.1150	0.0440	0.0765
Sun/Light No	0.3263	-0.2099	0.1066	0.0011	0.0310	0.0171	0.0053	0.5967	0.1855	0.0399
Sun/Light Yes	-1.1275	0.7252	-0.3691	0.0039	0.1071	0.0590	0.0183	0.5963	0.1853	0.0400
Secluded No	0.1913	-0.0460	-0.2493	0.0009	0.0105	0.0008	0.0284	0.2436	0.0106	0.2591
Secluded Yes	-0.6148	0.1475	0.8013	0.0030	0.0337	0.0026	0.0913	0.2433	0.0105	0.2590
Nature No	0.0990	-0.0861	-0.3747	0.0010	0.0027	0.0027	0.0623	0.0608	0.0345	0.5457
Nature Yes	-0.2818	0.2450	1.0681	0.0028	0.0077	0.0078	0.1775	0.0606	0.0344	0.5457
N+NE+E	0.6252	-0.6476	-0.3756	0.0031	0.0381	0.0544	0.0220	0.2729	0.2200	0.0617
West	-0.2191	0.2269	0.1315	0.0011	0.0133	0.0191	0.0077	0.2724	0.2197	0.0616
Active total				0.0847	1.0000	1.0000	1.0000			

Source: Compiled from survey data

TABLE 2: GENERAL TABLE OF RESULTS OF PRINCIPAL COMPONENTS ANALYSIS

Examination of (a) row points												
Modalities	Mass	Score in dimension			Inertia	Contribution						
						Of points to inertia of dimension			Of dimension to inertia of point			Total
		1	2	3		1	2	3	1	2	3	
Germany	0.0212	-0.9189	0.4219	-0.1652	0.0035	0.1209	0.0339	0.0062	0.7484	0.1185	0.0151	0.8821
Mainland	0.0176	0.9517	0.0929	-0.3458	0.0034	0.1079	0.0014	0.0227	0.6866	0.0049	0.0568	0.7483
Netherlands	0.0053	0.1668	0.4753	1.3778	0.0033	0.0010	0.0109	0.1094	0.0067	0.0412	0.2886	0.3366
Others	0.0020	0.3908	-0.1530	1.7364	0.0032	0.0020	0.0004	0.0637	0.0139	0.0016	0.1720	0.1875
Canaries	0.0094	0.1108	-1.3589	-0.1242	0.0033	0.0008	0.1568	0.0016	0.0052	0.5832	0.0041	0.5924
Swim No	0.0317	-0.3439	-0.0648	-0.2426	0.0017	0.0253	0.0012	0.0201	0.3195	0.0085	0.0996	0.4276
Swim Yes	0.0239	0.4513	0.0905	0.3265	0.0023	0.0329	0.0018	0.0274	0.3124	0.0094	0.1024	0.4243
Hiking No	0.0087	-0.4496	-1.0532	-0.1047	0.0032	0.0119	0.0871	0.0010	0.0816	0.3367	0.0028	0.4211
Hiking Yes	0.0468	0.0839	0.1961	0.0194	0.0006	0.0022	0.0162	0.0002	0.0820	0.3362	0.0027	0.4209
Diving No	0.0513	-0.0559	-0.0251	-0.0181	0.0003	0.0011	0.0003	0.0002	0.0896	0.0136	0.0059	0.1090
Diving Yes	0.0043	0.6722	0.2999	0.2153	0.0032	0.0131	0.0035	0.0021	0.0901	0.0135	0.0058	0.1093
C. Park No	0.0258	-0.3515	-0.0217	-0.0283	0.0019	0.0216	0.0001	0.0002	0.2437	0.0007	0.0010	0.2454
C. Park Yes	0.0297	0.3055	0.0186	0.0244	0.0017	0.0188	0.0001	0.0002	0.2440	0.0007	0.0010	0.2456
Monu No	0.0199	-0.5524	-0.2689	0.2701	0.0025	0.0411	0.0130	0.0157	0.3556	0.0633	0.0533	0.4721
Monu Yes	0.0356	0.3096	0.1504	-0.1514	0.0014	0.0231	0.0072	0.0088	0.3560	0.0631	0.0534	0.4725
Sport No	0.0322	-0.5053	-0.0350	-0.2889	0.0020	0.0556	0.0004	0.0290	0.6088	0.0022	0.1247	0.7356
Sport Yes	0.0233	0.6986	0.0481	0.3990	0.0028	0.0769	0.0005	0.0401	0.6092	0.0022	0.1245	0.7358
Dip No	0.0057	-0.7661	-0.9475	0.9357	0.0035	0.0226	0.0460	0.0538	0.1415	0.1626	0.1323	0.4364
Dip Yes	0.0499	0.0877	0.1082	-0.1071	0.0004	0.0026	0.0052	0.0062	0.1420	0.1622	0.1325	0.4368
Fauna/FI No	0.0150	-0.3958	-1.0839	-0.0357	0.0032	0.0158	0.1581	0.0002	0.1094	0.6164	0.0006	0.7263
Fauna/FI Yes	0.0406	0.1460	0.3992	0.0130	0.0012	0.0058	0.0582	0.0001	0.1097	0.6160	0.0005	0.7263
Spots No	0.0139	-0.7625	-0.6780	-0.3439	0.0032	0.0546	0.0574	0.0177	0.3782	0.2246	0.0482	0.6510
Spots Yes	0.0417	0.2544	0.2258	0.1145	0.0011	0.0182	0.0191	0.0059	0.3788	0.2243	0.0481	0.6511
Stars No	0.0110	-0.2397	-0.7244	0.5961	0.0029	0.0043	0.0521	0.0423	0.0320	0.2196	0.1240	0.3756
Stars Yes	0.0445	0.0596	0.1795	-0.1480	0.0007	0.0011	0.0129	0.0105	0.0322	0.2193	0.1242	0.3757
Random No	0.0465	-0.1688	0.1031	0.0814	0.0007	0.0090	0.0044	0.0033	0.2981	0.0835	0.0434	0.4249
Random Si	0.0091	0.8672	-0.5297	-0.4183	0.0034	0.0461	0.0229	0.0171	0.2974	0.0834	0.0434	0.4242
Commun. No	0.0468	0.0121	-0.1399	0.1228	0.0006	0.0000	0.0082	0.0076	0.0018	0.1789	0.1150	0.2957
Commun. Yes	0.0087	-0.0643	0.7500	-0.6599	0.0031	0.0002	0.0442	0.0410	0.0017	0.1787	0.1154	0.2958
Near beach No	0.0524	0.0561	-0.0401	0.0576	0.0002	0.0011	0.0008	0.0019	0.1155	0.0442	0.0762	0.2359
Near beach Yes	0.0032	-0.9142	0.6526	-0.9424	0.0034	0.0181	0.0123	0.0307	0.1150	0.0440	0.0765	0.2355
Sun/Light No	0.0431	0.3263	-0.2099	0.1066	0.0011	0.0310	0.0171	0.0053	0.5967	0.1855	0.0399	0.8220
Sun/Light Yes	0.0125	-1.1275	0.7252	-0.3691	0.0039	0.1071	0.0590	0.0183	0.5963	0.1853	0.0400	0.8217
Secluded No	0.0424	0.1913	-0.0460	-0.2493	0.0009	0.0105	0.0008	0.0284	0.2436	0.0106	0.2591	0.5133
Secluded Yes	0.0132	-0.6148	0.1475	0.8013	0.0030	0.0337	0.0026	0.0913	0.2433	0.0105	0.2590	0.5129
Nature No	0.0411	0.0990	-0.0861	-0.3747	0.0010	0.0027	0.0027	0.0623	0.0608	0.0345	0.5457	0.6410
Nature Yes	0.0144	-0.2818	0.2450	1.0681	0.0028	0.0077	0.0078	0.1775	0.0606	0.0344	0.5457	0.6408
N+NE+E	0.0144	0.6252	-0.6476	-0.3756	0.0031	0.0381	0.0544	0.0220	0.2729	0.2200	0.0617	0.5545
West	0.0411	-0.2191	0.2269	0.1315	0.0011	0.0133	0.0191	0.0077	0.2724	0.2197	0.0616	0.5537
Active total	1.0000				0.0847	1.0000	1.0000	1.0000				

