

Saaka Saari

TAKING OVER THE WORLD IN A WHEELCHAIR

The Difficulties and Challenges when Travelling by Air Transportation

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ABSTRACT

Name of UAS Kokkola-Pietarsaari Unit	Date April 2015	Author Saaka Saari
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Name of thesis TAKING OVER THE WORLD IN A WHEELCHAIR The difficulties and challenges when travelling by air transportation		
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<p>Travelling is nowadays considered a human right everyone should have the same rights and possibilities to. Commercial aviation celebrated its 100-year birthday in 2014, and thanks to the effectiveness of reaching even the most remote locations in a relatively short time, air transportation has become the most common mode for international tourism.</p> <p>The aim for the thesis was to get knowledge about the difficulties and challenges passengers in a wheelchair may face while they are travelling by means of air transportation. The matter was also viewed from the point of view of equality, in other words, if a wheelchair passenger actually has the same possibilities for air transportation as a passenger travelling without one has. The thesis was divided into two parts – theoretical framework, which gave an overview and deeper understanding on the topic, and to empirical, which was a questionnaire survey conducted among people who either had personal experience of being an air transportation passenger in a wheelchair, or who had experience of the issue as they had been travelling with a person using a wheelchair. The theoretical framework was constructed by the help of several journals, online articles, books, regulations and previous research results, while the empirical part was based on primary data – it shows the personal experiences of wheelchair passengers in air transportation and their viewpoint to the equality issues.</p> <p>The survey revealed that air travel by no means is simple for a wheelchair passenger. The most common problem is the use of toilets, as it very often is impossible during a flight. A majority of the respondents felt they do not have equal rights and possibilities for air travel if compared to able-bodied passengers.</p>		

Key words

Accessibility, air transportation, challenges, difficulties, mixed methods, travelling

TIIVISTELMÄ

Yksikkö Kokkola-Pietarsaaren yksikkö	Aika Huhtikuu 2015	Tekijä/tekijät Saaka Saari
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<p>Matkustaminen mielletään yhä useammin ihmisoikeudeksi, johon jokaisella tulisi olla yhtäläiset mahdollisuudet sekä oikeudet. Vuonna 2014 siviili-ilmailu vietti 100-vuotisjuhlaansa. Nykyisin lentoliikenne mahdollistaa jopa kaukaisimpien kohteiden saavuttamisen suhteellisen lyhyessä ajassa, ja on siten vakiinnuttanut paikkansa suosituimpana matkustustapana kansainvälisessä matkailussa.</p> <p>Opinnäytetyön tavoitteena oli kerätä tietoa niistä ongelmista ja haasteista, joita pyörätuolimatkustaja voi lentomatallaan kohdata. Asiaa pohdittiin myös tasa-arvon kannalta, tutkimalla ovatko pyörätuolia tarvitsevan henkilön mahdollisuudet lentomatkustamiseen todellisuudessa samat sitä ilman matkustavaan henkilöön verrattuna.</p> <p>Opinnäytetyö koostuu kahdesta osasta. Teoreettinen viitekehys luo yleisen katsauksen tutkimusongelmaan ja syventää samalla lukijan ymmärrystä aiheesta. Tutkimusosio puolestaan kertoo opinnäytetyötä varten laaditusta tutkimuksesta sekä sen tuloksista. Tutkimus toteutettiin osittain määrällisenä, osittain laadullisena kyselynä. Kohderyhmänä olivat lentomatkustamisesta kokemuksia omaavat pyörätuolimatkustajat. Myös henkilöille, jotka ovat toimineet matkaseurana tai avustajana pyörätuolimatkustajalle, annettiin vastausmahdollisuus. Teoreettinen osio luotiin erinäisten internet-artikkeleiden, kirjojen, säädösten sekä aiempien tutkimustulosten perusteella, kun taas tutkimusosio pohjautuu primaariseen tutkimustietoon – se selvittää pyörätuolimatkustajien henkilökohtaisia kokemuksia lentomatkustamisesta sekä kertoo heidän näkökannastaan tasa-arvokysymykseen.</p> <p>Tutkimustulokset osoittivat, ettei lentomatkustaminen ole pyörätuolimatkustajalle suinkaan ongelmatonta. Merkittävimpänä haasteena ovat WC-käynnit, joihin ei lennon aikana juuri ole mahdollisuutta. Suuri osa vastaajista koki, ettei omaa tasavertaisia mahdollisuuksia lentomatkustamiseen pyörätuolissa olonsa takia.</p>		

Asiasanat

esteettömyys, haasteet, lentomatkustaminen, matkailu, mixed methods, vaikeudet

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1 INTRODUCTION

The aim of the thesis is to gain knowledge about the difficulties and challenges persons in a wheelchair may confront when they are travelling by the means of air transportation. The problems and difficulties are also considered from the point of view of equality. Equality and preventing of discrimination are being seen as very important issues in nowadays' western society. The Universal Declaration of Human Rights, agreed by the United Nations in 1948, states in the first article, that "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood." The same convention also declares, that everyone is entitled to all the rights and freedoms set in the declaration, not depending on individual's race, religion, colour, sex, language, policy opinion, social or national origin, or birth or other status.

As a concept, travelling is being thought of as something everyone should have the right and same possibilities to. Also the importance of travelling as one of the dimensions of individual's spare time has been increasing persistently during the last decades. Tourism has universalized, and it could be said, it is actually a part of the identity of all the nations counted as industrialized countries. According to World Tourism Organization, 1 087 million international tourist arrivals were being recorded in 2013. This number represents more than 10 % of the global population. The main transport mode for international tourism is air transport due to its effectiveness - it enables travelling over long distances in a relatively short time.

While travelling, an individual is practicing his own freedom, in order to get some rest from normal everyday life and to experience a little bit more happiness. Tourism and travelling give opportunities to strong experiences which normally have an effect even to the quality of life as a whole. Thus it enables personalization – the personal evolution of an individual.

Even though travelling is considered to be a right for everyone, and a thing everyone should be able to practice if just wishing to, in real life, this is not really the case. It is obvious that physically disabled persons do not have as easy access to transportation modes as able-bodied persons do.

In addition to focusing on the difficulties and challenges for wheelchair users in air transportation, another focus of this report is also to concentrate on the comfort and safety aspects of travelling in a wheelchair when travelling by air transportation. When talking about disabilities, the term "disability" in overall can include several types of disabilities: it can be mobility or a physical impairment; a spinal cord disability; a head injury or a brain disability; a vision or hearing disability; a cognitive or learning disability; a psychological disorder or a disability that is sort of invisible. Anyhow in this thesis the cause or type of one's disability is not crucial, the only concern is on the necessity of a wheelchair use in everyday life. Hence the physical disability may be caused by any disability category that affects the physical functioning of a person.

2 THE MAIN DEFINITIONS

As this thesis is concentrating on examining the problems and challenges passengers travelling with a wheelchair may confront in air transportation, some definitions need to be clarified first in order to ease the understanding of what actually is being meant by certain definitions. The topic is basically folded around three different definitions – disability, air transportation and accessibility – and the first two subchapters below are explaining each one of them in more detail. The last subchapter gives accessibility a definition, as well as discusses accessibility more widely in public transport, and gives the reader an understanding about the barriers a disabled passenger may confront when using public modes.

2.1 Disabilities

According to the World Health Organization (WHO) over a billion people are disabled. In other words, this means that about 15% of the world's population has some kind of disability. The number of adults having major difficulties with functioning is between 110 million to 190 million. WHO is highlighting that these rates are just about to increase due to the ageing of population and the increase of chronic health conditions. (WHO 2013.) According to the WHO's International Classification of Impairments, Disabilities and Handicaps, over half of all the disabilities can be described as physical disabilities. In other words, they are affecting a person's everyday life, complicating their mobility, self-care and communication. (Cole & Morgan 2010, 2.)

Darcy and Dickson (2009) have been establishing that it is likely that an average of 30% of people will have some sort of disability or other access requirement during their lifetime. To explain the physical disability or access requirement a bit more, Darcy and Dickson are stating that this access requirement does not have to be anything permanent, also temporary situations are being included. They also include the cases where

the access requirement is because of a family member or someone with whom they are travelling, into their definition. (Darcy & Dickson 2009, 1-2.)

According to how the WHO (2013) is defining disability, it can be said that disabled persons are not only disabled by their body; they can also be disabled by society. Disability is nowadays understood as an issue of human rights. WHO is stating that disabled persons may live surrounded by several barriers, which are possible to overcome but only in the case where governments, nongovernmental organizations, professionals and people with disabilities, as well as their families, all work together. (WHO 2013.)

2.2 Air transportation

Air transportation defined in the simplest way is a transportation system for moving passengers or goods by air. The past decades have been remarkable, as a lot has changed in air transport. This has provided the airlines with many new possibilities and challenges. Even though the traditional airlines have faced severe challenges in a short period of time, at the same time, the low cost airlines have been doing well and been able to refresh the structure of air transport industry. The low cost airlines have been conquering the market area, while the traditional airlines have been decreasing their number of flying routes available. From passenger's point of view, this has been a very positive change – the range of possibilities available has grown and at the same time the prices have gone down. (Matkasuunnittelun opas 2010, 22; Vocabulary.com.)

During the year 2014, the commercial aviation celebrated its 100-year birthday. The very first commercial passenger flight, a Benoist flying boat, took off from St. Petersburg in Florida in 1914, and crossed the bay to Tampa. During the first year of commercial flights, the number of passengers carried was 1 205 in total. By the year 2011, the same number has increased to 2,824,000,000. Nowadays air transport is the most common mode for international tourism. It is effective, as it is easy to reach even the

most remote locations and in a relatively short time, especially if compared to other transport modes - for instance trains and boats. Even though air transport is the most popular transport mode in tourism, it counts only 12.5 % of all tourist travel. Still, quite controversy, for international tourism this share is noticeably larger, as it points to 40 %. This difference is mostly due to prices of air transport. (International Air Transportation Association 2014; Rodrique 2013.)

2.3 Accessibility and public transportation

The idea of accessibility got its start in 1960-1970, as it became a new, yet important element for disability researches and discussions worldwide. The interest of architects, designers, governments and organizations towards barrier-free building rose highly. At this time the worldwide symbol of a plain, wheelchair user shaped figure was also designed. (Kemppainen 2008, 21.)

The word accessible can be defined as something that is able to be reached or approached, able to be used or obtained, or easy to appreciate or understand. (Merriam-Webster Dictionary.) As a term accessibility does not only apply to the physical environment – even though it is probably the most significant part of it. Instead, if accessibility is examined comprehensively, also such things as informational, financial, and social accessibility can be separated from the definition. Informational accessibility could be explained as understandability of language and that language is well articulated. This is important, as some persons with a disability do need plain language material and thus it should be always available. Financial accessibility on the other hand, is more about prices and something being possible to be afforded. (Könkkölä 2013, 19, 62-63.)

For air transportation, accessibility is mostly about two of the definitions given above; a disabled person being able to reach something, for example in this case to reach the plane and about the person being able to use something and to benefit from it – in other

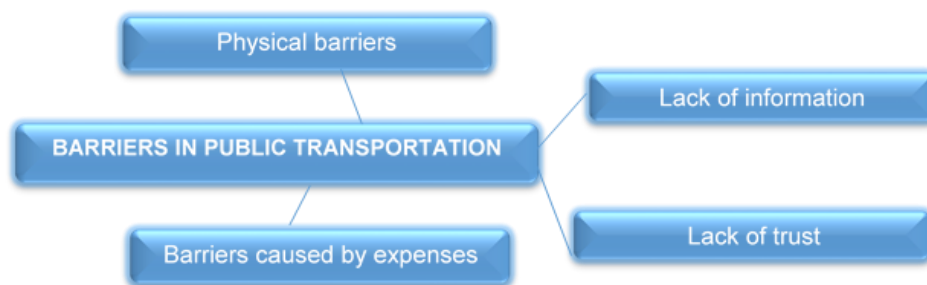
words, to have a good access to all of the facilities of the plane. What comes to the surrounding environment of a disabled person, the most crucial factors are the environment and the surroundings where the person is living in, traffic and transportation, and the information and communication technology. Accessibility can be eased by building in a barrier-free way – which all alone does not guarantee the access. Also some prerequisites for operations, transportation modes, economic requirements, performance, and motivation are needed. In addition to these, the help required can be humane as well. (Kemppainen 2008, 21.)

When considering ways to improve accessibility in a physical environment, the priority should be set on the possibility for independent functioning. Despite all the solutions that have been made for barrier-free building, also help and good service is often needed. Then again, these should be only completing the accessible solutions made - they are not enough to replace them. The importance and the need of accessibility is only increasing year by year, as the population is ageing. In the end, accessibility is all about attitudes - when something is being experienced as important, it is more likely that it will be invested in. (Kilpelä, Laitinen ed. 2013, 62-63, 65.)

According to Finnish Transport Agency, the definition of public transport includes buses (operating in long and short distances and charter routes), subways and trams, trains, (suburban - long distance -, and night trains, and long distance trains to Russia), taxis, airplanes (charter flights, regular flights) and other modes of public transportation, such as ferries and boats. (Finnish Transport Agency 2012.)

The accessibility in public transport is not beneficial only for the passenger itself, but for the whole society. The possibility of being able to live and move around independently improves the quality of one's life and gives opportunities to meet other people, benefit from services available, enjoy one's spare time, and to be able to take part in working life - it enables a person to delight in his life. (Esteetöntä palvelua joukko-
liikenteessä 2012, 2.)

The barriers a passenger faces in public transportation can be divided into four main groups. They can be physical barriers, due to the lack of information or the lack of trust, or the barrier can be caused by the expenses. The physical barriers, for instance, can be the level differences on a street, or the access to a vehicle. Lack of information may mean signs that are not articulated well enough, or the information on public transportation is insufficient. What comes to the lack of trust, it can be explained as uncertainty and worry whether the trip will go well or whether there will be assistance and help available if needed. The expenses causing barriers can simply be explained as the cost of a vehicle or transportation. All the three first mentioned barriers are possible to be eased by improving the level of customer service. The trust to get good customer service, to be able to travel independently or to be able to get help during the travel if needed has a significant effect on the decision whether the passenger will be using public transportation or not. (Esteetöntä palvelua joukkoliikenteessä 2012, 4-5.)



GRAPH 1. Barriers in public transportation (adapted from Esteetöntä palvelua joukkoliikenteessä 2012)

Even though this thesis was not concentrating on public transportation in overall, the barriers mentioned above can still be applied to the topic of this thesis, as air transportation is included in the definition of public transportation.

3 THE TWO MAIN APPROACHES TO DISABILITY

Equality is a crucial matter in today's world, and it is not only about the equality in sexes or in races, even though those may come to one's mind first when thinking about it. Instead, it also concerns the fact that everyone should have the same possibilities and the same opportunities to do things one wishes for. According to Cole and Morgan (2010), nowadays especially in more economically developed countries, tourism is being thought of as an experience to which everyone has the right to (Cole & Morgan 2010, 1). This right, anyhow, does not actualize if tourism facilities and transportation modes are not made accessible for everyone. Disabilities, and the need for accessibility and building in a barrier-free way can be viewed from a point of two different approaches. This chapter explains these two approaches to disabilities and later discusses their applicability to the topic of the thesis.

3.1 Medical and social approach

Cole and Morgan (2010) have presented two different viewpoints, from which the physical disabilities can be examined. These means are "medical" and "social approach". In the medical approach the focus is on the individual himself, the difficulties of taking part in social life are being seen as the fault of the individual and his or her disability. In other words, the medical approach claims that the inability to access is related to the medical condition. The social approach, on the other hand, is explaining disability in quite the opposite way; disability is a result of a person's impairment, it is his personal tragedy. It is not the disability itself that is disabling him/her from the social life, but the environment and the prevailing attitudes. Social approach sees environment as the factor causing one's disability. (Cole & Morgan 2010, 3-4.)

3.2 The applicability of the approaches

If applying medical approach to the topic this thesis was concentrating on, the difficulties an individual travelling in a wheelchair confronts, are being seen as a result of his condition instead of examining them as a result of a non-suitable environment for a wheelchair user. Disabilities are being seen as something that is absent from a normal citizen. This kind of thought is dividing people into two categories: normal and abnormal, which is something that does not really go well together with the equivalent baseline of the thesis' topic. Therefore in this case the medical approach is not really applicable.

As one of the main focuses for this thesis is the equivalent possibilities for people to travel, the social approach is more crucial. In this case, when a person in a wheelchair is travelling from one destination to another, there will be situations when the person needs some assistance or personal help. If any additional services for better accessibility have not been arranged, or do not exist on the mode of transportation, it is the environment that is disabling the person from travelling - or at least challenging him. The fact that the surrounding environment is not made accessible causes an unequal position compared to persons with no disabilities, as it creates limitations for a wheelchair user.

4 THEORIES, IMPROVEMENTS AND REGULATIONS FOR ACCESSIBILITY

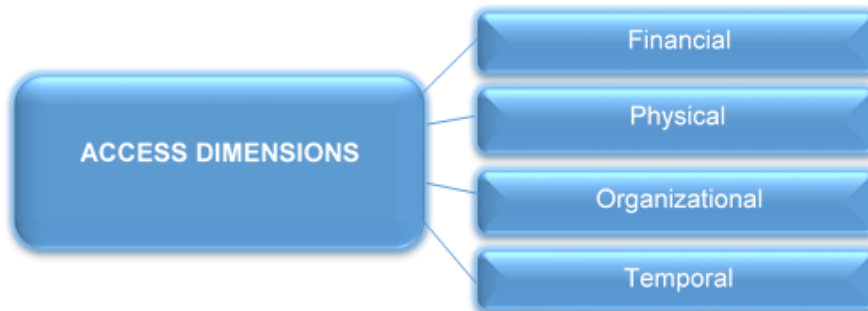
When travelling, the access to a transport system and to a vehicle is necessary. This may be the most concrete example of accessibility in travelling, but also other aspects and theories can be drawn out. They are presented below in this chapter, and discussed from the point of view of air transport. Subchapter 4.2 introduces some technical devices as well as other ways for accessibility improvement. In the last subchapter the regulation set by the EU in order to ensure the rights of a disabled passenger is being explained.

4.1 Accessibility theories

Gay and Siraut (2009) have presented four access dimensions first introduced by Cass, Shove and Urry (2005). These key dimensions can be identified as financial, physical, organizational and temporal. Physical access means the ability to get to and to enter a certain type of transportation service. Financial access, on the other hand, is accessibility related to the costs of transportation. The persons with higher income can afford more transportation – this can be seen in the length of trips made and in the modes of transportation used. Therefore their access to public transportation system is better than those with lower income and less affordability. Organizational access relates to the public transportation organization as a whole; for instance where services go to and how comprehensive the public transport system is, the facilities in which a possible transfer takes place, information provision and the ticket system. Temporal access attributes the coverage of public transport schedule. In other words, how well the schedule responds to the needs and wishes of the passengers. (Cass, Shove & Urry 2005; Gay & Siraut 2009, 695-696.)

Even though these access dimensions presented by Gay and Siraut (2009, 695-696) were examined from the viewpoint of public transport in London, they can be well

applied to the topic of this thesis as well. As defined in the second chapter, according to Finnish Transport Agency (2012) air transport is considered one of the public transport modes, and hence most of these dimensions do appear in air transport sector as well.



GRAPH 2. Access dimensions (adapted from Gay & Siraut 2009, 695-696)

If applied to the topic concerned in this thesis, physical access can simply be seen as the ability to enter the aircraft. Financial access in turn is referring to the costs of air transport. According to the Ministry for Foreign Affairs of Finland (2011), poverty and disabilities are strongly connected to each other. In industrialized countries, around 50-70 % of disabled persons are unemployed and in developing countries the number is even greater, as it points to 80-90%. (Gay & Siraut 2009, 695-696; Finnish Transport Agency 2012; Ministry for Foreign Affairs of Finland 2011.)

In Finland the unemployment rate of citizens with reduced mobility is a lot greater than the average unemployment rate of the country. Almost 24 % of the respondents with reduced mobility and belonging to the age category of 30-44 years were unemployed – the number of women in this category was around 18 % – while for persons with total motility the unemployment rates in the same age category were 8 % for men and about 10 % for women. As unemployment usually strongly correlates to poverty, the survey also revealed it being more common among the persons with reduced mobility than among other population. (Airaksinen 2006, 77-78). Hence in air transport and among

persons with reduced mobility, the financial access could be related to the costs and the persons not being able to afford air transport.

Organizational access in air transport occurs for instance at the airport. How accessible is the airport for a wheelchair user and how the transfer to the aircraft is arranged. If there are any transfers during the route the passenger is flying, the same factors are again faced at the transfer airport. Temporal access on the other hand, is an access dimension which is not as crucial and easily applicable to the thesis' topic, as it is mainly about the flight schedules and how well they meet the needs of the passengers.

4.2 Access enablers for better accessibility

Mobility can be eased by different kinds of access enablers. Cole and Morgan (2010) have introduced three categories, into which the access enablers can be divided. These are adaptive or assistive technology, environmental or structural enablers and attitudes and behavior of others. To understand these a bit deeper, Cole and Morgan explain the categories as follows: adaptive and assistive technology means any technology that maximizes the abilities of disabled persons, while environmental or structural enablers are certain codes for building in a barrier-free way. These inventions can be for example ramps, lifts and accessible toilets. By others' attitudes and behavior Cole and Morgan mean all the disabling attitudes people may have towards people with disabilities. (Cole & Morgan 2010, 5-6.)

4.3 Ensurement of passenger rights

The rights of disabled persons and persons with reduced mobility in air travel are governed by EU Regulation 1107/2006. This regulation aims to make the travel by air of passengers with special needs easier, to improve accessibility at airports and to ensure the assistive devices needed can be transported with the passenger. The regulation's

priority is the equal possibility for disabled persons and persons with reduced mobility to board an aircraft as easily as a person with no mobility limitations do. These regulations are applied to passengers at all EU airports and the operations of EU carriers worldwide, as well as to non-EU carriers within or leaving Europe. Finnish Transport Safety Agency, also known as Trafi, is overseeing the regulation to be fulfilled in Finland. (European network for accessible tourism 2012; European Commission 2012; Trafi 2013.)

Even though the rights of passengers with reduced mobility are quite well regulated in Europe, the situation may not be the same when travelling in other parts of the world. The United States and Canada do have a similar regulation as the one applied in the EU, by which the rights of disabled passengers are being ensured. However, when talking about underdeveloped countries, the case can be very different. For example some airlines based in Africa and Asia have denied carrying passengers due to their physical disability. (Harrington 2009.)

The EU Regulation 1107/2006 specifies three different rights for disabled persons and persons with reduced mobility. The first one is about the equal right to air travel for persons with reduced mobility. In other words, an air carrier or its agent, or a tour operator shall not refuse to accept a reservation because of the passenger's disability or reduced mobility. This regulation concerns all flights departing from an EU airport, as well as cases where the passenger is embarking at such an airport. If any derogations are made, they should be made only for security reasons allowed by law. By this regulation, intentional and unintentional discrimination are being prevented. (Trafi 2013.)

The second regulation makes sure everyone with a disability, or everyone who is physically handicapped, gets assistance at all the airports in the EU and that this assistance is free of charge. The assistance should be available also outside the terminal, e.g. in parking facilities. The third regulation concerns the right to get assistance also on board. Airlines should provide the passenger with a certain type of assistance, and free of charge - for example the carriage of a wheelchair. This regulation concerns all flights departing from airports in the EU. (Trafi 2013.)

The EU Commission has set guidelines to interpret how the regulation should be followed. The regulation takes care that physically disabled persons get assistance in air travel when needed. It also ensures the possibility of assistance for other types of requirements, as the definition of physically disabled passengers covers a wider area than could be thought of at the first glance. Also passengers requiring assistance because of their age, obesity or pregnancy may be entitled to get it - with some exceptions. It is not obligate for carriers to carry a pregnant woman if she is not supposed to fly because of health or safety reasons. Neither can the regulation be covering children travelling as an unaccompanied minor and using the unaccompanied minor service provided by the airlines. Even though obesity can be seen as a mobility reducing factor, may the travelling of obese persons still be limited for instance due to problems confronted with appropriate seating. (EU Commission 2012.)

The regulation is dividing the rights for assistance of disabled passengers and passengers with reduced mobility into two categories - to those that are needed because of safety issues and to those that are more related to comfort aspects. Providing the assistance required depends on into which category it is related to, as those ones concerning the comfort of the disabled passenger are not sufficient enough to require the passenger to be accompanied. (EU Commission 2012.)

The primary task for cabin crew is to be in charge of the safety of all of the passengers on board. Therefore the regulation is not requiring the cabin crew to perform any other services or assistance that is not in line with the services provided to other passengers, for example medication. Disabled passengers and the ones with reduced mobility are anyhow entitled to get assistance, if needed, to be able to use toilets while on board. This assistance means only moving from the seat to the toilet, and does not include any assistance inside the toilet. The moving from the seat to the toilet should be done by the help of an on-board wheelchair if just available. (EU Commission 2012.)

No passenger with a disability or with reduced mobility should be refused onto a flight because of the lack of an on-board wheelchair – instead, the airlines should inform

passengers well in advance if no on-board wheelchair is available, so that the passengers with disability or reduced mobility could themselves make a decision if they are willing to travel in such an aircraft. According to the regulation, aircrafts should inform the passengers in advance about other similar limitations as well, for example if the armrests are not possible to be lifted at all, as this may cause problems for passengers with a disability or for the ones with reduced mobility. (EU Commission 2012.)

A disabled passenger or a passenger with reduced mobility may be required to be accompanied, but this is allowed to be done only due to safety reasons. If an accompanied person is required, he/she should be given a seat preferably for free or at least for a remarkable discount. Also another passenger from the same flight may be asked to perform the role of an accompaniment. (EU Commission 2012.)

Disabled passengers and passengers with reduced mobility are allowed to carry maximum two pieces of mobility equipment onto a flight for free. The same weight limitations apply to the normal check-in baggage of disabled passengers as long as it is not any kind of medical device or mobility equipment required for their journey. (EU Commission 2012.)

The regulation is encouraging all the airport management bodies to allow disabled passengers and passengers with reduced mobility to use their own wheelchair or other assistance equipment until the boarding or at least as far as just is possible due to the safety and security aspects. In addition to this, the airports are recommended to provide a range of different types of wheelchairs to suit the varying needs of disabled passengers. On disembarking, the passengers with disability or reduced mobility should be able to receive their own mobility equipment immediately, instead of receiving it at the baggage hall. (EU Commission 2012.)

5 TRAVELLING BY AIR TRANSPORTATION IN A WHEELCHAIR

When a person in a wheelchair is travelling by the means of air transportation, things may be a bit more complicated than for the ones with total motility. The limitations encountered do not only occur during the flight and while on-board – they begin when a disabled passenger or a passenger with reduced mobility leaves from home and they continue all the way through security check until the passenger is seated in the aircraft. After coping with several challenges on-board, the passenger faces new ones when disembarking the plane, as well as at the destination airport. (Wheelchair Traveling 2014.) This chapter explains the possible challenges faced by a wheelchair passenger from phase to phase – from the very beginning of the travel as the passenger arrives at the airport until the end of the air transportation trip as the passenger arrives at the destination.

5.1 Getting to the airport

To get to the airport, one may use public transportation or other means of transportation – which should be accessible for a wheelchair user. If using public transport, the passengers are most likely to take responsibility for transporting their own luggage, which may cause a big challenge. Some passengers, if they just are able to, may prefer driving to the airport by themselves. Such cases include negative sides as well, as long-term parking may be expensive and the parking site may be situated pretty far from the airport. (Wheelchair Traveling 2014.)

5.2 At the airport

If a physically disabled person or a person with reduced mobility is travelling alone without a companion, it is usually possible to ask for assistance at the check-in for the

luggage that is being carried onto the plane. Some airports have specific security check-point lines that are specially designed to be accessible and to meet the requirements for a wheelchair user. The screening at the security check-point is depending on the passenger's ability to stand or walk. It can be done either by giving a patdown while the passenger is standing next to the wheelchair or if the passenger is not able to walk at all, he can remain seated in the wheelchair while he is being checked giving a patdown. If a passenger is able to walk, he may be screened using a metal detector or imaging technology. Also the wheelchair of the passenger is being checked thoroughly – the seat cushions and all the non-removable pouches or fanny packs are inspected as well. The wheelchair is also checked for any traces of explosives. (Transportation Security Administration 2014; Wheelchair Traveling 2014.)

5.3 Boarding the plane

There are two types of wheelchairs, manuals and electric ones. Manual wheelchairs are usually quite light and easy to dismantle and to build again. Often the persons using manual wheelchairs are able to cope quite independently as well. An electric wheelchair, then again, is a lot heavier to handle and some persons using an electric wheelchair may need to carry a respirator with them. When handling this kind of an electric wheelchair, it is necessary for the staff to know how the wheelchair is functioning. (Esteetöntä palvelua joukkoliikenteessä 2012, 8.)

Before boarding the aircraft, the passenger is usually changed to an aisle chair and the proper one is tagged and taken to the aircraft. As can be seen from Graph 3 below, an aisle chair is a narrow, straight back chair with wheels underneath that is designed to fit in the aisle of an aircraft. If the boarding is being done through a jetway, the passenger can often cope his way to the plane without assistance. If no jetway is available, the passenger is being lifted up the stairs either manually or by using a lift

or hoist if available. The crew can assist the passenger with moving from the aisle chair to the seat. (Spinal Network 2014; Wheelchair Traveling 2014.)



GRAPH 3. An aisle chair used for boarding (adapted from Spinal Network 2014)

5.4 On board and upon arrival

If the aircraft has an on-board aisle chair, the disabled passenger or passenger with reduced mobility can use it in order to get to the toilets. Unfortunately these on-board aisle chairs may not be really comfortable, as there are no standards existing for them. Some aircrafts have accessible toilets, which are easier to use from a wheelchair, but this mostly concerns only the bigger aircrafts with more than one aisle. (Wheelchair Traveling 2014.)

At arrival at the destination airport, the passengers travelling with a wheelchair are normally the last ones to disembark. The crew is good to be reminded of the wheelchair and to be noticed if any assistance with disembarking or at the airport is needed. Wheelchairs and other assistive devices should always be the first items to be unloaded from the aircraft, and they should be given back to the passenger as

soon as possible and as close to the door of the aircraft as the regulations just allow to. (U.S. Department of Transportation 2007; Wheelchair Traveling 2014.)

5.5 Physically disabled passengers in Helsinki-Vantaa

Helsinki-Vantaa Airport is the most popular airport in Finland. The number of aircrafts taking off from the airport every day is around 270, and about 15 million passengers use the airport in a year. The next biggest airports in Finland are Oulu with 877 080 passengers and Tampere with 466 671 passengers in a year. Helsinki-Vantaa Airport is also the leading airport in Northern Europe what comes to long-haul traffic, and it connects Europe and Asia with the shortest route available. The airport, passenger and air navigation services at Helsinki-Vantaa Airport are provided by Finavia, which has 25 airports in total in Finland. (Finavia 2013; Salonen 2013.)

Helsinki-Vantaa offers free assistance service for persons with reduced mobility. This assistance service can be booked from the travel agency or the airline company, and it should be booked 48 hours prior the departure, at the latest. While booking, all services needed should be specified and ensured they are in the reservation as well. Also any aids the person may need, e.g. wheelchair, should be announced. (Finavia 2013.)

While at the airport and getting ready for the departure, registering should be done at least two hours before the departure. There are several registering points at Helsinki-Vantaa where it is possible to contact the assistant. At other airports than Helsinki-Vantaa the assistants are called at the check-in. A trained assistant will help the passenger in check-in, through the security check and the gate area, until the passenger is seated on the airplane. Helsinki-Vantaa Airport has a dedicated security control line for persons with a disability and for those who are physically handicapped. Also families with children can use the same security check line. In the security check, passengers in wheelchairs are always checked by hand, and so is their equipment as well. (Finavia 2013.)

Even though the assistants are trained for the job, it is always important for the passenger to inform the assistant about the best ways of lifting and moving the passenger. When arriving back at Helsinki-Vantaa Airport, the passenger will be assisted and accompanied from the airplane to the terminal, all the way to parking areas, public transport stops or taxi stop, depending on how the passenger will continue his way from the airport. Helsinki-Vantaa Airport also offers disabled passengers free parking and the toilets at the airport are made to be accessible for everyone. (Finavia 2013.)

5.6 Previous studies and passenger experiences

This thesis was conducted by the means of mixed methods research, and a quantitative survey including qualitative questions was conducted for information gathering. These issues will be discussed in more detail in chapter six. When using quantitative research methods, theory and preunderstanding of the phenomenon or topic are required. The same requirement for knowing previous, already existing theories is also necessary for the questionnaire design. (Kananen, 2011, 72-73.) Therefore a look on previously published research material on the topic was necessary, and this chapter presents an outcome of one such research.

Travelling in a wheelchair by the means of air transportation has been studied by a few researchers. One example is a research done by Brandt, Poria & Reichel (2009) in which 45 individuals were interviewed during the years 2003-2006 in Israel. As a requirement for these individuals that were interviewed was that they were either wheelchair users or using crutches, or unlike in this thesis, had a visual impairment, and had had minimum one overseas flight experiment. In their study Brandt et al. have introduced two different categories for the difficulties experienced by passengers in a wheelchair. These problems can be divided into pre- and post-flight difficulties, and to difficulties experienced while onboard. (Brandt, Poria & Reichel, 2009, 219-220.)

The study showed that the environment of a basic airplane is not really designed to meet the needs of a physically disabled person. The biggest pre- and post-flight difficulty is being faced when entering the plane and again when disembarking. The interviewees of Brandt et al. were indicating that since the aisles are too narrow for a normal wheelchair, they have to board by using another chair in order to be able to get to their seat on the plane, and repeat the procedure again when disembarking the plane. These wheelchairs may be really uncomfortable, and can even cause actual pain. The staff is not always familiar enough with moving the client in the right way from the wheelchair to the seat and this may reopen the person's pressure sores. The reopened pressure sores can be really painful, and they may not hurt only during the flight - the whole vacation may be ruined, since they take a long time to heal. (Brandt et al. 2009, 220.)

As one of the main reasons while onboard, Brandt et al. (2009) recognized the difficulties occurring because of the inaccessible design of the plane. Since the toilets are not normally accessible for a wheelchair user, they have to be carried there by another passenger or a companion, if there just is one with them. This was experienced as quite humiliating. Therefore the need of going to the toilet was preferably tried to be avoided in all the possible ways; by using a catheter, a diaper, a bottle or a hygroscopic bag, or even by fasting or breaking the flight into two, in order to be able to use the accessible toilets at the airport. The avoidance of toilets may result into more problems, for example to accidental defecations. Also the use of a diaper is sort of a humiliating experience due to the stench which may be noticed by other passengers. (Brandt et al. 2009, 221.)

Another difficulty resulted from the survey was the crew members' way to communicate with physically disabled persons. According to the results, the physically disabled passengers had sometimes experienced the crew members' ways of acting towards them as inappropriate. The crew members may behave in a way as the person in a wheelchair would undoubtedly also have a cognitive disability, and therefore speak and answer questions only to the accompanying person, or speak in the ways as one does when

speaking to children – loudly, slowly and by using only simple words. (Brandt et al. 2009, 221.)

One issue according to the study can be the changes in flight schedules, which may cause real problems. Therefore the informing should be immediate and the information accurate. In their study Brandt et al. (2009) were informed many times that since the toilet entering is really hard for wheelchair users, many are doing preparation in advance; such as diets and fasting. If any delays, changes or cancellations occur, it may cause serious consequences to a person, since it is hard to know whether there is a need for these prior flight preparations or not. (Brandt et al. 2009, 222.)

Also the seat location is a matter the survey of Brandt et al. (2009) pointed out as crucial. The persons themselves may feel they are causing inconvenience on others, and therefore prefer a certain type of seat. Another reason is again the pressure sores, as they may get reopened by any physical contact with other people. (Brandt et al. 2009, 221.)

6 CONDUCTING THE RESEARCH

The practical part of this thesis was a research conducted among air travel passengers who had experience of travelling with a wheelchair – either because they are wheelchair users themselves or they have been travelling together with someone using a wheelchair. This chapter clarifies the theory needed for research conducting, presents the research objective and discusses reliability and validity issues.

6.1 Research goals and objectives

As already shortly presented in the introduction chapter, this thesis had a few main research goals. Firstly, the aim was to get knowledge about the difficulties and challenges passengers in a wheelchair may confront when they are travelling by the means of air transportation. This leads to the second research goal, which was to consider the travelling of a wheelchair user from the point of view of equality - whether equality really actualizes in practice, and if the possibilities for air travel are the same as they are for a passenger with total motility. As a third research goal the interest was to come up with ways to improve the situation and to ease the difficulties experienced.

In order to achieve these research goals, a research object needed to be chosen. As for the purpose of this thesis, the research objective was quite restricted – it had to be persons having experience from air travel with a wheelchair. To broaden it a bit, also people who had been travelling by air as a companion for a wheelchair user were included, instead of accepting only those being in a wheelchair by themselves.

6.2 Research methodology

Simply put, the aim of a research is to solve a problem and to gain knowledge for further improvements on the phenomenon or topic. It is about turning something previously unknown into known in order to advance human knowledge. (Veal 2006, 3-5.)

According to Veal (2006), research can be divided into three types. These are descriptive, explanatory and evaluative research. Descriptive research is about finding something out, and as the name already indicates, it is descriptive from its nature. In tourism and leisure area this is the most common type of research, mainly because as a field leisure and tourism are quite new and the nature of the phenomena being studied is changing. Explanatory research on the other hand is more about explaining how or why things are as they are. The aim for such a research is to find causality, and to be able to use the knowledge gained for predictions. In evaluative research, the success and efficiency of policies or programmes is being judged and evaluated. This type of research is highly developed in some areas of public policy, but not so well in the field of tourism and leisure. This thesis survey was descriptive, as the questionnaire intended to find out how it is to travel by air with a wheelchair and what the challenges may be – it attempted to give a description of the phenomenon. (Veal 2006, 3-5.)

Principally two different kinds of research methods can be specified; quantitative and qualitative. It could be simplified that in quantitative research the usage of numbers is preferred, while in qualitative research the preference is on using words. Another distinction for these two research approaches is that in quantitative interviews the questions are mainly close-ended, while in qualitative interviews they are open-ended. The questionnaire for this thesis was mostly including close-ended questions gathering numerical data, thus the main focus was on quantitative approach. However, one of the main research goals was to get a deeper understanding on the phenomenon, and not only concentrate on how common it is to face challenges as a wheelchair passenger. Therefore qualitative research methods were also applied in order to gather more detailed information and to get answers for the research goals presented previously in

subchapter 6.1. Hence a few open-ended questions were included in the questionnaire, in which the respondents' personal experiences of the research problem were being collected. These open-ended questions were mainly placed at the end of the questionnaire form, and were used in order to give the participant a possibility to define his answer in more detail or to give additional information related to his previous response. A research including both quantitative and qualitative methods is often called a mixed method approach, and therefore it is the method used for this thesis research. (Kananen 2011, 18, 130, 72; Veal 2006, 2, 98; Creswell 2009, 4.)

6.3 Questionnaire design and distribution

A questionnaire-based survey can be carried out either in interview-format or in respondent-completion-format. As Smith (2010) clarifies, a questionnaire can be distributed in several ways. It can be distributed personally or be conducted via a telephone interview. A questionnaire can also be a self-completion sent by mail or a web-based survey, just to name a few. For this study purpose, a web-based survey was chosen as it enables a relatively large sample size to be achieved easily and as it may improve the respondent rate as the respondents have the possibility to fill in the questionnaire adjusted to their own schedule. On the other hand, a web-based survey may not result a random sample. The sample is only persons using Internet and therefore the persons not using it are automatically excluded from the sample. This may affect for instance the age distribution of the sample and hence bias the result. (Smith 2010, 77-85; Veal 2006, 100-101.)

When planning a questionnaire, it is inevitable to keep in mind that the questions need to be unambiguous and easy to understand, and that the respondents should have the required knowledge for a question. If questions are close-ended, one has to be careful that the answering options given are exclusive if compared to each other, and that the number of options the respondent can choose is stated clearly. The scale of answering options available should be broad enough, so every respondent can find an alternative

suiting them best. Any kinds of classifications and categories, concerning for example ages or wages, should be used considerably as almost empty categories may appear if there is not a lot of dispersion among the respondents. (Vilpas 2015, 5.)

The questionnaire was designed and conducted by the use of Google Forms™, which is a free tool for questionnaire design. The questionnaire was then distributed by the help of social media, which helped to find a relatively large amount of respondents belonging to the target group. As discussed earlier in this chapter, getting a random sample when conducting a web survey may be problematic. For this questionnaire the respondents were only those using the internet and following social media. This may affect for instance the age distribution, as the usage of the internet, and social media especially, may not be so common for elderly people. On the other hand, by distributing the questionnaire through this certain social media channel it was possible to achieve exactly the target group needed, as this social media channel was related to accessible travelling and meant for disabled persons or to their families and friends. The questionnaire was available online for two weeks, from the 11th of February until the 25th of February. Once enough responses were gathered, the research results were turned from Microsoft Office Excel file into IBM SPSS Statistics Data Editor.

6.4 Discussing reliability and validity

Veal (2006) defines validity as the range in which the data collected from a survey is expressing the phenomenon that has been studied. In other words, if the right things have been researched and measured. Reliability on the other hand is the stability of the research method used – it is the likelihood in which the results of a survey would be the same if it were be conducted again. The more likely it is to get the same research results, the higher is reliability. Reliability is mainly affected by two factors; the sample size and the sampling method. Problems can occur if the sample size is small as in such a case the results can be very coincidental. In tourism and leisure research, validity and reliability can often be problematic as empirical research tends to be related

to the behaviour and attitudes of people, and in order to gain information on these, the researcher has to rely on what people report by themselves when answering questionnaires or interviews. (Kananen 2011, 125; Veal 2006, 41; Vilpas 2015, 12.)

To evaluate the validity and reliability of this thesis, as the research provided answers to the research questions set at the beginning of the process, it could be said its validity is fairly good. All the data have been handled carefully in order to avoid any mistakes and thus to increase reliability. On the other hand, any qualitative data can be problematic when validity and reliability are concerned. As the open-ended questions collected such data in a form of writing freely with one's own words, there is a chance the researcher did not understand the answer in the way the respondent actually meant to. Some answers were even ambiguous, which of course decreases validity. Another matter is translating the results from a language to another that may, even though how carefully done and not intended to, change slightly the original idea behind the answer. In this case all the responses were in Finnish and later translated into English.

7 PRESENTING THE RESEARCH RESULTS

This chapter will present the results and the outcome of the questionnaire. The questionnaire was structured so that the first three questions were gathering personal information on the respondents; such as gender, age and the place of living. The questions presented after this section were mainly concentrating on their experiences about air travel; how many times they have been flying and with whom, what airport in Finland they have mainly been using, as well as if they have faced any problems and when those have occurred – just to mention a few. A few open-ended questions were placed at the end of the questionnaire in order to gain an understanding of how the respondents themselves see air travel with a wheelchair from the point of view of equality and what there is to be improved.

7.1 Information about respondents

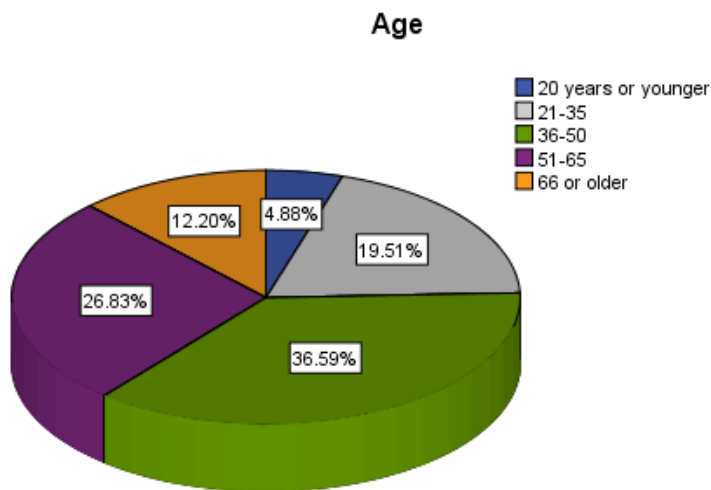
The first three questions were set to get a picture of an average respondent. As can be seen from Table 1, majority (83 %) of the 41 respondents were female as the frequency pointed to 34. Only 17 %, equal to 7, of the answers were sent by male respondents.

TABLE 1. Gender distribution of respondents

	<i>Frequency</i>	<i>Percentage (%)</i>
<i>Male</i>	7	17,07
<i>Female</i>	34	82,93
Total	41	

The age distribution appeared to be a bit more even than the gender distribution. The respondents were given five age categories to choose from; 20 years or younger, 21

to 35, 36 to 50, 51 to 65 and 66 years or older. As Graph 4 shows, all the given age groups were presented in the survey. The dominating age group with over 36 % was between 36 and 50 years as it pointed to 15 of the respondents, while 51 to 65 years was the second one with nearly 27 % (11 respondents). Also the age group of 21 to 35 was quite well presented as it pointed to over 19 %, which was equal to 8 persons. Only 5 respondents checked to belong to the age group of 66 years or older (12 %), whereas the age group of 20 years or younger was the clear minority, being represented only by two respondents, which was equal to 5 %.



GRAPH 4. Age distribution of respondents

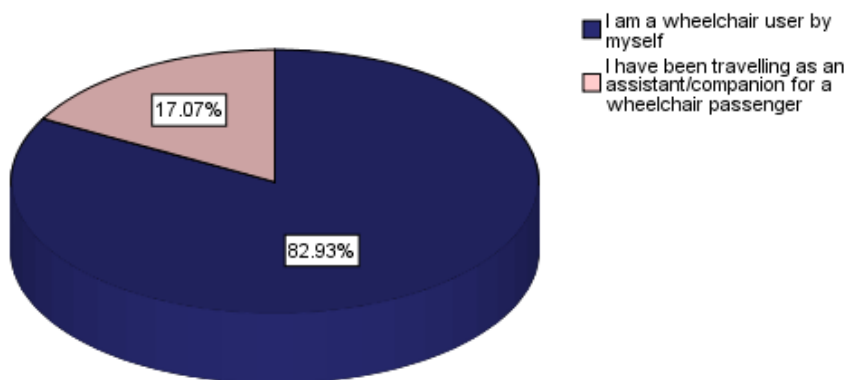
Personal information was also gathered concerning the home region of the respondents. As Table 2 on the next page shows, the biggest region presented was Uusimaa, which was quite expectable as it is the most populated region in Finland and as it is the region where the capital city Helsinki is located as well.

TABLE 2. Home region in Finland

	Frequency	Percentage (%)
Uusimaa	14	34,15
Varsinais-Suomi	6	14,63
Kanta-Häme	1	2,44
Pirkanmaa	6	14,63
Etelä-Savo	1	2,44
Pohjois-Savo	2	4,88
Pohjois-Karjala	2	4,88
Keski-Suomi	1	2,44
Etelä-Pohjanmaa	1	2,44
Keski-Pohjanmaa	1	2,44
Pohjois-Pohjanmaa	3	7,32
Lappi	3	7,32
TOTAL	41	

The following question was checking whether the respondent had experience of travelling with a wheelchair in air travel as he is a wheelchair passenger himself, or if the respondent had experience as he had been in a role of an assistant or companion for a wheelchair passenger. As Graph 5 indicates, the majority of the respondents, almost 83 % of them, were wheelchair users - which is equal to 34 persons out of 41. The rest seven respondents had been travelling with a wheelchair passenger, the number pointing to 17 %.

I have experience of travelling with a wheelchair by air as

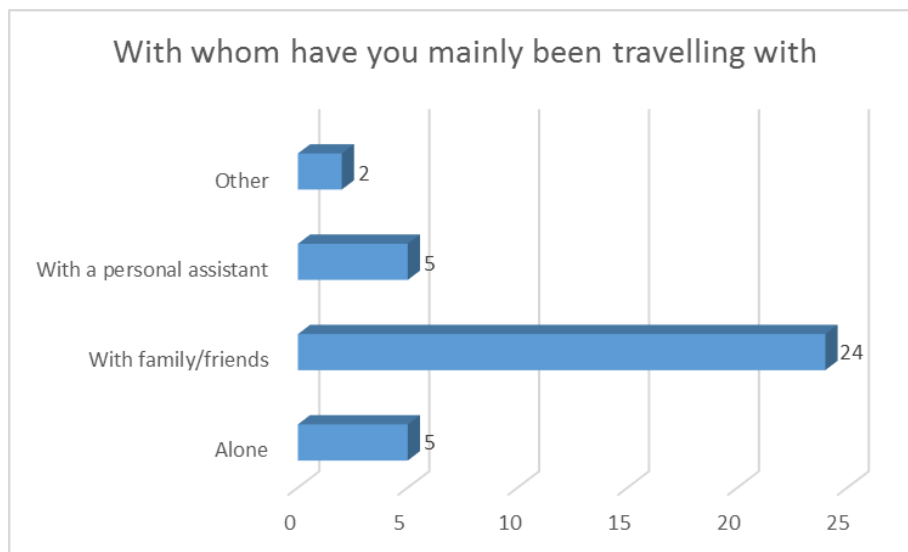


GRAPH 5. The distribution of wheelchair users and travelling companions

7.2 Experiences in air travel

The next questionnaire section was set to collect data on the flying experience of the respondents. This section included questions related to the number and type of flights taken as well as to possible problems encountered.

The first one was designated to only those respondents who had previously checked to be wheelchair users themselves. They were asked with whom they had mainly been flying. As can be seen from Graph 6, most of them had mainly been flying with family or friends as this option amounted to 24 respondents. The number of respondents flying either alone or with a personal assistant both pointed out to five persons. The fourth option was to choose the answer “Other”, and it was chosen by two respondents.

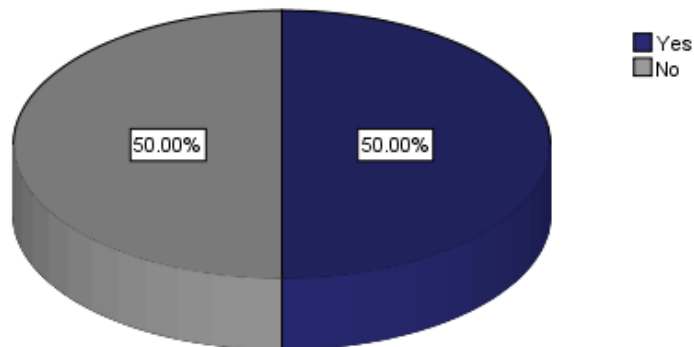


GRAPH 6. The most common travelling companion

As previously seen in Graph 5, the number of wheelchair passengers taking part in the questionnaire was 34 and only they were supposed to give an answer for this question. However, as can be seen from Graph 6 the total number of responses for the question

concerned points out to 36, hence two non-wheelchair user respondents had mistakenly given their answer as well.

If you have never been flying alone, could you imagine doing so?



GRAPH 7. Would the respondent fly alone

Those wheelchair passengers who had not been flying alone, were then asked whether they could imagine themselves doing so or not. The result turned to be even – 16 respondents could see themselves flying alone, while the rest 16 respondents could not (GRAPH 7).

The respondents answering “no” to the previous question had the possibility to give reasons for their choice of response. These reasons given were mainly due to two factors, the requirement for help or safety issues.

“I need help during the flight, and the service assistant does take one until the gate, but I can’t go eating or to restrooms with my hand luggage as I have to carry so much medication and devices with me.”

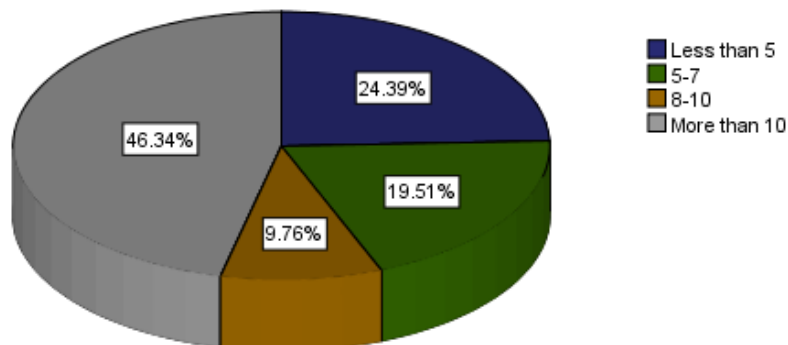
“I don’t trust the help available at the airport, neither do I trust that the wheelchair will be brought to the arrival gate to wait, as it once happened to me. Back then I could not have managed on my own. I also need help when in the destination.”

“It is a matter of feeling safe. If something totally unexpected would happen at the airport, it is good to have a husband/friend with you.”

“The physical environment is so poorly designed and the help so hasty and aleatory from its nature that flying alone would be a suicide. The last time I was on a flight, my wife, personal assistant and my daughter were there to help me. And right after the Spanish airport staff took over, it took only two seconds for an accident.”

A question was set up to check the number of flights the respondents had taken either in Finland or departing from Finland. The participants in the questionnaire were able to choose their answer from the given options of ‘less than five’, ‘5 to 7’, ‘8 to 10’ or ‘more than 10’. The respondents who had experience of travelling as a companion for a wheelchair passenger were asked to give a response based on the number of flights they had accompanied a wheelchair passenger on. As can be seen from Graph 8, nearly half (46.34 %) of the respondents had been taking part in more than 10 flights. This is a pleasing result, hence it is likely these respondents have more experiences, either bad or good, to tell than the ones with fewer flights taken. On the other hand, the option of flights fewer than five was the second common response option as it pointed to almost one quarter (24.39 %).

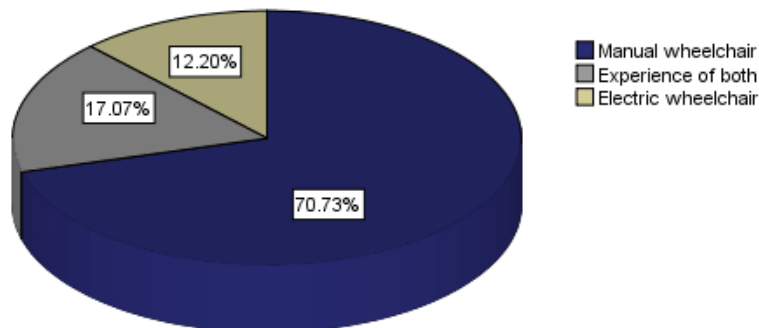
The amount of flights done in Finland/departing from Finland



GRAPH 8. The number of flights the respondent has done in Finland/from Finland

Airline companies and airports may have different kinds of policies and procedures depending on the type of a wheelchair the passenger is using. Therefore the respondents were asked to choose a response from three options; if they had been using a manual wheelchair, an electric one or if they had experience about being an air travel passenger with both kinds of wheelchairs. The respondents who were not wheelchair users were advised to give an answer based on the type of a wheelchair the person they had been travelling with had been using. As Graph 9 indicates, the majority of 70 % had been using a manual wheelchair, this being equal to 29 persons. The other two options resulted to be quite even - the percentage of persons having experience of both was a bit higher as it pointed to 17 % (7 persons), while the number of those using an electric wheelchair was referring to about 12 % (5 persons).

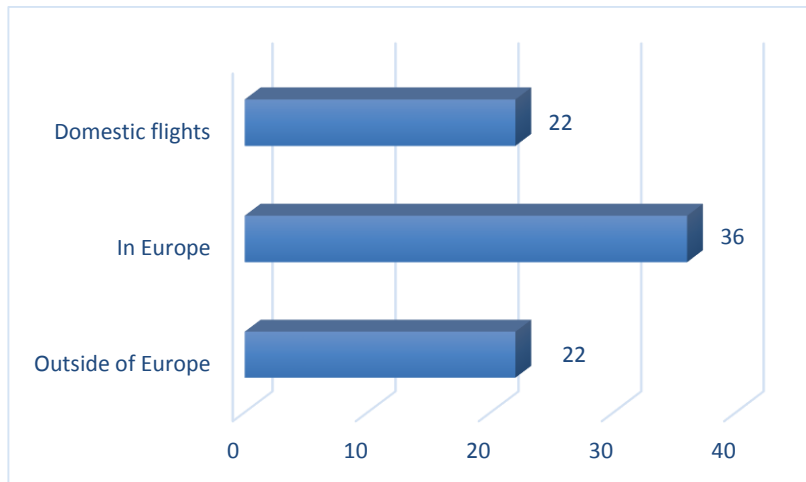
The type of a wheelchair used in air travel



GRAPH 9. The most common wheelchair type used in air travel

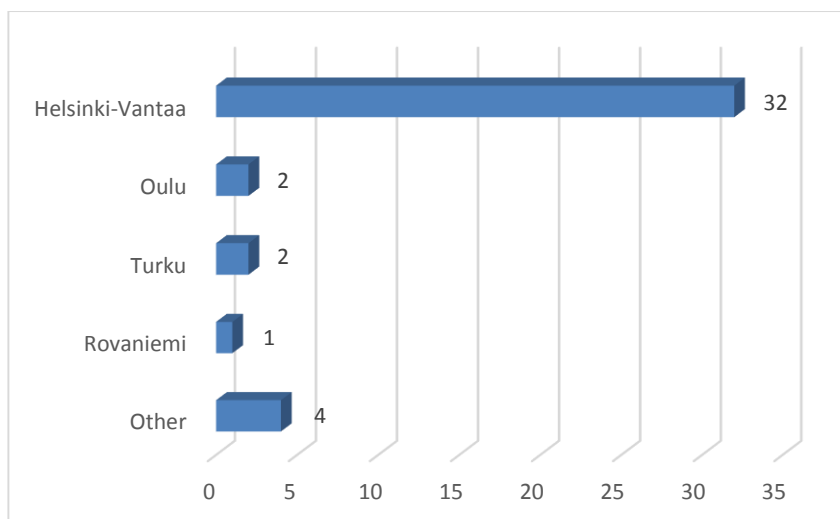
Regulations of disabled passengers' rights in air travel may vary worldwide. In Europe, in the United States and in Canada these rights are fairly well classified, but outside of these areas the situation may be totally different. Therefore one concern in the questionnaire was in which kinds of flights the respondents had been taking part. These flights were divided into three categories, 'domestic flights', 'flights in Europe', and 'flights outside of Europe'. The respondents were able to choose as many options as they needed to. As can be seen from Graph 10, most of the respondents (36 persons)

had been flying inside of Europe. Anyhow, all the three categories were presented among the respondents as 22 of them had been taking part in domestic flights and 22 had experience of flying outside of Europe.



GRAPH 10. The type of flights the respondents had been taking part in

The next question checked the airport in Finland the respondents had mainly been using (GRAPH 11). A clear majority of 32 persons had been using Helsinki-Vantaa. This result was quite expectable, as Helsinki-Vantaa is the biggest airport in Finland.

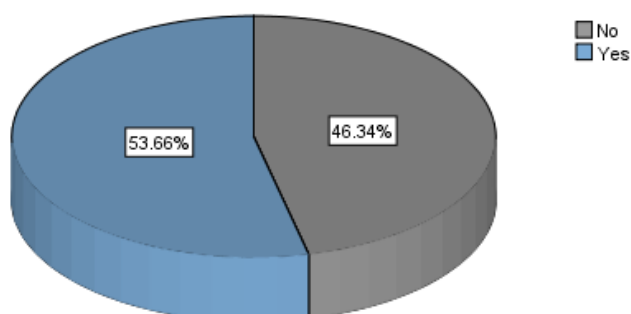


GRAPH 11. The airport mainly used in Finland

7.3 The problems for a wheelchair passenger in air travel

As one of the main aims was to research what kind of problems and difficulties wheelchair passenger can face in air travel, several questions were set up to ask about the experiences of the questionnaire participants. First, a simple question whether the respondent had faced any problems or challenges was needed. As shown in Graph 12, the result was quite even. Almost 54 %, which is equal to 22 persons, replied with the answer 'yes', indicating they had experienced problems or challenges. On the contrary, 46 % (19 persons) of the respondents have not had any experience in this matter.

Have you faced challenges or problems while travelling by air with a wheelchair?



GRAPH 12. The wheelchair passengers faced with problems in air travel

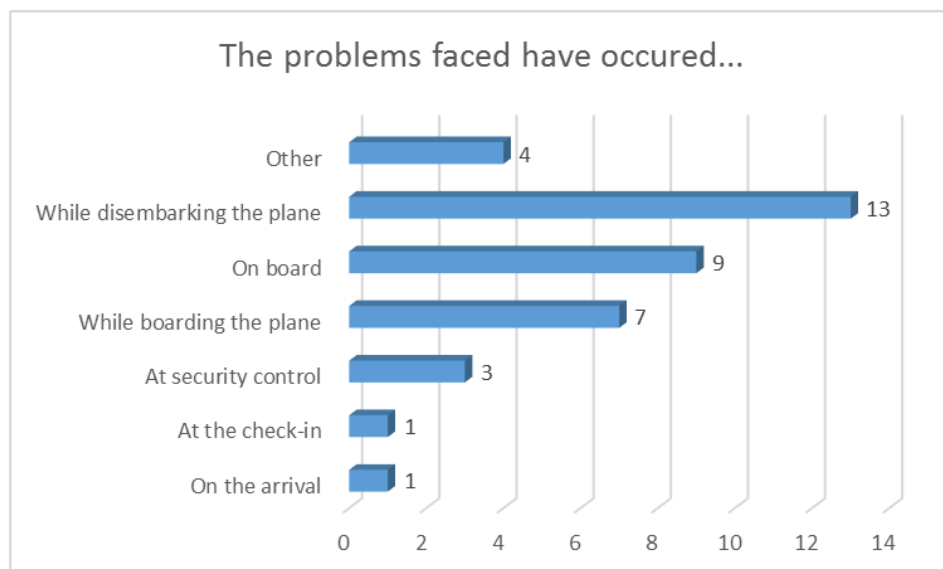
As subchapter 5.3 already shortly explained, travelling in air travel with an electric wheelchair may be a bit different than with a manual one. Manual wheelchairs are relatively easy to dismantle and the persons using them can usually cope by themselves to some extent. Electric wheelchairs on the other hand are a lot heavier. From Table 3 it can be seen that a majority of 80 % of the electronic wheelchair users had experienced problems in their air travel, while the distribution for manual wheelchair users was more or less even - 48,3 % had experienced problems while 51,7 % had not. On the other hand, only 4 respondents checked to have experience of using an electronic

wheelchair, which is a small sample and hence there is a possibility for just a pure coincidence.

TABLE 3. Experience of problems faced in air travel by the wheelchair type

Experience of problems faced in air travel by the wheelchair type	No (f)	percentage	Yes (f)	percentage	Total
A manual wheelchair	15	51,7 %	14	48,3 %	29
I have experience of flying with both of them	3	42,9 %	4	57,1 %	7
An electric wheelchair	1	20,0 %	4	80,0 %	5
Total	19	46,3 %	22	53,7 %	41

Those who had experienced problems, difficulties or challenges were then asked to choose the part of air travel journey in which these problems have occurred (GRAPH 13) and later to describe the problems experienced more in detail. They were able to check as many response options as needed. It resulted that most of the time the problems were encountered when disembarking the plane, as it was an option chosen by 13 persons. Also boarding (with 7 persons) and being on board (with 9 persons) had been problematic among the respondents.



GRAPH 13. The part of air travel journey in which the problems have occurred

From the answers given, mainly six different themes were able to be separated. Most commonly mentioned were lavatories and problems related to the wheelchair – it getting damaged or lost, for instance. Also seating on the plane, boarding the plane, problems related to the help available, and problems occurred because of the personnel of the airport/airline company were reported. Some of these comments are cited below.

“An electric wheelchair often gets broken on a flight. Luckily, usually this hasn’t happened until the flight back home. The best would be if one could travel in his own electric wheelchair.”

“The airport personnel that assists one to his seat on the plane is not always listening to instructions given, they often have poor language skills, and are physically weak. One is not allowed to get a front row seat on the plane, which makes moving to the seat complicated. I am not able to use the lavatories on board. I have to be seated in a seat that causes me pain. My electric wheelchair and other assistive devices have often got broken in the cargo room, or when loading/unloading it.”

“On my way back home, my wheelchair got broken as it was thrown out upside down from the cargo room, neither was it brought to the gate I was waiting at. Nobody informed me about this. The back rest has also got damaged, as the personnel were not bothered to listen to the instructions how the wheelchair is supposed to be lifted and carried. The holiday was unpleasant as the back rest was twisted and as all the adjustments were totally wrong. The airport personnel should be educated how to handle wheelchairs and how valuable those actually are.”

“Even though ordered, the aisle chair for on board use has either been late or has not been there at all. It is also difficult to get to the toilet, if not seated near it as requested. Once I was brought to the wrong terminal and it made me miss my flight. The wheelchair has got lost and hasn’t been returned until a couple of days after the arrival. This is truly a problem!”

“Since the toilets on board are not accessible, I have been forced to use diapers, and to cut down any drinking before the travel and during it.”

“It is impossible to use the toilet during the flight. There is no one helping you, unless you have two walk-able persons carrying you there. This causes me stress on every flight. Especially on long-haul flights (6 hours or longer), no matter what I do (fasting, not drinking, using medication), I still wish I could have the possibility to use the toilets as all the other passengers – the fact I can’t is humiliating and unequal. In my opinion, if

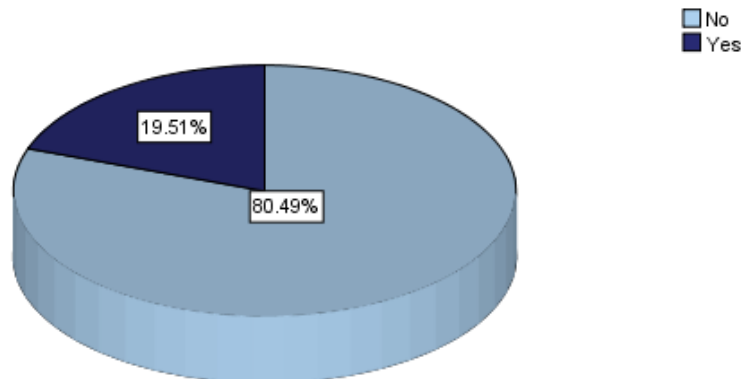
there is no wheelchair on board to be used in order to enter the toilet, at least the staff should be helping one out. But they deny doing so. This is a matter of equality to which a solution should be found!"

"It is not possible to enter the toilet during the flight. There is no wheelchair to be used, neither your own nor one to be borrowed. Once in Berlin despite a notification made in advance, my plane was leaving from a gate where no elevator was available. In the end I was taken to the plane through the outside area. Another time when we were travelling with a bigger group, the wheelchair passengers and their assistants were forgotten to be seated next to each other."

"It is always a bit of a worry, will the electric wheelchair and other assistive devices stay uninjured on a flight. A couple of times I have already arrived back home, yet the assistive devices have still stayed in the travelling destination for months. I can't enter the toilet on board."

"The airport personnel do not always understand what kind of problems a wheelchair passenger is having. Many times they are speaking over my head, only to my husband. The air hostesses have often asked me, if I can walk to my seat, even though I have ordered the service to take me until my seat."

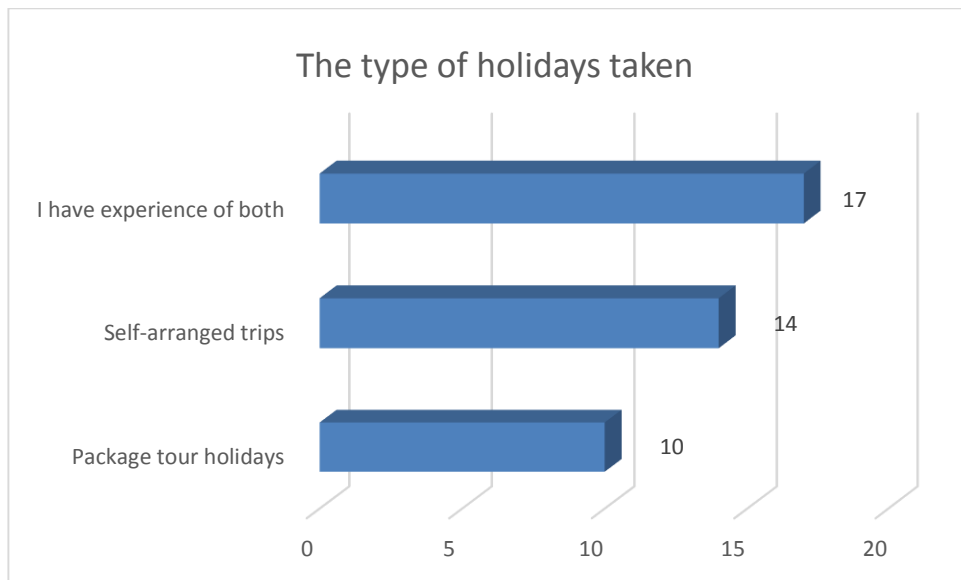
Have you ever decided not to travel by air, as you felt it as a too complicated option with a wheelchair?



GRAPH 14. The complicity of wheelchair travelling as a factor for not travelling by air

As air travel with a wheelchair is a bit different thing than travelling without it, one question was set to check whether the respondents had ever decided not to travel by air

transportation, as they felt it would be too complicated an option (GRAPH 14). The majority of about 80 % (33 respondents) had not, while nearly 20 % (8 respondents) responded they had decided not to take a flight because of its complicity. Even though the dominating answer was no, 20 % is still quite a large number as it points to one fifth.



GRAPH 15. The type of holidays done

Package tour holidays and self-arranged trips may be quite different by their nature. With package tours the holiday is, to a broad extent, arranged in advance by the tour operator while with self-arranged holidays all the responsibility for arrangements is on the person travelling themselves. Hence one interest for the research was if the respondents had experience of using package tour holidays, self-arranged trips or alternatively both of those. Later they were asked to describe how they find the differences between these two to be. The result showed that a slight majority of 17 persons had been taking part in package tour holidays as well as also been doing self-arranged trips. Anyhow, the results were fairly even throughout, as the rest of the result distribution was divided to 14 responses for self-arranged holidays and 10 for package tours (GRAPH 15). The comments given on the differences were as follows below.

“I prefer travel agencies, and am currently using a certain one that makes an effort to create the holidays to be accessible from the beginning until the very end.”

“With package tour holidays, the hotels are always more or less non-accessible. A small toilet in the hotel room or a stupid, annoying step on the way to the hotel room. With self-arranged holidays you know for sure what you are going to get, and who to blame if something is wrong. A part of the ‘travel-fever’ is cured already while doing all the arrangements.”

“Self-arranged holidays have gone better, because the arrangements have been taken care of individually.”

“Both are fine. Self-arranged holidays need to be planned carefully, and can often work out better.”

“A self-arranged holiday is actually easier, as you can come and go by your own schedule. But without good language skills, it would probably not be as easy. “

“In the beginning I would believe if the hotel advertised itself as accessible. The only thing accessible was a ramp from the street level to the hotel. Later I learned to ensure the hotel for these things. Searching online by yourself truly takes several hours.”

“Depends on the tour operator, both have required work.”

“Thanks to the internet, I have found enough information. Sometimes a package tour has turned out to be a bad choice on behalf of the hotel, as I had not realized to ask if there is enough room under the bed for the legs of the hoist (either did the travel agency, even though the hoist was arranged by them).”

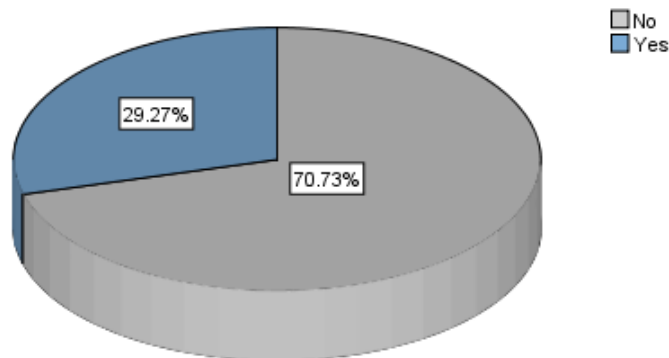
“We have never been on a package tour holiday. All the holidays, for instance the far-distance holidays, have been self-arranged.”

“They are pretty much the same, I guess it depends more on the country or the airline company.”

Since one main interest for the research was the equal possibilities of wheelchair passengers in air travel, one question intended whether they themselves find their possibilities and rights in air travel to be equal to those of passengers travelling without a wheelchair. The response options were given shortly as either ‘yes’ or ‘no’. As can be

seen from Graph 16, nearly 71 %, being equal to 29 persons, stated the rights and possibilities are not the same.

Do you think a wheelchair passenger in air travel has the same rights and possibilities compared to a passenger travelling without one?



GRAPH 16. The equal possibilities and rights of a wheelchair passenger in air travel

The ones who found the rights not to be the same were given possibility to clarify the things and factors causing this inequality. Several themes were able to be drawn out from the answers, but one being absolutely dominant – the lavatories. 16 of these comments (32 in total) were bringing this up as a factor causing the unfair situation. Other aspects mentioned were for instance seating, attitudes of others, higher expenses than for a regular passenger, the regulations and procedures of airports/airline companies, the damages for wheelchairs during the flight, as well as the lack of help and assistance. Some of these comments given are quoted below.

“I can’t enter the toilet on board, therefore I have been avoiding long flights. This causes limitations for travelling, I have to plan my trips more carefully.”

“I can’t enter the toilet, broken electric wheelchair is a disaster, I have to choose more expensive flights because of my severe disability and my electric wheelchair. “

“If you need a personal assistant you have to pay double the price...The air hostesses do not necessarily help you even with small things that could support your possibility for travelling alone (like emptying a urine bottle in the toilet). This is what happened to a passenger sitting next to me...”

“The other passengers “can’t stand” wheelchair passengers. All the operations are slower because of me being there. I am forced to take even a more unpleasant seat, even though it would not be that favourable for me considering moving around, to the toilet for instance.”

“All airline companies do not accept an alone travelling wheelchair passenger on board (Norwegian for example). The use of toilets on board should be possible for disabled passengers as well.”

“Everything – there is no seat specially adjusted for disabled persons, moving around is totally impossible, the wheelchair often gets broken, it is not possible to enter the toilet – the whole thing is unequal. I have begun to either travel by car or to stay home.”

“A notification has to be done before the trip, and you also have to give an explanation in advance about your help requirements at the airport and on board. It is not possible to take last minute holidays. You have to know the weight and size of the wheelchair you will be travelling with, and will you take an electric or manual one. You have to consider into what kinds of components the chair will be dismantled to, who takes care of dismantling and packing it...If it is an electric wheelchair, take the foot plates and joystick apart, fold the backrest, and wrap it in plastic.”

“The use of toilets is the biggest problem. But also some certain airports (Paris for instance) are not giving you your own wheelchair at the airport, if you are going to have a connecting flight to another destination. How do they imagine that one is able to do anything, like going to the toilet, by using a so called airport wheelchair? Every one of us has an individually designed and adjusted wheelchair, in order to maximize the ability for all kind of physical functioning. Other kinds of wheelchairs can often take all the functioning abilities away! Once again, this is a humiliating procedure. These things should be regulated by law, in the area of the EU as well as outside of it.”

“Placing inside the plane, the seat is always next to the window. In an emergency situation you are the last one to be taken out.”

In addition to asking about the factors causing inequality, the respondents were also asked if they had ever felt being in an unequal situation in air travel or if the service

they had gotten had been unequal from its nature for the fact they are travelling with a wheelchair, and to describe the situation shortly. This question was one of the non-mandatory questions, and it got 18 responses. Eight, which turned out to be a slight majority, gave an answer indicating they had had such an experience. On the other hand, two respondents had not faced such a situation, and quite surprisingly, five explained they felt they had only got better service than the regular passengers. Some examples of these answers are written below.

“Sometimes. I have felt myself embarrassed.”

“I have not, everything has been going fine for me. I have found Finnair, SAS and Lufthansa to be really good.”

“I am unequal, as I have to take a personal assistant with me and to pay for his flight ticket as well. A person with total motility can travel with the price of one ticket, a wheelchair passenger cannot cope on his own, so he pays double the price. Some municipalities refund the ticket price afterwards, some do not. When travelling with VR, a wheelchair passenger can have his assistant with him for free. Some disabled passengers have had a perception that the air hostesses are helping out, for instance when going to the toilet, but this is not the case in reality. This kind of assisting on board is not a part of their job, but they do it just for being kind.”

“My husband is in a wheelchair as well, and I feel we are being treated in an unequal way. For instance, during the flight we are not allowed to sit next to each other, this being because of the safety regulations? This is something I don’t understand.”

“Yes. The toilet issue. I can’t go to the toilet for several hours while on board.”

“I feel I’ve only been paid attention to in a better way: I have been called out to pass the lines and I have had a private transport from a plane to the terminal.”

“I have only got positive attention because of my disability/special requirements!”

As the primary data reviewed for the theoretical framework had revealed, travelling with a wheelchair can be a bit more of a problem or challenge than without it, in addition to

concentrating on what these challenges are like, there was a need to ask the participants if they have any improvements on mind and what these are. If having a look at the previous questions providing qualitative data in this survey, the responses were quite similar to those – the toilet issue was dominating, as 15 answers out of 24 brought it up as the main concern. Also seating was another point being quite common among the respondents, since it was mentioned in 8 of the comments. Other topics discussed in the responses were mainly seat comfort, the ticket policies with personal assistants, the ways the airline company or airport staff is handling wheelchairs, the transferring to the plane and the transferring equipment, as well as the importance of the possibility for using one's own wheelchair. One response was associated to the accessibility of airports and how it should be improved.

“One should be able to be seated in his own electric wheelchair while on board. Aircrafts should also provide wheelchair passengers with a possibility for toilet use. The aisle chairs are not really convenient for that many disabled persons.”

“It would be really important to have a big toilet with a handrail, as well as being able to bring your own assistive device from the cargo room to the toilet. The personal assistant should also be given a discount on international flights, for half the price for instance.”

“It is difficult that a person with reduced mobility has to be squashed into the third seat next to the window, it makes moving from the wheelchair to the seat even harder. I know the reasoning though. The transferring, and a safe seat into which moving and assistance is possible. The possibility for toilet would be pure luxury, and a secure carriage for the wheelchair.”

“At least in the bigger planes, there could be seats specially designated to those passengers who are not able to walk at all and these seats would be a bit more spacious than the ones in economy class.”

“Accessible toilets, at least for the long-haul flights. Spacious wheelchair seats, comfortable chairs. Now my swayback can't really stand any leaning while seated on board, and instead I am sitting most of the flight leaning forward. Therefore there could be seats designated for wheelchair passengers, and which could be adjusted.”

“One should be able to go to the toilet while on board, as for instance on trains one can. There should also be movable seats, so there would be no need for the passengers to be lifted from aisle chairs to their seats.”

“The toilet facilities should be enlarged and have handrails. Also a better possibility for choosing the seat on the plane. However I understand, that it is not allowed to sit next to the emergency exit.”

At the very end of the questionnaire the respondents were provided with a possibility to tell about any other kinds of unpleasant experiences in air travel. These reported somewhat similar problems and situations, as the previously asked questions concerning the challenges encountered and the equality issues. A few of them are quoted here.

“Mostly negative attitude from other passengers”

“That you are the last one to be taken on the plane, and everybody has to move and give way for you.”

“I know electric wheelchairs have got damaged on flights. So far I have not dared to take mine with me, instead I have rented one in the holiday destination. The electric wheelchair getting broken is a major worry.”

“The wheelchair has not arrived at connecting airports or at the destination. It was frustrating to notice that after many hours of travelling, I was at the destination without a chair. Many times problems occur with the aisle chair, like the booking of it has not be registered. I have been delayed from my flight, when I was alone and brought to the wrong terminal.”

“Even though I have been at the airport on time to say the least, due to the assistance staff being in a hurry, I have been almost delayed from my flight twice.”

“If the boarding is done from the ground-level and not through a jetway, you are being carried up the steep stairs.”

“The unpleasant situations have occurred only when the services booked in advance have not been provided, the disabilities can’t “suddenly be recovered” when there is no wheelchair available - how could one walk through the security control if your feet are not working...In Finland the wheelchair is taken through the security control and is checked together with the passenger.”

8 CONCLUSION

The main purpose for this thesis was to examine air travelling in a wheelchair in order to understand how it is like, and to achieve an insight of the challenges and difficulties that are possible to be faced during the travel. The air transportation for a wheelchair user was also considered from the point of view of equality, one question being whether the possibilities for air travelling are the same for a wheelchair passenger as they are for an able-bodied person. In addition to these, one more interest was on the things that there are to be improved. The answers for these research goals were being searched by exploring secondary data and by conducting a survey among wheelchair users having experience of air travel.

As an issue, equality is possibly more important today as ever before. At the same time travelling, especially international tourism, is increasing its popularity year by year. Many low cost airlines have conquered the market, bringing the prices down and making air travel more affordable – resulting it being achievable to more and more people around the world. As the writer is personally interested in travelling, as well as in equality and accessibility issues, the subject was easily found when combining all of them. When considering the choice of research method, the solution was not as simple. It was obvious a quantitative research would provide good and useful data, but as a wish was to gain a bit deeper understanding on the topic, also qualitative research seemed to be a useful tool to give the answers longed for – yet qualitative methods alone could not work as well as needed to achieve reliable answers for the research goals set for the process. Hence the method was decided to be a combination of both of those, which resulted to be a good choice. The research results revealed the most common problems encountered, how wheelchair passengers tend to fly and with whom, and how they personally feel their situation in air travel to be if compared to passengers travelling without a wheelchair. The qualitative questions provided answers to the rest of the research goals, as they gave very valuable, more detailed, information on what the

problems and difficulties are and when they occur, how the wheelchair passengers themselves experience the equality issue, and what they think could be improved in air travel and its accessibility. On the other hand, as an unexperienced researcher, some problems did occur during the process and for instance, the questionnaire could have been a bit more logical and unambiguous. Anyhow, when the survey questionnaire was published, the target group seemed to be very pleased to receive it and it got a very positive feedback. Furthermore, some respondents even approached the writer personally, wanting to discuss the importance of the topic.

WHO defines disability being caused not only by one's body, but also by society. If summing up the results of the survey, this definition of WHO can be seen in air travel as well. A wheelchair passenger could travel as any other person, if the environment was just built in a way enabling it. As could they also, if there were no negative attitudes on behalf of the other passengers, and if the personnel of airports and airlines would be better educated what comes to taking care of wheelchair passengers and their most necessary belongings, that is, their wheelchair. All these things seem to cause major worries and a lot of stress for a wheelchair passenger, as well as they cause a large amount of preparation prior the flight. An individual is supposed to practise his own freedom and to get some rest from normal everyday life while he is travelling, but as long as wheelchair passengers in air travel are concerned, this does not seem to actualize to its full extent.

According to the research results, air travel for wheelchair passengers does include several barriers. Mainly it is a physical barrier, the aircrafts are not accessible. Transferring to the plane and to the seat is tricky and often not a nice experience. Being able to use a toilet during the flight is nearly impossible. The seats are not comfortable for wheelchair passengers and therefore the trip may be unpleasant and even cause pain for the passenger. One common barrier among the wheelchair passengers seemed to be the lack of trust. There was a lot of worry of taking a wheelchair to the flight, as it may easily get damaged or even lost, and due to the importance of it for the passenger,

such a case could easily ruin the whole holiday. Also the uncertainty of a holiday destination being accessible even though advertised so, is a barrier related to the lack of trust. One barrier more is the expenses; in case a wheelchair passenger needs to have a personal assistant with him during the travel, he has to pay a lot more for the flights than a regular passenger does – this is because of the costs of the assistant's flight tickets which do not have any discounts and which are not always refunded back by the passenger's municipality.

In order to improve the situation and to increase the equal possibilities for air travel, the physical accessibility of aircrafts needs to be developed further. When considering the ways of improving accessibility, the main concern should be on enabling the physical functioning. The toilets are one of the biggest factors for inaccessibility and hence assisting devices for toilet use could be available on board. Even simple ones, such as hand rails in a toilet, would be of high importance as they often increase the ability of independent functioning of a wheelchair passenger. If just possible, the toilets could be a bit more spacious as well in order to ease the functioning when being inside. The seating could be done more individually, possibly by a solution in which the passenger does not have to leave his own wheelchair at all – then again, this of course requires the aisles to be broader, so that a regular wheelchair can fit in. Another solution could be seats that can be adjusted to meet the personal needs of a passenger. Obviously all of these require quite major changes in the physical structure of an aircraft, and therefore would be a huge investment.

For the writer, the whole thesis process has been rewarding. As the writer was personally keen on the topic, the interest remained strong throughout the whole project. The material explored for the report, as well as the research results provided the writer with a pretty vast knowledge, which hopefully can be a benefit in the future as the writer has a strong interest in working around the field of accessibility and tourism. If summing up the research results all together, there are plenty of things still to be improved in order to ease the situation - such that do not even come up to one's mind if being able-bodied. The possibilities for a wheelchair passenger to take part in air transportation are not the

same as they are for a passenger with total motility. Air travel causes a lot more stress and worries for a wheelchair passenger, as he has to take care of several prior flight arrangements, the expenses may be higher and he can't benefit from the aircraft facilities (e.g. toilets) in the same way as an able-bodied passenger can. Even though possible, it is difficult for a wheelchair passenger to travel independently. A major worry is the wheelchair, and if it survives the flight undamaged and is not lost. It is obvious every passenger wishes to retrieve their luggage undamaged in the destination, but for a wheelchair passenger it is almost vital as a wheelchair is his necessity for coping with everyday life. Travelling with a wheelchair by air transportation is by no means easy or simple.

For further research, one could have a closer look on how to improve accessibility in aircrafts and at airports. Such a further research could concentrate on specific factors only, for instance on how to improve the accessibility of toilets or to try to find a solution on how the passengers could be able to remain seated in their own wheelchairs during a flight. In addition to those already mentioned, one possible topic for future research concerning air travel and accessibility could cover other kinds of accessibility requirements as well, and study the problems and difficulties such passengers may face. For instance, air travel passengers with vision or hearing impairments, elderly people, pregnant women or even obese passengers could be concentrated on. Accessibility is needed by several kinds of different conditions, and hence it provides a researcher with a great variety of opportunities to choose from.

REFERENCES

Accessible Travel Worldwide. Wheelchairtraveling.com. Traveling with Medical Equipment at Airports and on Airplanes. Available: <http://www.wheelchairtraveling.com/traveling-with-medical-equipment-or-a-wheelchair-handicap-limited-mobility-or-senior-at-airports-airplanes-and-all-aboutflying-faa-tsa-air-carriers-act/>. Accessed 3 September 2014.

Airaksinen, T. 2006. Syrjäyttäminen eriarvoistaa. Vertaileva tutkimus liikkumisesteisten ihmisten asemasta. University of Tampere. Department of Social Policy and Social Work. Master's thesis in Social Policy. Available: <http://tampub.uta.fi/bitstream/handle/10024/93316/gradu00970.pdf?sequence=1>. Accessed 24 November 2014.

Brandt, Y., Poria, Y. & Reichel, A. 2009. The Flight Experiences of People with Disabilities: An Exploratory Study. Available: <http://jtr.sagepub.com.ezproxy.centria.fi/content/49/2/216.full.pdf+html>. Accessed 27 October 2013.

Cass, N., Shove, E. & Urry, J. 2005. Social Exclusion, Mobility and Access. The Editorial Board of the Sociological Review. In Gay, N. & Siraut, J. Expanding Travel Horizons: Overcoming Barriers to Travel for Socially Excluded Groups. 2. Available: <http://ec.sagepub.com.ezproxy.centria.fi/content/24/8/694.full.pdf+html>. Accessed 28 October 2013.

Cole, S. & Morgan, N. 2010. Tourism and Inequality: Problems and Prospects. Oxon: CABI Publishing. Available: <http://site.ebrary.com.ezproxy.centria.fi/lib/cop/docDetail.action?docID=10426603&p00=tourism%20inequality>. Accessed 25 October 2013.

Creswell J. 2009. Research Design. Qualitative, Quantitative and Mixed Methods Approaches. 3rd Edition. United States of America: SAGE Publications Inc.

Currie, J., Stanley, G. & Stanley, J. 2007. No Way To Go. Melbourne: Monash University ePress. Available: <http://site.ebrary.com.ezproxy.centria.fi/lib/cop/docDetail.action?docID=10231476&p00=go>. Accessed 25 October 2013.

Darcy, S. & Dickson, T. 2009. A Whole-of-Life Approach to Tourism: The Case for Accessible Tourism Experiences. Available: <http://epress.lib.uts.edu.au/research/bitstream/handle/10453/10091/2008005505.doc?sequence=1>. Accessed 29 October 2013.

ELSA-Ohjelma/Liikenne- ja viestintäministeriö. Esteetöntä palvelua joukkoliikenteessä. 2014. Available: <http://www.lvm.fi/files/399/Palveluopas.pdf>. Accessed 21 September 2014.

European Network for Accessible Tourism. Air Passengers' Rights: Commission sets out new guidance for airports and airlines ahead of London Paralympics. 2012. Available: <http://www.accessibletourism.org/?i=enat.en.news.1335>. Accessed 3 February 2015.

European Commission. Commission Staff Working Document. Interpretative Guidelines on the application of Regulation (EC) N° 1107/2006 of the European Parliament and of the Council of 5 July 2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air. 2012. Available: http://ec.europa.eu/transport/themes/passengers/air/doc/prm/2012-06-11-swd-2012-171_en.pdf. Accessed 2 September 2014.

Finavia. Services for passengers requiring assistance at airports. 2013. Available: <http://www.finavia.fi/en/travelling/before-travelling/passengers-with-reduced-mobility/>. Accessed 12 February 2014.

Finavia. Passengers 2013. 2014. Available: <http://dxww91qv4d0rs.cloud-front.net/file/dl/i/l5EJAw/U89LMHPz9zUNKhSQWjCuBQ/Matkustajatlentoasemittaineng2013.pdf>. Accessed 4 September 2014.

Finavia. Finavia provides a gateway between Europe and Asia. Available: <http://www.finavia.fi/en/finavia-corporation/about/>. Accessed 4 September 2014.

Flying with Disability. Flying with a wheelchair & other mobility aids. 2014. Available: http://www.flying-with-disability.org/flying_with_a_wheelchair_and_other_mobility_aids.html. Accessed 4 September 2014.

Gay, N. & Siraut, J. 2009. Expanding Travel Horizons: Overcoming Barriers to Travel for Socially Excluded Groups. Available: <http://ec.sagepub.com.ezproxy.centreia.fi/content/24/8/694.full.pdf+html>. Accessed 28 October 2013

Harrington, C. 2009. Barrier Free Travel: A Nuts and Bolts Guide for Wheelers and Slow Walkers. 3rd edition. New York: Demos Medical Publishing. Available: <http://www.worldcat.org/title/barrier-free-travel-a-nuts-and-bolts-guide-for-wheelers-and-slow-walkers/oclc/630542639/viewport>. Accessed 3 February 2015.

Kananen, J. 2011. Rafting Through the Thesis Process. Step by Step Guide to Thesis Research. Tampere University Print – Juvenes Print.

Kemppainen, E. 2008. Kohti esteetöntä yhteiskuntaa. Yhteiskuntapolitiikan normatiiviset keinot esteettömyyden edistämässä. Helsinki, Stakes: Valopaino Oy

Kilpelä, N. 2013. Yhtenä joukossa vai ympäristön ehdoilla? In M. Laitinen Miksi joka paikkaan pitää päästä. Vantaa, Hansaprint Oy, 62-63, 65.

Könkkölä, K. 2013. Pitääkö joka paikkaan päästä? In M. Laitinen Miksi joka paikkaan pitää päästä. Vantaa, Hansaprint Oy, 19.

Liikennevirasto. Määritelmät. 2012. Available: http://portal.liikennevirasto.fi/sivu/www/f/aineistopalvelut/verkkopalvelut/henkiloliikennetutkimus/maaritelmat#.VB6mKPI_uQn. Accessed 21 September 2014.

Matkasuunnittelun opas. 2010. UNIpress. Painettu EU:ssa. 24.8.2014

International Air Transportation Association. Annual Review 2014. 2014. Available: <http://www.iata.org/publications/Documents/iata-annual-review-2014-en.pdf>. Accessed 24 August 2014.

Merriam-Webster Dictionary. 2014. Available: <http://www.merriam-webster.com/dictionary/accessible>. Accessed 26 August 2014.

Petzäll, J., Ståhl, A. & Wretstrand, A. 2008. Wheelchair Users and Public Transit: Eliciting Ascriptions of Comfort and Safety. Available: <http://web.ebsco-host.com.ezproxy.centria.fi/ehost/pdfviewer/pdfviewer?vid=5&sid=fbac4aa0-0bae-4c1d-a4b7-3ebc85e56b32%40sessionmgr14&hid=19>. Accessed 28 October 2013.

Rodrique, J-P. 2013. The Geography of Transport Systems. Available: <http://people.hofstra.edu/geotrans/eng/ch7en/appl7en/ch7a3en.html>. Accessed 25 September 2014.

Savolainen, J. Nämä ovat Suomen vilkkaimmat lentokentät. Rantapallo.2013. Available: <http://www.rantapallo.fi/matkailu/nama-ovat-suomen-vilkkaimmat-lentoasemat/>. Accessed 18 March 2015.

Smith, S.L.J. 2010. Practical Tourism Research. United Kingdom, Wallingford: CABI International.

Spinal Injury Network. Spinal Holiday Guide – Disabled Flying Guide. 2014. Available: <http://www.spinal-injury.net/disabled-flying-guide.htm>. Accessed 6 April 2015.

Trafi. Passengers with special needs. 2013. Available: http://www.trafi.fi/en/aviation/for_passengers/passenger_rights/passengers_with_special_needs. Accessed 12 February 2014.

Transportation Security Administration. Wheelchairs and Scooters. Travelers with Disabilities and Medical Conditions. 2014. Available: <http://www.tsa.gov/traveler-information/wheelchairs-and-scooters>. Accessed 36 September 2014.

Ulkoasiainministeriö. Kehitysviestinnän verkkojulkaisu. Vammaiset ja kehitys. 2011. Available: <http://global.finland.fi/public/default.aspx?nodeid=44088>. Accessed 24 November 2014.

United Nations. The Universal Declaration of Human Rights. 10.12.1948/1 Available: <http://daccess-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/043/88/IMG/NR004388.pdf?OpenElement>. Accessed 18 March 2015.

U.S. Department of Transportation. Aviation Enforcement and Proceedings. 2007. Available: <http://airconsumer.ost.dot.gov/publications/horizons.htm>. Accessed 19 March 2015.

Veal A. J. 2006. Research Methods for Leisure and Tourism. A Practical Guide. Third Edition. Essex, England: Pearson Education Limited.

Vilpas, P. 2015. Ohjeita kvantitatiiviseen tutkimukseen. Osa 1. Metropolia Ammattikorkeakoulu, Liiketalouden Yksikkö. Available: <https://wiki.metropolia.fi/display/~pervil/Kvantitatiivinen+tutkimus+ja+ohjaus>. Accessed 4 February 2015.

Vocabulary.com. 2014. <http://www.vocabulary.com/dictionary/air%20transportation%20system>. Accessed 25 September 2014.

Wheelchair Travelling. 2014. Air Travel and Airports. Available: <http://www.wheelchairtraveling.com/traveling-with-medical-equipment-or-a-wheelchair-handicap-limited-mobility-or-senior-at-airports-airplanes-and-all-aboutflying-faa-tsa-air-carriers-act/>. Accessed 21 September 2014.

World Health Organization. 2013. Available: <http://www.who.int/mediacentre/factsheets/fs352/en/>. Accessed 17 October 2013.

Ihmisoikeuksien yleismaailmallinen julistus. 1948. Available: http://www.ihmisoikeudet.net/uploads/materiaali/YK_Ihmisoikeuksien%20julistus.pdf. Accessed 23 August 2014.

World Tourism Organization. 2013. Annual Report 2013. Available: http://dtxtg4w60xqpw.cloudfront.net/sites/all/files/pdf/unwto_annual_report_2013_0.pdf. Accessed 19 March 2015.



Survey: Accessibility in air travel

Exploring the world with a wheelchair? Travelling is being thought of as something everyone has a right to, but is the world actually available for a wheelchair passenger as well? And how is equality, does it actualize in real life?

The aim for the research is to find out the possible challenges and difficulties a wheelchair passenger may confront when travelling by air, and to consider air travel with a wheelchair from the point of view of equality as well; does a wheelchair passenger really have the same the same possibilities for air travel as a passenger travelling without one has? The research is conducted as a part of a Bachelor's thesis for Centria University of Applied Sciences. All the answers are treated anonymously.

The questionnaire is designated to persons having experience on travelling with a wheelchair by the means of air transportation. If you are not a wheelchair user personally, but you do have experience on the matter for instance as a role of a family member or personal assistant for a wheelchair passenger, you can fill in the questionnaire based on the flights done together with the wheelchair passenger.

For additional information: Saaka Saari, saaka.saari@centria.fi

1. I am *

- Male
- Female

2. Age *

- 20 years or younger
- 21-35
- 36-50
- 51-65
- 66 years or older

3. Place of living *

- Uusimaa
- Varsinais-Suomi
- Satakunta
- Kanta-Häme
- Pirkanmaa

- Päijät-Häme
- Kymenlaakso
- Etelä-Karjala
- Etelä-Savo
- Pohjois-Savo
- Pohjois-Karjala
- Keski-Suomi
- Etelä-Pohjanmaa
- Pohjanmaa
- Keski-Pohjanmaa
- Pohjois-Pohjanmaa
- Kainuu
- Lappi
- Ahvenanmaa

4. I have experience on travelling by air with a wheelchair, as *

- I am a wheelchair user myself
- I have been travelling as an assistant/companion for a wheelchair user

5. With whom have you mainly been flying with?

Give your response only if you are/have been a wheelchair user by yourself

- Alone
- With family/friends
- With a personal assistant
- Other

6. If you do not have experience of flying alone, could you imagine yourself doing so?

Give your response only if you are/have been a wheelchair user by yourself

- Yes
- No

7. If you chose no to the previous question, why?

Here you can write with your own words, why you would not fly alone.

8. How many flights have you done in Finland/departing from Finland? *

If you have been travelling as a companion/assistant for a wheelchair passenger, give your answer based on the amount of flights done together

- Less than 5
- 5-7

- 8-10
- More than 10

9. What type of a wheelchair have you been using when travelling by air? *

If you have been travelling as a companion/assistant for a wheelchair passenger, give your answer based on the type of a wheelchair he/she has been using

- A manual wheelchair
- An electric wheelchair
- I have been flying with both kind of wheelchairs

10. Have you been taking part to*

(You can choose several options)

- Domestic flights
- Flights in Europe
- Flights outside of Europe

11. Which airport in Finland have you mainly been using?*

- Helsinki-Vantaa
- Oulu
- Tampere
- Turku
- Vaasa
- Kuopio
- Jyväskylä
- Lappeenranta
- Rovaniemi
- Ivalo
- Kittilä
- Other

12. Have you experienced any problems or difficulties in air travel with a wheelchair? *

- Yes
- No

13. If you chose 'yes', have these problems occurred

(You can choose several options)

- When arriving to the airport
- At the check-in
- At security check
- When boarding the plane
- While on board

- When disembarking the plane
- Other

14. How have these problems/difficulties been like?

Here you can describe with your own words about the problems/difficulties you have experienced. (i. e. accessibility in toilets, security check, the service on behalf of the personnel etc.)

15. Have you ever decided not to travel by air, as you felt a flight with a wheelchair would be a too complicated option? *

- Yes
- No

16. Have you been using *

- Package tour holidays
- Self-arranged holidays
- I have experience on both of them

17. If you have experience on package tour holidays as well as from self-arranged holidays, have you noticed any differences between these two?

Here you can compare your experiences by your own words. For instance, has a package tour advertised as accessible turned out to be more problematic than expected? What about self-arranged holidays, do they require unreasonably lot work in order to make sure the holiday is going to be accessible?

18. Do you think a wheelchair passenger has the same rights and possibilities for air travel if compared to a passenger travelling without one? *

- Yes
- No

19. If you chose 'no', what is the thing/are the things causing this inequality?

Here you can write with your own words.

20. Have you ever felt being in an unequal position or to being treated unequally for the fact you were a wheelchair passenger in air travel?

Here you can write by your own words. If you have experienced such a situation, please, tell briefly about the situation/situations.

21. Is there anything you think should be improved in air travel for wheelchair passengers? What are these things like?

22. Have you faced any other kind of unpleasant situations in air travel with a wheelchair that you would especially like to share?

Thank you for your participation!