

# Service innovation in hotels for people with disabilities

*Georgia Yfantidou, Eleni Spyridopoulou*

Department of Physical Education and Sport Science, Democritus University of Thrace,  
Komotini, Greece

Email: gifantid@phyed.duth.gr, espyrido@phyed.duth.gr

*Alkistis Papaioannou*

Department of Sport Management, University of Peloponnese, Sparta, Greece

Email: alkistisp@uop.gr

*Panagiota Balaska*

Department of Physical Education and Sport Science, Aristotles University of Thessaloniki,  
Thessaloniki, Greece

Email: pbalask@phed.auth.gr

## Abstract

Vacations, journey and physical and recreational activities are an important part of the life of people with disabilities as a means in order to escape from their daily routine, to strengthen family ties and to promote health, self-confidence and independence. Researches in tourism have shown that disabled people face many obstacles when they participate in sport and recreation activities because of the lack of accessible destinations, of facilities, of means of transport, of appropriate information and because of obstacles in communication and behavior, but also in finding an accessible accommodation. The aim of this paper is the investigation of the dimensions of sport tourists' accessibility as regards to tourist accommodation and sport facilities.

The sample consisted of 81 sport tourists with disabilities aged 18 to 60 years and above, men and women, with physical and sensory disabilities (vision or hearing disabilities) participated in this research. The questionnaire was consisted of a) the scale "Accessible Tourism Accommodation Survey" – ATAS, which is about the accommodation needs of disabled people based on the accessibility b) the "Tourist Role Preference Scale" – TRPS, c) a part of 24 questions concerning sport activities for disabled people and d) a part of 10 questions regarding demographics and specific preference destination. The surveys' data revealed preferences and habits and barriers to access for travelers with disabilities, which the tourism industry is invited to understand and to respond to them through the design and redesign of products and services in the field of tourism.

**Keywords:** tourism; hotel; accommodation; disabilities; innovation; sport

## 1. Introduction

Some trends for the hotel of the future have also been addressed presenting uniquely different concepts with the question being asked 'are they futuristic enough to attract the consumer of tomorrow? Tomorrow's consumers are more sophisticated, educated and travel experienced, older and more affluent, more physically and mentally active, more self-aware in an increasingly stressful world, seek value learning and self-improvement, look for more innovation in destinations and activities, seek holidays that have a low impact on the physical and cultural environments, increasingly look for better value for money, and are looking for 'more' than the traditional hotel product (Hackett & Melia, 2012).

Vacations, journey and physical and recreational activities are an important part of their life as a means in order to escape from their daily routine, to strengthen family ties and to promote health, self-confidence and independence. Researches in tourism have shown that disabled people face many obstacles when they participate in sport and recreation activities because of the lack of accessible destinations, of facilities, of means of transport, of appropriate information and because of obstacles in communication and behavior, but also in finding an accessible accommodation. The hotel activity targets to specific market segments related to quality and categories levels, seasonality and possibilities of product differentiation. The market segment can be approached, according to Davies and Downward (1996), through the type of board sold, the channels used in commercializing the service and the degree of customer loyalty. Innovation propensity can be explored according to these features.

Other recent studies have contributed to research on innovation in the tourism sector. The existing research can be divided into three groups based on the distinct issues they address. The first group tackles the innovative behaviour of firms. In some of these studies, the nature of the innovative practices carried out by tourism firms is examined (Hjalager, 1997; Orfila-Sintes et al, 2005) while in others the innovative behaviour of firms leads to their grouping, as in Sundbo et al (2007). A second group of studies focuses on the identification of the main determinants of innovation for tourism firms. For instance, in Orfila-Sintes and Mattsson (2009), the determinants of innovation are analysed for four different specific types of innovation measures: management, external communication, service scope and back office. They find that the main determinants are: the additional services offered by hotels; the fact that bookings are made through tour operators; that hotels are part of a hotel chain; and that the owners run the business (Tugores Ques & García, 2015).

Service innovation capability is crucial for an international hotel to acquire a competitive advantage, which enables the hotel to respond to or exceed customer expectations for novel and unique services. Service innovation capability is deemed contributive to hotels' competitive advantages, however, research exploring the ways of improving service innovation capability is scant. Customers of international tourist hotels have high expectations for service quality and accommodation experience. To maintain their competitive advantages, hotels must strive to satisfy customer demands for new and unique services (Hu et al. 2009; Rayna and Striukova 2009). Service innovation is a source of competitive advantage for hotels (Ottenbacher and Gnoth 2005) because new services can help attract new customers, increase customer loyalty, create new market opportunities, and raise sales performance and profitability (Huang 2013; Nicolau and Santa-Maria, 2013; Tang, Wang, & Tang, 2015).

The hotels' differentiation is the strategic behavior related to its closest competitors, companies with similar services in the same area. Using technological innovations, as a way to differentiate services, can provide tourist accommodation services in addition or higher quality than those of their competitors. This differentiation, according to Chung and Kalnins (2001) is considered a major competitive variable, achievable through innovation. Survival of tourist enterprises in today's demanding, dynamic and competitive market allows only

monitoring of trends and this is primarily the improvement of product and service quality at all levels of the business with the most efficient and effective performance of business processes. It is necessary to work on improving the excellence, innovation and quality products and services and on improving knowledge, skills and abilities of employees. Only the companies that are focused on quality, satisfaction of their customers and their employees can compete on the demanding tourist market (Sladoljev, Sisara & Goles, 2014). Investments in innovation are considered a key element in explaining a firm's competitive advantage, either in costs or differentiation strategy, which in both cases might lead to better performance indicators for the firm (Peteraf, 1993; Tugores & García, 2015).

People with disabilities represent a large and growing market for tourism businesses. They usually travel in large groups, stay for long periods, become more easily "loyal customers" than other tourists (Buhalis et al., 2011; Burnett & Baker, 2001) and return to destinations that provide good accessibility (European Commission, 2004). In their daily lives, they are mostly dependent on carers / attendants who are an important part of their life and travel with. While they have the same rights for tourism as any social group, they still have to think more factors than ordinary people and face more challenges during their trip (Daniels, Drogin Rodgers & Wiggins, 2005; Yau et al., 2004). Therefore, holidays away from home prove to be different for tourists with disabilities than for other tourists and accessibility is an important factor for the trip (Blichfeldt & Nicolaisen, 2011; Shaw & Coles, 2004).

Another key concept for the development of accessible tourism is universal design, which is a challenge for the tourism industry. It's high time the tourism industry adopted the principles of universal design as the foundation for achieving greater social sustainability. Universal design is addressed to all people of all ages and abilities. It has been defined as the design of products and environments that can be used by all people to the greatest extent, without the need for customization or special design. The philosophy of universal design focuses on simplifying everyone's life by designing products, forms of communication and the natural environment to make it more user-friendly by most people at little or no extra cost. In many countries, the framework for the development of accessible tourism or the application of universal design can be found in building codes and accessibility standards (Mace, Hardie & Place, 1990).

International literature on recreation emphasize the need to find ways to understand and analyze the existing barriers experienced by people with disabilities in relation to sports and leisure activities. Tourism and leisure research reveals a series of problems encountered by disabled travelers when participating in sports and leisure activities. Problems focus on accessibility and specifically on the inaccessible destinations, facilities and means of transport, on costs and the lack of adequate information and behavioral barriers (Blichfeldt & Nicolaisen, 2011; Burns et al., 2009; Figueiredo et al., 2012; Freeman & Selmi, 2010; Israeli, 2002; Shaw & Coles, 2004; Yau, McKercher & Packer, 2004).

Beginning decades ago, the economy faced changes in the consumption of products. This is a result of the emergence of symbolic meanings and hedonic consumption and experience based value adding consumption of products. Therefore, features and characteristics of the experience economy become markedly important. The combination of various factors such as associated shift from work to leisure activities, income and wealth and accumulating human capital, are the reasons behind the increasing economic impact of experience services including Entertainment and Art compared to several decades ago (Andersson & Andersson, 2006). McCabe (2009) highlighted the fact that "hospitality services are much more than simply about selling food and drink or providing people with a roof over their head for a night" (essential or basic needs of life). They are rather "delivered as a consumer experience" and becoming an 'experiential consumer good' that are aimed at satisfying 'consumer's emotions'. Also Lashley (2008) expressed how hospitality is 'rooted in social engagement'. It

is also interesting and considerable to note how entertainment and art industries, hospitality industry and tourism can be closely tied to each other. Consequently, shifting towards an experience economy is obviously growing and the relationships between these industries are increasingly important (Jalali, 2013).

Relaxation, recreation and resting are the main motivators of international travel (52%) (UNWTO, 2014). The Mediterranean, dominated by the sun-and-sea tourism product, is the leading tourism micro region with around 200 million tourist arrivals in 2013 (UNWTO, 2014). Although the sun-and-sea product is the dominant tourism product in all Mediterranean countries, including Croatia, survival on the highly demanding market dictates the need for innovation and development of new products. Influenced by extremely high competition and significant, layered social change, a new concept of sun-and-sea travelling is being developed, based on premises such as 'social experience', 'localization', 'sustainability', 'healthy life', 'individualization and personalization' (Ivandić et al., 2006; Živoder & Čorak, 2015).

Customer value creation is determined by experience (Pine and Gilmore 2011). Customers hope that tourist hotels will not only provide comfortable accommodations, but will also assist them with obtaining a memorable travel experience. Thus, international tourist hotels must focus on creating functional and leisure values to satisfy customer expectations. In addition to offering accommodations and dining services, the provision of entertainment services (i.e., leisure facilities and guided tours to surrounding attractions) is central to creating customer value. Hotels must integrate multiple services or use innovative ways to link existing services to satisfy the functional and pleasant requirements of customers. Successful innovation depends on the convergence of various functions (Lee et al. 2012). Knowledge convergence offers an organization the ability to provide new services to meet customer needs (Ordanini and Maglio 2009). Through creative processes to increase service values, hotels are able to converge of unrelated things to meet customer demands (Lee et al. 2012), such as intangible services, tangible goods, technology, and management to deepen customer experiences. A hotel that values service innovation uses new ideas, technology, and customized services to create high service values, thereby providing frequent guests with different experiences during their stays. To promote knowledge sharing, hotels must construct a social environment conducive to cooperation and communication (Tang, Wang, & Tang, 2015).

The issue of accessible tourism has been addressed through the analysis of various forms of disability, different participation opportunities and a variety of leisure experiences (Figueiredo et al., 2012). It has been found that, along with the removal of physical barriers and barriers to behavior, people with diverse and specific disabilities need differently tailored activities, services and equipment and the creation of spaces and activities more accessible to all. The research by Rimmer and Schiller (2006) and Rimmer et al. (2004), regarding the accessibility of sport facilities and leisure programs, pointed the lack of accessible facilities, gyms, parks, buildings and the difficulty in accessing information about the availability of customized programs and equipment as inhibitory factors for the participation of people with disabilities in sport and leisure programs.

The economic background is an equally important factor in determining accessibility and behavioral barriers as it identifies a travel experience, such as length of stay, the selection of means of transport and the accommodation and can therefore be an important obstacle for travelers with disabilities (Darcy & Daruwalla, 1999). For example, travelers with mobility disabilities may spend more on the cost of an attendant / carer, auxiliary aids and services, accessible hotel rooms and for transport. In general, people with disabilities have lower income than people without disabilities (Smith et al., 2001), which limits both their choices and their experiences. However, it is worth mentioning that the research of Bi, Card, and Cole

(2007), which examined the obstacles encountered by disabled tourists in China, revealed that income was not among the most important barriers but the level of functionality was the one that influenced to a significant extent the travelers. Researches conducted in Australia (Darcy, 2010; Darcy, 1998) and other countries (Bi et al., 2007; Burnett & Baker, 2001; Daniels et al., 2005; Shaw & Coles, 2004) showed that tourists with disabilities often encounter obstacles and problems in finding accessible accommodation in affordable prices and information about it.

Darcy (1998), pointed out that disability, independence, need for care and mobility support are decisive factors for the destination selection and the travel frequency. He also found that income, age and lifestyle had a significant effect on the choice of accommodation. At the survey of Burnett and Bender-Baker (2001) regarding the travel criteria for people with mobility impairment about the accessible accommodation, it was found that the level of support combined with gender, age, income, family and occupational status were significant factors, with 2/3 of the participants declaring that they would travel more often if there was a hospitable accommodation and easily accessible to them.

On the contrary, similar research by Avis et al. (2005) suggest that gender and age explain the different levels of accessibility that are required and Bi et al. (2007) indicate functional capacity as a factor that influences the perception of accessibility. Darcy (2010) explored the criteria that tourists with disabilities consider as important for choosing an accommodation facility and their preferences for access to information. People with mobility disabilities, sensory disabilities (vision and hearing), multiple disabilities and people with cognitive difficulties who were users of accessible rooms participated at his survey. The results highlighted the importance of information, while the criteria of access to the room and bathroom were considered by the majority of participants as very important. The above survey has shown that access to information allows people with disabilities to be informed about their choices and whether the general accessibility for tourists is accessible also for their own needs. Consequently negative experiences have a negative impact on the person with a disability and prevent him/her to take a trip that will be stressful. The aim of this paper is the investigation of the dimensions of sport tourists' accessibility as regards to tourist accommodation and sport facilities.

## **2. Methodology**

### *2.1. Sample*

The sample consisted of 81 sport tourists with disabilities aged 18 to 60 years and above, men and women, with physical and sensory disabilities (vision or hearing disabilities) participated in this research.

Two of them due to inability to complete the questionnaire were helped to complete it by two carers / attendants with whom they traveled. The participation criteria in the research were: a) the existence of any form of kinetic or sensory disability (partial or total loss of hearing or vision), excluding persons suffering from other disabilities (mental retardation, multiple disabilities, etc.); and b) the duration of the trip with at least 24-hour stay for sports tourism. Participants in the survey were selected using the targeted sampling method and came from 3 different countries, Greece, Germany and Serbia.

### *2.2. Questionnaire*

The questionnaire was consisted of a) the scale "Accessible Tourism Accommodation Survey" – ATAS, b) a part of 24 questions concerning sport activities for disabled people and c) a part of 10 questions regarding demographics and specific preference destination.

ATAS scale is about the accommodation needs of disabled people based on the accessibility, with 2 questions for dimensions of access and independence of traveler, 17 questions regarding the accommodation type, 50 questions in relation to travel patterns and 64 questions about the accommodation attributes where 9 questions were added for research needs. Specifically, 7 questions were added in order to examine accessibility to sport facilities and 2 about the accommodation attributes, considering that the ATAS scale mainly examines accommodation attributes.

The bellow questions were added for sport facilities: 1. Facility with an accessible hot tub or whirlpool, 2. Trained fitness instructors in helping individuals with disabilities to participate at sports/recreation programs, 3. Suitable sports equipment for individuals with disabilities is provided, 4. Sports/recreation programs that allow persons with disabilities to participate, 5. Facility with an accessible sauna or steam room, 6. Trained personnel in helping individuals with disabilities, 7. Professional support and training in the facility and also 2 questions for accommodation attributes: 1. Rooms on lower floors, 2. Bathroom door that opens outward).

### *2.3. Process*

The survey data were collected from February to April 2013. The survey was conducted in 4 cities in Northern Greece, where sport events were organized and conducted. There was a cooperation with the Hellenic Sport Federation for People with Disabilities in order to get the permission to conduct the research. Also there was a contact with disability organizations, sport clubs, hotels, outdoor companies and camps, in order to ensure the voluntary participation and the confidentiality of the data of all the participants in the survey. The meetings with the participants took place in the mentioned cities, at the participants' rooms (hotels) and at the venues where they participated or attended the sporting events. The sports that they participated in or attended included weightlifting on bench, basketball on wheelchair, swimming, rugby with wheelchair, chess for blind people and football for deaf.

## **3. Results**

### *3.1. Demographic characteristics*

Data consisted of 81 tourists with disabilities, 84% of them were men and 16% women. Age was recorded according to the model in three life eras (Gibson, 1994): Era 1: Initial Adulthood (17-39 years), Era 2: Medium Adulthood (40-59 years) and Era 3: Final Adulthood (60 years and over). The majority (84%) belonged to the first life era (18-39 years). Most of them were singles (67%), 22% were married, 4.9% were divorced and 6.2% were domestic partnered. As far as education is concerned, the majority were graduates of high school (515) and followed by graduates of university or a 4-year college (32%). Annual family income for the 77.8% was under 20.000€. The 37% were employed full time / self-employed, 24.7% had retired, 16% were unemployed, 13.3% were students, while 8.7% worked part-time.

### *3.2. Dimensions of access*

In order to take into account the access needs of participants in sport tourism and in particular the accommodation attributes, all participants were asked to choose their accessibility or the disability of the person with whom they traveled. 74 persons had a motor disability and 7 persons had sensory disabilities. Table 1 shows the frequency and percentages of travelers' access dimensions, according to the scale ATAS (Darcy, 2010).

Table 1. Frequency and percentages of travelers' access dimensions

Dimensions of access	Frequency	Percentages
Mobility – requiring use of a power wheelchair or scooter	4	4,9
Mobility – requiring use of a manual wheelchair	53	65,5
Mobility – requiring use of other mobility aids	8	9,9
Mobility – no aid required but a mobility limitation, i.e. able to cover a limited distance	7	8,6
Blind or vision	3	3,7
Deaf or hearing	4	4,9
Achondroplasia	2	2,5

### 3.3. Structural validity and reliability

Factor analysis was implemented to sixty-four (64) of accommodation attributes by implementing the principal component analysis and the varimax rotation. The number of factors was determined by using the criterion of eigenvalues, which should have been greater than one (>1). Also, the maximum iterations number of convergence should have been equal to .30. Thus, six factors were revealed for the ATAS scale which explained the 59,149% of the total variance (Tables 2,3,4,5,6,7,8):

1. Core Mobility
2. Hearing and Vision
3. Ambulant (Safety)
4. Service and security
5. Amenity (comfort / recreation)
6. Supplementary Mobility

Table 2. The loadings and variable means of factor Core Mobility

1 <sup>st</sup> Factor	Variables	Loading	Variable Mean
Core Mobility	Clear circulation space from both sides between the toilet and the walls/door to allow for transfer	,346	4.10
	Table/kitchen bench with an underside clearance (800mm)	,581	3.30
	Handheld shower head with a long hose (2 metres)	,640	3.70
	Roll in hobless shower entry (no raised edge)	,432	4.28
	Toilet seat between (460-480mm) in height from the floor	,602	3.43
	Accessible height vanity unit	,722	3.41
	Lever action mixing water taps	,546	3.40
	All lights, television, telephone and other room controls accessible and visible by a person lying in the bed	,384	3.86
	Adjustable magnifying mirror	,577	2.91

*Table 3. The loadings and variable means of factor Hearing and Vision*

2 <sup>nd</sup> Factor	Variables	Loading	Variable Mean
Hearing and Vision	Non audible door bell/alarm	,800	2.83
	Access to a telephone typewriter (TTY)	,637	2.30
	TV sets provided with captioning/teletext	,685	2.85
	Alternative format guest information (text, Braille, audio tape etc.)	,538	3.14
	An in-room telephone with volume control, speaker or a visual light alert	,700	2.80
	Internet and/or email access	,354	3.84
	Emergency phone in lift	,483	3.99
	Alarm system in room	,493	3.35

*Table 4. The loadings and variable means of factor Ambulant (Safety)*

3 <sup>rd</sup> Factor	Variables	Loading	Variable Mean
Ambulant (Safety)	Illuminated switches	,653	3.48
	Grab rails in the bathroom and toilet (800-810mm)	,632	4.01
	Pull-down bench in shower	,320	3.47
	Non-slip bathroom floor	,791	4.19
	Call/emergency button in the bathroom	,706	4.09
	Room near lift	,422	3.52
	Easily operated door handles (e.g. D-handles)	,301	3.49
	Well lit public areas	,507	3.58

*Table 5. The loadings and variable means of factor Service and security*

4 <sup>th</sup> Factor	Variables	Loading	Variable Mean
Service and security	Firm mattress	,425	2.90
	Low pile carpet or easy push floor surface (tiles, lino etc.)	,592	3.95
	Extra linen, pillows and bedding on request	,394	3.72
	Room service	,507	4.07
	Assistance getting luggage to & from room	,662	4.16
	A positive 'can do' customer service attitude	,434	4.06
	Orientation to the room, establishment and surrounding areas by a knowledgeable staff member	,336	3.83
	Emergency evacuation orientation	,421	3.59
	Professional support and training in the facility	,559	3.98



Table 6. The loadings and variable means of factor Amenity (comfort / recreation)

5 <sup>th</sup> Factor	Variables	Loading	Variable Mean
Amenity (comfort / recreation)	Gym with access provision	,543	4.12
	Pool with access provisions	,444	4.25
	Self serve laundry with access provisions	,346	3.59
	Complimentary newspaper to room	,442	2.70
	Trained personnel in helping individuals with disabilities	,335	4.30
	Sports/recreation programs that allow persons with disabilities to participate	,481	4.20
	Facility with an accessible sauna or steam room	,676	3.69
	Facility with an accessible hot tub or whirlpool	,657	3.51
	Catering for dietary considerations	,408	3.47
	In-room temperature control – reverse cycle air conditioning	,444	3.63
	Suitable sports equipment for individuals with disabilities is provided	,637	4.15
	Trained fitness instructors in helping individuals with disabilities to participate at sports/recreation programs	,425	4.04

Table 7. The loadings and variable means of factor Supplementary Mobility

6 <sup>th</sup> Factor	Variables	Loading	Variable Mean
Supplementary Mobility	Flexible bed configuration/movable bed	,515	3.27
	Appropriate bed height (500-550mm)	,554	3.47
	Under bed clearance between floor and bed base for hoist (150mm)	,346	2.93
	Clear circulation and manoeuvring space between walls, furniture and fixtures in guest rooms	,721	4.27
	Bar fridge for storing medication	,498	3.58
	Handrails throughout facility	,400	3.62
	Seats near the lift at the foyer and on all floors	,445	3.12
	Clear signage indicating accessible areas/features	,791	3.75
	Split-level/Dual height reception desk	,644	3.15
	An intercom at an accessible height at the entrance/reception	,545	3.33
	Entrance that offers independent access (automatic doors)	,687	4.01
	Switches, door handles, and temperature controls located 900-1100mm above floor level	,608	3.46
	Accessible guest rooms that offer equal level of comfort and amenity as non-accessible rooms	,598	4.31
	In-room tea/coffee making facilities reachable/useable from a seated position	,630	3.56
	Continuous accessible path of travel to all public areas (lounges, conference facilities, gym and swimming pool)	,594	4.47
	Designative accessible parking spaces	,709	4.43
	Bathroom door that opens outward	,545	3.78
	Rooms on lower floors	,398	3.17

Table 8. The eigenvalues, variances and total variance of accommodation attributes factor

<b>Factor Analysis</b>	1st Factor	2nd Factor	3rd Factor	4th Factor	5th Factor	6th Factor
<b>Eigenvalue</b>	8,291	6,440	6,191	6,064	5,871	4,999
<b>% Variance</b>	12,955	10,062	9,673	9,476	9,173	7,811
<b>Total Variance Explained</b>	59,149					

The reliability analysis was made by utilizing Cronbach's  $\alpha$  test. The accommodation attributes scale ATAS presented reliable scores for each factor (table 9). Cronbach  $\alpha$  for the 64 questions of the scale was excellent ( $\alpha = .968$ ).

Table 9. Reliability Test – ATAS factors

<b>Accommodation attributes</b>	<b>Cronbach's alpha</b>
Core Mobility	0,903
Hearing and Vision	0,850
Ambulant (Safety)	0,875
Service and security	0,863
Amenity (comfort/recreation)	0,895
Supplementary Mobility	0,925

#### 4. Conclusions

Through the analysis of demographic characteristics, the profile of disabled tourists has emerged. The majority of the participants were men while women accounted very small percentage. The small percentage of women's participation raises questions about the promotion and design of the tourist product, such as advertising of sport programs, planning of exercise and recreational programs focused on the needs of women with disabilities. So it is revealed a need to understand the needs of women with disabilities and response to them through sport tourism industry. Participants were between 18-39 years and most of them were single and this is with accordance to the research of Figueiredo et al. (2012). The educational level showed a superiority of high school graduates, a much higher percentage compared to the data of the survey for disabled travelers from China (Card et al., 2006). The educational level comes into agreement probably with the low income, which for the majority was less than 20,000€ per year and the possibility of choosing tourism activities. Most participants were found to work full-time / self-employed, a rate consistent with the Darcy's survey (2010).

This research investigated the accessibility dimensions of hotels for disabled tourists in terms of tourist accommodation and sports facilities. It has shown to a significant extent the accessibility problem of disabled tourists in Greece and has exported valuable data for the sport tourism industry through an attempt to explore the perceptions, experiences and preferences of sport tourists with disabilities. This target group for tourism industry is increasingly growing and it is now the time to improve information, technology and equal access for all.

According to their preferences and experiences tourists with disabilities categorized the sixty-four accommodation attributes and the most important for them (variable Means over 4) are the following: Designative accessible parking spaces, Accessible guest rooms that offer equal level of comfort and amenity as non-accessible rooms, Trained personnel in helping individuals with disabilities, Roll in hobless shower entry (no raised edge), Clear circulation and manoeuvring space between walls, furniture and fixtures in guest rooms, Pool with access provisions, Sports/recreation programs that allow persons with disabilities to participate, Non-slip bathroom floor, Assistance getting luggage to & from room, Suitable sports equipment for individuals with disabilities is provided, Gym with access provision, Clear circulation space from both sides between the toilet and the walls/door to allow for transfer, Call/emergency button in the bathroom, Room service, A positive 'can do' customer service attitude, Trained fitness instructors in helping individuals with disabilities to participate at sports/recreation programs, Grab rails in the bathroom and toilet (800-810mm) and Entrance that offers independent access (automatic doors). Both Greek and foreign participants in the survey, although they encountered a wide range of difficulties and obstacles during their journey, they continue to travel, acquire experiences, strengthen and become an important economic factor for the tourism industry. They are loyal to a destination, they stay for a long time and usually travel to large groups, making them a big and growing market for tourism businesses.

Future research in sport tourism should be focused on the type of disability and level of functionality in relation to the accessibility dimensions of people with disabilities. Lack of accessibility in sport tourism acts as a barrier for disabled tourists. More tourists with disabilities will travel and continue to travel if the accessibility and behavior of the staff are improved.

The tourism industry should understand the desires, needs and expectations of disabled tourists and limit all accessibility obstacles they encounter, providing more opportunities for travel and exercise in an environment that respects diversity. At the same time, research needs to be done to make the tourism industry more aware of the issue, to understand the obstacles encountered by disabled sports tourists by designing and redesigning innovative products and services based on the needs of this target group. Innovation activity should be defined as two innovation degrees in which client intensity is monitored by hotels and leads to the introduction of additional characteristics to existing attributes (incremental innovation) or to the adoption of a new attribute (radical innovation) in the services provided, although these changes in the service may come from process innovation (Martínez-Ros & Orfila-Sintes, 2009). The travel and tourism industry must act at all levels in order to create better conditions for disabled travelers. The World Travel Trends Report 2012/2013 refers that "People with disabilities want to participate at the travel process just like other people. They do not want to stay at home" (Berlin, 2012).

Finally, the goal is to create an accessible environment where accessibility is not a luxury but an inalienable right. It is worth noticing that the creation of an accessible environment, where everyone is able to move safely and comfortably, is the duty of all stakeholders, designers, manufacturers, supervisors and all active citizens in general, to improve the quality of life of all. People with disabilities have the same rights and wishes for tourism as any social group. According to the Global Code of Ethics for Tourism, tourism activities should promote human rights and, in particular, the rights of the most vulnerable groups, such as children, the elderly, the disabled, ethnic minorities and native populations. Tourism is a universal right and tourism for the disabled must be promoted and strengthened (World Health Organization, 2001).

## References

- Andersson, Å. E., & Andersson, D. E. (2006). *The Economics of Experiences, the Arts and Entertainment*. Cheltenham, Massachusetts : Edward Elgar Publishing.
- Avis, A., Card, J. A., Cole, S. (2005). "Accessibility and attitudinal barriers encountered by travellers with physical disabilities", *Tourism Review International*, 8(3): 239-249.
- Berlin, I. T. B. (2012). World travel trends report 2012/2013.
- Bi, Y., Card, J. A., Cole, S. T. (2007). "Accessibility and attitudinal barriers encountered by chinese travellers with physical disabilities", *International Journal of Tourism Research*, 9: 205-216.
- Blichfeldt, B. S., Nicolaisen, J. (2011). "Disabled travel: not easy, but doable", *Current issues in tourism*, 14(1): 79-102.
- Buhalis, D., Darcy, S. (2011). *Accessible Tourism: Concepts and issues*. Bristol: Channel View Publications.
- Burnett, J.J., Baker, H.B. (2001). "Assessing the travel-related behaviors of the mobility disabled consumer", *Journal of Travel Research*, 40(1): 4-11.
- Burns, N., Paterson, K., Watson, N. (2009). "An inclusive outdoors? Disabled people's experiences of countryside leisure services". *Leisure Studies*, 28(4): 403-417.
- Card, J. A., Cole, S. T., Humphrey, A. H. (2006). "A comparison of the accessibility and attitudinal barriers model: travel providers and travelers with physical disabilities", *Asia Pacific Journal of Tourism Research*, 11(2): 161-175.
- Chung, W., Kalnins, A. (2001). "Agglomeration effects and performance: A test of the Texas lodging industry", *Strategic Management Journal*, 22(10): 969-988.
- Daniels, M. J., Drogin Rodgers, E. B., Wiggins, B. P. (2005). "'Travel tales': an interpretive analysis of constraints and negotiations to pleasure travel as experienced by persons with physical disabilities", *Tourism Management*, 26(6): 919-930.
- Daniels, M. J., Rodgers, E. B. D., Wiggins, B. P. (2005). "'Travel Tales': an interpretive analysis of constraints and negotiations to pleasure travel as experienced by persons with physical disabilities", *Tourism Management*, 26(6): 919-930.
- Darcy, S. (2010). "Inherent complexity: Disability, accessible tourism and accommodation information preferences", *Tourism Management*, 31(6): 816-826.
- Darcy, S. (1998). *Anxiety to Access: The tourism patterns and experiences of new South Wales people with a physical disability*. Australia: Tourism New South Wales.
- Darcy, S., Daruwalla, P. (1999). "The trouble with travel: tourism and people with disabilities", *Social Alternatives*, 18(1): 41-48.
- Davies, B., Downward, P. (1996). "The structure, conduct, performance paradigm as applied to the UK hotel industry" *Tourism Economics*, 2(2): 151-158.
- European Commission (2004). *Improving information on accessible tourism for disabled people*. Italy: Enterprise publications.
- Figueiredo, E., Eusébio, C., Kastenholz, E. (2012). "How diverse are tourists with disabilities? A pilot study on accessible leisure tourism experiences in Portugal", *International Journal of Tourism Research*, 14: 531-550.
- Freeman, I., Selmi, N. (2010). "French versus canadian tourism: response to the disabled", *Journal of Travel Research*, 49(4), 471-485.
- Gibson, H. (1994). *Some predictors of tourist role preference for men and women over the adult life course*. Published Doctoral Dissertation, AAT: 9525663, University of Connecticut. Connecticut, United States.
- Hackett, G., Melia, D. (2012). "The hotel as the holiday/stay destination: trends and innovations" Presented at THRIC Conference, Belfast, Ireland - June 2012 and EuroCHRIE Conference, Lausanne Switzerland - October 2012: 1-10.

- Hjalager, A.M. (1997). "Innovation patterns in sustainable tourism. An analytical typology", *Tourism Management*, 18(1): 35-41.
- Hu, M. L. M., Horng, J. S., Sun, Y. H. C. (2009). "Hospitality teams: Knowledge sharing and service innovation performance", *Tourism management*, 30(1): 41-50.
- Huang, H. L. (2014). "Performance effects of aligning service innovation and the strategic use of information technology", *Service Business*, 8(2): 171-195.
- Israeli, A. (2002). "A preliminary investigation of the importance of site accessibility factors for disabled tourists", *Journal of Travel Research*, 41, 101-104.
- Ivandić, N., Telišman-Košuta, N., Čorak, S., Krešić, D. (2006). Ljetni odmorišni turizam. In Hrvatski turizam – plavo, bijelo i zeleno. Ed. Čorak, S. & Mikačić, V. Institute for Tourism: Zagreb.
- Jalali, N. (2013). *Entertainment & Arts' effect on Hotel & Restaurant Industries: An Empirical Study of Sweden*. Master's Thesis in Economics and Management of Entertainment and Art Industries, Jönköping International Business School. <http://www.diva-portal.org/smash/record.jsf?pid=diva2%3A699862&dswid=8851#sthash.eUT23rBB.dpbs>
- Lashley, C. (2008). "Studying hospitality: Insights from social sciences". *Scandinavian Journal of Hospitality and Tourism*, 8(1): 69-84.
- Lee, S. M., Olson, D. L., Trimi, S. (2012). "Co-innovation: convergenomics, collaboration, and co-creation for organizational values", *Management Decision*, 50(5): 817-831.
- Mace, R. L., Hardie, G. J., Place, J. P. (1990). *Accessible environments: Toward universal design*. Center for Accessible Housing, North Carolina State University. [http://www.ncsu.edu/ncsu/design/cud/pubs\\_p/docs/ACC%20Environments.pdf](http://www.ncsu.edu/ncsu/design/cud/pubs_p/docs/ACC%20Environments.pdf)
- Martínez-Ros, E., Orfila-Sintes, F. (2009). "Innovation activity in the hotel industry", *Technovation*, 29(9): 632-641.
- McCabe, S. (2009). *Positioning Marketing Communications for Tourism and Hospitality*. Hungary: Elsevier
- Nicolau, J. L., Santa-María, M. J. (2013). "The effect of innovation on hotel market value", *International Journal of Hospitality Management*, 32: 71-79.
- Ordanini, A., Maglio, P. P. (2009). "Market orientation, internal process, and external network: A qualitative comparative analysis of key decisional alternatives in the new service development", *Decision Sciences*, 40(3): 601-625.
- Orfila-Sintes, F., Crespi - Cladera, R., Martínez-Ros, E. (2005). "Innovation activity in the hotel industry: Evidence from Balearic Islands", *Tourism Management*, 26: 851-865. doi:10.1016/j.tourman.2004.05.005
- Orfila-Sintesa F., Mattsson J. (2007). "Innovation behaviour in the hotel industry", *Omega*, 37: 380-394. doi:10.1016/j.omega.2007.04.002
- Ottenbacher, M., Gnoth, J. (2005). "How to develop successful hospitality innovation", *Cornell Hotel and Restaurant Administration Quarterly*, 46(2): 205-222.
- Peteraf, M.A. (1993). "The cornerstones of competitive advantage: a resource-based view", *Strategic Management Journal*, 14: 179-191.
- Pine, B. J., Gilmore, J. H. (2011). *The experience economy*. Harvard Business Press.
- Rayna, T., Striukova, L. (2009). "Luxury without guilt: service innovation in the all-inclusive hotel industry", *Service Business*, 3(4): 359-372.
- Rimmer, J. H., Riley, B., Wang, E., Rauworth, A. (2004). "Physical activity participation among persons with disabilities. Barriers and facilitators", *American Journal of Preventive Medicine*, 26(5): 419-425.
- Rimmer, J. H., Schiller, W. J. (2006). "Future directions in exercise and recreation technology for people with spinal cord injury and other disabilities: perspectives from the rehabilitation

- engineering research center on recreational technologies and exercise physiology for people with disabilities”, *Top Spinal Cord Injury Rehabilitation*, 11(4): 82-93.
- Shaw, G., Coles, T. (2004). “Disability, holiday making and the tourism industry in the UK: a preliminary survey”, *Tourism Management*, 25: 397–403.
- Sladoljev, J., Sisara, J., Goles, I. K. (2014, January). “Innovation and education as key factors for further improvement of tourism and competitiveness of the Sibenik-Knin county”, In *An Enterprise Odyssey. International Conference Proceedings* (p. 461). University of Zagreb, Faculty of Economics and Business.
- Smith, R. W., Austin, D. R., Kennedy, D. W. (2001). *Inclusive and special recreation: opportunities for persons with disabilities* (4th ed.). Boston: MA: McGraw Hill.
- Sundbo, J., Orfila-Sintes, F., Sørensen, F. (2007), “The innovative behavior of tourism firms: comparative studies of Denmark and Spain”, *Research Policy*, 36: 88-106.
- Tang, T. W., Wang, M. C. H., Tang, Y. Y. (2015). “Developing service innovation capability in the hotel industry”, *Service Business*, 9(1): 97-113.
- Tugores, M., García, D. (2015). “The impact of innovation on firms' performance: an analysis of the hotel sector in Majorca”, *Tourism Economics*, 21(1): 121-140.
- UNWTO. (2014). *Tourism Highlights, 2014 Edition*. Madrid: UNWTO.
- World Health Organization (2001). Global code of ethics for tourism.  
<http://ethics.unwto.org/en/content/global-code-ethics-tourism>
- Yau, M. K., McKercher, B., Packer, T. L. (2004). “Traveling with disability more than an access issue”, *Annals of Tourism Research*, 31(4): 946-960.
- Živoder, S. B., Čorak, S. (2015). “Importance of sport and recreation activities for tourism development: the case of Croatia”, *Sport Tourism: New Challenges in a Globalized World*: 218.

### **Biographical sketch**

- Georgia Yfantidou, Ph.D., Educational personnel, Department of Physical Education & Sport Sciences, Democritus University of Thrace, Greece. Her research interests include tourist behavior, sustainability, sport tourism and innovation.
- Eleni Spyridopoulou, M.Sc., Accountant - Office Administrator, Department of Physical Education & Sport Sciences, Democritus University of Thrace, Greece. Her research interests include economics, sustainability and human resources management.
- Alkisti Papaioannou, Ph.D., Lecturer under the (Presidential Decree No.407/80 regulation), Department of Sport Management, University of Peloponnese, Greece. Her research interests include human resource management, facility management and entrepreneurship/innovation.
- Panagiota Balaska Ph.D., Director of sport for all programs at MGO, Department of Physical Education & Sport Sciences, Aristotle University of Thessaloniki, Greece. Her research interests include sport participation and facility management.