

Middlesex University Research Repository

An open access repository of

Middlesex University research

<http://eprints.mdx.ac.uk>

Andriotis, Konstantinos ORCID: <https://orcid.org/0000-0003-0960-0216>, Agiomirgianakis, George and Mihiotis, Athanasios (2007) Tourist vacation preferences: the case of mass tourists to Crete. *Tourism Analysis*, 12 (1/2) . pp. 51-63. ISSN 1083-5423 [Article]

Published version (with publisher's formatting)

This version is available at: <https://eprints.mdx.ac.uk/13240/>

Copyright:

Middlesex University Research Repository makes the University's research available electronically.

Copyright and moral rights to this work are retained by the author and/or other copyright owners unless otherwise stated. The work is supplied on the understanding that any use for commercial gain is strictly forbidden. A copy may be downloaded for personal, non-commercial, research or study without prior permission and without charge.

Works, including theses and research projects, may not be reproduced in any format or medium, or extensive quotations taken from them, or their content changed in any way, without first obtaining permission in writing from the copyright holder(s). They may not be sold or exploited commercially in any format or medium without the prior written permission of the copyright holder(s).

Full bibliographic details must be given when referring to, or quoting from full items including the author's name, the title of the work, publication details where relevant (place, publisher, date), pagination, and for theses or dissertations the awarding institution, the degree type awarded, and the date of the award.

If you believe that any material held in the repository infringes copyright law, please contact the Repository Team at Middlesex University via the following email address:

eprints@mdx.ac.uk

The item will be removed from the repository while any claim is being investigated.

See also repository copyright: re-use policy: <http://eprints.mdx.ac.uk/policies.html#copy>

TOURIST VACATION PREFERENCES: THE CASE OF MASS TOURISTS TO CRETE

KONSTANTINOS ANDRIOTIS, GEORGE AGIOMIRGIANAKIS, and ATHANASIOS MIHIOTIS

Hellenic Open University, Greece

Tourists during their vacations participate in a variety of activities. These activities range from active to passive ones and they may depend on various factors, including travel arrangement and sociodemographic characteristics. The aim of this article is to provide guidelines to Cretan destination managers for supplying well diversified tourist products that could satisfy particular requirements of tourists by examining tourist vacation preferences and identifying whether certain factors can influence tourists' preferences. The findings suggest that tourists visiting Crete prefer passive activities, and that the three main factors that influence tourists' activities are nationality, age, and season of visit. Despite the limitations of the study, it is evident that various policies are required by Cretan destination managers in order to provide activities directed to satisfy tourists' demand. These policies are discussed in relation to Crete's brand identity.

Key words: Activities; Preferences; Mass; Alternative tourism; Policy-making; Crete

Introduction

Leisure is frequently translated and manifested in the form of travel and tourism (Haywood et al., 1995). As a result, travel and tourism today represents a significant leisure activity, since visitors while on vacation engage in particular activities that attain the beneficial psychological experience of a sense of freedom from constraint, enjoyment of the current activity, and personal control (Venkatesh, 2006, p. 92). Typically, tourists derive benefits from participation in activities, since activities usually provide novelty or change to daily routines, relief from stress, and the possibility of escape from personal problems and/or difficulties.

In other words, activities provide to their users opportunities for certain physical, mental, and psychological rewards (Ross & Iso-Ahola, 1991), and therefore play a vital role in tourists' overall satisfaction (Euthimiadou, 2001). On the other hand, people often want to engage in leisure activities mainly for social contact (Ross & Iso-Ahola, 1991). However, activities are not the same for each individual. For example, one tourist may consider environmental-friendly activities important, while another may value more nightlife and recreation activities. In addition, activities undertaken during a vacation period may vary among different travel arrangements and various cultural and sociodemographic characteristics.

Although there is extensive research on tourist behavior in the case of a mass tourism destination, the majority of these studies are focused either on tourist motivation (Bogari, Crowther, & Marr, 2004; Correia & Crouch, 2004; Crompton, 1979; Dann, 1981; Kozak, 2002), tourist satisfaction (Akama, & Kieti, 2003; Dunn & Iso-Ahola, 1991; Fallon & Schofield, 2004; Kozak, 2001; 2003; Kozak & Rimmington, 2000; Tribe & Snaith, 1998), or on the economic, environmental, and sociocultural impacts of mass tourism to the host communities (Flognfeldt, 1999; Murphy & Williams, 1999; Stoeckl, Greiner, & Mayyocchi, 2006; Taylor, Fletcher, & Clabaugh, 1993). As a result, it is not yet well documented whether mass tourists prefer activities other than those associated with the 4S offerings (sun, sea, sand, and sex). If more detailed information could be available on the preferences of tourists, it would be possible for destination managers to anticipate better development trends and supply well diversified products that could satisfy certain requirements of tourists. This implies that more research is required on understanding how tourists act in mass destinations, in an effort to make the most efficient use of tourism resources and facilities and provide guidelines for future recreational, leisure, and infrastructural investments. In addition, the match or mismatch of tourists' preferences will make it possible to consider how contemporary or relevant the brand is of a destination to current visitors' expectations.

This article comes to supplement previous literature focusing on tourist vacation preferences for the island of Crete, a Greek mass island tourism destination, and aims at providing guidelines to Cretan destination managers for supplying well diversified tourist products that could satisfy particular requirements of tourists by examining tourist vacation preferences and identifying whether certain trip arrangement and sociodemographic characteristics can influence tourists' preferences. The article is organized in five sections. In section one, past research on tourist vacation preferences is presented. Section two analyzes the tourism industry in Crete, while section three presents the methodology adopted in this article. Section four presents the findings of the study, and the final

section provides the policy implications and the conclusions of the study.

Tourist Vacation Preferences

Naturally, a wide range of activities can be undertaken by vacationers. According to Weaver (2001), a comprehensive classification can be made by activity type (e.g., shopping, surfing, bird-watching, cycling, etc.). On the other hand, the spectrum of activities can be classified on whether a tourist activity is an active or a passive one. Active tourists can be considered those who would travel to destinations for the main purpose of participating in various types of activities, while passive ones are those who consider participation in activities, other than those related to the 4Ss, as one negligible element of their trip. However, when mass travelers arrive to a self-contained resort, only a limited amount of travel occurs to areas outside the resort (Hills & Lundgren, 1977). As vividly illustrated by Macleod (1997), a typical day of passive tourists on Canary Island consists of:

a large and leisurely breakfast: coffee, cereal, bread, eggs and fruit, eaten on the terrace, followed by a midday stroll to the beach. Once on the beach the tourists made their own entertainment and were happy to do so. Most read books, listened to music or juggled on the beach and occasionally went for a swim, or, more daringly, body-surfed. Home-made snacks (banana and chocolate pancakes, vegetable omeletes, etc.) were purchased from beach vendors who were themselves tourists or short-term settlers. The afternoon on the beach was followed by a rest at the apartment, preparation for the evening activities, a cooked meal and a visit to the bars. (pp. 133–134)

Only a small number of studies have followed a comparative approach of tourist vacation preferences. Among these studies, Plog (1974, p. 57) categorized tourists into "psychocentrics," who prefer relaxed "sun n' fun" destinations, and "allocentrics," who prefer to discover "strange cultures" in "non-mass" tourism destinations. In an attempt to enhance Plog's theory, Nickerson and Ellis (1991) tried to differentiate the sources of energy as a result of stable personality characteristics. Cohen (1972), in his study on sociology of international tourism, reported that organized mass tourists are less adventurous compared to individ-

ual tourists, although Smith (1978) identified seven tourist types, namely explorer, elite, off-beat, unusual, incipient mass, mass, and charter. Ceballos-Lascurain (1991a, 1991b) compared mass tourist and ecotourist preferences and found that although both groups are keen to go to the natural areas, mass tourists have a more passive role with nature, and participate in activities that do not relate to the true concern over nature or ecology, such as watersports, jogging, and biking, although ecotourists tend to have a more active role by undertaking activities such as nature photography, botanical studies, and observing wildlife. Finally, a study undertaken in Australia by Loker-Murphy and Pearce (1995) found that 92.3% of backpackers tend to prefer more active holidays, compared to only 47.5% of other types of visitors.

Although in the last years there is increasing research evaluating tourist preferences, these studies deal mainly with environmental friendly activities. Among these studies, Niefer, da Silva, and Armend (2002) examined the interest of visitors to Superagul National Park, Brazil for practicing various activities and found that environmental friendly activities, such as observation of landscape and flora and fauna, were top rated. This was not unexpected, considering the type of tourists attracted by national parks.

Preferences are usually influenced by an individual's characteristics. Sociodemographics are among the easiest identifiable. According to various authors (e.g., Gayler, 1980; Hanson & Hanson, 1981; Pas, 1984), the more affluent and higher educated tourists tend to be more mobile, and, as a result, to undertake more activities, although the elderly and children tend to be the most spatially concentrated (Debagge, 1991; Driver & Tocher, 1979). Kelly (1978) found life stage as the best predictor of outdoor recreation participation compared to various other variables. Debbage's (1991) study of spatial behavior in Paradise Island, Bahamas, found that the socioeconomic characteristics of income, education, age, and occupation did not seem as main discriminators of tourists' preferences. On the other hand, a study by Ryan and Huyton (2000) found that in the Northern Territory, Australia, age affected preferences, with younger age groups being more likely to have a

sense of adventure. Differences also exist in the behavior across different nationalities. For example, Reid and Reid (1997) examined activities undertaken by tourists in Barbados and found significant differences between Americans, Britons, Canadians, Germans, and tourists from Trinidad.

Other factors that seem to play a fundamental role in determining tourists' preferences include the type of travel arrangements, type of accommodation, party size, and length of stay. It is well documented by many authors (e.g., Britton, 1982; Cohen, 1972; Husbands, 1986) that the independent traveler, who makes his or her own travel arrangements, tends to travel further afield, and as a result to undertake more activities, compared to the packaged tourist. Where the tourist stays also plays a pivotal role in explaining vacation preferences. Tourists staying in large, self-contained hotels are inclined to remain near the place of stay and visit fewer sites, in part because of the easily accessible facilities nearby (Debagge, 1991, p. 254). The size of the immediate travel group can also condition preferences. As Debagge (1991) reports, "the collective decision making associated with large travel groups tends to complicate activities undertaken, while the smaller group markets may be driven by their own unique spatial dynamics" (p. 255). Likewise, length of stay can be considered a major discriminator of spatial behavior and related activities, as found by Debbage (1991).

Tourism in Crete

Crete has remarkable natural, cultural, and historical resources (Anagnostopoulou, Arapis, Bouchy, & Micha, 1996; Andriotis, 2001). Although it has rich resources, the island today attracts, almost entirely, package tourists looking for the 4Ss (Andriotis, 2003a; Andriotis & Vaughan, 2003). For instance, Papanikos (2005) found that in 2002 the three main activities of visitors to Greece were swimming/sunbathing (87.6% of the total), dining outside the accommodation establishment (75.9%), and shopping (66.1%), with fourth priority activity the visitation of cultural sites (62.1%).

The majority of tourists visiting Crete prefer to stay at their hotels for sunbathing or walk in the vicinity of their hotels for dining, drinking, and relaxing. Only a small number practice other type

of cultural and environmental activities, such as visiting museums and archaeological sites or the natural assets of the island such as Samaria gorge and the palm forest of Vai. As stated by Andriotis (2003a), for Crete only adventurous tourists are apt to wander in long distance from their hotel to experience what it is considered authentic. Because of the physical hardship associated with the enervating effects of the climate, the majority of tourists enjoy walking only short distances from their accommodation and prefer to stay in areas where they will encounter desirable shops and attractions (Andriotis, 2003a; Weaver, 1993).

In 2005, more than 2.5 million tourists visited the island, more than 12 million overnights were recorded, and the island had more than 200,000 beds (Hellenic National Tourism Organisation, 2006). Crete is considered a family resort, with approximately 42% of total tourist arrivals representing families with children, 38% couples, and 20% singles (RITTS, 2003). It attracts mainly the younger segments of the market, with 49% of tourists belonging to the age group 18–35, 22% between the ages of 36–45, and 21% over 45 years of age (RITTS, 2003). Papanikos (2005) estimates that the average length of stay in Crete is 12.7 days, and each tourist spends for the whole tourist package €1,306.

The Cretan economy relies heavily on the tourism industry for its prosperity, mainly because a handful of other regional sectors, especially agriculture, commerce, transportation, construction, and services, are strongly related to tourism (Andriotis & Vaughan, 2004; Tzouvelekas & Mattas, 1995). For example, it has been estimated that approximately 40% of the local population are directly or indirectly involved in tourism activities (Anagnostopoulou et al., 1996; Region of Crete, 1995). However, up to now tourism development was directed to the increase of arrivals through the increase of the numbers of beds, rather than the attraction of better quality tourists and the provision of a better quality product (Andriotis, 2005, 2006).

The rapid increase in bed supply and the high number of competing destinations in the Mediterranean has increased tour operators' use of the island as a cheap mass destination. In effect, tour operators play a crucial role for the island's tour-

ism industry because they determine tourists' choice through advertising and promotion and due to the trend toward inclusive tour packages organized exclusively in origin countries (Andriotis, 2002a, 2002b). In addition, the island has a high seasonality problem, stemming from the fact that during the high summer period tourist facilities are utilized to capacity, while during the low season they are underutilized, and during the winter they are almost unused (Andriotis, 2001, 2003b; Vaughan, Andriotis, & Wilkes, 2000).

Methodology

Questionnaire Design

Given the scarcity of data on most aspects of activities undertaken by tourists visiting Crete, the current study was conducted. The questionnaire was designed following a review of tourists' activities while on vacation in Crete. The questionnaire contained three main parts. The first part inquired about visitors' general trip arrangements, such as the traveling party, length of stay, type of accommodation, and sources of information. The second part contained questions about respondents' nationality and sociodemographic characteristics (gender, marital status, age, education, income, and employment status). The third part asked respondents to indicate which activities they had undertaken, wished to undertake but were not available, or were available but they were not interested to undertake while in Crete. Vacation activities have been presented in five categories, as follows: environmental related, cultural, sporting, water based, and other (Table 3). Under each category, specific activities were listed. In total, 17 activities were included. In addition, the questionnaire offered the opportunity for respondents to indicate additional activities.

Sampling

The sample included tourists who visited Crete during the summer of 2005. Respondents were approached and asked to complete the questionnaire, while waiting at the lounges in one of the two International airports, located in the vicinity of the two largest cities of the island, Heraklion or Chania. Self-completion questionnaires were uti-

lized because are believed to provide the most reliable responses as respondents have the opportunity to review the complete questionnaire and fill in any questions not answered initially (Hurst, 1994). A main criterion for qualifying potential respondents was their age, which had to be at least 18. Also, the minimum stay criterion of four nights was implemented to ensure that the respondents had sufficient opportunity to experience various activities while on the island.

In total, 1,550 questionnaires were administered. In detail, 405 vacationers responded at Chania airport and 465 at Heraklio, a response rate of 52.3% and 60%, respectively. In more detail, 568 questionnaires were completed during the high season (15th of July up to 15th of August) and 302 questionnaires during the low season (20th of September up to 10th of October). The overall response rate was 56.1%.

Data Analysis

A number of statistical procedures were carried out for this article using the Statistical Package for the Social Sciences (SPSS, version 12.0). First, univariate statistics (frequency distributions, percentages, and means) were calculated where appropriate. Second, to identify differences between one of the 10 independent variables (age, gender, marital status, education, income, employment status, season, length of stay, party composition, and type of accommodation) and each of the dependent (activities), bivariate statistics were used. To identify statistically significant relationships between two nominal variables, chi-square tests were performed. Cramer's V was calculated (and is given in the text where appropriate) in order to identify the strength of the relationship. The main limitation faced in the use of chi-square is that in order to use this test, no more than 20% of cells should have expected frequencies of less than 5, and none should contain expected frequencies of less than 1. In instances where any of these happened, the chi-square was used for descriptive reasons, although its validity is questioned. For all Cramer's V calculations, the level of probability for rejecting the null hypothesis was based on a statistical relationship at the 0.05 level of confidence.

Analysis

General Profile of the Respondents

Table 1 presents the seven sociodemographic characteristics of the sample used as independent variables. The 870 respondents were divided between geographic origin as follows: West Europeans 90.4% (among which 23.3% were British, 22.1% were Scandinavians, 18.1% were Germans, and 4.8% were Italians), East Europeans 3.5%, and non-Europeans 1.3%. Slightly more than half of the respondents were female (52.2%) and 61% married. 36.9% were 46 years old or over; they had received a college degree (36.9%); the vast majority (76%) were employed; and slightly more than half (51.7%) had an income of less than

Table 1
Profile of Respondents

	<i>N</i>	%
Gender		
Male	408	47.8
Female	446	52.2
Marital status		
Married	519	61.0
Single	260	30.6
Separated/widowed/divorced	72	8.5
Age		
18–30 years	239	28.4
31–45 years	292	34.7
46+ years	311	36.9
Geographical origin		
British	198	23.3
Scandinavian	188	22.1
German	154	18.1
Italian	41	4.8
Other West Europeans	229	26.9
East Europeans	30	3.5
Non-Europeans	11	1.3
Education		
Below high school	131	15.7
High school	246	29.4
College/degree	306	36.6
Postgraduate and beyond	154	18.4
Income		
Less than €25,000	153	22.0
Between €25,000 and €50,000	207	29.7
Between €50,001 and €75,000	165	23.7
€75,001 or more	171	24.6
Employment status		
Employed	641	76.0
Retired	77	9.1
Student	70	8.3
Homemaker	43	5.1
Unemployed	12	1.4

€50,000. Attempts to test the representativeness of the sample were unsuccessful, because of lack of official data for specific market segments visiting the island.

Trip Arrangements

Table 2 presents the trip arrangement characteristics of respondents. The majority visited Crete with their partner (42.2%) or with their family and their children (38.4%), more than one third stayed in a five- or four-star hotel (39.3%), for 4–7 days (44.8%) or 14 days and more (39.9%). On average, each tourist stayed 10.7 days. Tourists selected Crete on the recommendation of friends and relations (42.9%), indicating that word of mouth is the most effective information source for travel decisions to Crete. In addition, previous visit was second in priority source of information to tourists (36.8%), followed by recommendation by travel agents and tour operators (32.8%).

Overall Responses

Respondents were asked to indicate the activities they undertook during their holiday in Crete

Table 2
Trip Arrangements

	<i>N</i>	<i>%</i>
Accommodation type		
Five- or four-star hotel	338	39.3
Three- or two-star hotel	237	27.6
Rented apartments	236	27.4
Other	49	5.7
Length of stay		
4–7 days	372	44.8
8–13 days	127	15.3
14 days+	331	39.9
Party composition		
With a partner	389	42.2
With family with children	354	38.4
With friends	136	14.8
Alone	27	2.9
Other	15	1.6
Sources of information		
Friends and relations	365	42.9
Previous visit	313	36.8
Travel agent/tour operator	279	32.8
Internet	219	25.7
Travel books/guides	191	22.4
Newspaper/TV	117	13.7
Total	1484	174.4

Responses do not add up to 100%, due to multiple answers.

out of a range of 17 proposed activities. They had also the opportunity to indicate additional activities not listed in the questionnaire. Table 3 presents descriptive statistics of the respondents' participation in activities. The most popular activities undertaken by tourists are rather informal, since 91.7% participated in activities characterizing the mass type, such as swimming, sunbathing, eating, and drinking. Also, activities such as visiting historical and archaeological sites (64%), observation of flora (53.9%) and fauna (47.7%), and guided excursions/tours (47.5%) were popular among respondents, although the least popular activity was hunting (1.5%). On the other hand, some tourists wished to visit local festivals and events (30.9%), to participate in agricultural activities (16.9%), to observe fauna (14.4%), to ride horses (13.8%), and to surf (13.5%), but such activities were not available at their destination. Finally, more than 82% of respondents were not interested in participating in activities such as hunting, fishing, gambling, golf, bicycle riding, and surfing, although such activities were available. In fact, most of the active type of activities came in last positions in terms of popularity.

Explanatory Variables of Tourist Vacation Preferences

Driver and Tocher (1979) support that people engage in recreational activities with the expectation of obtaining certain rewards. However, the rewards from a single activity are not the same for all people. Therefore, tourists were asked for details on certain sociodemographic characteristics that were considered to be probable determinants of activity participation. Cramer's *V* contingency coefficients were calculated to identify significant differences between the 10 independent variables and the 18 activities. In the results of the Cramer's *V*, not many statistical differences were evident as respondents displayed quite a high degree of similarity in their choices. However, some groups presented some differences.

An increasing number of scholars are incorporating nationality as a key variable to explain patterns in tourists' preferences and behaviors (Pizam & Sussman, 1995; Reisinger & Turner, 2002). This was also evident in the current study where

Table 3
Participation of Tourists to Activities

	Having Undertaken (%)	Wished to Undertake But Not Available (%)	Available But Not Interested (%)
Environmental Related			
1. Observation of flora	53.9	10.1	36.0
2. Observation of fauna	47.7	14.4	37.9
3. Trekking	15.0	10.2	74.8
Cultural			
4. Visiting historical and archaeological sites	64.0	5.9	30.1
5. Visiting local festivals and events	21.4	30.9	47.7
Sporting			
6. Bicycle riding	6.6	11.3	82.0
7. Golf	4.3	11.7	84.0
8. Horse riding	3.5	13.8	82.7
Water based			
9. Boat trips	37.2	10.2	52.6
10. Diving	16.5	11.6	71.9
11. Surfing	3.9	13.5	82.5
12. Fishing	3.1	10.5	86.4
13. Other water based sports	27.0	11.1	62.0
Other			
14. Guided excursions/tours	47.5	6.2	46.3
15. Gambling	5.8	9.9	84.3
16. Participation in agricultural activities	6.4	16.9	76.6
17. Hunting	1.5	10.9	87.6
18. Other activity	91.7	7.3	1.0

the major determinant of tourists' participation in activities was nationality (Table 4). More than 70% of non-Europeans and Germans were interested in observation of flora (Cramer's $V = 0.181$), more than 84% of non-Europeans and East Europeans visited historical and archaeological sites (Cramer's $V = 0.187$), 60% or more of non-Europeans participated in other water-based activities (Cramer's $V = 0.154$), and 73.1% of East Europeans participated in guided excursions/tours (Cramer's $V = 0.193$). On the other hand, the British have shown the lowest interest in participation of activities such as gambling (Cramer's $V = 0.134$), agricultural activities (Cramer's $V = 0.129$), and observation of flora and fauna (Cramer's $V = 0.174$). East and non-Europeans with more than 90% have shown the lowest interest in horse riding (Cramer's $V = 0.139$), and Scandinavians have shown the lowest interest for visiting local festivals and events (Cramer's $V = 0.126$) and undertaking boat trips (Cramer's $V = 0.184$). In brief, analysis of activity by market share shows that East Europeans and non-Europeans present many

commonalities, and Western Europeans, and mainly British, have shown the lowest interest for participation in activities. On the other hand, Italians have shown the highest interest to participate in most type of activities, although many of the activities demanded were not available at their destination.

Important associations also existed between visitors of different age, and, as a result, age was the second best discriminator related to tourist activities. More specifically, older tourists, as might be expected, were uninterested in most active activities (Table 5). In particular, they showed the higher lack of interest for activities, such as surfing (Cramer's $V = 0.100$), diving (Cramer's $V = 0.140$), horse riding (Cramer's $V = 0.140$), trekking (Cramer's $V = 0.096$), and other water-based activities (Cramer's $V = 0.125$), although they showed higher interest in nonactive activities such as observation of flora (Cramer's $V = 0.099$) and fauna (Cramer's $V = 0.099$). In addition, older respondents have shown lower interest in gambling (Cramer's $V = 0.091$).

Table 4
Preferences by Nationality

	Having Undertaken (%)	Wished to Undertake But Not Available (%)	Available But Not Interested (%)
Environmental related			
Observation of flora			
British	40.4	7.2	52.4
German	70.3	6.5	23.2
Italian	37.1	20.0	42.9
Scandinavian	52.6	9.6	37.8
Other West European	56.0	13.2	30.8
East European	57.7	15.4	26.9
Non-European	75.0	12.5	12.5
Observation of fauna			
British	35.2	9.9	54.9
German	61.5	13.3	25.2
Italian	39.4	27.3	33.3
Scandinavian	48.7	11.8	39.5
Other West European	49.5	17.0	33.5
East European	46.2	26.9	26.9
Non-European	42.9	14.3	42.9
Cultural			
Visiting historical and archaeological sites			
British	52.3	4.0	43.8
German	70.4	3.5	26.1
Italian	70.6	14.7	14.7
Scandinavian	53.1	9.3	37.7
Other West European	72.5	5.0	22.5
East European	84.6	11.5	3.8
Non-European	87.5	—	12.5
Visiting local festivals and events			
British	21.6	33.3	45.1
German	17.7	37.7	44.6
Italian	14.3	51.4	43.3
Scandinavian	20.7	21.4	57.9
Other West European	23.9	27.2	48.9
East European	20.8	33.3	45.8
Non-European	33.3	44.4	45.8
Sporting			
Horse riding			
British	4.5	11.5	84.0
German	1.7	14.9	83.5
Italian	5.9	32.4	61.8
Scandinavian	4.7	7.4	87.8
Other West European	2.6	18.8	78.6
East European	—	8.7	91.3
Non-European	11.1	11.1	91.3
Water based			
Boat trips			
British	33.3	4.7	62.0
German	30.3	18.2	51.5
Italian	45.7	11.4	42.9
Scandinavian	28.1	7.8	64.1
Other West European	51.4	10.3	38.4
East European	34.8	17.4	47.8
Non-European	44.4	—	55.6

Table 4
Continued

	Having Undertaken (%)	Wished to Undertake But Not Available (%)	Available But Not Interested (%)
Other water-based activities			
British	30.2	5.8	64.0
German	21.1	9.8	69.1
Italian	28.1	21.9	50.0
Scandinavian	18.1	10.4	71.5
Other West European	31.6	15.5	52.9
East European	26.1	17.4	56.5
Non-European	60.0	—	40.0
Other			
Guided excursions/tours			
British	37.4	2.3	60.2
German	41.6	8.0	50.4
Italian	62.9	11.4	25.7
Scandinavian	38.9	7.6	53.5
Other West European	61.6	6.3	32.6
East European	73.1	7.7	19.2
Non-European	22.2	11.1	66.7
Gambling			
British	1.4	7.9	90.6
German	3.6	14.4	82.0
Italian	6.9	13.8	79.3
Scandinavian	5.1	8.1	86.8
Other West European	11.5	10.3	78.2
East European	9.5	9.5	81.0
Non-European	—	—	—
Participation in agricultural activities			
British	3.9	14.4	81.7
German	2.5	19.7	77.9
Italian	2.9	26.5	70.6
Scandinavian	11.9	11.2	76.9
Other West European	7.7	18.7	73.5
East European	4.2	25.0	70.8
Non-European	—	25.0	75.0

Regardless of the sociodemographic characteristics of tourists, the temporal constraint plays a key role in dictating what an individual will, or will not, do while visiting a destination. Tourism is often affected by temporal effects, as many tourists' activities are seasonal (Gartner, 1986, p. 638). This was evident in the current study, where respondents reacted differently during the two time periods. As a result, season of visit was the third best discriminator as far as participation in activities is concerned. The cross-tabulations shown in Table 6 indicate respondents from the high season were more likely to undertake water-based activi-

ties such as diving (Cramer's $V = 0.180$) and other (Cramer's $V = 0.135$), compared to respondents from the low season. This may be a result indicating that fewer opportunities exist for water-based activities during the low season. On the other hand, tourists visiting Crete in the low season preferred more to observe the flora (Cramer's $V = 0.123$) and the fauna (Cramer's $V = 0.112$). Also, the percentage of tourists wishing to undertake activities such as horse riding (Cramer's $V = 0.125$), golf (Cramer's $V = 0.100$), and gambling (Cramer's $V = 0.103$) during the high season was higher,

Table 5
Preferences by Age

	Having Undertaken (%)	Wished to Undertake But Not Available (%)	Available But Not Interested (%)
Environmental related			
Observation of flora			
18-30	45.7	11.9	42.2
31-45	50.4	11.0	38.8
46+	62.2	11.4	29.3
Observation of fauna			
18-30	40.3	14.6	45.1
31-45	45.0	14.0	40.9
46+	55.7	14.3	29.9
Trekking			
18-30	14.3	16.3	69.4
31-45	16.2	7.9	75.9
46+	13.9	7.4	78.7
Sporting			
Horse riding			
18-30	4.0	20.0	76.0
31-45	3.6	13.8	82.7
46+	2.8	8.4	88.8
Water based			
Diving			
18-30	20.3	18.8	60.9
31-45	17.4	8.9	73.6
46+	11.2	7.6	81.3
Surfing			
18-30	4.7	19.5	75.8
31-45	3.6	13.1	83.3
46+	3.7	7.9	88.3
Other water-based activities			
18-30	31.5	16.3	52.2
31-45	28.8	10.4	60.8
46+	20.1	7.4	72.5
Other			
Gambling			
18-30	7.4	13.8	78.7
31-45	4.9	11.2	84.0
46+	5.0	5.5	89.5

Table 6
Preferences by Season

	Having Undertaken (%)	Wished to Undertake But Not Available (%)	Available But Not Interested (%)
Environmental related			
Observation of flora			
High	49.5	11.2	39.4
Low	62.3	8.1	29.6
Observation of fauna			
High	43.8	15.0	41.2
Low	55.4	13.2	31.4
Sporting			
Horse riding			
High	3.0	16.9	80.1
Low	4.4	8.0	87.6
Golf			
High	4.6	13.9	81.5
Low	3.7	7.4	88.9
Water based			
Diving			
High	19.3	13.6	67.1
Low	10.9	7.9	81.2
Other water-based activities			
High	30.0	12.7	57.3
Low	21.0	7.9	71.2
Other			
Gambling			
High	5.8	12.2	82.0
Low	5.7	5.7	88.6

although these types of activities were not available at their destination.

To summarize, many traditional explanations of tourists' participation in activities did not seem as applicable in the case of Crete. In particular, factors that were not significant included the socioeconomic characteristics (gender, marital status, education, employment status, income) and the trip arrangement characteristics (accommodation type and length of stay). Also, it is noteworthy that differences among the most popular activities, such as swimming, sunbathing, eating, and drinking, were not statistically significant, since due to the mass type of tourists visiting the island most visitors tended to practice such activities. On the other hand, for more specific activities that had participation rates of 64% or under, significant differences across different sociodemographics occurred more often.

Implications and Conclusion

This article used as a sample 870 tourists visiting the island of Crete in the summer of 2005 to examine whether activities offered are able to satisfy demand, or amendments are required in order to provide a diversified tourism product. The results indicate that the vast majority of tourists visiting Crete undertake mainly passive and informal type of activities. Indeed, activities of the sport type, such as bicycle riding, golf, horse riding, and surfing, are far less often undertaken and although various types of alternative types of activities are available, tourists are not interested. This is in line with past research (e.g., Anagnostopoulou et al., 1996; Andriotis, 2003a; Briassoulis, 2003) supporting that tourists in Crete are of the mass type.

The findings of this study with respect to the activities of tourists visiting Crete revealed interesting issues, as far as different market segments are concerned. Although the Cramer's *V* calculations did not reveal strong relationships between the dependent and independent variables, it was evident that the most significant characteristic affecting tourists' behavior within the sample was nationality, as found also in other studies, such as Kompoula (2004), Kozak (2002), and Reid and Reid (1997). Following this finding, it can be assumed that the provision of specific activities can attract tourists of different nationalities. For example, since 51.4% of Italians and 44.4% of non-Europeans wished to attend local festivals and events, but this type of activity was not available, provision of facilities for such types of activities may increase these tourists' overall satisfaction and their frequency of visitation.

The second best discrimination was age. This study confirms the findings of past research (e.g., Debbage, 1991; Driver & Tocher, 1979; Fleischer & Pizam, 2002), reporting that age is a main discriminator of tourists' preferences. Because older aged tourists tend to travel off-season (Andriotis, 2005; Fleischer & Pizam, 2002), the attraction of the senior citizen market segment can be used as a strategy to reduce the seasonality problem. In doing so, there is a need to provide facilities mostly required by the older market segments. For example, since there were older tourists wishing to observe the fauna, but such facilities were not

available, the establishment of national parks, where tourists will have the opportunity to observe the fauna, may increase off-season visitation.

A third in significance variable affecting tourists' preferences within the sample was season of visit. This finding was not unexpected, since different seasons attract different types of visitors and there are various regular and recurring temporal changes in natural phenomena at a particular destination, which are usually associated with climate, and, as a result, influence demand for specific activities. To increase off-season visitation, programs for the attraction of new markets are required, including conference/incentive tourism and specialized types of tourism such as nautical, sport, cultural, agrotourism, ecotourism, mountain, and trekking tourism.

Apart from seasonality, two major problems faced by the Cretan tourism industry are low spending power and quality of incoming tourists (Andriotis, 2000, 2003b). To overcome these problems, future policy-making should capitalize on the available natural, historical, and cultural resources upon which the destination has traditionally been reliant. Provision of additional activities can contribute to this target. For example, a study undertaken by Papanikos (2005) found that if every tourist visiting Greece participates in one more activity, the average tourist spending will increase €50. This, in conjunction with the finding that respondents complained for not having the opportunity to participate in activities such as local festivals and events, because such options were not available, proves that destination managers should seriously consider the incorporation of additional activities that are usually considered incompatible with package holidays; they could provide new, and, to an extent, innovative products for individual market segments, such as city walks, agricultural activities, mountaineering, etc. In addition, policy actions should be designed to enhance tourists' awareness about activities and redirect attention away from the conventional mass tourism, toward the particular requirements of contemporary tourists by putting the demand at the focal point of any future tourism strategy. In other words, a more consumer-oriented approach should be followed as far as offered activities are concerned.

From this study it was evident that respondents' preferences were different in two time periods. However, the research design utilized in this study was misspecified due to time and monetary constraints. Giving an annual time frame, with a 3-month split between sampling periods, might affect research results and consequently promotion and marketing efforts. Therefore, the subject of temporal fluctuations in activities participation should be relevant to further research.

When policy-makers and entrepreneurs are not aware of the activities required by tourists, they may not be able to determine what specific activities may bring the desired benefits to tourists, and, hence, they would not be able to design additional activities or improve existing activities. Although this research was subject to several limitations, mainly limited time, low budget, and refusal of a significant number of potential respondents to participate in the survey, it was possible to identify tourists' demand for activities. However, tourists' preferences did not always match the product offered in Crete. The brand of Crete is not always contemporary and relevant to today's visitor expectations. Therefore, there is a need for Crete to develop a strong identity that will encapsulate the island's unique attributes, which could be marketed to those segments representing the best potential for increased return on investment. A repositioning of the island's brand identity could pervade all forms of communication and stimulate the core of visitors' behavior and decision-making process to position the island of Crete competitively in the global marketplace. However, this study has not made clear whether other activities such as shopping, city walks, mountaineering, etc. will be welcomed by incoming tourists. It may be useful to extend this research further by incorporating activities, other than the ones examined in this study, and investigating whether incoming tourists are prepared to consume such products.

A main shortcoming of this study was, also, that there was no question about the willingness of tourists to pay for the provision of additional activities. As a result, it was not possible to provide information regarding the financial viability of tourists' interests, or even at least the strength of these expressed interests. Future policy implications will need to come from tourists' willingness

to pay for activities, rather than a mere expression of interest. Therefore, future research should examine how prepared tourists are to finance these provisions in the first place. In doing so, it will become ultimately feasible to determine the success of tourism policies and initiatives, and thus their viability, as far as provision of activities is concerned.

This article is a destination specific study. Since hardly any studies of mass tourists' activities have been undertaken, it was not possible to compare the findings to other pieces of research in order to provide implications and draw lessons for other destinations with similar characteristics. In addition, limited past research has not made it clear whether participation of tourists in activities while in Crete differ from other mass tourist destinations. It may be useful to extend this research further by conducting surveys on other mass destinations, in an attempt to identify whether differences and similarities exist between destinations, before any definite statements can be made about tourists' preferences. In addition, this article did not provide evidence to justify if tourists' preferences are linked to their motivations. These issues need to be investigated further.

To conclude, the major aim of this article was to identify whether tourists' preferences are able to satisfy demand for the island of Crete, or amendments are required in order to provide a diversified tourism product. Ultimately, this statement is difficult to digest, mainly because of the difficulty to identify the types of tourists visiting the island. In particular, this article referred to the mass tourism demand, for the reason that, as many studies report (Anagnostopoulou et al., 1996; Andriotis, 2003a; Briassoulis, 2003), the island of Crete is considered as a mass tourism destination due to the trend toward inclusive tour packages organized exclusively by foreign tour operators (Andriotis, 2002a; 2002b). However, one should not forget that various niche markets exist within this ensemble, such as backpackers or ecotourists who might prefer more specific activities that have not been examined in this study and usually do not clearly transpire in general surveys. Implicitly, it is quite difficult to study different niche markets and to distinguish the types of tourists on the island. For example, it is not easy to characterize a

particular tourist as alternative, simply because he/she has visited the Samaria Gorge, or one or more cultural attractions in the island. This is something that this study did not address, and admittedly it is not an easy task. Thus, the results of this study are seriously hindered by this shortcoming, and future tourism research should investigate the types of tourists visiting the island and the demand for activities of segments other than the mass type.

References

- Akama, J. S., & Kieti, D. M. (2003). Measuring tourist satisfaction with Kenya's wildlife safari: A case study of Tsavo West National Park. *Tourism Management, 24*, 73–81.
- Anagnostopoulou, K., Arapis, T., Bouchy, I., & Micha, I. (1996). *Tourism and the structural funds—the case for environmental integration*. Athens: RSPB.
- Andriotis, K. (2000). *Local community perceptions of tourism as a development tool: The island of Crete*. PhD thesis, Bournemouth University, Bournemouth.
- Andriotis, K. (2001). Tourism planning and development in Crete. recent tourism policies and their efficacy. *International Journal of Sustainable Tourism, 9*(4), 298–316.
- Andriotis, K. (2002a) Local authorities in Crete and the development of tourism. *The Journal of Tourism Studies, 13*(2), 53–62.
- Andriotis, K. (2002b) Dependency on tour operators. problem faced by the Cretan tourism businesses and the views of their owners/managers. *International Journal of Hospitality and Tourism Administration, 4*(3), 23–48.
- Andriotis, K. (2003a). Coastal resorts morphology: The Cretan experience. *Tourism Recreation Research, 28*(1), 67–76.
- Andriotis, K. (2003b). Tourism in Crete. a form of modernisation. *Current Issues In Tourism, 6*(1), 23–53.
- Andriotis, K. (2005). Seasonality in Crete. problem or a way of life? *Tourism Economics, 11*(2), 207–224.
- Andriotis, K. (2006). Hosts, guests and politics. coastal resorts morphological change. *Annals of Tourism Research, 33*(4), 1079–1098.
- Andriotis, K., & Vaughan, D. R. (2003). Urban residents' attitudes towards tourism development: The case of Crete. *Journal of Travel Research, 42*(2), 172–185.
- Andriotis, K., & Vaughan, D. R. (2004). The tourism workforce and policy: Exploring the assumptions using Crete as the case study. *Current Issues in Tourism, 7*(1), 66–87.
- Bogari, N. B., Crowther, G., & Marr, N. (2004). Motivation for domestic tourism: A case study of the kingdom of Saudi Arabia. *Tourism Analysis, 8*, 137–141.
- Briassoulis, H. (2003). Crete: Endowed by nature, privileged by geography, threatened by tourism? In B. Bramwell (Ed.), *Coastal mass tourism. diversification and sustainable development in Southern Europe* (pp. 114–132). London: Channel View Publications.
- Britton, S. G. (1982). The political economy of tourism in the third world. *Annals of Tourism Research, 9*(2), 331–358.
- Ceballos-Lascurain, H. (1991a). Tourism, ecotourism, and protected areas. In J. A. Kusler (Ed.), *Ecotourism and resource conservation—a collection of papers* (Vol. 1, pp. 24–30). Madison: Omnipress.
- Ceballos-Lascurain, H. (1991b). Tourism, ecotourism and protected areas. *Parks, 2*(3), 31–35.
- Cohen, E. (1972). Toward a sociology of international tourism. *Social Research, 39*, 164–182.
- Correia, A., & Crouch, G. I. (2004). Tourist perceptions of and motivations for visiting the Algarve, Portugal. *Tourism Analysis, 8*, 165–169.
- Crompton, J. L. (1979). Motivations for pleasure vacation. *Annals of Tourism Research, 6*, 408–424.
- Dann, G. M. S. (1981). Tourist motivation. an appraisal. *Annals of Tourism Research, 8*(2), 187–219.
- Debagge, K. G. (1991). Spatial behavior in a Bahamian resort. *Annals of Tourism Research, 18*, 251–268.
- Driver, B., & Tocher, S. R. (1979). Toward a behavioural interpretation of recreational engagements with implications for planning. In C. S. van Doren, G. B. Priddle, & J. E. Lewis (Eds.), *Land and leisure, concepts and methods in outdoor recreation* (pp. 86–104). London: Methuen.
- Dunn, R. E. L., & Iso-Ahola, S. E. (1991). Sightseeing tourists' motivation and satisfaction. *Annals of Tourism Research, 18*(2), 226–237.
- Euthimiadou, V. (2001, April). *The relationship between urban visitors motivation, activities and satisfaction with the city*. Paper presented in the Growth in Travel and Tourism TTRA European Conference, Kiruna, Sweden.
- Fallon, P., & Schofield, P. (2004). First-timer versus repeat visitor satisfaction: The case of Orlando, Florida. *Tourism Analysis, 8*, 205–210.
- Fleischer, A., & Pizam, A. (2002). Tourism constraints among Israeli seniors. *Annals of Tourism Research, 29*(1), 106–123.
- Flognfeldt, T. (1999). Impacts of short-time visitors on local communities in the mountain areas of Southern Norway. *International Journal of Tourism Research, 1*, 359–373.
- Gartner, W. C. (1986). Temporal influences on image change. *Annals of Tourism Research, 13*(4), 635–644.
- Gayler, H. J. (1980). Social class and consumer spatial behavior: Some aspects of variation in shopping patterns in Metropolitan Vancouver, Canada. *Transactions of the Institute of British Geographers, 5*(4), 427–445.
- Hanson, S., & Hanson, P. (1981). The travel-activity patterns of urban residents: Dimensions and relationships to socio-demographic characteristics. *Economic Geography, 57*(4), 332–347.
- Haywood, L. J., Kew, F. C., Branham, P., Spink, J., Capen-

- erhurst, J., & Henry, I. (1995). *Understanding leisure* (2nd ed.). Cheltenham: Stanley Thornes.
- Hellenic National Tourism Organisation. (2006). *Statistics*. Athens: Author.
- Hills, T. L., & Lundgren, J. (1977). The impact of tourism in the Caribbean: A methodological study. *Annals of Tourism Research*, 4, 248–267.
- Hurst, F. (1994). En route surveys. In J. R. B. Ritchie & C. R. Goeldner (Eds.), *Travel, tourism and hospitality research* (2nd ed.) (pp. 453–471). New York: Wiley.
- Husbands, W. C. (1986). Leisure activity resources and activity space formation in periphery resorts: The response of tourists and residents in Barbados. *Canadian Geographer*, 30(3), 243–249.
- Kelly, J. (1978). *Outdoor recreation prediction: A comparative analysis*. Champaign, IL: University of Illinois.
- Komppula, R. (2004). Difference in image of Finland in seven target markets in Europe. In *Tourism: The State of Art II Conference*. Glasgow: Strathclyde University.
- Kozak, M. (2001). Comparative performance of tourist satisfaction with destinations across two nationalities. *Tourism Management*, 22, 391–401.
- Kozak, M. (2002). Comparative analysis of tourist motivations by two nationality and destinations. *Tourism Management*, 23, 221–232.
- Kozak, M. (2003). Measuring tourist satisfaction with multiple destination attributes. *Tourism Analysis*, 7, 229–240.
- Kozak, M., & Rimmington, M. (2000). Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination. *Journal of Travel Research*, 38, 260–269.
- Loker-Murphy, L., & Pearce, P. L. (1995). Young budget travelers: Backpackers in Australia. *Annals of Tourism Research*, 22(4), 819–843.
- Macleod, D. V. L. (1997). 'Alternative' tourists on a Canary Island. In S. Abram, S. Waldren, & D. V. L. Macleod (Eds.), *Tourists and tourism. Identifying people and places* (pp. 129–147). Bergman: Oxford.
- Murphy, A., & Williams, P. W. (1999). Attracting Japanese tourists into the rural hinterland: Implications for rural development and planning. *Tourism Management*, 20, 487–499.
- Nickerson, N. P., & Ellis, G. D. (1991). Travel types and activation theory: A comparison of two models. *Journal of Travel Research*, 29(3), 26–31.
- Niefer, I. A., da Silva, J. C. G. L., & Armend, M. (2002). Analysis of the visitors of Superagul National Park, Brazil. *Current Issues in Tourism*, 5(3&4), 208–221.
- Papanikos, G. Th. (2005). *Greek tourist earnings* [in Greek]. Athens: ITEP.
- Pas, E. L. (1984). The effects of selected sociodemographic characteristics on daily travel activity behaviour. *Environment and Planning, A*, 16, 571–581.
- Pizam, A., & Sussman, S. (1995). Does nationality affect tourist behaviour? *Annals of Tourism Research*, 22(4), 901–917.
- Plog, S. (1974). Why destination areas rise and fall in popularity? *The Cornell Hotel and Restaurant Administration Quarterly*, 14(3), 13–16.
- Region of Crete. (1995). *Tourism profile of Crete*. Unpublished manuscript. Heraklio.
- Reid, L. J., & Reid, S. D. (1997). Traveler geographic origin and market segmentation for small island nations: The Barbados case. *Journal of Travel and Tourism Marketing*, 6(3/4), 5–22.
- Reisinger, Y., & Turner, L. W. (2002). Cultural differences between Asian tourist markets and Australian hosts: Part 1. *Journal of Travel Research*, 40(3), 295–315.
- RITTS. (2003). *Socio-economic definition of the wider environment of Crete region*. Retrieved from <http://www.ritts-crete.gr/>
- Ross, E. L. D., & Iso-Ahola, S. E. (1991). Sightseeing tourists' motivation and satisfaction. *Annals of Tourism Research*, 18, 226–237.
- Ryan, C., & Huyton, J. (2000). Who is interested in aboriginal tourism in the Northern Territory, Australia? a cluster analysis. *Journal of Sustainable Tourism*, 8(1), 53–88.
- Smith, V. L. (1978). *Hosts and guests: The anthropology of tourism*. Oxford: Blackwell.
- Stoeckl, N., Greiner, R., & Mayyocchi, C. (2006). The community impacts of different types of visitors: An empirical investigation of tourism in North-west Queensland. *Tourism Management*, 27(1), 97–112.
- Taylor, D. T., Fletcher, R. R., & Clabaugh, T. (1993). A comparison of characteristics, regional expenditures, and economic impact of visitors to historical sites with other recreational visitors. *Journal of Travel Research*, 31, 3–13.
- Tribe, J., & Snaith, T. (1998). Holiday satisfaction in Varadero, Cuba. *Tourism Management*, 19(1), 25–34.
- Tzouvelekas, V. M., & Mattas, K. (1995). Revealing a region's growth potential through the internal structure of the economy. *International Advances in Economic Research*, 1(3), 304–314.
- Vaughan, R., Andriotis, K., & Wilkes, K. (2000, June). *Characteristics of tourism employment: The case of Crete*. Paper presented at the 7th ATLAS International Conference "North-South: Contrasts and Connections in Global Tourism," Savonlinna, Finland.
- Venkatesh, U. (2006). Leisure—meaning and impact on leisure travel behaviour. *Journal of Services Research*, 6, 87–108.
- Weaver, D. B. (1993). Model of urban tourism for small Caribbean islands. *Geographical Review*, 83(2), 134–140.
- Weaver, D. B. (2001). Ecotourism as mass tourism: Contradiction or reality? *Cornell Hotel and Restaurant Administration Quarterly*?, 104–112.

