ANALYSING THREE BASIC DECISIONS OF TOURISTS: GOING AWAY, GOING ABROAD AND GOING ON TOUR*

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ABSTRACT

This study analyses determinant factors in the taking of three basic decisions on the part of holidaymakers: going on holiday, foreign holidays and multi-destination holidays. We propose various research hypotheses relating to the impact on these decisions of various personal characteristics. The methodology used estimates various Binomial Logit models. The empirical application carried out in Spain on a sample of 3,781 individuals allows us to conclude that personal characteristics related to the chosen destination, personal restrictions and socio-demographic and psychographic characteristics are determinants of these decisions.

Key words: Tourism Marketing, Choice Behaviour, Probabilistic Choice Models.

RESUMEN

El presente trabajo analiza los factores determinantes de la toma de tres decisiones básicas de los turistas: salir de vacaciones, viaje internacional y viaje multidestino. Para ello se proponen diversas hipótesis de investigación relativas al impacto en las mismas de varias características personales del turista. La metodología aplicada estima diversos modelos Logit Binomial. La aplicación empírica realizada en España sobre una muestra de 3.781 individuos permite concluir que las características personales relacionadas con el destino seleccionado, las restricciones personales, así como las características sociodemográficas y psicográficas son determinantes de estas elecciones turísticas.

Palabras clave: Marketing Turístico, Comportamiento de Elección, Modelos Probabilísticos de Elección.

1. INTRODUCTION

The interest in the way in which individuals decide on purchase alternatives (product, brand, etc.) has made the analysis of choice and preference formation one of the most studied areas of marketing in recent years (Zwerina, 1997). A contribution to this has been the development of probabilistic choice models, derived from Random Utility Theory, which are the most used choice models in the literature of Marketing (González Benito, 1999).

These probabilistic choice models have been object of numerous applications, such as in the field of Tourism Marketing, as the probabilistic analysis of the choice behaviour of tourists can explain the success of marketing actions to tourism organisations, find out what aspects tourists value most and estimate changes in demand resulting from their modifications. Moreover, these applications in tourism have been strengthened by the great flexibility of the probabilistic approach in dealing with the discrete character of tourist choice alternatives; which makes it an adequate instrument for the analysis of choices made by tourists (Morley, 1994a).

In general, the study of tourist choice has been made from a wide perspective due to the multiple sub-decisions which intervene in the decision making process (Fesenmaier & Jeng, 2000), which has generated diverse areas of research. Our study is centred on the three basic decisions types considered by research into Tourism choice: i) Decision to go on holiday. This decision to leave the usual place of residence during the holiday period constitutes the first choice made by tourists (Morley, 1992; 1995; Seddighi & Theocharous, 2002). ii) Choice of foreign holiday. This decision implies choosing whether to spend the holidays in the home country or to holiday abroad (Eymann & Ronning, 1992). And iii) Choice of fixed destination or tour. The option of multi-destination holidays as opposed to staying in one destination is justified by the aggregate property of tourism products, due to the accumulated utility of buying multi-destination holidays being greater than the sum of the individual utilities of each separate destination (Lue et al., 1996; McGinley, 1999).

Basically, the probabilistic analysis of any of these decisions is theoretically supported by the models of Rugg (1973) and Morley (1992), which formally represent tourist decisions from the extension of the Neoclassical Economic Theory of Lancaster (1966), and by the approaches of Morey (1984; 1985) and Eymann (1995) to Household

Production Theory of Becker (1965). However, they have only found empirical evidence of the probabilistic analysis of the choices of going on holiday and of foreign holidays, whose operative formalisation follows the Binomial modelization (see Table 1), of immediate application in the case of choices with exclusive alternatives. For its part, the probabilistic examination of the choice of multi-destination holidays forms a gap in tourism research. Moreover, empirical literature analyses the decision to take a holiday through personal restrictions and socio-demographic characteristics of tourists, but it does not examine the influence of their psychographic characteristics; and research on the choice of foreign holiday studies determinant factors based on age.

The objective of this study is to analyse the determinant factors of the basic decisions to go on holiday, of foreign holidays and of multi-destination holidays. To do this, we propose various research hypotheses to explain the above decisions in terms of personal characteristics related to the chosen destination, personal restrictions and socio-demographic and psychographic characteristics. The methodology applied is based on the estimation of various Binomial Logit models. The empirical application is carried out in Spain on a sample of 3,781 individuals.

In order to fulfil this objective, the rest of the paper is organised in the following manner: The second section revises the literature of tourist choice and proposes the research hypotheses; the third section describes the methodology and the sample and sections four and five present the results and conclusions, respectively.

2. CHOICES OF GOING ON HOLIDAY, OF FOREIGN HOLIDAYS AND OF MULTI-DESTINATION HOLIDAYS.

A) Decision to go on holiday

In general, probabilistic literature empirically analyses the decision to go on holiday (Table 1) in terms of the personal restrictions of tourists (income and household size) and in terms of their socio-demographic characteristics (age, sex, marital status, education, occupational situation and the size of the town or city of residence). In particular, this study proposes hypotheses related to the influence of personal restrictions (income and household size), of some socio-demographic characteristics (age, occupational situation and size of town or city) and of psychographic factors such as an individual's opinion of going on holiday.

Table 1. Empirical evidence of the probabilistic models of tourist choice
(Going on holiday and international destinations)

Decision	Model	Explicative Dimensions	Operative Variables	Authors
Going on holiday	Linear Model of Probability and Binomial Logit	Personal characteristics	- Age - Age^2 - Income - Sex	Hay & McConnell (1979)
Going on holiday	Logit Binomial	Personal characteristics	- Age - Age^2 - Income - Sex - City of residence	Miller & Hay (1981)
Going on holiday	Logit Binomial	Personal characteristics	- Age - Age^2 - Income - Household size - Sex - Marital status - City of residence	Walsh, Kun, Mckean & Hof (1992)
Going on holiday	Logit Binomial	Personal characteristics	- Income - Household size	Eymann & Ronning (1992)
Going on holiday	Logit Binomial		- Income - Age - Occupational situation - Education - Size of the City of residence - Sex - Marital status	Eymann (1995)
Foreign holidays	Logit Binomial	Personal characteristics	- Age	Eymann & Ronning (1992)

A.1. Personal restrictions

Level of income. Income determines the spending capacity of individuals, so in order to maximise individual's utility, they consider their *personal budget restrictions* (Crawford & Godbey, 1987). Essentially, empirical literature shows that medium-high and high income groups are more likely to go on holiday (Hay & McConnell, 1979; S.G.T., 1989a; 1992; 1993; Bardón, 1991; Walsh et al., 1992; I.E.T., 2000). This result corroborates the idea that tourism generally behaves as a "*normal product"* with a positive demand-income elasticity, increasing its consumption as income increases (Silberman, 1985). Along this line, hypothesis 1.1 is as follows:

H.1.1: *Greater levels of income are associated with greater probabilities of going on holiday.*

Household size. Essentially, household size is a representative aspect of the so called *interpersonal barriers* (Crawford & Godbey, 1987). Therefore, Caswell & McConnell (1980), Eymann & Ronning (1992, 1997) and Walsh et al. (1992) consider that family size (a commonly used indicator of household size) plays an important and deterrent role in recreational decisions, both in the realisation of holidays and in the determination of the destination, as large family size restricts holiday spending. Therefore, insofar as a reduced household size, characterised by a lack of children[1], implies more possibilities to travel and cover holiday costs (Collins y Tisdell, 2002a), we propose the following hypothesis:

H.1.2: *Larger household size reduces the propensity to go on holiday*.

A.2. Socio-demographic characteristics

Age. One of the most important demographic dimensions that influence on holiday demand is the age of the tourist (Mieczkowski, 1990). Authors generally agree that the assumption of a linear relationship between age and holiday travel seems excessively simplistic and unrepresentative of the real behaviour of individuals. Obviously, a linear impact implies that the marginal effect of a change in age on participation in a certain recreational activity is constant and independent of age, when in reality, the effect of an increase of a decade (on the predisposition to take part in an activity holiday, for example) varies according to whether the individual is twenty or fifty years old.

Authors such as Hay & McConnell (1979), Miller & Hay (1981) and Walsh et al. (1992) propose a non-linear relationship between age and propensity to take holidays, in such a way as to show a positive (negative) marginal effect up to a certain point, and a negative (positive) marginal effect after that point. Eymann & Ronning (1992; 1997) suggest further stretching of the age-propensity to take holidays relationship, allowing non-linear impacts by age group. This allows them to represent

[1] Collins & Tisdell (2002a) indicate that this situation appears in the first and last stages of the family life cycle of Wells & Gubar (1966). In the initial stages the couple have no children while in the later stages the children are independent.

any behaviour pattern in function of age, like the *bimodal relationship* proposed by Becker (1992), Lawson (1991) and Oppermann (1995) of a greater propensity to travel among both younger and older people. This is basically due to a lack of children and the support given by public institutions to these two age groups (Núñez de Cela, 1998). We, therefore, propose the following hypothesis:

H.1.3: *Age exerts a non-linear effect on the probability of going on holiday*.

Occupational Situation. In general, the occupational situation of an individual is used as a substitute variable of income (Walsh et al., 1992; Riera, 2000), in such a way that an active situation determines the decision to go on holiday. The studies of the S.G.T. (1989a, 1993) and the I.E.T. (2000) show that people in work present greater propensity for going on holiday due to their greater budgetary capacity. However, occupational situation can also include other aspects with direct and positive incidence on recreational decisions, such as the holiday time available and its distribution throughout the year (Moutinho & Trimble, 1991). Along these lines, we find that students present greater propensity for going on holiday given the duration and continuousness of their holiday period (S.G.T, 1989a; 1993; I.E.T., 2000). Consequently, we propose hypotheses H.1.4 and H.1.5:

H.1.4: *An active occupational situation increases the probability of taking holidays.*

H.1.5: *Students have more probability of taking holidays.*

Size of the city of residence. The place residence is a characteristic of the origin of an individual that, in principle, has special relevance in the analysis of destinations with a preponderance of tourists of certain national groups, as it allows a differentiation of each group's behaviour at destination. More specifically, the size of the city of residence could also justify the decision to go on holiday. At an empirical level, the work of the S.G.T. (1989a, 1992) finds that the proportion of the population that takes holidays reaches the lowest levels in towns with lower populations. This is due to the fact that inhabitants of high population density cities have a greater need to escape in search of relaxation (Eymann & Ronning, 1997). Along this line, we propose:

H.1.6: *A larger city of origin brings about greater propensity for travel during holiday periods.*

A.3. Psychographic factors.

Favourable opinion of going on holiday: Although the previous characteristics are of great use in explaining tourist behaviour, Plog (1994) suggests incorporating dimensions which allow representation of other internal aspects of the individual[2]. Along this line, González & Díaz (1996) suggest that values and life styles (psychographic variables) provide a global description of the cognitive structure of the individual; therefore their examination represents a fundamental complement of socio-demographic characteristics for the optimum configuration of holiday products[3]. However, these psychographic factors are not widely used in the literature of choice, as they are not directly observable by the analyst, who would have to make additional effort in the collection of information (Plog, 1994) through databases and VALS (*Value and Life Styles*), LOV (*List of Values*) or AIO (*Activities, Interests and Opinions*) studies.

In any case, certain one-dimensional indicators –also known as primary dimensions or life style parameters (Lehmann, 1993; Bigné et al., 2000.)- allow the capture, as proxies, of the psychographic aspects of the individual. Chief among them being the favourable/unfavourable opinion of the product[4], as a person with a favourable opinion of going on holiday presents greater probability of tourist travel (Plog, 1994; Ryan, 1995). Therefore, we propose the following hypothesis:

H.1.7: *Favourable opinions of going on holiday positively affect the opinion of leaving the habitual place of residence.*

Finally, it can be shown that a number of studies (Hay & McConnell, 1979; Cosenza & Davis, 1981; Fodness, 1992; Eymann & Ronning, 1997; Collins & Tisdell, 2002b) suggest control of the impact of sex and marital status, when explaining the decision to go on holiday, along with the earlier determinant factors. In line with these studies, this study controls for these aspects.

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[2] In fact, Ashok et al (2002) and Seddighi & Theocharous (2002) show that the choice can be influenced by non-product related aspects.

[3] Moreover, from a wider point of view, research demonstrates that psychographic variables have a strong explicative power on tourist choice behaviour (Shih, 1986; Pitts & Woodside, 1986; Dalen, 1989; Muller, 1991; Hsieh et al., 1993; Zins, 1996; De Borja et al., 2002; González & Bello, 2002).

[4] Lack of information only allows us to analyse primary dimensions of the psychographic variables.

B) Foreign holidays.

The one probabilistic study detected only empirically analyses the choice of foreign holidays in terms of the age of the tourist (Table 1). Our study proposes hypotheses on the influence of personal characteristics related to the chosen destination (manner of organising the holiday), to personal restrictions (number of children), to socio-demographic characteristics (education) and to psychographic aspects (interest in discovering new places and in widening cultural knowledge).

B.1. Personal characteristics related to the destination.

Use of intermediaries in the organisation of the holiday. This dimension refers to the way in which holiday products are acquired, either directly[5] or through intermediaries[6] (Eymann & Ronning, 1992). Generally, the use of new technologies (which allow direct purchase) has greater impact on purchases of products of lesser importance and less specialised (Falkenstein, 1997) (for example, an individual is more likely to book a flight over the internet than buy an all inclusive package holiday). Conversely, the purchase of holiday products from travel agencies is associated with more complex products (Mak & Mancur, 1980; Sheldon & Mak, 1987; Esteban et al., 2000; Millán & Esteban, 2002), such as foreign holidays, due to the reduced uncertainty they bring and the time saved in the organisation of these multi-component trips (transport, accommodation, bookings etc.). In line with this, Bote et al. (1991) show that, in the case of Spain, although the number of organised holidays taken by Spanish holidaymakers is reduced due mainly to the high percentage of use of private means of transport and accommodation, the use of travel agencies for foreign holidays is greater. This has been corroborated by the studies of the S.G.T. (1989b; 1992; 1993) and the I.E.T. (2000). In virtue of the above, we propose the following hypothesis:2

H.1.8: *The purchase of holiday products through intermediaries is associated with foreign holidays.*

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[5] The way of organising tourist travel is of singular importance nowadays, due to the greater ease of direct purchase given by new technologies (Buhalis & Licata, 2002).

[6] Knowledge of the means of purchase of travel is fundamental for service prividers at the destination, given that it allows them to develop efficient communication policies and to establish commercial links with travel operators. Moreover, the greater or lesser demand for a holiday product, due to its being included in a package sold through intermediaries, largely conditions the type of relationship, direct or indirect, that service providers have with their clients (Sheldon & Mak, 1987).

B.2. Personal restrictions.

Number of children. As shown in the previous section, the number of children living at home negatively influences holiday decisions and conditions the choice of destination (Hsieh et al., 1993; Sheldon & Mak, 1987; Stemerding et al., 1999) as it restricts holiday spending. Also, the conclusions of the S.G.T. report (1989b) show that foreign holidays are more common among households of one or two members, due to their greater freedom of movement. Therefore, holidays with children are associated with national destinations. Therefore, hypothesis H.1.9 proposes that:

H.1.9: *The number of children who go on holiday is a restriction on the choice of foreign holidays.*

B.3. Socio-demographic characteristics

Education. The cultural and educational level of an individual is a determinant factor of holiday preferences, especially in the selection of foreign holidays, in which knowledge of the language spoken in the destination country is fundamental (Eymann & Ronning, 1997). Along this line, and in the case of Spain, we find that people with studies similar to or above secondary school levels are more likely to holiday abroad (S.G.T., 1989a; 1992; 1993; Bardón, 1991; I.E.T., 2000). Consequently, we propose that:

H.1.10: *A higher educational level increases the propensity for foreign holidays.*

B.4. Psychographic factors

Interest of the traveller in discovering new places and broadening cultural knowledge. The previous section shows the importance of primary psychographic variables as determinants of tourist behaviour (Ryan, 1995; Plog, 1994). In this way, Anderson (1970) and Santos (1983) propose the so called "Ulysses Factor", a psychological aspect of special relevance in the planning of holidays, through which people feel a deep need to explore and to discover what lies beyond the known horizon. Mayo & Jarvis (1981) suggest that this "need to explore" is determinant in the explanation of travel due to the fact that "travel allows one to satisfy the intellectual need to know". Bearing this contribution in mind, we can assume that these yearnings to

explore, manifested by an interest in discovering new places and in broadening cultural knowledge, are associated with foreign holidays. Therefore, we propose that:

H.1.11: *The interest of an individual in discovering new places positively influences the choice of foreign holidays*.

H.1.12: *The interest of an individual in broadening cultural knowledge positively influences the choice of foreign holidays*.

Finally, we observe the influence of sex, marital status, income and age[7], which are included in the analysis as control variables (Cosenza & Davis, 1981; Fodness, 1992; Eymann & Ronning, 1992; Collins & Tisdell, 2002b).

C) Single vs. Multi-Destination Holidays

Probabilistic research has not paid attention to the choice of multi-destination holidays. Our study, however, proposes that the decision to embark on multi-destination holidays is associated with personal characteristics related to the chosen destination (way of organising holidays) and psychographic characteristics (interest in discovering new places and in broadening cultural knowledge).

C.1. Personal characteristics related to the destination

Use of intermediaries in the organisation of the holiday. As shown in the previous section, the use of intermediaries to organise holidays is associated with the purchase of more complex products (Mak & Mancur, 1980; Sheldon & Mak, 1987). In this way, an individual reduces uncertainty and makes easier the purchase of multi-component holiday products. Therefore, and given that multi-destination holidays are highly complex products, they should be associated with greater use of intermediaries, as this would give tourists an efficient formation and aggregation of all the product elements. In virtue of the above, we make hypothesis H.1.13 thus:

H.1.13: *The use of intermediaries is associated with multi-destination holidays.*

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[7] The lack of theoretical argumentation for stating hypotheses on the impact of tourist age and income on the decision to holiday abroad has led us to consider it in the model as control variables.

C.2. Psychographic factors

Interest in discovering new places and broadening cultural knowledge. In line with the "Ulysses Factor" (Anderson, 1970; Santos, 1983) (see above), Mayo & Jarvis (1981) show any holiday travel, be it multi or single destination, satisfies the intellectual need to "know", because it involves visiting new places. In fact, they identify two tourist types: i) "sightseers", who visit various destinations in order to see, on a superficial level, their main sights; and ii) "vacationers", who remain in one destination during their holiday in order to "learn" in detail the characteristics of the place. However, Opaschowski (1990) indicates that there is another important tendency for tourists to diversify their holidays by looking for variety in the same trip (multi-destination holidays). This is due to the fact that tourists are, more and more, arriving at a state of psychological saturation and are becoming more critical and unsatisfied with traditional single-destination products (for example, they are becoming more and more tired of spending their entire holiday at sunny beach locations). In reality, these individuals who chose multi-destination holidays show interest in discovering various places. In line with Opaschowski, we propose the following hypothesis[8]:

H.1.14: *Interest in discovering new places positively influences the choice of multi-destination holidays.*

H.1.15: *Interest in broadening cultural knowledge positively influences the choice of multi-destination holidays.*

3. RESEARCH DESIGN

3.1. Methodology

The methodology proposed for testing the hypotheses relating to decisions on going on holiday, foreign holidays and multi-destination holidays, is based on an application of Binomial Logit Models[9] due to the dichotomous character of these

[8] As in the previous case, we control the effects of sex and marital status.

[9] This model allows us to overcome the incongruities of the Linear Probability Model, relating to the probabilistic estimations out with the range (0,1) and assuming constant change in P_{it} independently of the explanatory variable (Hay & McConnell, 1979; Maddala, 1983; Scott, 1997).

decisions, in line with Hay & McConnell (1979), Miller & Hay (1981) and Walsh et al. (1992), among others. Therefore, assuming linearity in the parameters, the utility function of alternative *i*, U_{it}, takes the following form:

$$U_{it} = \sum_{k=1}^{K} \beta_k x_{tk} + \varepsilon_i$$

where, x_{tk} represents the characteristic *k* of individual *t*, β_k the parameter of variable *k*, and ε_i the error term distributed under a Gumbel function. From Ben-Akiva & Lerman (1985), the probability of alternative *i* is determined by the expression:

$$P_{it} = \frac{\exp\left\{\sum_{k=1}^{K} \beta_k x_{tk}\right\}}{1 + \exp\left\{\sum_{k=1}^{K} \beta_k x_{tk}\right\}}$$

This is estimated by maximum likelihood, the objective function being

$$MV(\theta) = \sum_{t=1}^{T} \{d_{ti} \ln P_{ti} + (1 - d_{ti}) \ln[1 - P_{it}]\}$$

where, d_{ti}=1 if individual *t* chooses alternative *i*, and zero otherwise; θ represents parameters β_k to be estimated.

3.2. Sample and Variables

To reach the proposed research objectives, we use information on tourist choice behaviour, obtained from a national survey called "Holiday behaviour of the Spanish (III)" carried out by the Spanish Sociological Research Centre (*Centro de Investigaciones Sociológicas*). This is due to the following reasons: i) The availability of information on tourist behaviour; ii) The survey is home based and directed at a sample of individuals (over 18 years old) which avoids the selection bias characteristic of samples obtained in destinations and allows the incorporation of the decision processes of individuals who do not take holidays; leading to a more precise analysis of tourist demand, and iii) The lack of previous empirical research which apply discrete choice models to the individual behaviour of Spanish tourists on a national level.

The sample is taken from a total adult population of 30,820,626 individuals, using multistage sampling, stratified by conglomerations, with proportional selection of primary units -cities- and of secondary units –censorial sections-. The collection of the information was made in October 1995 through personal, at home, interviews with a structured questionnaire. The final sample is of 3,781 individuals –of which 68.72% take holidays -, with a sample error of ±1.24% for a confidence level of 95.5%.

In order to make the proposed choice model operative, we define the variables used, identifying the dependent and independent variables.

1) *Dependent variables*: The discrete nature of the decisions analysed –going on holiday, foreign holidays and multi-destination holidays- allows us to represent these decisions through dichotomous variables, in such a way that a value of 1 is given to each of these decisions, going on holiday, foreign holidays and multi-destination holidays; whereas a value of 0 means that the individual does not go on holiday, opts for a national holiday or selects a fixed destination, respectively.

2) *Independent variables*:

a) Personal characteristics relating to the destination: i) *Organisation*. The way of organising the holiday is collected with a dummy variable which takes a value of 1 if the tourist uses a travel agent and 0 if he/she organises his/her own holiday (Sheldon & Mak, 1987).

b) Personal restrictions: i) *Income*. This dimension considers different income levels in order to observe the possible lack of linearity to their effect (Eymann & Ronning, 1997). Monthly income levels are placed into the following categories: *Income 1*, up to 600€ per month; *Income 2*, between 600 and 1200€; *Income 3*, between 1200 and 2400€; *Income 4*, between 2400 and 4500€; and *Income 5*, more than 4500€. For its inclusion as an explanatory variable we take Income 1 as the reference category. ii) *Household size*. This is measured by the number of people living in the house (Caswell & McConnell, 1980; Eymann & Ronning, 1992; 1997; Walsh et al., 1992). iii) *Children*. Collects the number of children under sixteen who go on holiday (Moutinho, 1987).

c) Socio-demographic characteristics: i) *Age*. This dimension is measured with a variable expressed in quantitative terms (number of years). With the object of testing for possible non-linear effects, we also consider the square

of this variable (Age^2) (Hay & McConnell, 1979; Miller & Hay, 1981). Likewise, in order to give more flexibility to the effect of age, we construct an age group variable, in which we define four category variables in the following way: *Age 1*, under 25 years old; *Age 2*, between 26 and 45; *Age 3*, between 46 and 65; and *Age 4*, over 65 years old. As a reference category we take *Age 4*. This last age definition allows us to represent any behaviour pattern in function of it. (Eymann & Ronning, 1992; 1997). ii) *Sex*. Dichotomous variable with the following codification: male=1, female=0 (Hay & McConnell, 1979; Eymann & Ronning, 1997); iii) Marital status. Dummy variable where married=1 and single=0 (Hay & McConnell, 1979; Eymann & Ronning, 1997); iv) *Education*. We establish three educational levels through three category variables: *Education 1*, Basic Education; *Education 2*, Secondary education; and *Education 3*, University Education. Category *Education 1* is taken as a reference. (Caswell & McConnell, 1980; Eymann & Ronning, 1997; Riera, 2000); v) *Occupational Situation*. We establish five situations, defined by the following category variables: *Occ. Sit. 1*, employed; *Occ. Sit. 2*, retired; *Occ. Sit. 3*, unemployed; *Occ. Sit. 4*, student; and *Occ. Sit. 5*, housewife. As a base category, we use *Occ. Sit. 5* (Riera, 2000; Walsh et al., 1992). vi) *Size of City*. The size of the place of residence is defined by the following category variables: *Size of City 1*, up to 10.000 inhabitants; *Size of City 2*, between 10.000 and 100.000 inhabitants; *Size of City 3*, between 100.000 and 1000.000 inhabitants; *Size of City 4*, over 1.000.000 inhabitants. The category *Size of City 1* is taken as a reference (Eymann & Ronning, 1997; Smith & Munley, 1978).

d) Psychographic factors. As *one-dimensional indicators of the internal aspects of an individual* we include the following three dimensions: i) *An individual's favourable/unfavourable opinion of going on holiday at least once a year*. This is measured with a dichotomous variable and takes a value of one if an individual has a favourable opinion of going on holiday at least once a year, and zero if the person has the opposite view (Plog, 1994); ii) *Interest in discovering new places,* which is found with a dummy variable, where one indicates that an individual considers this aspect when planning holidays and zero if not; and iii) *Interest in broadening cultural knowledge* using another dummy, where one reflects an individual with interest and zero without (Hsieh et al., 1993).

Table 2 presents the descriptive statistic of each of the variables used, detailing the average for the continuous variables and the sample proportions of the category variables as well as the standard deviations.

4. RESULTS AND DISCUSSION

4.1. Determinants of the Decision to go on Holiday

The identification of the determinants of the decision to go on holiday in terms of the variables corresponding to hypotheses H.1.1-H.1.7 (income, household size, age, active occupational situation, condition of being a student, size of city and opinion of going on holiday[10]), implies the estimation by maximum likelihood of a Binomial Logit model, which is shown in Table 4, for the sample used.

Before applying the model, we carry out a detailed study of the correlation between the explanatory variables in order to avoid possible collinearity. This task is carried out by examining the correlation coefficients between them. Table 3 shows these coefficients. Its impact on the final results is limited by selecting independent, non-correlated variables, so that the equations presented for each model constitute different combinations of them, which are designed to collectively solve the problem of multicollinearity.

With regard to the individual and joint significance of the explanatory variables of the model, the following aspects stand out. Firstly, the likelihood ratio test (LR) of joint significance of the variables allows us to conclude, in all the equations, that significant information is obtained by introducing individual characteristics, in line with the suggestions of Eymann & Ronning (1992; 1997), Hay & McConnell (1979), Miller & Hay (1981), The S.G.T. (1992) and Walsh et al. (1992). This means that, the variables analysed are collectively significant at a level below 0.1%. Likewise, in order to determine the specification which best represents the model we calculate the Schwarz

[10] Additionally, we control the effects of sex and marital status.

Table 2. Descriptive statistic of the variables

Variable	Mean/Proportion	Standard Deviation
DEPENDENT VARIABLES		
Going on holiday	0.687	0.463
Foreign holidays	0.058	0.233
Multi-destination holidays	0.266	0.442
INDEPENDENT VARIABLES		
Indiv-Dest. Characteristics.		
Organisation of the holiday	0.840	0.366
Personal Restrictions		
Income1	0.279	0.448
Income2	0.484	0.499
Income3	0.196	0.396
Income4	0.037	0.188
Income5	0.004	0.063
Household size	3.440	1.440
Children	0.430	0.770
Socio-demographic Characteristics		
Age	43.570	17.520
Age^2	2,209.250	1,700.400
Age1	0.190	0.392
Age2	0.392	0.488
Age3	0.277	0.447
Age4	0.141	0.348
Sex	0.476	0.499
Marital status	0.626	0.483
Education1	0.545	0.497
Education 2	0.276	0.447
Education 3	0.188	0.390
Occ. Sit. 1	0.442	0.496
Occ. Sit. 2	0.180	0.384
Occ. Sit. 3	0.980	0.140
Occ. Sit. 4	0.087	0.281
Occ. Sit. 5	0.191	0.393
Size of city 1	0.207	0.405
Size of city 2	0.280	0.449
Size of city 3	0.320	0.466
Size of city 4	0.180	0.384
Psychographic Factors		
Favourable opinion of holidays	0.665	0.471
Interest in culture	0.093	0.290
Interest in discovering new places	0.323	0.467

Table 3. Correlation coeficients of the explanatory variables.

	Org.	Cont.	Days	Income	F. Size	Chilld.	Age	Sex	M. Stat.	Educat.	Occ. Sit	S. City	I, cult.	Places	Opin.
Org.	1,00														
Cont.	0,005	1,00													
Days of Vacat.	0,164[a]	-0,065[b]	1,00												
Income	0,006	-0,134[a]	0,086[a]	1,00											
Family size	0,085[a]	0,026	-0,023	0,271[a]	1,00										
Child.	0,071[b]	0,011	0,033	0,052[c]	0,211[a]	1,00									
Age	-0,071[a]	0,045[c]	0,045[c]	-0,323[a]	-0,361[a]	-0,054[b]	1,00								
Sex	0,027	0,004	-0,017	0,123[a]	0,023	0,002	-0,060[a]	1,00							
M. Status	-0,001	0,041[c]	-0,064[b]	0,036	0,009	0,171[a]	0,319[a]	0,004	1,00						
Education	0,046[c]	-0,171[a]	0,088[a]	0,510[a]	0,093[a]	0,014	-0,403[a]	0,127[a]	-0,160[a]	1,00					
Occ. Sit.	0,035	0,090[a]	0,067[b]	-0,183[a]	0,125[a]	0,019	-0,012	-0,453[a]	0,015	-0,187[a]	1,00				
Size of city	0,117[a]	-0,013	0,145[a]	0,165[a]	-0,035[c]	-0,075[a]	-0,006	0,003	-0,059[a]	0,190[a]	-0,026	1,00			
Culture	-0,106[a]	-0,063[b]	-0,053[b]	0,104[a]	-0,030[c]	-0,035	-0,047[b]	0,011	-0,073[a]	0,181[a]	-0,046[b]	0,005	1,00		
New places	-0,203[a]	-0,059[b]	-0,137[a]	0,055[b]	0,024	-0,034	-0,121[a]	-0,005	-0,071[a]	0,091[a]	-0,016	-0,083[a]	0,170[a]	1,00	
Opinion	0,006	-0,031	0,055[b]	0,122[a]	0,031	-0,002	-0,070[a]	0,022	0,000	0,065[a]	-0,042[c]	0,018	0,003	-0,017	1,00

a=prob<0,1%; b=prob<1%; c=prob<5%.

Table 4. Determinant factors of going on holiday with binomial logit

(1= go on holiday; 0= not go on holiday. Standard errors in brackets)

Independent Variables		Equation 1	Equation 2	Equation 3	Equation 4	Equation 5
Income2		0.744[a] (0.114)	0.823[a] (0.112)	0.746[a] (0.114)	0.836[a] (0.112)	0.751[a] (0.114)
Income3		1.705[a] (0.175)	1.900[a] (0.170)	1.709[a] (0.175)	1.910[a] (0.170)	1.712[a] (0.175)
Income4		2.681[a] (0.480)	2.931[a] (0.476)	2.682[a] (0.480)	2.930[a] (0.476)	2.678[a] (0.480)
Income5		2.183[c] (1.094)	2.254[c] (1.086)	2.171[c] (1.094)	2.261[c] (1.085)	2.182[c] (1.094)
Household size		-0.142[a] (0.038)	-0.141[a] (0.037)	-0.140[a] (0.038)	-0.137[a] (0.037)	-0.135[a] (0.0038)
Age		-0.006 (0.004)	-0.034 (0.017)	-0.015 (0.018)		
Age^2			0.0002 (0.0001)	9E-05 (0.0001)		
Age1					0.371 (0.199)	0.182 (0.251)
Age2					0.125 (0.153)	0.129 (0.200)
Age3					-0.234 (0.152)	-0.204 (0.173)
Occ. Sit.1		0.302[c] (0.140)		0.306[c] (0.140)		0.302[c] (0.140)
Occ. Sit.2		0.267 (0.171)		0.249 (0.175)		0.186 (0.174)
Occ. Sit. 3		-0.112 (0.188)		-0.114 (0.189)		-0.115 (0.188)
Occ. Sit. 4		1.037[a] (0.290)		1.008[a] (0.297)		1.031[a] (0.300)
Size of city 2		-0.034 (0.133)	-0.035 (0.132)	-0.032 (0.133)	-0.029 (0.133)	-0.028 (0.134)
Size of city 3		0.494[a] (0.134)	0.501[a] (0.132)	0.496[a] (0.134)	0.507[a] (0.132)	0.505[a] (0.134)
Size of city 4		0.691[a] (0.163)	0.664[a] (0.161)	0.694[a] (0.163)	0.676[a] (0.161)	0.704[a] (0.163)
Opinion Holidays		1.160[a] (0.097)	1.169[a] (0.097)	1.160[a] (0.097)	1.168[a] (0.097)	1.162[a] (0.097)
Constant		-0.515 (0.304)	0.364 (0.406)	-0.357 (0.455)	-0.619[b] (0.188)	-0.878[a] (0.242)
Control Variables	**Sex**		-0.189[c] (0.095)		-0.189[c] (0.095)	
	Marital status	0.206 (0.115)	0.137 (0.117)	0.224 (0.121)	0.147 (0.116)	0.227 (0.120)
MV(θ)		-1.314.70	-1.330.58	-1.314.59	-1.327.67	-1.311.99
SIC		1.111	1.112	1.114	1.113	1.115
LR		474.40[a]	463.21[a]	474.61[a]	469.04[a]	479.81[a]
ρ		0.152	0.148	0.152	0.150	0.154

a=prob< 0.1%; b=prob< 1%; c=prob< 5%.

Information Criterion[11] (SIC) for each equation. In virtue of this, Equation 5 presents the optimum specification, which is corroborated by reaching the largest McFadden ρ coefficient (15.4%), which is considered acceptable for this type of model (Hensher & Johnson, 1981). This result implies that the dimension combination included in specification 5 is that which presents the greatest joint significance.

Secondly, the significance tests of the individual parameters show that the variables relative to income, household size, active occupational situation, being a student, size of city and opinion of going on holiday, have an influence on this decision, being significant at a level below 5% in all the equations. The estimations of these coefficients show robust results in all equations, given that the variables present identical significance levels in all of them.

In particular, all the category variables relative to income levels show a positive sign. Moreover, all the parameters are significantly greater than that of the reference category of low income (*Income 1*), showing that the two categories of high income have the greatest impact on the probability of going on holiday. This confirms hypothesis H.1.1 that the consumption of holiday products rises as income rises, in line with Hay & McConnell (1979), S.G.T. (1989a; 1992; 1993), Bardón (1991) and Walsh et al. (1992), showing that this type of product is a *normal product* (Silberman, 1985).

For its part, household size presents a negative sign, which means that households with few members tend to take more holidays due to their larger budgets, thus supporting hypothesis H.1.2 in line with Crawford & Godbey (1987) and Collins & Tidell (2002). As regards age, we find no influence of this variable in any case -linear, curvilinear or by levels -, as the parameters estimated which relate it to the probability of going on holiday are not significant, which leads us to reject hypothesis H.1.3. This lack of significance of age is also found by the studies of Collins & Tisdell (2000, 2002a), The S.G.T. (1989a, 1992), Bardón (1991) and The I.E.T. (2000), and is explained by the fact that motivation can exert a greater influence than age when going on holiday (Collins & Tisdell, 2000, 2002a). For example, an individual makes a journey to visit family regardless of age. Therefore, this non-significance of age

[11] This criterion is defined as $SIC=\log(L_{ML})-(k/2)\log(M)$, where L_{ML} represents the function of verisimilitude, M the sample size and k the number of parameters. This measurement, in addition to considering the likelihood function takes into account the parsimony of the model by controlling the number of parameters. The model with the greatest SIC represents the specification which best fits the data.

suggests that there are other personal factors that push an individual to go on holiday regardless of age.

With regard to occupational situation, the positive signs of categories 1 and 4, referring to employed people (with larger incomes) and to students (with more free time), suggest greater probabilities of travel, their parameters being significantly greater than those of the other three categories, which verifies hypotheses H.1.4 and H.1.5 respectively, in line with the results obtained in other studies (S.G.T., 1989a; 1993; I.E.T., 2000).

Similarly, the size of the city of residence shows a positive sign for larger cities (categories 3 and 4), whose coefficients are significantly greater than those of the small size categories (1 and 2); which is indicative of the existence of a need to escape from large urban centres (Eymann & Ronning, 1992), and corroborates hypothesis H.1.6. The positive sign of the variable relating to the favourable/unfavourable opinion of going on holiday supports hypothesis H.1.7 that a favourable opinion foments holidays. Therefore, this psychographic dimension of individuals determines holiday decisions, in line with Plog (1994), González & Díaz (1996), Ashok et al., (2002) and Seddighi & Theocharous (2002). Finally, with regard to the control variables, sex is found to be significant, with males being to negatively influence the probability of going on holiday; whereas marital status does not seem to influence this decision. In summary, Figure 1 shows the final result of the contrasts of the research hypotheses.

Figure 1. Contrast of the hypotheses on the decision to go on holiday

	Hypothesis	Accept	Reject
H.1.1	*Greater levels of income are associated with greater probabilities of going on holiday.*	X	
H.1.2	*Larger household size reduce the propensity to go on holiday.*	X	
H.1.3	*Age exerts a non-linear effect on the probability of going on holiday.*		X
H.1.4	*An active occupational situation increases the probability of taking holidays.*	X	
H.1.5	*Students have more probability of taking holidays.*	X	
H.1.6	*A larger size city of origin brings about greater propensity for travel during holiday periods.*	X	
H.1.7	*Favourable opinions of going on holiday positively affect the opinion of leaving the habitual place of residence.*	X	

4.2. Determinants of the Choice of Foreign Holidays

The identification of the determinants of the choice of a foreign holiday in terms of the variables corresponding to the group of hypotheses H.1.8-H.1.12 (use of intermediaries, number of children, education, cultural interest and interest in discovering new places[12]) implies the estimation, by maximum likelihood, of a Binomial Logit model, which is shown in Table 5.

Table 5. Determinant factors of going on holiday abroad with binomial logit
(1= international destination; 0= national destination. Standard errors in brackets)

Independent Variables		Equation 1	Equation 2
Organisation of the holiday		1.416[a]	1.234[a]
		(0.190)	(0.231)
Children		-0.253[c]	-0.380[a]
		(0.103)	(0.142)
Education2		0.337	
		(0.226)	
Education3		1.113[a]	
		(0.217)	
Cultural interest		0.839[a]	1.073[a]
		(0.217)	(0.250)
Interest in new places		1.183[a]	0.998[a]
		(0.181)	(0.220)
Constant		-3.754[a]	-3.089[a]
		(0.243)	(0.477)
Control Variables	Sex	0.043	-0.005
		(0.175)	(0.214)
	Marital Status	-0.159	-0.075
		(0.187)	(0.261)
	Age		-0.008
			(0.008)
	Income 2		-0.122
			(0.341)
	Income 3		0.515
			(0.352)
	Income 4		0.708
			(0.460)
	Income 5		1.908[c]
			(0.775)
MV(θ)		-485.13	-338.00
SIC		0.457	0.470
LR		208.06[a]	134.30[a]
ρ		0.176	0.165

a=prob< 0.1%; b=prob< 1%; c=prob< 5%.

[12] Additionally, we control the effects of sex, marital status, age and income.

A preliminary analysis finds a high level of correlation between income and education (see Table 3); therefore the two equations presented offer two combinations of the variables that solve the problem of multicollinearity. As regards the joint and individual significance of the explanatory variables of the model; the following aspects can be highlighted. The estimations are globally significant at 0.1%, from which we deduce that the dimensions analysed seem to influence the decision. In particular, the McFadden ρ coefficient is around 17%, which means that the independent variables of the model explain an acceptable percentage of the probability of selecting foreign holidays.

With regard to the individual parameters it is shown that the use of intermediaries, the number of children under sixteen, education and the psychographic dimensions are determinants of the realisation of foreign holidays, all being significant at a level below 5%. In particular, the positive sign of the variable of organisation of the holiday corroborates hypothesis H.1.8, which links the use of intermediaries with international holidays (more complex products), as this allows a reduction in their inherent uncertainty (Mak & Mancur, 1980; Sheldon & Mak, 1987; Bote et al., 1991). The number of children under sixteen who go on holiday presents a negative sign, showing a preference for national destinations when they go on holiday, as with the study of the S.G.T. (1989b), which supports hypothesis H.1.9. This shows that children are considered when choosing a destination (Hsieh et al., 1993; Sheldon & Mak, 1987; Stemerding et al., 1999).

The positive sign of the variable relating to university studies (*Education 3*) suggests that individuals with this type of studies have a greater propensity to take foreign holidays in relation to those with lower educational qualifications, verifying hypothesis H.1.10. This implies that education, culture and knowledge of foreign languages are important aspects in this context, in line with Eymann & Ronning (1997). As regards the psychographic dimensions, the positive signs confirm the influence of "interest in broadening cultural knowledge" and "interest in discovering new places" in the decision to holiday abroad, supporting hypotheses H.1.11 and H.1.12, respectively. Finally, the control variables of sex, marital status and age do not seem to influence the decision to take foreign holidays, whereas the category of high income shows a positive effect on the realisation of this type of holiday.

Figure 2. Contrast of the hypotheses on the choice of foreign holidays

Hypothesis		Accept	Reject
H.1.8	*The purchase of holiday products through intermediaries is associated with foreign holidays.*	X	
H.1.9	*The number of children at home is a restriction on the choice of foreign holidays.*	X	
H.1.10	*A higher educational level increases the propensity for foreign holidays.*	X	
H.1.11	*The interest of an individual in discovering new places positively influences the option of foreign holidays*.	X	
H.1.12	*The interest of an individual in broadening cultural knowledge positively influences the option of foreign holidays*.	X	

4.3. Determinants of the Choice of Multi-Destination Holidays

The identification of the determinants of the choice of multi-destination holidays in terms of the variables corresponding to the group of hypotheses H.1.13-H.1.15 (use of intermediaries, interest in culture and discovering new places[13]) implies the estimation, by maximum likelihood, of a Binomial Logit model, which is shown in Table 6.

Table 6. Determinant factors of multi-destination holidays with binomial logit
(1= multi-destination holidays; 0= single destination holidays. Standard errors in brackets)

Independent Variables		Coefficients
Organisation of the holiday		0.706[a] (0.121)
Cultural interest		1.179[a] (0.147)
Interest in new places		1.100[a] (0.101)
Constant		-1.714[a] (0.103)
Control Variables	**Sex**	0.322[a] (0.097)
	Marital status	-0.173 (0.099)
MV(θ)		-1.306.34
SIC		1.056
LR		310.86[a]
ρ		0.106

a=prob< 0.1%; b=prob< 1%; c=prob< 5%.

[13] We also control the effects of sex and marital status.

The equation estimated is globally significant at 0.1% reaching a McFadden ρ of 10.6%. This suggests that the dimensions analysed appear to influence the choice of multi-destination holidays, explaining a relatively acceptable percentage of the variability of the probability of choosing these type of holiday.

With regard to the individual parameters, it is shown that the way of organising the holiday and the psychographic dimensions influence the choice of multi-destination holidays, being significant at a level below 0.1%. In particular, the variable of organisation of the holiday shows a positive coefficient, which supports hypothesis H.1.13 of the use of intermediaries being associated with holidays to various destinations (highly complex product) due to the fact that tourists can reduce their uncertainty and more efficiently obtain the aggregation of multiple components (Mak & Moncur, 1980; Sheldon & Mak, 1987).

In the same way, the two psychographic dimensions present positive signs, which support hypotheses H.1.14 and H.1.15 that they positively influence the choice of this type of multi-destination holiday. In particular, the Spanish tourist who shows an interest in discovering new places and in broadening cultural knowledge, behaves as a "sightseer" according to the classification of Mayo & Jarvis (1981), therefore it seems that the intellectual need to know is satisfied by covering various destinations.

Figure 3. Contrast of the hypotheses on the choice of multi-destination holidays

	Hypothesis	Accept	Reject
H.1.13	*The use of intermediaries is associated with multi-destination holidays*	X	
H.1.14	*Interest in discovering new places positively influences the choice of multi-destination holidays*	X	
H.1.15	*Interest in broadening cultural knowledge positively influences the choice of multi-destination holidays.*	X	

As regards the control variables, sex is significant, being the male who positively influences the probability of choosing a multi-destination holiday; whereas marital status does not appear to influence the decision.

5. CONCLUSIONS

The implication that basic tourist decisions (to take a holiday away from the habitual place of residence, to take a foreign or multi-destination holiday) can be explained by certain characteristics of the individual, allows us to analyse these phenomena in the context of Spain on a sample of 3,781 individuals. To do this, this study proposes various hypotheses on the impact of personal characteristics relating to the chosen destination (way of organising the holiday), to personal restrictions (income, household size and number of children), to socio-demographic characteristics (age, education, occupational situation and size of the city of residence) and to psychographic dimensions (interest and opinions). The operative formalisation used to test these hypotheses follows a Binomial modelization, of immediate application when dealing with decisions with exclusive choices.

The empirical application carried out on the sample allows us to reach the following conclusions: a) *Decision to go on holiday.* The dimensions that appear to have an effect on this decision are income, household size, active occupational situation, being a student, size of the city of origin and opinion of going on holiday. We can conclude that a greater propensity to go on holiday is associated with high income (meaning that holidays are normal goods), with smaller household size (due to the monetary restrictions of households with many members), with an active occupational situation (implying a greater available budget), with being a student (having more leisure time), with residence in large cities (because of the need to escape), and with a favourable opinion of going on holiday (psychographic dimension). b) *Choice of foreign holiday.* The determinant factors of the choice of foreign holidays are the way of organising the holiday, the number of children under sixteen, education and interest in broadening cultural knowledge and discovering new places. In other words, the choice of a foreign holiday is linked with the use of travel agents (to facilitate the organisation of complex holidays), with a lower number of children (which allows greater spending and more freedom of movement), with university education (which supposes higher levels of education, culture and knowledge of foreign languages), and with greater interest in widening cultural knowledge and discovering new places (psychographic dimensions). c) *Multi-destination holidays*. The explanatory variables of this type of holiday are the means of organisation and interest in widening cultural knowledge and discovering new places. This means that more complex holiday products are associated,

once again, with the use of intermediaries (as they facilitate the organisation of a complex holiday) and that the psychographic dimensions influence the selection of multi-destination holidays.

As implications for management, we can mention that knowledge of the profile of the holidaymaker and the type of holiday they take -foreign and multi-destination- allows travel organisations to better design their policies and Tourism Marketing strategies, adapting them to those aspects that are considered most important.

Likewise, companies, which provide services at holiday destinations that are popular with foreigners and "sightseers", should establish commercial links with holiday operators and develop efficient intermediation policies, given that the purchase of foreign and multi-destination holidays is made at travel agents.

Among the limitations of the study is the fact that we do not consider the impact of important dimensions such as personal motivations, due to the lack of information on them. Equally, the perceptions of individuals on the attributes of the holiday types -foreign and multi-destination- could also provide relevant information when choosing one or another kind of holiday.

Among future lines of research, it can be said that the results presented here should be supported by other studies on other geographical areas. Likewise, it would be interesting to test the proposed hypotheses from a longitudinal perspective, which would allow an observation of the temporal evolution of the effects of the dimensions studied.

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