

## SERIOUS LEISURE AND PEOPLE WITH ORTHOPEDIC IMPAIRMENT: BENEFITS AND CONSTRAINTS

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### ABSTRACT

There are many people around the world who have different types of disabilities. Understanding their needs is the first step of developing policies to increase their quality of life and satisfaction. Leisure is an essential need of disabled people and it plays an important role in disabled people's lives. The purpose of this study is to gain a deep understanding on the serious leisure activities of people with orthopedic impairment, and also both benefits and constraints involved with serious leisure. Therefore, semi-structured in-depth interviews were conducted with 17 people who have orthopedic impairment. The data collected through interviews was analyzed by using a coding process. Findings of the study indicate that people with orthopedic impairment pursue many leisure activities. The research revealed that the participants were aware of significant individual and community benefits of serious leisure activities. Although the benefits of leisure for private and community life are obvious for people with orthopedic impairment, it is not always easy for them to pursue serious leisure activities. Disabled people recognize that there are many constraints involved with serious leisure. Based on the findings, these constraints are explained as psychological factors, family support, level of orthopedic impairment, community awareness and environmental factors, work and income.

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## INTRODUCTION

It was estimated that about 15% of the World's population is now living with different types of disabilities (World Bank, 2011) and it is expected that this number will be higher in the future. Leisure is being recognized as one of the crucial issues for their lives.

According to Albrecht and Devlieger (1999: 977), the life quality of disabled people depends on two conditions which were explained as "*finding a balance between body, mind, and spirit in the self and on establishing and maintaining a harmonious set of relationships within the person's social context and external environment*". At this point, leisure has a critical importance. Leisure can positively contribute to the life quality of disabled people (García-Villamizar & Dattilo, 2010). Furthermore, leisure satisfaction can provide life satisfaction for disabled people (Kinney & Coyle, 1992).

Besides the challenges that arise from the physical, cognitive, and psychological problems caused from disabilities, a lack of awareness by governments and members of the society can create additional challenges for the life of disabled people. Joining in community life with equal conditions is a fundamental right of everyone. Therefore, supporting the rehabilitation of disabled people through physical, mental, and social leisure activities in non-isolated areas and with equal conditions is the responsibility of governments.

In the history of Turkey, the 1980s were important years because policies about disabled people began to take place regarding "*Constitution and Development Plans*" (Burcu, 2006). Since 2000, the policies related to this issue have been ongoing and developing. The "*5378 Law on Disabled People*" was drafted on July 1, 2005. It is one of the key elements of the mechanism designed to give basic rights and freedoms to disabled people. The law encompasses issues on disabled people, their families, institutions, and organizations providing services for people who have disabilities. It also contains measures to be taken to ensure that issues surrounding disabled people remain an active subject for social and community life (Çağlar, 2012).

Legislation and policies help to reduce the challenges that disabled people have to overcome in Turkey. Awareness within the general public has also been increasing. However, there are still many unsolved problems regarding their quality of life, leisure needs and satisfaction. It is the lack of understanding of the needs of disabled people that may create

leisure barriers (Burns, Paterson, & Watson, 2009). Without understanding the perception of disabled people, on leisure needs and emerging constraints, it is not possible to develop solutions for those problems.

The leisure of people with disabilities is a recent concern of scholars (Aitchison, 2009). Their attention on the subject is growing, but so far only in a limited number of studies perceptions of disabled people on different aspects of leisure were examined (e.g. Aitchison, 2003; Akyıldız-Munusturlar, 2016; Kim, Kim, MaloneBeach, & Han, 2016). Some of the issues on leisure examined by researchers are: How do private or/and public industry meet the leisure needs of disabled people (e.g. Miller & Kirk, 2002; Yeşilyurt, Kırlar, & Lale, 2014); outdoor lesiure of disabled people (Burns et al., 2009; Burns, Watson, & Paterson, 2013); perceptions and/or use of information communication technologies (Houlihan et al., 2003; Söderström, 2009), and constraints to leisure (Celik, Tercan, & Yerlisu-Lapa, 2014; Daniels, Drogin Rodgers, & Wiggins, 2005). However, only a little attention has been paid to benefits of and constraints to the serious leisure of people with orthopedic impairment. As a response to this gap, this study aims to: (1) gain an in-depth understanding on serious leisure activities, (2) the perceived benefits of serious leisure and (3) the constraints to serious leisure undertaken by people with orthopedic impairment.

The outline of this study is as follows: In the first section, a brief review of literature is provided. In the second section, a methodological approach to the study is explained. In the third section, the findings of the study are presented. These sections are followed by the conclusion, implications, limitations, and future research.

## LITERATURE REVIEW

### Leisure Categories

Stebbins (1982, 1997, 2005) classified leisure into three main categories: serious, casual, and project-based leisure. In his studies, he clearly explained the meaning and characteristics of serious leisure.

Serious leisure was defined by Stebbins (1997: 17) as *“systematic pursuit of an amateur, a hobbyist, or a volunteer activity sufficiently substantial and interesting for the participant to, and a career there in, the acquisition and expression of a combination of its special skills, knowledge, and experience”*. As

explained in the definition, Stebbins (1982) classified serious leisure activities as amateurism, hobbyism (this category was divided into four sub-categories as collectors, maker and tinkers, activity participations, players of sports and games), and career volunteering. Systematically playing a musical instrument, playing tennis, bodybuilding, developing collections, birdwatching, and participating in community volunteer projects are some examples given for serious leisure.

There are six qualities that distinguish serious leisure from other leisure categories (Stebbins, 1982: 256-257). These are: (1) perseverance, (2) presence of career-related attributes, (3) personal effort, (4) durable benefits, (5) unique ethos, and (6) identity. The characteristics of serious leisure can be explained as following: Perseverance is the first quality of serious leisure. It means, (1) in spite of the fact the activity includes some challenges for the person such as pain, anxiety, fear, or fatigue he/she continues to pursue that activity. (2) Career related attributes are another characteristic of serious leisure activities. Although leisure and career activities have differences, in terms of the effort performed and time spent, career type behaviours are displayed by serious leisure pursuers. Moreover, in some occasions, leisure activity gains more priority than the career. (3) Personal effort means while performing the activity, the person has to use all his/her knowledge and skills to struggle with challenges. (4) Durable outcomes are the positive effects of performing the leisure activity on a person, such as self-gratification, satisfaction, and self-actualization. (5) Unique ethos is a kind of special social world. The term is referencing the common culture and ethics that arise between the persons who pursue the same leisure activity. (6) The last quality, identity, means that person identifies herself/himself with the leisure activity – after a while the leisure activity becomes a part of their identity.

### **Leisure Constraints**

Leisure constraints are issues that affect the leisure participation of people (McLean & Hurd, 2012). Although the words “constraint” and “barrier” are sometimes used interchangeably, the meaning of constraint in leisure is more complex. Since the 1990s, constraints have not been seen as “*absolute barriers*” which affect the participation decision of people, but constraints have been perceived as “*negotiable*” and can alter “*how their [people’s] leisure would have been, if the constraints had been absent*” (Jackson, 1999: 196). The effects of leisure constraints may vary, from creating some

challenges for the person pursuing the activity, to actually restraining the person who is participating in that activity (McLean & Hurd, 2012).

In 1987, Crawford and Godbey (1987) classified leisure constraints into three categories: intrapersonal, interpersonal, and structural. Intrapersonal constraints include psychological, physical and cognitive factors such as anxiety, stress, health, and an individual's perception of their own skills. Interpersonal constraints include social and cultural factors such as gender roles and relationships with other people. Finally, structural constraints include limitations such as time, financial resources, or insufficient transport.

Leisure constraints may vary based on some factors such as the demographic characteristics of the person (Burns & Graefe, 2007). However, leisure constraints of disabled people are investigated only in a few studies (Celik et al., 2014). It is known that people with disabilities face more challenges than others while doing recreational activities (Burns & Graefe, 2007). Results of a study on the leisure activities of young disabled people showed that "physical accessibility", "cultural characteristics", and "social identity" are three important factors that affect their leisure activities and experiences (Aitchison, 2003). Another research by Celik et al. (2014) concluded that "social environment and lack of knowledge" and "facilities/services and accessibility" are two important leisure constraints of disabled people. In the same study "lack of interest" was revealed as the constraint, which has the least importance. Results of another study (Daniels et al., 2005) showed that structural leisure constraints such as "transportation", "facility", "environment/geography", and "financial constraints" are the most emphasized constraints by the disabled people who travel. Understanding the constraints perceived by disabled people help to eliminate some of those constraints by allowing governments to develop policies and strategies to overcome them.

## METHODOLOGY

The purpose of the study is to gain an understanding of the perception of people with orthopedic impairment on leisure activities, and also the benefits and constraints to serious leisure.

Qualitative methods allow for an in-depth and detailed study of a subject (Patton, 2002). Therefore, this method was employed to get information about main research questions. Data were collected from

participants through semi-structured in-depth interviews. A questionnaire was prepared by researchers that included: 12 questions on leisure activities and four questions on demographics of participants. Interview questions were designed in accordance with the previous leisure studies on disabled people (e.g. Aitchison, 2003; Aitchison, 2009; Burns & Graefe, 2007; Celik et al., 2014; Crawford & Godbey, 1987; Daniels et al., 2005). The questionnaire includes questions such as “how do you spend your leisure time?,” “which of your leisure activities require more time and effort?,” “what are the benefits of pursuing a serious leisure activity?,” and “what are the challenges against pursuing a serious leisure activity?”. Additional questions were also directed to participants spontaneously during the interviews to gain a deeper understanding on leisure issues. Demographic questions included age, education, marital status, number of children and work status.

There are many sampling methods used in qualitative studies (Coyne, 1997; Cutcliffe, 2000; Patton, 2002). In this study, purposeful and snowball sampling methods were used to collect data. Therefore, in the beginning of the data collection process, some experts were identified. Researchers communicated with them to get contact information for potential participants.

The sample study includes people with orthopedic impairments. People with orthopedic impairments are defined as, “a person having a functional limitation as a result of a deficiency in his/her muscular and skeleton system” (State Institute of Statistics, 2009: X). This group includes people who suffer from restricted movement, disfigurement, muscle weakness, paralysis, cerebral palsy, and similar types of health problems. While preparing the pool of participants, researchers aimed to achieve maximum diversity in terms of demographics, seriousness of disability, and variety of leisure activities.

This study sample includes 17 participants. The ages of the participants are between 21 and 68. The genders of the participants were 7 female and 10 male. 5 of the participants are married, one is a widow, one is separated from their spouse, and 10 are single. After initial arrangements were completed, researchers started to conduct face-to-face interviews of people with orthopedic impairment in Izmir, Turkey.

During the data collection process, researchers participated in boccia games (a popular ball game among people with orthopedic impairment) to spend time with disabled people in a recreation centre. Participating in the boccia game enabled researchers to talk with the

player's coach. Researchers also visited the house of a young disabled person who has very limited movement capabilities and is using a breathing device. The visit enabled researchers to conduct an interview with him and talk with his parents. Researchers also attended an opening ceremony of an exhibition of handcrafts created by people with orthopedic impairment during "People with Disability Week."

Data collected from informal talks during this process were excluded in this study. However, passive observations and active participation by the researchers helped to create new questions for the interviews.

Researchers stopped the interviewing process when the data became saturated. For this study, interviews with 17 people were conducted. The length of those interviews lasted between 20 minutes to 60 minutes. All the interviews were audiotaped, after taking permission from the participants. Afterwards, audio records were transcribed into text by researchers. Then the text documents of the interviews were evaluated and coded individually by both of the researchers. Open, axial, and selective coding methods were applied to analyze texts (Corbin & Strauss, 1990). To ensure the dependability of the study, code lists of the researchers were compared.

Texts of the interviews were translated into English by researchers and controlled by a native speaker to avoid mistakes. The findings of the research were explained by referring to quotes derived from the interviews. According to ethical concerns, the names of the participants were kept confidential and instead, interview numbers were given to represent each participant. To correct some statements which could lead to misunderstanding, authors added some words and used square brackets "[ ]" to show the changes.

## FINDINGS

Findings of the study revealed from interviews were discussed under three headlines: "Serious Leisure Activities," Benefits of Serious Leisure," and "Serious Leisure Constraints".

### **Serious Leisure Activities**

Researchers first investigated all the leisure activities of the participants. There were a wide variety of leisure activities amongst the respondents.

Table 1. *Demographics and Serious Leisure Activities of Participants*

No	Demographics of Participants (Gender, Age, Marital Status, Number of Children, Education Level, Work Status, Wheelchair Usage)	Serious Leisure Activity/Activities of Participants
1	<ul style="list-style-type: none"> <li>Male, 66, married and has children, graduated from university, retired.</li> <li>Has movement impairment (not using a wheelchair).</li> </ul>	Working for the association Acted out in a theatre [previously] Playing basketball
2	<ul style="list-style-type: none"> <li>Male, 29, single, student of open university, not working.</li> <li>Has movement impairment (using a wheelchair and a breathing device).</li> </ul>	Writing poems
3	<ul style="list-style-type: none"> <li>Female, 56, widow, has children, graduated from primary school, retired.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Working for the association
4	<ul style="list-style-type: none"> <li>Male, 30, single, graduated from high school, retired.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Working for the association
5	<ul style="list-style-type: none"> <li>Female, 50, single, graduated from primary school, not working.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Handcrafting
6	<ul style="list-style-type: none"> <li>Male, 45, single, graduated from high school, retired.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Working for the association Reading books Creating his own library [in the past] Developed collections of objects [previously]
7	<ul style="list-style-type: none"> <li>Female, 68, single, uneducated, not working.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Handcrafting
8	<ul style="list-style-type: none"> <li>Male, 46, married and has children, student of open university, retired.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Playing boccia Developing collections of objects
9	<ul style="list-style-type: none"> <li>Male, 26, single, uneducated, not working.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Playing boccia Inventing objects and machines
10	<ul style="list-style-type: none"> <li>Male, 22, single, uneducated, not working.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Playing boccia Watching football games [a fan of a team]
11	<ul style="list-style-type: none"> <li>Male, 49, single (get married after interview), graduated from primary school, not working.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Playing badminton
12	<ul style="list-style-type: none"> <li>Female, 41, single (get married after interview), graduated from primary school.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Playing badminton
13	<ul style="list-style-type: none"> <li>Female, 53, single, graduated from primary school, not working.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Aikido Member of a Turkish art music choir Working for disabled council as a volunteer
14	<ul style="list-style-type: none"> <li>Female, 58, separated, has a child, graduated from primary school, not working.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Member of a Turkish art music choir Working for disabled council as a volunteer Handcrafting
15	<ul style="list-style-type: none"> <li>Female, 61, single, graduated from primary school, not working.</li> <li>Has movement impairment (using a wheelchair).</li> </ul>	Playing boccia Member of a Turkish art music choir Working for disabled council as a volunteer Handcrafting
16	<ul style="list-style-type: none"> <li>Male, 44, single, graduated from university, working.</li> <li>Wearing a prosthetic leg.</li> </ul>	Travelling to cultural heritage sites.
17	<ul style="list-style-type: none"> <li>Male, 53, married and has a child, graduated from high school, retired but still working.</li> <li>Wearing a prosthetic leg.</li> </ul>	Has no serious leisure activity. His dream leisure activity is gardening.

The main groups of all leisure activities are as follows: sports, travelling and gastronomy, congresses, events and meetings, arts (literature, music, crafting etc.), social activities, educational activities such as handcrafting or computer courses, TV, online activities, hobbies (gardening and puzzle making etc.) and volunteer activities. Then, these activities were categorized as casual, project-based, and serious leisure activities. In order to determine the category of the activities of the participants, each activity was questioned according to the six qualities of serious leisure defined by Stebbins (1982). Motivation, a dedication to effort/time, and the duration of the activity are important factors that determine the category of the leisure activity.

Table 1 presents both demographics and the serious leisure activities of participants. The study revealed that the interests of role models and mentors, availability of vocational courses, and accessibility of courses all play critical roles in the decision-making process of participants for serious leisure activities they will pursue. Volunteer activities, sport activities, handcrafting, art activities, developing collections, inventing objects and machines, and travelling are major groups of serious leisure activities. Answers of the participants show that altruism, creating value, entertainment, and competition are important factors in the pursuit of a serious leisure activity. The list of serious leisure activities includes both individual and group activities. However, most of the individual activities are carried out in a room shared by other people (parents, relatives, friends). Therefore, individuals can both pursue their activity and socialize with others at the same time.

Table 2 shows the distribution of serious leisure activities of participants according to their age and gender groups. Two age groups were determined based on the cut-off 60 plus used by United Nations to refer older populations (World Health Organization, 2002). Some participants have more than one serious leisure activity. Therefore, the total number of activities is higher than the number of participants distributed to different age and gender groups. Previous activities of participants were not reflected to these numbers.

Table 2. *Serious Leisure Activities Based on Age and Gender*

Age Group	Gender	Frequency	Volunteer activities	Sport activities	Handcrafting	Art activities	Developing Collections	Inventing objects and machines	Travelling
22-60 (Young)	Female	5	3	2	2	2			
	Male	9	2	4		2	1	1	1
60-68 (Elder)	Female	2	1	1	1	1			
	Male	1	1	1					
Total		17	7	8	3	5	1	1	1

The results show that volunteer and sport activities are the most common activities and have been pursued by participants from different age groups. Voluntary activities such as working for associations have been pursued by both young and elder participants. Moreover, sport activities such as basketball, boccia, Aikido, and badminton which require more physical energy have been also carried out by participants of different ages.

Home is an important place of spending free time for disabled people (Taylor & Józefowicz, 2012). There are also some age-related differences about leisure activity and site preferences. Findings of the study showed that especially during the evening hours and winter months, older people tend to spend their time for home-based casual leisure activities (i.e. watching popular TV series and movies) instead of serious ones.

Study results of Aitchison (2003) revealed that watching TV, listening to music, playing computer games, and watching videos are frequent activities of young disabled people. Our study has also shown similar findings on the leisure of young disabled people. Although some participants expressed that they enjoy active forms of outdoor activities which enable them to socialize with their friends; the level of their disability and health problems, weather conditions, time constraints, or health problems of their parents push them to perform more passive forms of leisure activities at home. Therefore, some of the young participants suffer from loneliness and spending their leisure time with elderly people and relatives instead of friends. It should be also emphasized that the internet also helps some participants to escape from loneliness. It connects them to other internet users. So, the findings of Söderström (2009) on the social benefits of the internet were supported.

There are some gender-based differences on serious leisure preferences. For instance, handcrafting preferred only by female participants as a serious leisure activity. During the interviews some male participants emphasized that they do not prefer handcrafting as a serious leisure activity. They sometimes join the handcrafting courses of associations just to spend their leisure time and socialize with their friends. Moreover, developing collections, inventing objects and machines, and travelling are serious leisure activities of only male participants.

Most of the participants emphasized that travelling is an indispensable leisure activity for their lives. By travelling to beautiful coastal areas, green picnic sites, and charming towns they have fun and recreate their bodies and souls. Except for one respondent, travelling was seen as a casual activity. Because of the financial and the physical constraints, others pursue this activity in casual form. The person who travels as serious leisure emphasized that he has a particular interest in heritage and culture.

Virtual reality systems offer benefits for people with disabilities (Guttentag, 2010). These systems provide positive leisure experiences for disabled people and direct them to use their cognitive and motor abilities (Weiss Tamar, Bialik, & Kizony, 2003). One of the participants who uses a breathing device cannot easily travel long distances from his house. In the interview he explained that thanks to virtual reality technologies, he had been in many of the countries that he wished to visit.

### **Benefits of Serious Leisure**

Leisure creates a variety of physiological (i.e. contributing to cardiovascular health, controlling obesity), psychological benefits for individuals (i.e. promoting spiritual and intellectual development) and also has positive outcomes on the community (i.e. strengthening community ties, strengthening intergroup relations) (McLean & Hurd, 2012). According to review study of Caldwell (2005), leisure contributes to the physical, social, cognitive, and emotional health of people and helps disabled people to cope with negative effects of disabilities.

Stebbins (1982) explained, in his study, that one of the qualities of serious leisure is durable benefits. Some of these benefits include self-actualization, self-enrichment, recreation of self, feelings of accomplishment, self-gratification, enhancement of self-image, self-

expression, social interaction, belonging, and the lasting physical effects of the activity. In this study, answers of the respondents indicated two different categories of serious leisure benefits, which were grouped together under the umbrella concepts of personal and community benefits. These benefits are presented in Figure 1 and Figure 2.

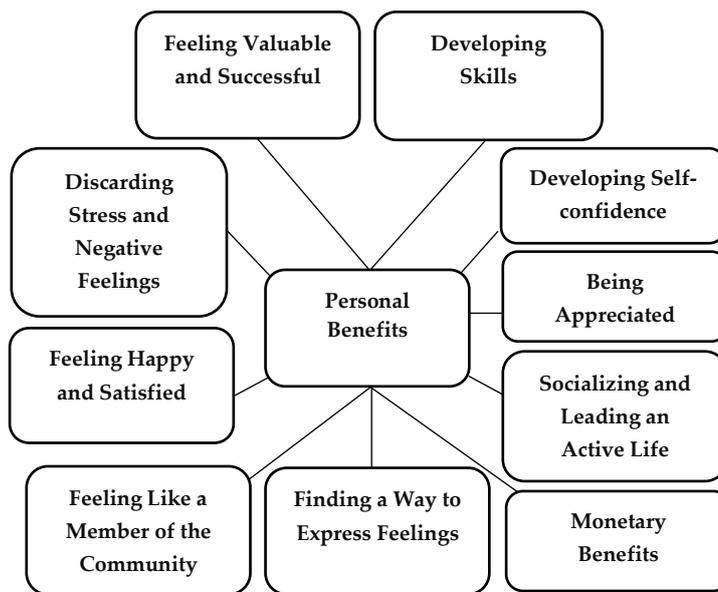


Figure 1. *Personal Benefits of Serious Leisure Activities*

Participants explained that serious leisure activities evoke positive feelings, help to discard negative sentiments, and help to share positive emotions with others. Moreover, it helps to develop self-confidence, which is an important necessity in the lives of disabled persons. Every serious leisure activity includes a degree of challenge. To overcome these challenges, they have to use their skills and abilities, and sometimes the activity requires the improvement of current skills. Using or improving skills and struggling with the challenges help to develop self-confidence. These benefits also positively affect the life of a disabled person because it increases personal resistance, both physically and mentally, and helps with the struggle of daily problems. Feeling as if they are a valuable part of a community is another benefit of serious leisure activities. Sometimes disabled people may feel excluded from community life and activities. As emphasized in interviews – during serious leisure activities they feel successful, valuable, and like a member of the community.

Group activities in particular, increase social interaction amongst disabled people. Activities help disabled people to meet other disabled and also non-disabled people. Friends in the group motivate each other to spend time together during the time away from activities. Thus, activities create social bonds between people and help them to lead an active life. Another individual benefit of serious leisure is the appreciation of others. Disabled people feel like being appreciated because of the effort they show for the activity and the achievements they gain from activity. Some people generate a small amount of money from the activities they pursue. This also positively affects their self-confidence and evokes positive feelings.

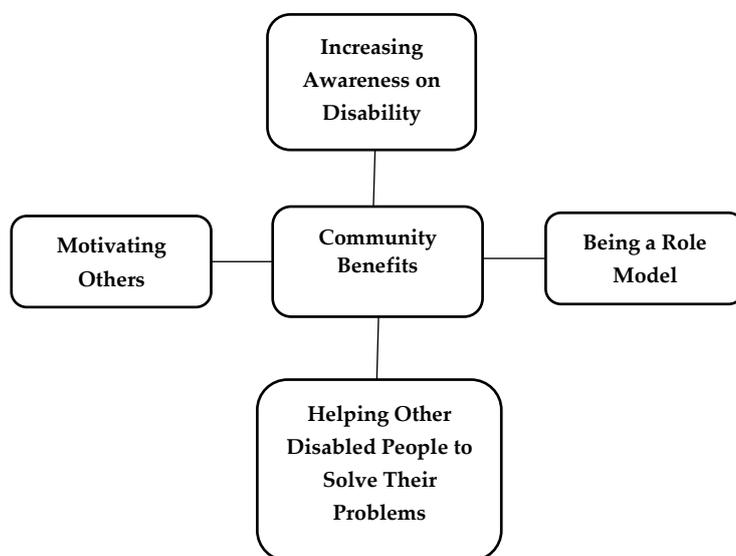


Figure 2. *Community Benefits of Serious Leisure Activities*

Respondents of the interviews expressed, feelings of happiness come from doing something for other disabled people. Being a role model for other disabled people, motivating them to pursue serious leisure activities, helping them to find meaning in their lives through those activities, and using their knowledge/experience to help other disabled people to solve similar problems are the altruistic benefits of the serious leisure activities of disabled people. Participants also believe that their activities attract the attention of the community and increase awareness of disability-related issues. In summary, the serious leisure of disabled people triggers not only their own benefits, but also the benefits of other disabled and non-disabled community members.

## **Constraints to Serious Leisure**

There happens to be some constraints to the serious leisure activities of people with orthopedic impairment. After questioning the participants, the following were determined as the five groups of factors that can cause serious leisure activity constraints: (1) psychological factors, (2) family support, (3) level of orthopedic impairment, (4) community awareness and environmental factors, (5) work and income. The variety and intensity of those constraints to leisure may also change from person to person or one group to another one (Jackson, 2000). Therefore, in this study, categories were specified based on the answers of the participants. Furthermore, findings on serious leisure constraints are similar to those with the leisure constraints explained under the three main categories (intrapersonal, interpersonal, and structural) in the study of Crawford and Godbey (1987). Psychological factors and level of orthopedic impairment are intrapersonal constraints; family support is an interpersonal constraint; work, income, and environmental factors are all structural constraints. Community awareness is an interpersonal constraint but can also cause structural constraints. Constraints will be further discussed in the following section.

### *Psychological Factors*

According to Viemerö and Krause (1998) people with physical disabilities are at great risk of displaying symptoms of depression. It has also been shown that they show more pessimism, passivity, aggression, and immaturity than non-disabled persons. One of the most important leisure constraints is the psychological factors category. Participants of the study referred to a lack of self-confidence as a common problem among disabled people. They explained that people who have a lack of confidence also have a tendency to isolate themselves from community life.

One of the respondents, who is working as a volunteer for a disability association explained that even though associations offer free transportation support, some disabled people refuse to use it. They prefer to stay in their houses instead of coming to recreation centers to participate in workshops and develop their current skills. This was explained as a lack of self-confidence and blamed on the negative mood of disabled people, by some of the participants:

*“In the past, I had a “bee in my bonnet.” I had a complex. That was the reason why I was aggressive and stressed. Disabled people have conflicts and they are pessimistic”. [Respondent 1]*

*“There are many challenges for disabled people. But first, they should eliminate obstacles in their mind. I have not left my house for 26 years, it was like a prison”. [Respondent 11]*

On the contrary, one of the respondents emphasized the idea that the real constraint to serious leisure is laziness, not psychological problems. According to him, disabled people have to insist on what they really want. He explained his thoughts in the following quote:

*“There are a lot of places for a disabled person to do sports in İzmir. I think the one who says, ‘I want to use the pool but there is not any suitable for me’, does not really want to use the pool. To get into that pool, you may even have to fight. For you it is a problem of self-confidence, from my perspective it is laziness. Most of the disabled are lazy. They do not have psychological problems. On the contrary, their psychologies are very good”. [Respondent 16]*

Disabled people struggle with many challenges in their daily lives. Therefore, being resilient and showing courage when faced with obstacles is really important. One of the respondents explained this necessity in the following quotes:

*“There are always many problems in traffic for us. But we are strong people who can struggle with the challenges. [In our lives] after a while it is getting easier to struggle. I was paralyzed at the age of three. At 18 I went to the Employment Agency by myself. I started working at 19. I really struggled. I am a person who knows problems. Because I know these problems, I am the one who produces solutions to those problems. Those who do not do it [struggle with the challenges] are people who are suppressed in society”. [Respondent 3]*

One of the participants gave the secret of happiness as, “the avoidance of developing a life solely based on disabilities.” Being realistic, understanding one’s own potential and then making decisions on leisure activities are also necessary. The respondent explained the idea in the following quote:

*“I did not construct my life on being a disabled person. I am a disabled person, I know it. I cannot compete against an athlete for 100 meters. I do not want too. When I realized this fact, my life has changed. Otherwise,*

*people can be offended and do not want to leave home. When you asked my dream [serious] leisure activity, I could say running, but I didn't".*  
[Respondent 6]

Occupational status has a great importance on psychological constraints. Viemerö and Krause (1998) showed that disabled people with higher occupational status had less depression and stress symptoms. Serious leisure can help disabled people to gain some benefits such as the self-fulfilment which is generally produced by a job (Patterson, 1997). One of the participants explains the positive effects of gaining income from serious leisure activities, such as job, in the following quote:

*"In general, they create handicrafts and sell them. We had a one-armed friend. In the beginning of the workshop, he said "I can't do this". He now creates handicrafts and sells them. His mood is better now. He even earns money from this activity".* [Respondent 3]

### ***Family Support***

Emotional support from family, friends, and professionals has been related to greater participation in leisure activities in people with disabilities. Badia, Orgaz, Verdugo, Ullán, and Martínez (2011) stated that social support is associated with higher rates of participation in leisure activities. Results of this study showed that parents, wife/husband, and children may positively or negatively affect serious leisure activities of individuals. Also, a lack of family support is another fundamental constraint to serious leisure for people with orthopedic impairment.

Support of family members helps disabled people to gain self-confidence. Moreover, parents sometimes act as role models in the life of disabled people. One of the studies highlighted that encouragement, support, and admiration from family, friends, and others affect a sense of pride to people with disabilities and contribute to their enjoyment related to leisure activities (Powrie, Kolehmainen, Turpin, Ziviani, & Copley, 2015). A respondent explained her life experience on this issue in the following quote:

*"I was an introverted person in the past. My mother was very active. She supported me. Thanks to her I solved my problems".* [Respondent 3]

One of the biggest concerns for parents of disabled children is the protection of that child from danger and abuse. Disabled children are at

risk of different forms of child abuse (Alwis & Horridge, 2016). Therefore, families have both caregiving and protection responsibilities towards their children. One of the participants explained how protectionist approaches can cause constraints and explained the thought in the following quote:

*“Our parents have many responsibilities such as their work, our brothers, and sisters. My parents were saying that we were meeting all your needs. You are waiting a bit on edge. When I was saying, “I want to go out” they were replying as “we have to finish our duties first”. But soon someone [guest] was coming to home and we could not go out. This is also an obstacle. The young people are a little touchy. My parents were overprotective. They were thinking that I could be exposed to danger outside [if I go by myself]. But we have to get into the life”. [Respondent 13]*

Income, education, and number of parents are revealed as factors that may affect the diversity and intensity of activities of disabled children (Law et al., 2006). Socio-cultural values of the community and the approach of community members towards disability-based issues may change from region to region. Particularly in the past, some parents were ashamed of their disabled child. Some families were hiding their child from the community. In some regions of the country, these types of attitudes are still being observed by some of the respondents:

*“Disabled people in İzmir are more active when we compare it with other cities. I observed that in other cities some families were ashamed of their child and hiding them in the house. I am 46 years old and never quit doing sports. My family was doing sports and me as well”. [Respondent 8]*

One of the interesting thoughts expressed about family support is, the positive and negative effects of marriages on participating in leisure activities. A respondent, who will get married soon, told that love and marriage make disabled people more active.

*“Some of our friends got married who met at the association. They are more active, they are more connected to life”. [Respondent 8]*

On the contrary, a participant explained that marriage also caused some problems, in terms of the time dedicated for the serious leisure activity. She preferred to allocate her free time for the association instead of her family, which really disturbed her husband in the past.

*"I have always had trouble with my husband, god of mercy. I sacrificed time my husband and children want devoted to them". [Respondent 3]*

### ***Level of Orthopedic Impairment***

The level of the impairment may vary the needs of people with disabilities (Chang & Chen, 2011). Serious leisure activities bring both positive outcomes and physical challenges. The level of orthopedic impairment affects the movement capabilities of people and the form of serious leisure activity.

The findings of Bergier, Bergier and Kubińska (2010) revealed that individuals who have severe disabilities mostly prefer passive forms of activities instead of tourism and recreation that require motor skills. Physical barriers increase the potential risk of the activity and trigger fear amongst the participants. The emotion of fear and negative past experiences were often reported in existing literature as barriers to joining or seeking out a physical activity (Martin, 2013). One of the respondents explained this idea in the following quote:

*"Certainly there must be someone besides a heavy handicap that accompanies him. Most of our friends do not want to ask for help. They do not want to go out of their house. For example, one of my friends said that "I do not want to go out of town, I want to be at home". [Respondent 4]*

Some participants also explained that if the level of disability does not require rehabilitation, they do not want to pursue their leisure activities in recreation centers designed for disabled people. For some respondents, doing the activity in those types of centers damages the quality of their experience. Many of the participants emphasized the need of spending time with non-disabled people in non-isolated places. One of the respondents explained his feelings with following words:

*"They establish parks and announce that those places are established for disabled people. Why can't I go to Hasanağa [a local park in İzmir]? Are they trying to isolate us? Only disabled people who require special care and rehabilitation need disabled parks". [Respondent 6]*

### *Community Awareness and Environmental Factors*

There are community related constraints and environmental challenges in the lives of disabled people. People who are not aware of disability issues, and have a lack of empathy, sometimes behave negatively towards them. Communication with disabled people requires responsibility, sensitivity, and awareness (Kızıldağ, 2012). Negative behaviours and attitudes of community members make disabled people unhappy. One respondent explained this situation with the following words:

*"The roads and sidewalks are not comfortable for us. One man in Şirinyer [district of İzmir] said, "What happens if they [disabled people] live or not?" I said, "Only God will take the life given by him". One of the women said, "God had a reason to do this to you". Look, it's not a joke. For example, if you are on the bus, you have to ask for an empty space [for wheelchair]. Some people are very kind, but some are just looking at you, they are not moving". [Respondent 5]*

A respondent who wears a prosthetic leg and has a wound on his face explained how he realizes the disturbing gaze of people:

*"I feel the gaze of people when I go out in the streets, but tell me, why do I have to constrain myself? Because you think that I look bad [ugly] in your beautiful eyes?" [Respondent 16]*

It is known that disabled people may challenge structural barriers and confront *psycho-emotional disablism* by doing outdoor activities, which include some risks (Burns et al., 2013). But the comments of other people, such as linking activities only to self-achievement instead of interest, or emphasizing risks and asking them not to participate, may offend a disabled person:

*"The first time I climbed to Nemrut [cultural heritage site in Turkey], I shared my photo through internet. One of my colleagues told me "Mr. X are you trying to go beyond yourself?" Do you mean that if a non-disabled person climbs, this is called tourism but if we [disabled people] climb, this is called 'trying to go beyond ourselves?' ... When I was climbing to Hasankeyf [cultural heritage site in Turkey] one of the people from the tour group, told me "Brother, do not climb, you can fall down". [Respondent 16]*

Physical challenges such as the absence of structures, facilities, and inaccessible public spaces can affect the variety, quality, and frequency of serious leisure activities of disabled people and increase the need for

family support. One of the participants explain his/her thoughts in the following quotes:

*"[My Aikido Sensei] met with me at fair held in 2015, İzmir. We had a stand. During free time we were wandering around the fair with friends. While I was watching people perform the art of Aikido, a lady and my sensei came close. They showed me a simple movement. I tried the movement and I really liked it. [Later] I met with my sensei by chance in my street. He was my neighbour. He asked me why don't I go to school to learn Aikido? I asked the address. He gave me the directions and I told him that it is impossible for me to go there because of the distance. And he said he would open a school, which is close to my house. He asked me to give him a promise to go there. They built the place, which is very suitable for us, and then I started attending". [Respondent 13]*

Rimmer, Riley, Wang, Rauworth, and Jurkowski (2004) conducted a study on access to places, including recreational and leisure facilities, from the perspective of adult wheelchair users. The study concluded that people who use wheelchairs were unable to gain access to those facilities because of barriers such as: bad weather or climate, inaccessible doors and bathrooms, no parking, poor travel surfaces, and various other problems involving wheelchairs. Similar problems were explained by respondents:

*"I was living in a slum [when I was younger]. My house was on a slope. There were many architectural obstacles. I have been very active for only the last 8-9 years". [Respondent 11]*

*"I am doing handicrafts but I can't go to [building of] the association when the weather is cold in winter". [Respondent 12]*

Researchers have investigated: accessibility of transportation (e.g. Chang & Chen, 2011), hotels (e.g. Tutuncu, 2017), and visitor attractions (e.g. Yeşilyurt et al., 2014). Findings of these studies showed that people with different disabilities are faced with many challenges during travel and hotel stay. Also, Daniels et al. (2005) found that travel constraints aren't something of the past, they are occurring today. Many respondents of this study suffer from the physical challenges they face during travel, regarding transport and accommodation services:

*"Our transportation is very difficult. They are putting our wheelchairs down. Hotels are not suitable for us. Only with the support of our families, we can travel". [Respondent 3]*

Sometimes, the absence of community awareness can also cause physical challenges for disabled people. One of the participants gave an example for such a common problem:

*“The other day I left the house and realized that a car was parked on my ramp. I waited for an hour to go”. [Respondent 14]*

### ***Work and Income***

The last group of serious leisure constraints is, work status and income level of the disabled person. The study results of Pagán (2013) showed that disabled people spend more time participating in leisure activities than non-disabled people. In this study, some participants supported this finding with their thoughts. Moreover, unemployed disabled people have more leisure hours. During these hours they can pursue serious leisure activities.

Some of the participants have jobs that don't allow the amount of free time necessary to pursue leisure activities. One of the responses was:

*“...I love reading books. I did not read in the last two years. I could not read because I have been working. I keep working even though I am retired. I was trying to create a library. I was collecting paper and metal coins. I gave a break. Maybe later I will begin again”. [Respondent 6]*

While work responsibilities constrict leisure time, effect of low level income on leisure pertains to situation. According to participants, financial difficulties can constrain to leisure or on the contrary motivate people to serious leisure activities to earn money:

*“People with disabilities have anxiety about the future. It's hard to gain a serious leisure activity without removing anxiety. If that disabled person earns a salary, they can go to a novel writing course, or a painting course, and he/she gets a hobby. If they do not have a job, they carry anxiety about tomorrow”. [Respondent 16]*

*“In my poems I can write the things which I can't say. Sometimes I hide [my feelings] between the lines. I feel relieved. I need nothing more than to sell my book”. [Respondent 2]*

## CONCLUSION

This study aimed to reveal the type of leisure activities of people with orthopedic impairment, the benefits and constraints to serious leisure activities from their perspectives. Findings of the study are in line with studies of Caldwell (2005) and Stebbins (1982), by supporting the idea that serious leisure activities create many benefits for disabled people. Findings on constraints to leisure activities are consistent with those of Crawford and Godbey (1987) and Smith (1987).

People with orthopedic impairment participate in a variety of leisure activities. Role models and mentors, availability of vocational courses, and accessibility of courses are important factors, which affect the leisure choices of disabled people. The level of disability and environmental conditions sometimes force disabled people to pursue more passive, individual, and home-based activities. Volunteer activities, sport activities, handcrafting, art activities, developing collections, inventing objects and machines, and travelling are major groups of serious leisure activities of people with orthopedic impairment. Altruism, creating value, entertainment, and competition are defined as the main motivating factors of serious leisure.

Playing sports and doing volunteer activities are two fundamental serious leisure activities and have been carried out by people from different age groups. While developing collections, inventing objects and machines, and travelling are serious leisure activities of men, handcrafting is preferred as a serious leisure activity by women. Hanna and Rogovsky (1991) found that gender roles may affect the leisure preferences of disabled women. Gender based differences explained in this study might be also affected by the gender roles of community.

Travel is one of the major leisure activities of people with orthopedic impairment. There are some challenges for disabled people in travel activities (Bergier, Kubińska, & Bergier, 2013; Evcil, in press). Findings of this study also indicated some challenges in travel. Because of the financial and physical constraints, most of the people pursue this activity as a casual leisure activity.

The characteristics of leisure inevitably make serious leisure necessary for the life of disabled people. Those activities add different colors to their life. When we consider the results of the study it is obvious that serious leisure activities can increase the self-confidence, motivation, and happiness of people with orthopedic impairment and can help to

strengthen the bonds between them and the community. Furthermore, serious leisure activities allow them to increase awareness on needs of disabled people, to motivate other disabled people, to be a role model for them and to help them in solving their problems. Psychological and social benefits revealed in this study support the findings of Patterson (2000) and Bergier et al. (2010). Patterson (2000) pointed out that serious leisure helps people with disabilities to establish positive feelings and self-esteem and contributes to their social inclusion in community. Bergier et al. (2010) revealed physiological, social and cognitive benefits of recreation and tourism on people with disabilities. After all, this study showed that activities may increase productivity of people with orthopaedic impairment and help them to generate a small amount of money, which is sometimes very important for people who only receive the monthly disability salary from the government.

Some disabled people think that their disability can help to their leisure and social life (Bedini, 2000). However, the findings of this study do not support the social benefits and facilitator role of disabilities revealed by Bedini (2000). Disabilities have been perceived as challenges and leisure activities have been perceived as the reason of social benefits.

Although serious leisure creates many benefits for individuals and the community, there are some barriers involved with those activities. In this research, leisure constraints were classified under 5 categories; psychological factors, family support, level of orthopedic impairment, community awareness/environmental factors, work and income. Constraints revealed in this study are similar to constraints explained in the study of Crawford and Godbey (1987) and barriers discussed in the study of Smith (1987). The socio-cultural dynamics and economic conditions of different regions may affect the constraints perceived by individuals. Effects of constraints vary from limiting the frequency/duration of the activities to barriers that don't allow them to pursue the activity.

Self-confidence and courage are perceived as necessary personal characteristics for serious leisure activities. Other key elements for serious leisure include: the personality, upbringing style of parents, their supportive attitudes, health conditions, caregiving and work responsibilities. The severity of orthopedic impairment in a disabled person affects both the level of dependability on others and their movement capabilities. Inadequate community awareness, and also environmental factors, such as physical barriers and harsh weather

conditions are other serious leisure constraints. Work and income may considerably affect serious leisure activities. Having a job and gaining income from the serious leisure activity can change the expectations of the disabled person towards the activity.

The findings of this study contributed to the literature, by supplying a deep understanding on the perceptions of people with orthopedic impairment towards serious leisure benefits and constraints.

## IMPLICATIONS

Role models and mentors, availability of vocational courses, and accessibility of courses are important factors in the serious leisure choice of disabled people. Therefore, disabled people should attend educational seminars, conferences, and one-on-one meetings to expand their knowledge of serious leisure. It is also necessary to help them to discover their own interests and abilities through professional mentoring services, and offering different types of courses to develop their skills that are available in recreational and disabled association centers. Disabled people should be introduced to successful role models from different fields.

Increasing the awareness of families on the importance of raising and supporting a disabled child to improve their self-confidence and to prepare them for the future is also necessary. The Ministry of Family and Social Policies can cooperate with disability associations, non-profit organizations, and universities to give education to the parents of disabled people on how to improve the self-confidence of disabled individuals.

From the leisure sector's perspective, it can be argued that understanding the needs of different disability groups such as people with orthopedic impairment and offering products and services which can meet their needs are crucial. For example, travel is one of the major leisure activities of people with orthopedic impairment. Although environmental conditions have been developing in line with the needs of disabled people, there are still many physical barriers. In their study, Tutuncu and Lieberman (2016) emphasized, that through the development of accessibility checklists, transformation of current policies, and by performing audits to assess conformity – accessibility of hotels for people with visual impairment can be achieved. To remove the physical barriers for people with orthopedic disabilities, the same approach should be

adopted. The needs of this group of people should be examined in a detailed way and then strategies should be developed.

To learn the skills necessary for a serious leisure activity, disabled people participate in some courses generally arranged by associations, vocational institutions, and/or municipalities. Sometimes the content of the courses is criticized by participants as being out-of-fashioned, not attractive, and not useful enough. Therefore, before opening courses, offering different options and collecting feedback could be more effective.

Governments, non-profit organizations, associations of vocational training, the leisure sectors, and the community must all cooperate to eliminate the negative effects of those constraints and to develop serious leisure opportunities for people with orthopedic impairment.

### LIMITATIONS AND FUTURE RESEARCH

This study has some limitations. First, sample of the study only included people with orthopedic impairment. It would be fruitful to create a broader research sample, which includes different disability categories in the future. Second, results revealed that efforts of family members are important to overcome leisure constraints. Therefore, in the future, relatives and friends should also be included in the study sample. Third, researchers spent limited time with disabled people. However, the participant observation of researchers in recreation centers may contribute to a better understanding of the needs and wants of disabled people. The findings of this study also showed that there might be some socio-cultural and regional effects on leisure constraints, such as family support for the activity and monetary expectations from the leisure activity. Thus, those types of effects should be deeply investigated in future studies.

### REFERENCES

- Aitchison, C. (2003). From leisure and disability to disability leisure: developing data, definitions and discourses. *Disability & Society, 18* (7), 955-969.
- Aitchison, C. (2009). Exclusive discourses: leisure studies and disability. *Leisure Studies, 28* (4), 375-386.
- Akyıldız Munusturlar, M. (2016). Examination of the serious leisure, leisure satisfaction and quality of life of people with physical disabilities. *Sport Science, 11* (9), 23-38.
- Albrecht, G. L., & Devlieger, P. J. (1999). The disability paradox: high quality of life against all odds. *Social Sciences & Medicine, 48*, 977-988.

- Alwis, Y., & Horridge, K. (2016). Safeguarding disabled children and young people, *Paediatrics and Child Health*, 26 (11), 488-492.
- Badia, M., Orgaz, B. M., Verdugo, M. A., Ullán, A. M., & Martínez, M. M. (2011). Personal factors and perceived barriers to participation in leisure activities for young and adults with developmental disabilities. *Research in Developmental Disabilities*, 32 (6), 2055-2063.
- Bedini, L. A. (2000). Just sit down so we can talk: Perceived stigma and the pursuit of community recreation for people with disabilities. *Therapeutic Recreation Journal*, 34, 55-68.
- Bergier, B., Bergier, J., & Kubińska, Z. (2010). Environmental determinants of participation in tourism and recreation of people with varying degrees of disability. *Journal of Toxicology and Environmental Health*, 73 (17-18), 1134-1140.
- Bergier, B., Kubińska, Z., & Bergier, J. (2013). Interests and needs for participation in tourism among disabled from eastern regions of Poland. *Annals of Agricultural and Environmental Medicine*, 20 (4), 807-811.
- Burcu, E. (2006). Özürlülük kimliği ve etiketlenmenin kişisel ve sosyal söylemleri [Personal and social discourses of disability identity and labelling]. *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi*, 23 (2), 61-83.
- Burns, N., Paterson, K., & Watson, N. (2009). An inclusive outdoors? Disabled people's experiences of countryside leisure services. *Leisure Studies*, 28 (4), 403-417.
- Burns, N., Watson, N., & Paterson, K. (2013). Risky bodies in risky spaces: disabled people's pursuit of outdoor leisure. *Disability & Society*, 28 (8), 1059-1073.
- Burns, R. C., & Graefe, A. R. (2007). Constraints to outdoor recreation: Exploring the effects of disabilities on perceptions and participation. *Journal of Leisure Research*, 39 (1), 156-181.
- Çağlar, S. (2012). Engellilerin erişebilirlik hakkı ve Türkiye'de erişebilirlikleri [Right of accessibility for persons with disabilities and accessibility in Turkey]. *Ankara Üniversitesi Hukuk Fakültesi Dergisi*, 61 (2), 541-598.
- Caldwell, L. L. (2005). Leisure and health: why is leisure therapeutic?. *British Journal of Guidance & Counselling*, 33 (1), 7-26.
- Celik, G., Tercan, E., & Yerlisu-Lapa, T. (2014). Leisure constraints and leisure satisfaction in the recreational activities of employees with disabilities. *South African Journal for Research in Sport, Physical Education and Recreation*, 36 (2), 33-46.
- Chang, Y., & Chen, C. (2011). Identifying mobility service needs for disabled air passengers. *Tourism Management*, 32 (5), 1214-1217.
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13 (1), 3-21.
- Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing*, 26 (3), 623-630.
- Crawford, D., & Godbey, G. (1987). Reconceptualising barriers to family leisure. *Leisure Sciences*, 9, 119-127.
- Cutcliffe, J. R. (2000). Methodological issues in grounded theory. *Journal of Advanced Nursing*, 31 (6), 1476-1484.
- 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, 919-930.
- Evcil, A. N. (in press). Barriers and preferences to leisure activities for wheelchair users in historic places. *Tourism Geographies*. Doi: /10.1080/14616688.2017.1293721

- García-Villamizar, D. A. & Dattilo, J. (2010). Effects of a leisure programme on quality of life and stress of individuals with ASD. *Journal of Intellectual Disability Research, 54* (7), 611-619.
- Guttentag, D. A. (2010). Virtual reality: Applications and implications for tourism. *Tourism Management, 31* (5), 637-651.
- Hanna, W. J., & Rogovsky, B. (1991). Women with disabilities: Two handicaps plus. *Disability, Handicap & Society, 6* (1), 49-63.
- Houlihan, B. V., Drainoni, M., Warner, G., Nesathurai, S., Wierbicky, J., & Williams, S. (2003). The impact of Internet access for people with spinal cord injuries: a descriptive analysis of a pilot study. *Disability and Rehabilitation, 25* (8), 422-431.
- Jackson, E. L. (1999). Comment on Hawkins et al., "Leisure constraints: A replication and extension of construct development". *Leisure Sciences, 21* (3), 195-199.
- Jackson, E. L. (2000). Will research on leisure constraints still be relevant in the twenty-first century?. *Journal of Leisure Research, 32* (1), 62-68.
- Kim, J., Kim, M., MaloneBeach, E., & Han, A. (2016). A study of health perception, disability acceptance, and life satisfaction based on types of leisure activity among Koreans with a physical disability. *Applied Research Quality Life, 11*, 791-804.
- Kinney, W. B., & Coyle, C. P. (1992). Predicting life satisfaction among adults with physical disabilities. *Archives of Physical Medicine and Rehabilitation, 73*, 863-869.
- Kızıltaş, M. (2012). *Engellilerle 360 Derece İletişim: İnsan Kaynaklarında Engellilerle Doğru İletişim Metodları* [360 Degree Communication with Disabled People: Correct Communication Methods with Disabled People in Human Resources]. Türkiye: Elma Yayınevi.
- Law, M., King, G., King, S., Kertoy, M., Hurley, P., Rosenbaum, P., & Hanna, S. (2006). Patterns of participation in recreational and leisure activities among children with complex physical disabilities. *Developmental Medicine & Child Neurology, 48* (5), 337-342.
- Martin, J. J. (2013). Benefits and barriers to physical activity for individuals with disabilities: a social-relational model of disability perspective. *Disability and Rehabilitation, 35* (24), 2030-2037.
- McLean, D. D. & Hurd, A. R. (2012). *Kraus' Recreation and Leisure in Modern Society*. Ontario: Jones & Bartlett.
- Miller, G. A. & Kirk, E. (2002). The Disability Discrimination Act: Time for the stick?. *Journal of Sustainable Tourism, 10* (1), 82-88.
- Pagán, R. (2013). Time allocation of disabled individuals. *Social Science & Medicine, 84*, 80-93.
- Patterson, I. (1997). Serious leisure as an alternative to a work career for people with disabilities. *Australian Disability Review, 2*, 20-28.
- Patterson, I. R. (2000). Developing a meaningful identity for people with disabilities through serious leisure activities. *World Leisure Journal, 2*, 41-51.
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks: Sage.
- Powrie, B., Kolehmainen, N., Turpin, M., Ziviani, J., & Copley, J. (2015). The meaning of leisure for children and young people with physical disabilities: a systematic evidence synthesis. *Developmental Medicine & Child Neurology, 57* (11), 993-1010.
- Rimmer, J. H., Riley, B., Wang, E., Rauworth, A., & Jurkowski, J. (2004). Physical activity participation among persons with disabilities: barriers and facilitators. *American Journal of Preventive Medicine, 26* (5), 419-425.

- Smith, R. W. (1987). Leisure of disable tourists: barriers to participation. *Annals of Tourism Research*, 14 (3), 376-389.
- Söderström, S. (2009). Offline social ties and online use of computers: A study of disabled youth and their use of ICT advances. *New Media & Society*, 11 (5), 709 - 727.
- State Institute of Statistics (2009). *Turkey Disability Survey-2002*. Ankara: State Institute of Statistics, Printing Division.
- Stebbins, R. A. (1982). Serious leisure: A conceptual statement. *The Pacific Sociological Review*, 25 (2), 251-272.
- Stebbins, R. A. (1997). Casual leisure: a conceptual statement. *Leisure Studies*, 16 (1), 17-25.
- Stebbins, R. A. (2005) Project-based leisure: theoretical neglect of a common use of free time. *Leisure Studies*, 24 (1), 1-11.
- Taylor, Z., & Józefowicz, I. (2012). Intra-urban daily mobility of disabled people for recreational and leisure purposes. *Journal of Transport Geography*, 24, 155-172.
- Tutuncu, O. (2017). Investigating the accessibility factors affecting hotel satisfaction of people with physical disabilities, *International Journal of Hospitality Management*, 65, 29-36.
- Tutuncu, O., & Lieberman, L. (2016). Accessibility of hotels for people with visual impairments: From research to practice. *Journal of Visual Impairment & Blindness (Online)*, 110 (3), 163-175.
- Viemerö, V., & Krause, C. (1998). Quality of life in individuals with physical disabilities. *Psychotherapy and Psychosomatics*, 67 (6), 317-322.
- Weiss Tamar, P. L., Bialik, P., & Kizony, R. (2003). Virtual reality provides leisure time opportunities for young adults with physical and intellectual disabilities. *Cyberpsychology & Behavior*, 6 (3), 335-342.
- World Bank (2011). *Main report (World report on disability)*. Washington: World Bank. Retrieved 1 February, 2016, from <http://documents.worldbank.org/curated/en/665131468331271288/Main-report>
- World Health Organization (2002). Proposed working definition of an older person in Africa for the MDS Project. Retrieved 27 November, 2017, from <http://www.who.int/healthinfo/survey/ageingdefnolder/en/>
- Yeşilyurt, H., Kırlar, B., & Lale, C. (2014). Müzelerin sessiz ve karanlık dünyası: "Herkes için müzeler" mümkün mü? [The silent and dark world of museums: is "museums for all" possible?]. *Gazi Üniversitesi Turizm Fakültesi Dergisi*, 2, 1-19.