

The Views of Greek Mountain Travelers on Mountain Tourism During Summertime: A Questionnaire Web-Based Analysis

Natali Dologlou and Vaios Kotsios

Abstract Almost 78 % of Greece is mountainous, with uniquely beautiful landscapes, rich culture and warm hospitality. Local wintertime tourism, which has traditionally been a strong pillar for the economies of mountainous areas, could decrease significantly in the future, due to economic crisis, but also due to decreased snow coverage according to the predicted climate trends for the coming years. This paper is based on the idea to address the crisis in the mountainous areas of Greece, and ski destinations in particular, by an all-year model of operation that could alleviate seasonality (at least in part) and yield important social and financial benefits for the local communities. Our thesis is motivated by successful summer-tourism practices of ski centers around the world. Are Greek people actually willing to visit ski destinations after the short ski season, and if so what are their preferences on possible activities, services and facilities in ski centers (assuming they would operate all year long)? To answer such questions, we created a self-administered, web-based questionnaire that was circulated to the public via e-mail and social media for a period of one month. About 460 people, most of them fans of the Greek mountains, completed the questionnaire. We present and discuss data collected and analyzed, focusing on the participants' preferences on possible activities, services and organizational aspects of mountain tourism during summertime.

Keywords Visitor preferences • Summer mountain tourism • Ski centers • Greece

1 Introduction

Almost 78 % of Greece is mountainous (Nordregio, 2004, p. 29). According to Nezis (2010), Greece has 413 mountains above 1,000 m; notably, 53 of them are over 2,000 m, while 138 are between 2,000 and 1,500 m. Most of these areas face numerous socioeconomic problems such as isolation, abandonment, population

N. Dologlou (✉) • V. Kotsios

Metsovion Interdisciplinary Research Center, National Technical University of Athens,
Patission 42, 10682 Athens, Greece

e-mail: ndolog@central.ntua.gr; pa07vaik@survey.ntua.gr

ageing, poverty, and marginally profitable agricultural activities due to their small scale and the hard climate conditions during winter (Michailidou & Rokos, 2011).

The mountains of Greece offer uniquely beautiful landscapes, rich culture and warm hospitality. However, the respective touristic offerings are unstructured and fragmented. Moreover, these areas are vastly underrepresented if not completely missing in almost all national marketing campaigns, especially the ones targeting foreign tourists. To make matters worse, local wintertime tourism, which has traditionally been a strong pillar for the economies of mountainous areas, could decrease significantly in the future, due to high unemployment, dropping salaries and rising fuel prices. Another, probably even more important factor that could impact winter tourism in the longer term, even in the absence of the current economic crisis, is the decrease in snow coverage according to the predicted climate trends for the coming years. As previous work mentions: “In the long run, ‘world-wide’, ski visitor numbers are projected to decline due to decreasing overall snow depths and annual real ticket price changes are inevitable to keep skiing operations profitable” (Damm, Köberl, & Prettenhaler, 2014, p. 8). But note that, in the case of Greece, an increase in the ski-pass price, which is already quite significant compared to the average family income, may reduce the number visitors even further.

One way to increase the number of people who visit mountainous areas is to creatively exploit the nearby ski centers, by extending their scope of operation beyond the “usual” skiing season, also during summertime. An all-year business model could alleviate seasonality (at least in part) and yield important social and financial benefits for the local communities. Unfortunately, while this approach is common practice for ski centers around the world, it is a rare phenomenon for the Greek landscape. As discussed in (Dologlou 2013), a radical change in attitude is required, including smooth cooperation between the respective public and private stakeholders, education that promotes physical activities and the enjoyment of nature, development of non-wintertime leisure/sport activities and services, clear and suitable legal frameworks, and promotion of mountain tourism abroad.

In this paper, we investigate the operation of Greek ski centers during the summer season based on data collected via an anonymous questionnaire that was published on the web and disseminated through social media, and was completed by 459 people on a voluntary basis. We start by reviewing previous research and surveys related to mountain visitors and ski centers around the world, emphasizing the possible impact of climate change on ski centers. Then, we describe the research methodology followed by a descriptive data and variables analysis. Finally, we discuss our main findings and their possible implementations, and conclude the paper.

2 Literature Review

Greece has around 20 small ski centers in different areas of the country. It is not by chance that the major ones (Parnassos and Kalavrita) are located near Athens, where about 35 % of the Greek population lives (Hellenic Statistical Authority 2013, data for 2011). Some ski centers did not operate at all during this winter, while many others face operational, financial and/or bureaucratic problems. Notably, there is no single ski center that operates regularly beyond the (very) short Greek skiing season.

“Mountain areas are second only to coasts and islands as popular tourism destinations, generating 15–20 % of annual global tourism” (UNEP, 2007, p. 11). Several ski destinations around the world are identified as leisure and tourism destinations beyond the skiing season, offering a diversified touristic product comparable to this of more general-purpose mountain tourism. According to Cockerell (1994) “diversifying and developing year-round facilities and activities could be the single most important move by mountain resort operators and other suppliers to help ensure that mountain tourism flourishes” (p. 34). The areas that typically offer the most extensive accommodation and leisure ecosystem, and hence are the main beneficiaries of such an approach, are the ones closest to ski destinations. However, these benefits also come at the price of abandoning traditional activities. For instance, research conducted for the central Spanish Pyrenees (Lasanta, Laguna, & Vicente-Serrano, 2007, p. 1326) shows that those municipalities nearest to ski centers “show positive demographic changes and a negative evolution of primary activities. The municipalities more distant from the ski resorts show the opposite pattern”. In Greece, similar demographic trend can be seen in some ski destinations, due to winter tourism. Unfortunately, the negative evolution of primary activities does not only occur in ski destinations, but is a general pattern of Greek mountainous areas.

In a recent study, Dologlou (2013) provides an overview of the most popular all-year-round nature-based recreation activities and services, which are offered in ski centers around the world, e.g.,: hiking; trekking; climbing; canyoning; mountain biking; chairlifts and elevators for scenery view; water sports and activities in nearby lakes/river; mini-golf; golf; disc golf; wine tasting and gastronomy; conferences/seminars; concerts and festivals; museums; special activities for kids/families; athletic and kids camps; parachuting; bungee jumping; indoor and outdoor water parks; tennis; football; volleyball; horse riding; paintball; archery; adventure and thematic parks; climbing walls; tubes, star observation; wild life observation; spas. The list goes on, and is getting longer. New innovative leisure and sport activities and services full of creativity are being developed in order to attract new visitors and to compete in the market of mountain tourism.

According to Ski Area Management research (SAM, 2011, pp. 46–47) in 100 ski centers of North America, 44 % operate all year long. Mountain bike is the most popular activity during summer (61 %), while ¼ of the ski centers reported increased revenues of at least 20 % due to summertime operation. Another study

on US ski resorts (Arseneault, 2014) shows that during the summer of 2012 there was an average of 48,000 visitors per ski center, with 30 % of visitors using the ski chairlifts just to have a relaxing ride and enjoy the scenery. An earlier study reports that many alpine ski centers worldwide have at least one chairlift operating in the summer, and that some ski centers accept more than 2,50,000 visitors each summer (Needham, Wood, & Rollins, 2004). In the Alps, for 65 % of visitors, hiking is the main leisure activity during summer (Virgil, 2008).

It was quite interesting to see a recent presentation of Switzerland Tourism, an organization financed by the Swiss government, where the Swiss summer is, quite humorously, characterized as unadventurous, unsexy and unprofitable. This, due to the 12.3 % drop of summer mountain tourism in 2012 (Nydegger 2014). But note that this criticism comes while the country had around 20 million overnight stays in its mountainous zone during summer (Swiss Agency for Development and Cooperation (SDC), 2012). Obviously, for Switzerland Tourism, it is not enough to sit down and hope for better days to come by themselves; instead, they aim to re-invent summer tourism through a national plan that results in an even more attractive offering for the global mountain tourism market.

Another major player in summer mountain tourism, Austria, shows surprising findings: an almost equal distribution of overnight stays per month for foreign visitors during summer and winter holidays (Preslmair, 2012). This reflects the high reputation of Austria as a summer tourism destination, as well as the trend of visitors who are willing to spend their holidays in the mountains. In fact, Austria is a more popular touristic destination, ranked in the 5th overall place among EU-28 countries; while the strongly sea-summer oriented model of Greece yields just a 7th place (EUROSTAT, 2012).

Specific studies have been conducted on the preferences of ski centers visitors in the summer (Needham et al., 2011; Needham & Rollins, 2005), some of which also investigate the visitor's sensitivity with respect to environmental issues (Kelly & Williams, 2007; Needham & Little, 2013). There are also surveys on specific subjects and/or areas, e.g., surveys in Switzerland and Spain that assess the importance of mobile (smartphone) applications for mountain destinations and ski centers (Grèzes, Crettol, Sarrasin, Zumstein, & Perruchoud, 2013; Peñarroya, 2014). In general we agree with Keller (2012) that "mountain tourism research is too local and not enough international" (p. 28).

Scott and Steiger (2013) explores the sensitivity of the ski industry with respect to the climate change over the last three decades. The US National Ski Areas Association (NSAA) produces the annual "sustainable slopes" reports, which among other environmental issues encourage ski areas to participate to the «Climate Challenge» program designed to give technical support and recognition to the ski areas that reduce their carbon footprint (NSAA 2013). Due to climate change "there is a slow realisation that attention needs to be given to increasing tourism in the summer months if these seasonal alpine destinations are to survive" (Thomas, Triandos, & Russell, 2005, p. 5). Similar, Scott and McBoyle (2007) study the adaptation strategies for the climate change that are followed by ski industry operators and stakeholders, mentioning four-season operation as one of the options

that can amortize their expensive facilities, boost personnel employment and support financial and social local communities. According to the European Center for Climate Adaptation Tourism Austria report, winter skiing tourism will drop in the near future (2030), especially in ski centers below 1,500 m. But the climate change is not just bad news for these areas. As mentioned in the 5th report of the Intergovernmental Panel on Climate Change (IPCC, 2014), “tourism in mountainous areas may benefit from improved climatic conditions in summer” (p. 16), as higher temperatures will, for example in Alps, increase summer tourism duration and attractiveness.

The European Center for Climate Adaptation, Tourism Greece report, states that Greece will be one of the losers from climate change, given the high ratio of international tourists and the high proportion (20 %) of employment from tourism. If the predictions turn out to be true, in the near future, the Greek sea-summer tourism will most likely decrease: high summer temperatures will discourage a large number of tourists from aboard to visit the Greek coasts and islands. On the other hand, as noted above, this could be a good opportunity to develop Greece’s mountain tourism. Comfortable temperatures, beautiful landscapes and unique traditional villages (e.g., the region of Epirus alone, has 82 villages officially characterized as traditional) can provide for an attractive package. Moreover, Greece has a unique feature: despite its strongly mountainous character, no single village in the country is more than 137 km away from the sea (Heinrichs, 2002), thus making it perfectly possible to combine mountain tours with a dip in blue waters.

One problem that researchers face is the lack of significant statistical data (e.g., overnight stays for mountainous accommodation per month, customer flow for companies offering mountainous activities, etc.) for mountainous tourism in Greece, winter or summer. In the recent past, efforts were made to investigate the behaviour of Greece’s ski areas visitors, but the few published studies focus on the skiing tourism sector. Christopoulou and Papadopoulos (2001) conducted a questionnaire-based survey to evaluate winter mountain tourism demand in Pertouli ski center and the surrounding communities. Another survey, which included a sample of Greek skiers (N: 301) in 3–5 Pigadia ski center investigates constraints on recreational skiing participation (Avourdiadou, Alexandris, & Kouthouris, 2007). Research in 11 Greek ski centers based on questionnaires (N: 499) concluded that visitors most value easy access to the ski destination and the price of lifts and lunch (Siomkos, Vassiliadis, & Lathiras, 2006). Again, using questionnaires (N: 1760), Vassiliadis, Priporas, and Andronikidis (2013) analyzed visitor behaviour in 13 ski centers of Greece, structuring activities in different time blocks of the day. A research on the constraints of visitor’s leisure activities in two Greek ski centers (N: 225) was conducted by Andronikidis, Vassiliadis, Priporas, and Kamenidou (2006). Findings show that, in order to maintain or to increase the number of visitors, marketing plans must consider the specific characteristics of different visitor types. The research study of Zampetaki (2012) on the development strategies of ski centers in Greece leads to similar conclusions. Karasoulas (2012) studies hedonic pricing for the Parnassos ski center using questionnaires (N: 690). The results provide an indication of the characteristics valued by visitors and how much

they are willing to pay for a lift ticket. “Moreover, the quality of accommodation services in the surrounding area variable was also proved important” (p. 88). Tsiotsou (2006) investigates, using a questionnaire survey in two ski centers (N: 191), the degree to which ski experience, overall satisfaction and income play a role for weekly vs. monthly visitors.

Data related to mountain tourism (but not specifically for the skiing sector) can also be found in studies that focus on ecotourism and alternative forms of tourism (Anastasiou & Alexiou, 2001; Aptoglou, 2007; Lampropoulos, 2005; Liakara, 2010; Papadimitriou & Gibson, 2008; Svoronou, 2003). In addition, studies on Greek mountain tourism in general (Dologlou, 2008) or specific mountainous areas (Gouriotis, 2007; Theocharopoulos & Matthopoulos, 2012) are useful in order to obtain a wider picture for the condition, problems and prospects of tourism in the mountainous areas of Greece.

Notably, some of the above studies could be outdated given that the economic situation of Greek travelers has deteriorated significantly in the last years. However, for the time being and as long as mountains remain in the shadows of the classic “sun-and-sea” campaigns of Greece abroad, the prospects of summertime tourism in areas nearby ski centers is strongly coupled to the attitude, habits, preferences and financial capability of domestic travelers. This begs the question: Are Greeks currently willing to visit their own mountains and ski centers during summer, and if so, what are their expectations in terms of leisure activities and services? This paper is a first attempt to provide an answer to this question.

3 Methodology

After a bibliographical research on questionnaire construction, we decided to follow the steps proposed by Dawson (2007). We created a self-administered, web-based questionnaire consisting of 29 questions. The first five questions were demographic (age, gender, marital status, residential area, income range). A priori segmentation was used to divide prospective summer ski centers visitors into different homogeneous groups with respect to age, gender, marital status, range of income, type of residential area. A priori segmentation was also used in visitors’ intentions regarding mountain tourism and their preferences in services, in order to identify tourists with a similar profile. A series of seven questions investigated the criteria of visitors for choosing a mountainous area as their destination. The rest of the questions were focused on visitors’ preferences regarding the activities and services and desirable facilities that could be offered by the ski centers in Greece, assuming these would operate during summer. Most of the questions were closed-ended, while a few were both close- and open-ended. In 16 questions we used a 5-point Likert scale to let respondents specify the perceived level of importance of a specific statement.

We did a first pilot evaluation of the questionnaire by distributing it to selected persons with different occupations, living standards, interests and attitude to

outdoor/mountain activities. Their comments and queries were considered to perform corrections and adjustments, and the questionnaire was piloted for a second time. We also created a teaser-document explaining the purpose of our research, which accompanied the questionnaire on the web. A link to the questionnaire was distributed to the public via e-mail and social media, and the questionnaire remained online for a period of one month, during 2013 May.

Finally, a statistical analysis was performed on the questionnaire data. Results are expressed as mean, standard deviation (SD) or 95 % confidence interval (95 % CI). The Kolmogorov-Smirnov test was used to analyse the normal distribution of the variables ($p > 0.05$). Quantitative data without a normal distribution were analysed with non-parametric tests, while data with a normal distribution were analysed with parametric tests. The statistical analysis was conducted at 95 % confidence level. A p value less than 0.05 was considered as statistically significant. In cases where the homogeneity control was statistically significant, non-parametric criteria were used.

4 Results

A total of 459 completed questionnaires were collected. Although the questionnaire was circulated randomly, most participants turned out to be mountain fans. This can be inferred from answers to specific questions, e.g., when asked “Do you have the intention to do summer tourism in mountainous areas of Greece in the future?”, 79 % replied affirmatively. We suspect that this ratio is overly positive with respect to the attitude/behavior of the typical Greek citizen. But having a balanced sample is a usually issue to web surveys, e.g., as Couper (2000) states “there is no way to determine whether one’s sample is representative”. It is reasonable to assume that some people who received the questionnaire but were not interested in summer mountain tourism, simply decided not to complete it, whereas people who strongly related to mountain tourism not only completed the questionnaire but also forwarded it to friends and colleagues with similar interests. This is “common in internet designs because participants who respond may be especially motivated or interested in the research topic, exacerbating the problem of sample representativeness” (Matsuo, McIntyre, Tomazic, & Katz, 2004, p. 3998). Notably, this holds at least in part also for surveys that are conducted by telephone, mail or interviews, where some people not interested to the subject are more likely to refuse participation.

Sample Demographics

Table 1 describes the demographics of our survey. Most participants were 30–45 years old (52 %), followed by the age group 19–29 years (28 %). The majority of participants were males (64 %) and most participants were singles (61 %). The 72 % lives in a city, while 12 % in a coastal region. Only 6 % lives in mountainous

Table 1 Demographics

Variable code	Variable label	Variable values	Number of responses	Percentage
T1V1	Age	<18 y/o	5	1 %
		19–29 y/o	130	28 %
		30–45 y/o	240	52 %
		45–64 y/o	77	17 %
		>65 y/o	7	2 %
T1V2	Gender	Male	292	64 %
		Female	167	36 %
T1V3	Family status	Single	257	61 %
		Married/no kids	35	8 %
		Married + 1 kid <12 y/o	32	8 %
		Married + 2 kids <12 y/o	41	10 %
		Married + 3 or more kids (at least one kid <12 y/o)	17	4 %
		Married + all kids >12 y/o	39	9 %
T1V4	Residential area	Mountain	27	6 %
		Semi-mountain	26	6 %
		Lowland	21	5 %
		Urban	330	72 %
		Coastal	55	12 %
T1V5	Monthly income	0–500 €	127	28 %
		501–900 €	97	21 %
		901–1,300 €	151	33 %
		1,301–2,500 €	65	14 %
		>2,501 €	19	4 %

areas and another 6 % in semi-mountainous areas. Income reflected a wide range, however only 4 % earned more than 2,500€ per month.

Summer in the Mountains?

Table 2 describes the intentions related to mountains as summer destinations. Over 34 % of the participants visit mountainous areas during winter time almost every weekend, while in the summer 28 % spend more than 8 days in the mountains. Most participants intend to visit mountainous areas during summer in the future (79 %). The 27 % relate summer with the sea, whereas for 17 % economical reasons prevent summer visits to mountainous areas. Getting in contact with nature (28 %), calmness and cool temperature (26 %) and sport activities (17 %) are the main reasons to visit mountainous areas during summer (Fig. 1). In terms of favorite actual or prospective activity, the most popular is hiking (27 %), followed by climbing (15 %), mountain biking (14 %), camping (14 %) and rafting/kayak (13 %); note that participants were free to select more than one activity. The 68 % of participants prefers to visit ski centers and surrounding areas during spring or autumn rather than summertime.

Table 2 Intention to visit mountains in the summer

Variable code	Variable label	Variable values	Number of responses	Percentage
T2V6	Actual number of winter trips in mountainous areas	None	33	7 %
		1–2 times	94	20 %
		3–5 times	82	18 %
		6–8 times	92	20 %
		Almost every weekend	158	34 %
T2V7	Actual number of summer trips in mountainous areas	None	71	15 %
		1–2 days	107	23 %
		3–5 days	96	21 %
		6–8 days	55	12 %
		>8 days	130	28 %
T2V8	Intention to visit mountainous areas during summer in the future	Yes	364	79 %
		No	95	21 %
T2V9	During summer I am more likely to:	Spend my vacation in my summer house (or friendly house) by the sea	59	14 %
		Spend my vacation in my summer house (or friendly house) in the mountains	30	7 %
		Spend my entire vacation by the sea	66	15 %
		Spend my entire vacation in the mountains	18	4 %
		Spend most of my vacation time mainly by the sea, and less in the mountains	107	25 %
		Spend most of my vacation time mainly in the mountains, and less by the sea	43	10 %
		Spend my vacation abroad	5	1 %
		Stay at home	16	4 %
		Combination of the above	77	18 %
		Other	11	3 %
T2V10	Reasons that prevent me from visiting the mountains more often in summer	Lack of time	66	11 %
		Economical reasons	100	17 %
		Lack of transport	15	3 %
		I don't want to, I prefer to go elsewhere	25	4 %

(continued)

Table 2 (continued)

Variable code	Variable label	Variable values	Number of responses	Percentage
		Lack of company	68	12 %
		Unsatisfactory organization of activities	79	14 %
		Family reasons	23	4 %
		I relate summer with the sea	156	27 %
		Other	47	8 %
T2V11	Reasons to visit mountains during summer	Contact with nature	279	28 %
		Cultural reasons (museum, traditional architecture, festivals etc)	66	7 %
		Sport activities	174	17 %
		Calmness and cool temperature	262	26 %
		Because I am from a mountainous area (or/and have a house there)	95	9 %
		Because my friends go	30	3 %
		Traditional gastronomy and quality of accommodation facilities	58	6 %
		professional conference/ seminar	34	3 %
		Other	11	1 %
T2V12	Which activities do you (wish) to practice during a summer visit to a mountainous area? (multiple replies option)	I m not doing any activity	13	1 %
		Hiking	309	27 %
		Mountain biking	168	14 %
		Rafting/kayak	155	13 %
		Health spa	85	7 %
		Museum visits	69	6 %
		Climbing	172	15 %
		Summer camps	160	14 %
		Other	28	2 %
T2V29	It is more likely to spend my holidays in the mountains in autumn or spring, rather in summer	Strongly disagree	18	4 %
		Disagree	30	7 %
		Neither agree nor disagree	84	20 %
		Agree	129	30 %
		Strongly agree	162	38 %

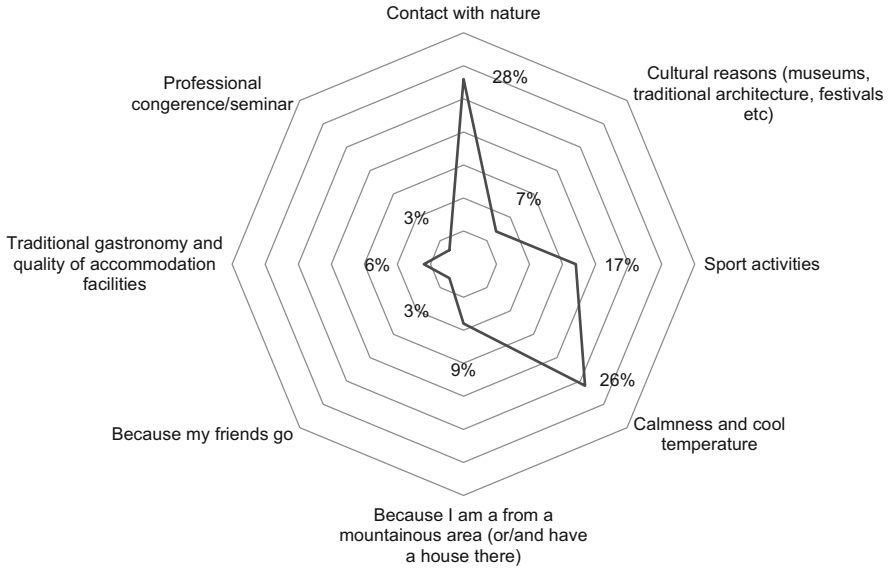


Fig. 1 Reasons to visit mountains during summer

Criteria for Choosing a Mountainous Destination During Summer

Table 3 describes the criteria for choosing a mountainous destination during summer. Cost is very important (32 %) or important (31 %) in order to decide which mountainous area to visit. The distance is a important (24 %) or moderately important (34 %) criterion when choosing a mountainous destination. It seems that participants do not strongly consider the organised activities offered in the mountainous areas to make their pick. The exploration of mountains is important for the 26 % and of moderate importance for the 25 %; in fact, many participants (35 %) do not wish to visit the same area several times. For 17 % of the participants quality of accommodation facilities and services in the surrounding area is very important, important for the 30 %, and of moderate importance for 31 % (Fig. 2). Over 53 % have a strong opinion when choosing mountainous destination, and do not simply follow their friends without making their own research. Internet-based research (e.g., general research, directly from a predetermined site, social media) is the major source of information when planning a trip (71 %), followed by the traditional mouth to mouth approach (18 %).

Preferences on Potential Leisure Activities, Services and Facilities in Ski Centers

Table 4 describes the participants’ preferences on potential summer leisure activities, services and facilities in ski centers. The prospect that ski centers have outdoor athletic facilities is almost equally divided in our sample in terms of importance. However, elementary chalet services (e.g., coffee/snack bar, small market) during summer are very important for the 32 % or important for the 31 % of participants.

Table 3 Criteria for choosing a summer mountainous destinations

Variable code	Variable label	Variable values	Number of responses	Percentage
T3V13	Cost	Unimportant	26	6 %
		Of little importance	38	9 %
		Moderately important	93	22 %
		Important	130	31 %
		Very important	134	32 %
T3V14	Distance	Unimportant	34	8 %
		Of little importance	69	16 %
		Moderately important	145	34 %
		Important	102	24 %
		Very important	71	17 %
T3V15	Organized activities offered	Unimportant	83	20 %
		Of little importance	66	16 %
		Moderately important	95	23 %
		Important	95	23 %
		Very important	81	19 %
T3V16	Every time I visit a different mountain destination to explore my country	Strongly disagree	41	10 %
		Disagree	74	18 %
		Neither agree nor disagree	104	25 %
		Agree	111	26 %
		Strongly agree	92	22 %
T3V17	I am always going to the same mountainous destination	Strongly disagree	149	35 %
		Disagree	111	26 %
		Neither agree nor disagree	86	20 %
		Agree	52	12 %
		Strongly agree	22	5 %
T3V18	Quality of accommodation facilities and services	Unimportant	47	11 %
		Of little importance	47	11 %
		Moderately important	129	31 %
		Important	124	30 %
		Very important	73	17 %
T3V19	I am going where my friends go	Strongly disagree	225	53 %
		Disagree	79	19 %
		Neither agree nor disagree	81	19 %
		Agree	20	5 %
		Strongly agree	16	4 %
T3V20	Most important source of information for planning such a trip	Books, leaflets and travel guides	41	10 %
		Travel agent	2	0 %
		Mouth to mouth	75	18 %

(continued)

Table 3 (continued)

Variable code	Variable label	Variable values	Number of responses	Percentage
		General Internet research	218	52 %
		Social media	21	5 %
		e-travel agent	3	1 %
		Directly from a predetermined site (e.g., of accommodation)	54	13 %
		Other	9	2 %

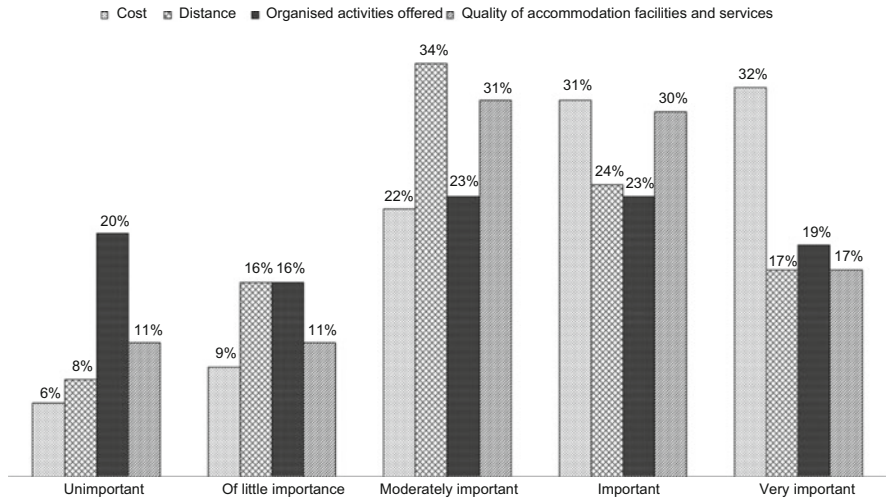


Fig. 2 Importance of different criteria for choosing a mountain destination during summer

The prospect that ski centers organize concerts, cultural, sport or thematic events is considered very important for 37 % and important for 29 %. Chairlift operation during summer is also important (33 % very important; 28 % important). Participants considered very important (46 %) and important (21 %) for ski centers to have kids-friendly outdoor facilities. The support of camping by the local chalet during summer is very important (37 %) or important (31 %), while 53 % consider that it is very important to have an information tourist office for the surrounding area operating in the chalet. Over 57 % of participants find it very important or important (26 %) to have the option to follow organized activities such as guided trekking.

Table 4 Preferences on potential summer activities, services and infrastructures in ski centers

Variable code	Variable label	Variable values	Number of responses	Percentage
T4V21	Outdoor sport facilities (e.g., football court)	Unimportant	69	16 %
		Of little importance	73	17 %
		Moderately important	102	24 %
		Important	87	21 %
		Very important	89	21 %
T4V22	Elementary chalet services (e.g., coffee/snack bar)	Unimportant	28	7 %
		Of little importance	48	11 %
		Moderately important	81	19 %
		Important	129	31 %
		Very important	134	32 %
T4V23	Organization of concerts, cultural, sports, thematic events	Unimportant	39	9 %
		Of little importance	34	8 %
		Moderately important	68	16 %
		Important	121	29 %
		Very important	157	37 %
T4V24	Chair lift operation	Unimportant	52	12 %
		Of little importance	43	10 %
		Moderately important	70	17 %
		Important	116	28 %
		Very important	139	33 %
T4V25	Kids-friendly outdoor facilities	Unimportant	36	9 %
		Of little importance	34	8 %
		Moderately important	66	16 %
		Important	90	21 %
		Very important	193	46 %

(continued)

Table 4 (continued)

Variable code	Variable label	Variable values	Number of responses	Percentage
T4V26	Chalet supports camping activity (e.g., kids or sport camps)	Unimportant	23	6 %
		Of little importance	28	7 %
		Moderately important	79	19 %
		Important	131	31 %
		Very important	155	37 %
T4V27	Information tourism office for the area available in the chalet	Unimportant	11	3 %
		Of little importance	9	2 %
		Moderately important	64	15 %
		Important	112	27 %
		Very important	220	53 %
T4V28	Support for organized activities (e.g., trekking with a mountain guide)	Unimportant	11	3 %
		Of little importance	11	3 %
		Moderately important	47	11 %
		Important	110	26 %
		Very important	239	57 %

Variables Analysis

The variables used in our analysis are defined in Tables 1, 2, 3, and 4. Our analysis is primarily based on variable T2V7, labeled «actual number of summer trips in mountainous areas», in relation to other variables. Some selected results are as follows. T2V7 presents a statistically significant difference in relation to T2V6 ($H(4) = 173.3, p = 0.000$), showing that participants who frequently visit mountains during the winter, also do this during the summer. Also, T2V7 presents a statistically significant difference in relation to T2V12 ($F(8, 389) = 3.037, p = 0.003$), allowing us to infer that the participants who visit mountain more frequently during summer prefer to hike. Furthermore, T2V7 presents a statistically significant difference in relation to T3V15 ($F(4, 419) = 4.214, p = 0.002$), as well as in relation to T3V18 ($F(4, 419) = 7.431, p = 0.000$). Those who frequently visit mountains during summer do not seem to place a lot of value in the organized activities being offered, and do not care very much about the quality of accommodation facilities and services in the destination area. Finally, T2V7 presents a statistically significant difference in relation to T3V24 ($F(4, 419) = 3.412,$

$p = 0.009$). Chairlift operation during summer is important to those who do not visit mountains at that period, but intent to do so in the future; it is also important to those who visit mountains more frequently.

Other variables were also analysed. For instance, variables T4V22 ($H(5) = 15.567, p = 0.008$), T4V25 ($H(5) = 55.288, p = 0.000$) and T4V26 ($H(5) = 29.550, p = 0.000$) present a statistically significant difference in relation to «family status» (T1V3). Participants with one kid under 12 years old consider as important the existence of elementary chalet services (coffee/snack bar), kids-friendly outdoor facilities and the option that chalets support camping activity (kids' or sports 'camps'). Participants who are single consider the existence of elementary chalet services and the kids-friendly outdoor facilities less important.

5 Discussion

The monthly income of participants reflects the difficult economic condition of our country. But, while winter ski tourism is an expensive leisure and sport activity, mountain summer tourism can in principle target less affluent visitors. This said, it is important to note that as summer ski destinations are getting popular, facilities and services are updated and enhanced, which in turn drives up prices. According to Ski Areas of New York (SANY 2013) “summer visitors were estimated to spend 80 % of what winter visitors spend on a per person per day basis” (p. 19). However, Greeks have related summer with the sea, and this is the main reason they do not visit mountains more often (27 %); economical reasons accounts for the 17 %. Nevertheless, they are more likely to spend their holidays in the mountains in autumns or spring (38 % strongly agree, 30 % agree), so any future plan regarding an off-ski operation of ski centers should strongly focus on autumn and spring time.

The beautiful scenery and contact with nature is the main reason for Greek people to visit mountains during summer. Similar findings have been reported for other ski regions in the world, like the Whistler ski center in Canada (Needham et al., 2011) or in the Kosciuszko alpine area in Australia in (Johnston & Growcock, 2005). This is actually the case as well for visitor's motivations regarding alternative tourism in Greece (Liakara, 2010). Similarly, as reported by Needham et al. (2004) “Since most respondents visited this area to view the scenery and to hike or mountain bike, it may be wise to market the natural setting more than the contrived amenities and tours” (p. 241). Thus, this aspect must be seriously considered in every future plan; importantly, this also implies that environmental protection ought to be a priority for ski centers.

Hiking is the preferred actual or prospective activity of participants (27 %), following the general international trends. It is also the most preferred activity for those visiting mountains in the summer more frequently. But, according variables analysis, when choosing a mountainous destination, this group does not consider the organized activities offered or quality of accommodation facilities and services

in the surrounding area. That can be explained as “Mountaineers accept lower comfort levels e.g., huts, as compared to their every day’s life, as part of a back to the roots experience” (Muhar, Schauppenlehner, Brandenburg, & Arnberger, 2007, p. 7). In addition, those visiting currently mountains in summertime frequently do not care for ski center services/facilities, except the chairlift operation. So, those who currently visit mountains several times during summer (e.g., hikers) are not the best clientele for ski centers’ four season operation.

As previously mentioned, chairlift operation is the only potential service/facility of ski centers that matters to those participants who visit mountains during summer frequently. Probably, this preference can be explained, for instance, as hikers prefer to get a lift so that they can get away from the crowd and manmade constructions as soon as possible, so that they can then start their ascent to the mountain top in peace. It can also be explained for mountain bikers who typically wish to enjoy a good downhill descent, without the burden of an exhaustive ride to the top. On the other hand, chairlift operation is also significant for those participants who do not visit mountains during summer at all, but intend to. Apparently, this group of potential visitors has never ridden a chairlift before and want to experience its first scenic chair ride, or simply because they are primarily interested in a casual way of exploring the mountainside rather than going through a physical exercise.

Frequent mountain visitors in summertime are mainly explorers who do not visit regularly the same destinations, as opposed to skiers. For example, in his survey Karsoulas (2012) estimates that around 64 % of participants were frequent winter visitors of a specific ski center (Parnassos ski center). As mentioned, over 53 % of the participants have a strong opinion when choosing mountainous destination, and do not simply follow their friends without making their own research. And only 1 % of the participants used a travel agent (e-travel agent) to plan their trip. This also seems to be the case in Austria, where “most mountaineers and mountain hikers prefer to organize their tours individually (85 %)” (Muhar et al., 2007, p. 11). A rather expected finding of this survey is that the majority of participants use the Internet as the main source of information when planning a summer mountain trip. This is global trend: according to the TripBarometer online survey (TripAdvisor, 2013) travel planning is dominated by online resources. So, any plan to operate ski centers during all four seasons should actively seek Internet-based promotion; even more in Greece where most people could not imagine that such an operation is possible.

Finally, concerning the preferences on potential leisure and sport activities, services and facilities in ski centers, elementary chalet services, organization of concerts, cultural, sports or thematic events, chairlift operation, kids-friendly outdoor facilities, and chalets supporting camps, all seem to be important. According to the opinion of participants, it would also be desirable to have an information tourism office for the surrounding area in the chalet, and the option to participate to offered organized activities (e.g., guided trekking tours). On the contrary, participants had a lukewarm response for outdoor athletic facilities (for adults) in ski centers.

6 Implementations

The results discussed above can provide the managers of ski centers with a first overview on the perspectives of tourism in ski destinations beyond the winter period. Our findings can also inform organizations and companies that (plan to) offer mountain tourism activities and services inspiring them to develop a more attractive and suitable package.

Of course, this study by no means provides solid evidence on the financial viability of such endeavors. Each ski center or organizations active in mountain tourism needs to further investigate its own case, to determine whether there is a critical number of potential summer visitors for the area in question, and to collect more information about their preferences on summer activities and services. Clearly, each case may have widely different prospects due to its existing facilities and infrastructures, its accessibility (in terms of cost, distance and road conditions), and its particular natural/cultural assets, so it may attract different categories of visitors. Therefore, future studies analyzing variables in specific mountain destinations are recommended.

7 Limitations

According to the Nordregio Report, “in countries which are largely mountainous (e.g., Greece, Norway, Slovenia) mountain policy is effectively synonymous with general development policy” (2004, p. 148). Unfortunately, Greek national policies do not focus on mountainous areas; in fact, most existing strategies and policies dealing with mountainous areas in Greece are decided at European level, without any adaptation to their specific socioeconomic and natural reality (Dax, 2004; Rokos, 2004, 2007). As a consequence, only a few mountain tourism plans are developed; what’s probably worse, these tend to be fragmental and local, and are mostly pursued via short-lived initiatives, without having a governmental umbrella that can guarantee the required continuity.

Another characteristic of Greece is that most of its ski centers are operated by governmental agencies, and do not make profits every year (Avourdiadou et al., 2007). While profitability for its own sake is not necessarily a desirable objective, especially when this can negatively affect the environment, this also indicates a lack of motivation and vision. As Zampetaki (2012) mentions “the state-based business model applied to the majority of the ski centers in Greece has to be questioned”. It is also our opinion that a mentality change is desperately needed in order to develop a competitive mountain tourism sector in Greece.

We suggest that the best way to develop summer tourism in ski destinations areas in Greece is by targeting foreign visitors. But this is also the most difficult way, as mountain tourism worldwide in strongly local, while foreign visitors concentrate on a few top and very well-known summer mountain resorts (Keller,

2012). Also, there is a strong market competition among ski centers all over the world that operate during summer. This means that Greece must strive for differentiated offerings and services, by combining activities that can rarely be found elsewhere. As one such example, one can imagine a breathtaking bicycle course, taking you from the top of the mountain to the coast, then diving into the big blue and drying up under the sun on a secluded beach, enjoying traditional sea food by the sea, and then, head back to mountain's cool temperature and calm natural scenery for a relaxing night. What sounds almost like science-fiction, is indeed perfectly possible in many different places in Greece.

8 Conclusions

There has been little empirical research to the behavior of summer visitors and their experiences in ski destinations around the world. To the best of our knowledge, this is the first one conducted for the Greek landscape. The study was designed to determine the motivations and preferences of potential visitors on mountain tourism during summer in ski centers (which, in Greece, do not operate after the skiing season).

The discussion session of this paper summarized and comments the most important findings, which are useful not only for researchers and ski centers' managers, but all those related to mountain and alternative tourism. The five most important findings, in our opinion, are as follows: (i) future plans regarding an off-ski operation of ski centers should focus on autumn and spring rather than summertime; (ii) the current frequent mountain visitors during summer (e.g., hikers) are not the clientele for ski centers' off season development; (iii) environmental protection ought to be a priority for ski centers; (iv) infrastructures for all-season outdoor athletic activities (e.g., football court for adults) in ski centers are not very important, whereas kids-friendly outdoors facilities, elementary chalet services, chairlift operation, organization of cultural, sports and thematic events, information tourism office, support for camping and organized activities, are important and related to the family status of potential visitors; (v) any plan to operate ski center during all four seasons should actively seek Internet-based promotion.

Of course, every ski center and its surrounding area have different opportunities and limitations, but also different benefits and disadvantages concerning four-season tourism, which must be taken into consideration. A long term plan must be developed, in each case, as the economical crisis combined with the climate change prediction, if not addressed properly, will most likely drive Greek ski tourism industry probably to an end; in turn this will have a detrimental effect to the areas surrounding ski centers, as well as their corresponding mountainous communities. By understanding who are the prospective visitors and their motivations and preferences, a better strategic management and marketing plan can be developed.

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