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A Study on the Travel Patterns of Physically Disabled People

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The main objective of this paper is to highlight the travel patterns and experiences of people with a physical disability. To understand better the travel needs of people with a physical disability, it is useful to examine how travel patterns differ across demographic variables. The method chosen for the empirical data collection was a self-completed web-based questionnaire, which was answered by a total of 596 physically disabled people. The data obtained were evaluated using frequency, percentage, arithmetic average, t-test, chi-square and factor analysis. The research findings reveal that people with physical disability in different demographics groups differ in their travel patterns.

Key words: disabled people, travel patterns, accessibility

Introduction

The disabled population of the world is over 500 million, and constitutes approximately 8% of its population (UNESCAP, 2000). It is now widely recognized that people with disabilities in addition to their care-givers, friends and relatives and the elderly comprise a large potential consumer market segment for the tourism industry (Vignuda, 2001). Therefore, people with disabilities present an important developing market in the world tourism industry. Nevertheless, the concept of “tourism and people with disabilities” is quite new. Although the literature

on tourism and people with disabilities has been increasing, detailed research on disabled travelers is fairly limited to tourism studies, especially those found in internationally referenced academic journals. The work that does exist tends to focus on the barriers traveling disabled people encounter. This research report focuses on issues associated with tourism and disability. It provides an insight into the tourism experiences of people with physical disabilities. With a better understanding of their travel patterns, it is hoped that society at large, especially tourism marketers, will be more aware of their needs and travel behaviors.

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People with Disabilities and Tourism

The World Health Organization has described disability as “any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being” (United Nations, 2008). The UK Disability Discrimination Act describes a disabled person as someone who “has a physical or mental impairment which has a substantial and long-term adverse effect on his/her ability to carry out normal day-to-day activities” (Office of Public Sector Information, 1995). Disability can be categorized into four different types: hearing disability, sight disability, physical disability and intelligence deficiency (Daniels, Rodgers, & Wiggins, 2005).

The right to travel and access tourist activities should be perceived as a key social right for disabled people and their families. Travel and tourism is an important factor in the quality of life of all people. For disabled people and their families the chance to go away on holiday can be a particularly important chance to relax and recuperate (European Disability Forum, 2001). There are two important declarations on this issue. The first is the Universal Declaration of Human Rights adopted in 1948. It states that all human beings are born free and are equal in dignity and rights (article 1). Moreover, everyone is entitled to all the rights and freedoms set forth in that Declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status (article 2). It is also declared that everyone has the right to freedom of movement (article 13) and the right to rest and leisure (article 24) (United Nations, 1948). The second is the Manila Declaration on World Tourism in 1980. It declares that the ultimate aim of

tourism is to improve the quality of life and the creation of better living conditions for all peoples (World Tourism Organization, 1980).

Turco, Stumbo, and Garncarz (1998) pointed out that people with disabilities are capable of participating in tourism activities. However, some arrangements should be made for people with disabilities in order for them to be included in tourism activities, such as tourist attractions, information resources, transportation, accommodation, and food and beverage facilities. Some countries have made legal regulations about this issue. According to Miller and Kirk (2002), the USA enacted the Law for Americans with Disabilities Act (ADA) in 1990, and the UK passed the Law of the Disability Discrimination Act (DDA) in 1995; both play important roles, especially in the tourism industry.

Turkey passed “the Law for Disabled People” in July 2005. The aim of this law is to help disabled people in the following areas: health, education, rehabilitation, employment, care and social security problems. The law also serves to provide assistance in every area and aspect of their lives, by taking measures to remove any obstacles and by making appropriate arrangements for the coordination of these services. These would include easy access to public buildings, roads, sidewalks, pavements and other properties deemed to be in the public realm (Türkiye Büyük Millet Meclisi, 2005).

Disability has been subjected to studies in the tourism and travel fields. At present, although the disabled customers’ market is an important niche market for the tourism industry, academic research so far on the travel of disabled people has been insufficient (Burnett & Bender, 2001; Darcy, 1998, 2002; Israeli, 2002). Earlier studies about disabled people and travel were carried out at the end of the 1980s and in the middle of the

1990s (Cavinato & Cuckovich, 1992; Driedger, 1987; Gleeson, 1997; Muloin, 1992; Murray & Sproats, 1990; Smith, 1987). There have been some additional studies carried out recently, but only a few (Aitchison, 2003; Daniels et al., 2005; McKercher, Packer, Yau, & Lam, 2003; Ray & Ryder, 2003; Yau, McKercher, & Packer, 2004).

Some studies have tended to focus on the barriers imposed on the travel of disabled people and policy measures. Smith (1987) examined the leisure of disabled tourists in terms of barriers to taking part in tourism activities. He identified three main types of barrier: environmental, interactive and intrinsic. Driedger (1987) has highlighted the impact of international and national air regulations on the travel of people with disabilities. Cavinato and Cuckovich (1992) looked at transportation barriers for tourists with disabilities. Abeyraine (1995) also examined transportation policy constraints, particularly those placed on legal measures adopted to facilitate air travel by individuals with disabilities.

Some studies analyze the decision-making processes of disabled people. Israeli (2002) studied the importance of accessibility of disabled people to tourist sites. The author demonstrated that tourists with disabilities use a decision-making process that is different from other tourists when evaluating a tourist site. Burnett and Bender (2001) identified the destination decision criteria of travelers with mobility impairments. Murray and Sproats (1990) found that the first tourism experience is an important determining factor in the decision-making process of disabled people's future plans for travel. Ray and Ryder (2003) explored the travel needs of disabled people. They examined the importance of information when disabled people are planning a vacation.

The Importance of the Disability Market

The significance of this large market can be appreciated when the total number of disabled people in the world is taken into consideration. UNESCAP (2000) reported that approximately 5–20% of a country's population is disabled. For example, 20% of the total population of England (English Tourism Council, 2000), 19.3% of the total population of the USA (US Census Bureau, 2000), 18% of the total population of Australia and 12% of the total population of Germany (Australian Bureau of Statistics, 1993) are disabled. In Turkey, the number of people with disabilities is approximately 7.5–8 million (12.3% of the total population) (Özürlüler İdaresi Başkanlığı, 2002).

“Importantly, the number of people with disabilities is expected to increase as a result of the increase in life-span, decrease in communicable diseases, improved medical technology, and improved child mortality” (Yau et al., 2004, p. 947). If the companions of disabled people are taken into account, the potential demand for travel will be more than these figures. However, the important point here is how many people with disabilities join in tourism activities. According to the research carried out by Touche Ross in 1993, 8 million disabled people in Europe go on a trip abroad at least once per year. In addition, 15 million European disabled people travel within their own country. Moreover, 22 million European disabled people join daily excursions in their own country. Regarding the USA, a 2002 market study conducted by Open Doors, a well-recognized staff training firm focused on serving guests with disabilities, found that travelers with disabilities took 31.7 million trips per year (Opening Doors, 2002, as cited in Grady & Ohlin, 2009, p. 161). Arellano (2003) claims that people with disabilities are a potentially important customer component for the tourism

industry and tapping into this market could generate billions of euros for the tourism industry. Shaw-Lawrence (1999) pointed out that countries wishing to expand their incoming travel markets should understand the special needs of tourists with disabilities.

A “tourism for all” approach makes good business sense. The European Commission handbook *Making Europe accessible for tourists with disabilities* (European Commission, 1996) identifies the economic potential of addressing the travel needs of disabled people and their families, which can benefit the tourist industry. In addition, the demographic changes of an ageing population have added important economic implications for the tourist industry. Older people share many of the access barriers faced by disabled people. By addressing these issues, the tourist industry would generate more business by attracting more customers. By improving the quality of service for disabled people, the tourist industry would improve the quality of service for all customers.

The objective of this paper is to investigate the travel patterns of physically disabled people. In reviewing the literature it was found that there were no pre-existing statistical data on the tourism patterns and experiences of Turkish residents with a physical disability that could provide a qualitative and quantitative foundation for further consideration or address access-related issues. This study represents an initial investigation of this traveler group in Turkey.

Study Methods

To achieve the objectives of the study, a range of methodologies was employed. These included a literature review, the empirical questionnaire-based email survey, and discussions and liaison with key organizations

(Turkish Disabled Association, Prime Minister Administration for Disabled People) and individuals. The method chosen for the empirical data collection was a self-completed web-based questionnaire. This was determined to be the only viable method to reach a country-wide cross-section of the population of the Turkish people with a disability in sufficient numbers. No census list of Turkish people with a disability was available other than through the organizational email mailing lists. Discussions with key organizations and individuals were held during the development of the questionnaire and to obtain access to organizational email mailing lists. The questionnaire was sent for discussion to more than 20 organizations and individuals over a 1-month period during the different stages of preparation. A final pilot questionnaire was sent back to these organizations and individuals. Their comments were incorporated into the final questionnaire. As such, the final questionnaire was changed to a small degree from those of the original drafts.

In this research, the survey population included physically disabled people in Turkey who use the Internet or their own email. In order to reach the target population, a standard document was prepared and sent to the email addresses of the associations of disabled people. The document stated the aims and the content of the research and gave instructions on how to fill out the questionnaire. Moreover, associations were asked to deliver our web-based questionnaire to their members and put it on their web pages. Two leading associations put our survey links on their web pages. The questionnaire was located at the Internet address <http://www.absunmep.gazi.edu.tr/yayli> between January 8 and April 10, 2006. At the end of the period, the questionnaire was completed correctly by a total of 660 disabled people. Initially, we wanted

to include all disabled groups in our survey. However, the number of respondents with sight and hearing disabilities of total respondents was too small, 28 and 36, respectively. Therefore, these groups of disabled people were not included in the final research. As a result the number of respondents was 596. As there are no data on the number of physically disabled people who have access to the Internet, it is not possible to give web survey return rate. The main limitation of the study was that it reached only those with a physical disability who had Internet access. Data analysis of the questionnaire was carried out using the Statistical Package for the Social Sciences (SPSS) for Windows. Frequencies, cross-tabulations and descriptions are provided where appropriate. The qualitative open responses at the end of the questionnaire were typed verbatim into a word processing file together with the questionnaire number.

Survey Findings

Profiles of the Respondents

The total number of respondents was 596. Of the respondents, 62.4% were male and 37.6% female; 66.8% were single and 33.2% married. Most of the respondents were aged between 26 and 35 years (55%), followed by people aged between 36 and 45 (20.1%), 15 and 25 (17.4%), and 46 and over (7.4%). In terms of the employment status of the respondents, people who had full- or part-time employment were in the majority (75.8%). Only a small proportion of respondents had not continued after their primary school education (12.1%), whereas most had completed high school (38.3%). A significant number had attained relatively high levels of academic training: 2-year associated degree (19.5%) and university

qualifications (30.2%). Nearly half of the respondents had some kind of university degree. As for the monthly income of the respondents, the majority of the respondents had an average level of income. A large share of respondents earned less than TL12,000 per year (54%). However, a significant proportion of respondents earned between TL12,000 and 24,000 per year (30.9%) and over TL24,000 (15.1%). (Exchange rate: US\$1 is equal to approximately TL1.5.) Of the respondents, 48.7% were white collar, 22.1% blue collar, 10.4% retired, 10.4% unemployed, 5.0% tradesmen and 3.4% students.

Tourism Patterns

This section analyzes the experiences and preferences of physically disabled people towards travel. In this context the following areas were explored: frequency of taking a holiday, domestic holiday planning period, travel dependence, purpose of holiday, desired accommodation type, length of stay, mode of transport, sources of information and factors that affect destination choice.

The Frequency of Taking a Holiday

A large number of respondents had undertaken more than one trip in the last 5 years. The average number of trips is 2.58. One-way analysis-of-variance (ANOVA) shows that there is a significant difference between age groups ($F = 8.007$, $p = 0.000$), monthly income groups ($F = 2.929$, $p = 0.020$), educational level groups ($F = 19.324$, $p = 0.000$) and occupation groups ($F = 10.055$, $p = 0.000$) in terms of the number of trips taken. It means that those people in different demographics groups differ in their travel behavior regarding the frequency of taking a holiday.

Further, Tukey HSD analysis indicated that the age group 26–35 years had taken more trips than others ($\bar{x} = 2.82$), whereas 46 and older age groups had taken the fewest trips ($\bar{x} = 1.73$). Regarding monthly income, high-income groups ($\bar{x} = 2.78$) had more trips than lower income groups. In terms of educational level, people with a 2-year associated degree ($\bar{x} = 3.29$) had more trips than others. Concerning occupation, both tradesmen/merchants and students shared the highest mean. *t*-Test statistical analysis indicated that there were no significant differences between male and females ($t = 0.964$, $p = 0.335$) in terms of the number of trips taken. The analysis also indicated that there was no significant difference between single and married people ($t = -1.425$, $p = 0.155$). The implication of this analysis is that gender and marital status had no effect on their travel behavior regarding the frequency of taking a holiday.

Domestic Holiday Planning Period

One-way ANOVA shows that there are significant differences between all groups between each variable in terms of domestic holiday planning period: age groups ($F = 12.467$, $p = 0.000$), monthly income groups ($F = 4.401$, $p = 0.002$), educational level groups ($F = 5.980$, $p = 0.001$) and occupation groups ($F = 10.570$, $p = 0.000$). Additionally, Tukey HSD analysis indicated that the 15–25 age group takes the longest time period to plan a holiday ($\bar{x} = 77.58$ days), whereas the over 46 age group's mean is 27.27 days. Regarding monthly income, middle-income groups ($\bar{x} = 57.34$ days) planning for their holidays take the longest time period. In terms of educational level, people with a 2-year associated degree ($\bar{x} = 66.52$ days) spend the longest time in planning for their holiday, whereas primary

school groups have the shortest mean ($\bar{x} = 32.11$ days). Concerning occupation, students had the highest mean ($\bar{x} = 126$ days), whereas tradesmen had the shortest mean ($\bar{x} = 10.20$ days). The *t*-test statistical analysis indicated that there were slight differences between males and females ($t = -2.016$, $p = 0.044$) and significant differences between single and married people ($t = 4.481$, $p = 0.000$) in terms of domestic planning period. The implication of one-way ANOVA and *t*-test analyses is that people in different demographics groups differ in their travel behavior regarding the domestic holiday planning period.

Travel Dependence

Travel dependence refers to the person's ability to travel independently without the need for assistance by an attendant, caregiver or family member, for the tasks of daily living. Of the 596 respondents, 336 (56.4%) required the assistance of an attendant. On the other hand, the rest (260) were able to travel independently (43.6%). The need to travel with an attendant greatly complicated the travel process because of the extra planning and financial resources required. When answers of the respondents who needed help were examined in terms of their socio-demographic profiles, getting help from family was the preferred option (69%). The second preferred option (23.8%) was people other than family members and relatives. The third was relatives (7.2%). This finding is consistent with the characteristics of the traditional Turkish family and the lack of services available for people with disabilities. When travel dependence was examined in terms of each socio-demographic profile, it was found that family is the preferred option.

Purpose of Holiday

The frequencies analysis shows that the main reasons stated for holidays were recreation/leisure (69.3%), cultural and historical (16.2%), visiting friends and relatives (9.7%) and adventure (3.4%), and were, to a lesser extent, disability-specific or for medical reasons (1.4%). A cross-tabulation analysis was made to understand better the disabled people's travel behaviors in terms of purpose of holiday. The analysis by respondents' socio-demographic profiles indicated there is a relationship between purpose of a holiday and the disabled people's gender (χ^2 value = 14.835, $p = 0.005$), marital status (χ^2 value = 34.397, $p = 0.000$), age (χ^2 value = 75.537, $p = 0.000$), monthly income (χ^2 value = 92.925, $p = 0.000$), education levels (χ^2 value = 61.746, $p = 0.000$) and occupation (χ^2 value = 115.415, $p = 0.000$). The implication of cross-tabulation analysis is that people in different demographics groups differ in their travel behavior concerning the purpose of holiday taking. Although recreation is the most stated purpose for a holiday for all socio-demographic profiles, respondents' preferences differed in other items. For example, cultural purpose is the second preferred item for single people whereas visiting friends and relatives (VFR) is the second preferred item for married people. Moreover, VFR purpose is the second preferred item for the over 46 age groups whereas it is third for the 26–35 age groups.

Desired Accommodation Type

The frequencies analysis shows that the most commonly used accommodation type was a hotel (64.4%); the second was homes of friends and relatives (18.8%), followed by

specific accommodation for disabled people (10.1%) and rented houses or flats (6.7%). A cross-tabulation analysis was made to be better aware of each group of the disabled people's travel behaviors in terms of desired accommodation type when they are taking a holiday. The analysis by respondents' socio-demographic profiles indicated that the desired accommodation type was irrelevant to disabled people's gender (χ^2 value = 1.447, $p = 0.695$). However, desired accommodation type was relevant to disabled people's marital status (χ^2 value = 26.900, $p = 0.000$), age (χ^2 value = 148.618, $p = 0.000$), monthly income (χ^2 value = 56.490, $p = 0.000$), education levels (χ^2 value = 48.810, $p = 0.000$) and occupation (χ^2 value = 122.089, $p = 0.000$). Although hotel is the most stated accommodation type for a holiday for all socio-demographic profiles, respondents' preferences differed in other items. For example, specific accommodation for disabled people is the second preferred item for the 36–45 age groups whereas it is third for the over 46 age groups, and fourth for the 26–35 age groups.

Length of Stay

Respondents were asked the number of days they stayed during their last holiday. The average number of days was 14.66. The one-way ANOVA shows that there is a significant difference between age groups ($F = 10.326$, $p = 0.000$), monthly income groups ($F = 2.467$, $p = 0.044$), educational level groups ($F = 4.894$, $p = 0.002$) and occupation groups ($F = 4.088$, $p = 0.001$) in terms of the length of stay. Further, Tukey HSD analysis indicated that the 36–45 age groups had stayed longer than others ($\bar{x} = 17.47$ days), whereas the over 46 age groups

had the lowest mean ($\bar{x} = 9.36$ days). Regarding monthly income, upper middle-income groups ($\bar{x} = 16.36$ days) had stayed longer than other income groups. In terms of educational level, people with a university degree ($\bar{x} = 16.22$ days) had stayed more than others. Concerning occupation, tradesmen/merchants had the highest mean ($\bar{x} = 18.40$ days). *t*-Test statistical analysis indicated that there were no significant differences between males and females ($t = 1.235$, $p = 0.217$) and single and married people ($t = -0.564$, $p = 0.573$) in terms of length of stay. The implication of one-way ANOVA is that people in different demographics groups differ in their travel behavior regarding the length of stay.

Mode of Transport

Transport is a crucial factor in the travel of people with a physical disability. Although advances in public transport access have been made, much of the Turkish transport system remains largely inaccessible to the disabled. The frequencies analysis shows that the main methods of transport used to reach holiday destinations were bus/coach (40.6%) and private vehicles or private modified vehicles (33.7%). Other forms of transport used, to a lesser degree, were planes (20.1%) and trains (5.6%). A cross-tabulation analysis was made to understand better each group of the disabled people's travel behaviors in terms of mode of transport when they are taking a holiday. The analysis by respondents' socio-demographic profiles indicated that the mode of transport was relevant to disabled people's gender (χ^2 value = 27.957, $p = 0.000$), marital status (χ^2 value = 27.691, $p = 0.000$), age (χ^2 value = 83.186, $p = 0.000$), monthly income (χ^2 value = 192.760, $p =$

0.000), educational levels (χ^2 value = 108.719, $p = 0.000$) and occupation (χ^2 value = 65.571, $p = 0.000$). Although bus is the preferred mode of transport for taking a holiday for all socio-demographic profiles, respondents' preferences differed in other items. For example, private car is the first preferred item for males whereas it is second for females. Moreover, bus is the first preferred item for single people whereas private car is first for married people.

Sources of Information

The Internet, word-of-mouth and travel agency are ranked first, second and third, respectively, as sources of information when planning to travel. Television and radio are ranked towards the bottom of the rankings of sources used. The current study findings are fairly consistent with Ray and Ryder's (2003) and Burnett and Bender's (2001) studies (Table 1).

Factors Influencing Destination Choice

Before arriving at the factors influencing destination choice by using factor analysis, a variance value of 7,013.654 and significance level of 0.000 were obtained using Bartlett's sphericity test, which suggests that the inter-correlation matrix contains sufficient common variance to make a factor analysis worthwhile; the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.703, in the acceptable range (well above 0.60).

Although the total sample size was 596, only 501 respondents answered all 34 items (see Appendix 1) of questions related to factor analysis. Therefore, the sample data of 501

Table 1 Importance of Sources of Information when Planning a Vacation

Rank	Meric & Hunt (1998) Nature Tourists	Burnett & Bender (2001) Abilities Expo Survey Respondents	Ray & Ryder (2003) "Eilities" (Mobility Challenged) Ecotourists	The Current Study
1	Previous experience	Word-of-mouth	Word-of-mouth	The Internet
2	Travel books/guides	The Internet	The Internet	Word-of-mouth
3	Word-of-mouth	Travel books/guides	Travel books/guides	Travel agency
4	Tourist bureaus	Travel agency	History/literature books	Previous experiences
5	Toll-free lines	Magazines	Tourist bureaus	Magazines
6	Magazines	Tourist bureaus	Travel agency	Tourist bureaus
7	Newspapers	Television	Newspapers	Disabled people associations
8	Television	Toll-free lines	Magazines	Television and radio
9	Travel agency	History/literature books	Toll-free lines	
10	Public radio	Newspapers	Television	
11	Commercial radio	Chambers of Commerce	Chambers of Commerce	
12		Radio	Radio	

Sources: Meric & Hunt (1998); Burnett & Bender (2001); Ray & Ryder (2003).

responses were examined using factor analysis with principal components as the extraction technique and varimax as the rotation method. Eight factors were extracted in the unrotated factor solution with eigenvalues greater than unity. These eight factors explain 70.594% of the variance. However, interpretation of the factors that are not subject to rotation is rarely significant. Three of the items were rejected because of their low communalities in the first rotated solution to improve the factor analysis. A more conservative solution was then sought by inspecting the factor screen plot. Then, after the content analysis, eight non-significant variables that had low loading values were not included in the factor analysis. After analyzing the remaining 26 factors, eight factors having a factor loading of 0.50 and an eigenvalue greater than unity were obtained. These eight factors explain 70.594% of the variance, which is an acceptable percentage. The compromise is worthwhile because the factor solution is easier to interpret. A varimax rotation was applied that converged in 12 iterations. According to the accepted guidelines for identifying significant factor loadings, 0.40 was accepted as the cut-off point for interpretation purposes. Eight factors were therefore identified as the main dimensions underlying destination choice. Reliability was evaluated by assessing the internal consistency of the items representing each factor using Cronbach's α . The reliabilities of factors are shown in Table 2. Cronbach's α values were high, ranging from 0.706 to 0.831 for the eight factors.

Factor 1 includes items related to the recreation and entertainment facilities. The items in factor 2 form a group including a number of alternative accommodation types. Factor 3 consists of accessibility of superstructure such as accommodation,

food and beverage. Factor 4 is composed of historical values. The items in factor 5 are about experience/advice. Factor 6 comprises items related to climate/natural beauty. The items in factor 7 are linked to the state of disability. Factor 8 is composed of only one item, which is cost of holiday. Although uses of a single item factor cannot be appropriate in factor analysis, in this study the cost of holiday factor is used for the factor analysis because of its importance in destination choice.

The descriptive statistics on choice of travel mean by their factors have been calculated and the results are given in Table 3. The research hypothesis was that each factor's test value was three (normal value of each load). Testing the hypothesis by one-sample *t*-tests showed each factor to be statistically different from the test value at the $p < 0.05$ significance level. This means each factor was found to have a higher value than the tested value and that participants value these factors more highly. The analysis indicated that "superstructure" was the most important factor for destination choice of physically disabled people. On the other hand, the least important factor was found to be the "alternative accommodation type".

A *t*-test was done to see whether there is a significant difference between genders in terms of destination choice factors. *t*-Test statistical analysis indicated that there are no significant differences between males and females in terms of "recreation and entertainment, alternative accommodation type and state of disability" factors. For others, there is a statistical difference. Females give more importance to superstructure, historical values, climate/natural beauty and cost of holiday than do males. Regarding marital status in terms of destination choice factors, *t*-test statistical analysis showed that there

Table 2 Results of Factor Analysis to Destination Choice

Factors	Factor Loadings	Initial Eigenvalues	Variance Explained (%)	Cronbach's α
<i>Factor 1: Recreation and entertainment</i>		6.430	13.962	0.820
Taste of traditional foods and beverages	0.778			
Accessibility of parks and recreational attractions	0.713			
Accessibility of night-life	0.694			
Accessibility of city tours	0.645			
Accessibility of concert facilities	0.630			
Accessibility of sport facilities	0.602			
Meeting with other peoples	0.584			
<i>Factor 2: Alternative accommodation type</i>		3.113	10.537	0.811
Availability of friends and relatives	0.825			
Accessibility of thermal facilities	0.772			
Accessibility of campsites	0.677			
<i>Factor 3: Superstructure</i>		2.128	10.507	0.732
Accessibility of accommodation establishments	0.746			
Accessibility of food and beverage establishments	0.678			
Accessibility of health facilities	0.653			
Accessibility of shopping facilities	0.610			
Accessibility of transportation	0.577			
<i>Factor 4: Historical values</i>		1.828	9.805	0.831
Accessibility of historical attractions	0.852			
Accessibility of museums and art galleries	0.834			
<i>Factor 5: Experience/advice</i>		1.398	8.643	0.708
Previous experience	0.836			
Advice of relatives and friends	0.674			
Advice of travel agency/tour operators	0.579			

(Continued)

Table 2. Continued

Factors	Factor Loadings	Initial Eigenvalues	Variance Explained (%)	Cronbach's α
<i>Factor 6: Climate/natural beauty</i>		1.328	6.326	0.766
Weather conditions	0.764			
Sightseeing places	0.682			
<i>Factor 7: State of disability</i>		1.079	5.887	0.706
Availability of specially envisaged accommodation establishments for disabled people	0.783			
My disability status	0.571			
Attitudes of local people towards disabled people	0.513			
<i>Factor 8: Cost of holiday</i>		1.050	4.927	-
Cost of holiday	0.846			

Notes: KMO Index = 0.703; Bartlett's test = 7,013.654 (significance = 0.000). Extraction method: principal components analysis. Rotation method: varimax with Kaiser normalization. Rotation converged in 12 iterations.

were no significant differences between "recreation and entertainment, superstructure and historical values". On the other hand, statistical differences were found for the factors alternative accommodation type, experience/advice, climate/natural beauty, state of disability and cost of holiday (see Table 4).

One-way ANOVA shows that there is a statistically significant difference between age groups in terms of alternative accommodation type, superstructure, experience/advice, climate/natural beauty, state of disability and cost of holiday. Regarding income level, the one-way ANOVA shows that there is no statistically significant difference between income levels in terms of "recreation and entertainment" (see Table 5).

The one-way ANOVA shows that there is a statistically significant difference between education levels in terms of all factors. Regarding occupation status, the one-way ANOVA

shows that there is a statistically significant difference between occupation status in terms of all destination choice factors (see Table 6).

Conclusion

Currently, one in eight people in the world is living with a physical or mental disability. Depending on the development level of individual countries, it is estimated that this number will increase gradually. The disabled customers' market is gaining importance, and exploiting its potential has become a key issue for tourism authorities. By understanding the importance of the disabled market, many countries aim to obtain a greater share of this market. Disabled people should not be considered incapable of participating in tourism activities and of establishing relationships with other people. It is necessary to

Table 3 Means and One-sample *t*-Test of Factors Scales

Ranking of Factors by Means	<i>n</i>	Means ^{a,b}	Standard Deviation	<i>t</i> -Values	<i>p</i> -Values
Superstructure	568	4.307	0.569	54.729	0.000
Cost of holiday	596	4.28	0.905	34.473	0.000
Climate/natural beauty	584	4.172	0.656	43.197	0.000
Experience/advice	556	4.041	0.774	31.689	0.000
Historical values	584	3.897	0.765	28.317	0.000
Recreation and entertainment	552	3.728	0.646	26.457	0.000
State of disability	540	3.669	0.789	19.707	0.000
Alternative accommodation type	576	3.424	0.987	10.323	0.000

^a1: Not at all important; 2: not very important; 3: neutral; 4: somewhat important; 5: very important.

^bTest value = 3.00.

accept that traveling is a human right for all, including disabled people.

The overall purpose of the study was to contribute to the body of knowledge on the travel patterns of people with physical disabilities and to introduce this consumer group to the business community, with an emphasis on service marketers. To this end, the quantitative data were complemented through anecdotal documentation of the tourism experiences of people with a physical disability. This provides a greater understanding of the travel patterns of people with a physical disability. The following conclusions can be drawn from the survey findings.

The average frequency of taking a holiday is 2.58 times in 5 years, which means that the respondents take a holiday at least once in 2 years. There were no effects of gender and marital status on the frequency of taking a holiday. When monthly income increases, the frequency of taking a holiday also increases. People in the 26–35 years age group travel more frequently than people in other age groups. As expected, unemployed and blue-collar workers travel less than people in other occupations. People with a 2-year

associated degree travel more frequently than others.

The average duration of the planning period is 47.7 days for a domestic holiday. The 15–25 age group, middle monthly income groups, 2-year associated degree groups, students, females and singles had the longest planning period within their own groups.

The majority of respondents required the assistance of someone (56.4%). The need to travel with an attendant greatly complicated the travel process because of the extra planning and financial resources required. Family was the preferred choice for all categories when required assistance was needed during travel. This finding is consistent with the characteristics of the traditional Turkish family and the lack of services for people with disabilities. The point to be emphasized here is that every two physically disabled customers create one extra non-disabled customer.

While recreation/leisure (69.3%) was the foremost reason for taking a holiday for all socio-demographic categories, disability-specific or medical reasons (1.4%) was the

Table 4 *t*-Test for Destination Choice Factors in Terms of Gender and Marital Status

Factors	Gender				Marital Status			
	\bar{x} Male	\bar{x} Female	<i>t</i>	<i>p</i>	\bar{x} Single	\bar{x} Married	<i>t</i>	<i>p</i>
Recreation and entertainment	3.8	3.7	1.88	0.06	3.78	3.77	0.22	0.82
Alternative accommodation type	3.4	3.3	1.05	0.29	3.32	3.65	-3.7	0.00
Superstructure	4.1	4.3	-2.3	0.02	4.24	4.20	0.89	0.37
Historical values	3.8	3.9	-2.1	0.03	3.93	3.81	1.73	0.08
Experience/advice	3.4	3.2	3.17	0.00	3.31	3.50	-2.4	0.01
Climate/natural beauty	3.8	4.0	-4.5	0.00	3.99	3.70	4.87	0.00
State of disability	3.1	3.1	0.03	0.97	3.06	3.44	-4.4	0.00
Cost of holiday	4.1	4.4	-2.7	0.00	4.35	4.12	3.01	0.00

1: Not at all important; 2: not very important; 3: neutral; 4: somewhat important; 5: very important.

Table 5 One-way ANOVA Test for Destination Choice Factors in Terms of Age and Income Level

Factors	Age						Income						
	\bar{x}^a	\bar{x}^b	\bar{x}^c	\bar{x}^d	<i>F</i>	<i>p</i>	\bar{x}^e	\bar{x}^f	\bar{x}^g	\bar{x}^h	\bar{x}^i	<i>F</i>	<i>p</i>
Recreation and entertainment	3.84	3.76	3.82	3.68	0.79	0.49	3.69	3.78	3.72	3.82	3.94	2.19	0.06
Alternative accommodation type	3.34	3.28	3.81	3.63	8.85	0.00	3.70	3.48	3.37	3.16	3.07	6.62	0.00
Superstructure	4.02	4.29	4.30	4.18	7.07	0.00	4.27	4.26	4.26	3.88	4.22	3.94	0.00
Historical values	3.96	3.90	3.77	3.95	1.22	0.29	3.98	3.93	3.98	3.72	3.64	4.04	0.00
Experience/advice	3.48	3.40	3.14	3.40	3.66	0.01	3.58	3.34	3.35	3.48	3.07	5.35	0.00
Climate/natural beauty	4.10	3.97	3.58	3.81	14.30	0.00	4.03	3.90	3.68	4.05	4.00	5.96	0.00
State of disability	3.11	3.03	3.49	3.59	9.91	0.00	2.98	3.29	3.16	3.08	3.27	2.59	0.03
Cost of holiday	4.30	4.42	4.10	3.63	12.3	0.00	4.81	4.29	4.02	3.90	4.04	19.6	0.00

^a15–25 years, ^b26–35 years, ^c36–45 years, ^d46 years and over.

^eLess than TL500

^fTL501–1,000

^gTL1,001–1,500

^hTL1,501–2,000

ⁱmore than TL2,000.

Table 6 One-way ANOVA Test for Destination Choice Factors in Terms of Education and Occupation

Factors	Education						Occupation							
	\bar{x}^a	\bar{x}^b	\bar{x}^c	\bar{x}^d	<i>F</i>	<i>p</i>	\bar{x}^e	\bar{x}^f	\bar{x}^g	\bar{x}^h	\bar{x}^i	\bar{x}^j	<i>F</i>	<i>p</i>
Recreation and entertainment	3.76	3.73	3.96	3.72	3.98	0.00	3.88	3.70	3.84	4.46	3.66	3.67	6.50	0.00
Alternative accommodation type	3.95	3.58	3.02	3.30	16.2	0.00	3.38	3.32	3.91	3.03	3.73	3.00	6.45	0.00
Superstructure	4.13	4.34	4.10	4.22	5.42	0.00	4.31	4.16	4.31	4.73	4.25	3.92	6.23	0.00
Historical values	3.96	4.03	3.75	3.78	5.20	0.00	4.15	3.97	3.87	3.88	3.96	3.60	4.86	0.00
Experience/advice	3.26	3.66	3.17	3.18	15.1	0.00	3.52	3.29	3.51	3.44	3.33	3.00	2.65	0.00
Climate/natural beauty	3.33	3.97	4.00	3.98	21.9	0.00	4.03	3.93	3.96	2.70	3.91	4.25	25.9	0.00
State of disability	3.25	3.07	3.06	3.35	3.68	0.01	3.15	3.00	3.59	3.33	3.43	3.53	6.38	0.00
Cost of holiday	3.72	4.44	4.24	4.31	12.5	0.00	4.60	4.36	4.32	2.66	3.93	4.20	31.1	0.00

^aPrimary school^bhigh school^ccollege^duniversity degree.^eBlue collar^fwhite collar^gunemployed^hmerchantⁱretired^jstudent.

least important reason. It is worth noting that physically disabled people show similar attitudes as non-disabled people in terms of reasons for taking a holiday. According to a study undertaken by the Association of Turkish Travel Agencies, it was discovered that leisure and recreation are the first reasons and medical is the last reason for taking a holiday, 62.3% and 2.5%, respectively (Türkiye Seyahat Acentaları Birliği, 2001).

The preferred accommodation type is a hotel for all socio-demographic categories. It is interesting to note that accommodation specifically designed for physically disabled people is not preferred very much. It is reasonable to assume that people with physical disabilities do not want to be segregated from non-disabled people.

The average length of stay was 14.6 days, ranging from 9.3 to 18.4 days. The average length of stay for physically disabled people is higher than that of the general public (Kültür ve Turizm Bakanlığı, 2008).

Bus/coach and private vehicles or private modified vehicles were the main methods of transport to reach holiday destinations. Other forms of transport used, to a lesser degree, were planes and trains.

When planning travel, the Internet, word-of-mouth and travel agencies are ranked first, second and third as the sources of information consulted. Television and radio are towards the bottom of the rankings of sources used. The current study findings are quite consistent with Ray and Ryder's (2003) and Burnett and Bender's (2001) studies.

As a result of factor analysis, eight main factors were determined. The analysis determined that "superstructure" was the most important factor influencing the destination choice of physically disabled people, whereas the least important factor was "alternative accommodation type".

Recommendations

As a result of the survey findings, a number of suggestions can be made. These suggestions may be useful to service marketers. Touristic superstructure should be accessible to all, including disabled people. Consequently, required arrangements should be made at accommodation establishments, food and beverage establishments, museums, parks, etc. Disabled people do not want to be segregated from people without disabilities. They do not want special accommodation or food and beverage establishments. They only want accessibility. Moreover, accessibility to transportation vehicles should be provided, above all in buses/coaches.

As the main purpose of travel for disabled people is leisure and recreation, tour operators or travel organizers should offer this type of tour program aimed at this market. One- or 2-week tour programs would be preferable.

The websites of accommodation enterprises and travel agents should provide the information sought by disabled people. For instance, do accommodation establishments have toilets, bathrooms and lifts that are accessible for them? Do beaches have accessible pathways for wheelchairs that lead to the beaches and provide a means to enter the sea? Programs on TV and articles in the press should aim to give information to disabled people's families and relatives because disabled people prefer to go on holiday with them.

Disabled people should be encouraged to join travel activities in order to improve their quality of life. Public authorities at national or local levels should take the necessary measures for this issue. For example, holiday credit with zero interest rate could be offered to disabled people. A sufficient number of rooms in public accommodation establishments could be allocated for use by disabled people free of charge or at low rates.

The public should be educated on disabled peoples' feelings and difficulties via TV and radio programs in order to change prejudiced and negative attitudes towards them. Moreover, the staff at tourist accommodation, food and beverage facilities, and transportation companies should be given special training on serving the needs and wants of disabled people.

In conclusion, it is worth re-emphasizing that people with disabilities have a right to travel and take a holiday as much as people without disabilities. Therefore, they must be encouraged to be part of regular touristic activities and barriers should be removed not only for disabled people but also for all others, such as the elderly, who would be prevented from enjoying their holiday as much as others. All of us have a joint responsibility to improve the quality of life for our families and communities at large.

Suggestions for Further Research

This study has explored the travel patterns of people with physical disabilities. Further research areas could be the investigation of travel patterns of people with sight, hearing and mental disabilities. It may help to compare the travel patterns, needs and experiences of the different classifications of disabilities. A comparative study about travel patterns of disabled and non-disabled people could be also investigated.

References

- Abeyrairie, R. I. R. (1995). Proposals and guidelines for the carriage of elderly and disabled persons by air. *Journal of Travel Research*, 33(3), 52–59.
- Aitchison, C. (2003). From leisure and disability to disability leisure: Developing data definitions and discourses. *Disability and Society*, 18(7), 955–969.
- Arellano, L. (2003). Broadening horizons. *Travel Agent*, 10(311), 21–22.
- Australian Bureau of Statistics (1993). *Catalogue No. 4430.0: Disability, ageing and careers*. Canberra: Author.
- Burnett, J., & Bender, B. H. (2001). Assessing the travel-related behaviors of the mobility-disabled consumer. *Journal of Travel Research*, 40, 4–11.
- Cavinato, J. L., & Cuckovich, M. L. (1992). Transportation and tourism for the disabled: An assessment. *Transportation Journal*, 31(3), 46–53.
- 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. (1998). *Anxiety to access: Tourism patterns and experiences of disabled New South Wales people with a physical disability tourism*. Sydney: New South Wales.
- Darcy, S. (2002). Marginalized participation: Physical disability, high support needs and tourism. *Journal of Hospitality and Tourism Management*, 9, 61–72.
- Driedger, D. (1987). Disabled people and international air travel. *Journal of Leisurability*, 14, 13–19.
- English Tourism Council (2000). *People with disabilities and holiday taking*. London: Author.
- European Commission (1996). *Making Europe accessible for tourists with disabilities: Handbook for the tourism industry*. Luxembourg: Office for Official Publications of the European Communities, Directorate General XXIII-Tourism Unit.
- European Disability Forum. (2001). EDF Position Paper on Tourism: Framing the Future of European Tourism, Retrieved January 15, 2008, from <http://ebookbrowse.com/edf-01-13-edf-response-on-framing-the-future-of-the-european-tourism-doc-d12316761>
- Gleeson, B. J. (1997). Disability studies: A historical materialist view. *Disability and Society*, 12(2), 197–202.
- Grady, J., & Ohlin, J. B. (2009). Equal access to hospitality services for guests with mobility impairments under the Americans with Disabilities Act: Implications for the hospitality industry. *International Journal of Hospitality Management*, 28, 161–169.
- Israeli, A. A. (2002). A preliminary investigation of the importance of site accessibility factors for disabled tourists. *Journal of Travel Research*, 41(1), 101–104.
- Kültür ve Turizm Bakanlığı. (2008). 2008 Yılı İşletme Belgeli Konaklama Tesislerine Giriş ve Geceleme Sayıları, Retrieved April 13, 2008, from <http://www.ktbaytirimisletmeler.gov.tr/belge/1-63775/isletme-belgeli-tesisler.html>

- McKercher, B., Packer, T., Yau, M., & Lam, P. (2003). Travel agents: Facilitators or inhibitors of travel for people with disabilities. *Tourism Management*, 24, 465–474.
- Meric, H. J., & Hunt, J. (1998). Ecotourists' motivational and demographic characteristics: A case of North Carolina travelers. *Journal of Travel Research*, 36(4), 57–61.
- Miller, G. A., & Kirk, E. (2002). The disability discrimination act: Time for the stick? *Journal of Sustainable Tourism*, 10(1), 82–88.
- Muloin, S. (1992). Wilderness access for persons with a disability. In G. Harper & B. Weiler (Eds.), *Ecotourism*, (pp. 20–25). Canberra: Australian Bureau of Tourism Research.
- Murray, M., & Sproats, J. (1990). The disabled traveler: Tourism and disability in Australia. *Journal of Tourism Studies*, 1, 9–14.
- Office of Public Sector Information. (1995). Disability Discrimination Act 1995, Retrieved May 22, 2008, from <http://www.legislation.gov.uk/ukpga/1995/50/contents>
- Özürlüler İdaresi Başkanlığı. (2002). Turkey Disability Survey 2002, Retrieved April 14, 2008, from http://www.ozida.gov.tr/?menu=arastirma&sayfa=tr_ozurluler_arastirmasi
- Ray, N. M., & Ryder, M. E. (2003). Eibilities tourism: An exploratory discussion of the travel needs and motivations of the mobility-disabled. *Tourism Management*, 24, 57–72.
- Shaw-Lawrence, P. (1999). Enabling the disabled. *Travel Weekly*, 59(91), 8.
- Smith, R. (1987). Leisure of disable tourists: Barriers to participation. *Annals of Tourism Research*, 14(3), 376–389.
- Touche Ross and Co (1993). *Tourism for all in Europe: Profiting from opportunities. A new market for tourism*. London: Author.
- Turco, D. M., Stumbo, N., & Garncarz, J. (1998). Tourism constraints for people with disabilities. *Parks and Recreation*, 33(9), 78–84.
- Türkiye Büyük Millet Meclisi. (2005). Özürlüler ve Bazı Kanun ve Kanun Hükmünde Kararnemelerde Değişiklik Yapılması Hakkında Kanun, Retrieved April 15, 2008, from <http://www.tbmm.gov.tr/kanunlar/k5378.html>
- Türkiye Seyahat Acentaları Birliği. (2001). TC Vatandaşlarına Yönelik İç Turlar Pazarı Anketi Sonuçları-2001, Retrieved January 11, 2008, from http://www.tursab.org.tr/dosya/1033/01icanket2_1033_2591031.pdf
- UNESCAP (2000). Economic and Social Commission for Asia and the Pacific (ESCAP), *Conditions to promote barrier-free tourism for people with disabilities and older persons*, Presentation at the National Workshop on Sustainable Tourism Development in China, Tianjin, China.
- United Nations (1948). The Universal Declaration of Human Rights, Retrieved April 10, 2008, from <http://www.un.org/en/documents/udhr/history.shtml>
- United Nations. (2008). Definition of Disability in Selected National Legislations, Retrieved April 10, 2008, from <http://www.un.org/esa/socdev/enable/rights/ahc8docs/ahc8bkdoc5.doc>
- US Census Bureau. (2000). Disability status: 2000–Census 2000 brief. Retrieved January 15, 2008, from <http://www.census.gov/prod/2003pubs/c2kbr-17.pdf>
- Vignuda, J. (2001). *Promotion of barrier-free tourism for people with disabilities in the Asian and Pacific region*, Economic and Social Commission for Asia and the Pacific (ESCAP). Seminar on Sustainable Development of Ecotourism in Pacific Island Countries, October 17–18, 2001 Suva, Fiji.
- World Tourism Organization. (1980). Manila Declaration on World Tourism Manila (Philippines), October 1980, Retrieved April 18, 2008, from <http://www.e-unwto.org/content/k4222x788q51/>
- Yau, M. K., McKercher, B., & Packer, T. L. (2004). Traveling with a disability: More than an access issue. *Annals of Tourism Research*, 31(4), 946–960.

Appendix 1

Factors influencing destination choice in the physically disabled market.

- Q1. Value of money
- Q2. Accessibility of accommodation establishments
- Q3. Accessibility of health facilities
- Q4. Accessibility of transportation
- Q5. Previous experience
- Q6. Accessibility of food and beverage establishments
- Q7. Cultural heritage
- Q8. Sightseeing places
- Q9. Cost of holiday

- Q10. Meeting with other people
- Q11. Attitudes of local people towards disabled people
- Q12. Accessibility of entertainment facilities
- Q13. Weather conditions
- Q14. Advice of relative and friends
- Q15. Accessibility of historical attractions
- Q16. Accessibility of museums and art galleries
- Q17. Accessibility of city tours
- Q18. Taste of traditional foods and beverages
- Q19. Advice of travel agency/tour operators
- Q20. Accessibility of concert facilities
- Q21. Accessibility of sport facilities
- Q22. Accessibility of shopping facilities
- Q23. Accessibility of fair
- Q24. My disability status
- Q25. Availability of tourism information offices
- Q26. Accessibility of campsites
- Q27. Availability of friends and relatives
- Q28. Being alone
- Q29. Availability of specially envisaged accommodation establishments for disabled people
- Q30. Accessibility of parks and recreational attractions
- Q31. Accessibility of night-life
- Q32. Accessibility of thermal facilities
- Q33. Safety and security
- Q34. Freedom