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EXPERIENCING LONG HAUL FLIGHT

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ABSTRACT

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The aim of this bachelor's thesis was to study how long haul flight is perceived as an experience and how to make it more comfortable and enjoyable. Other objectives were to find out how the tangible, intangible and social aspects of a long haul flight are perceived to maintain the experience.

The theoretical part of the thesis was gathered from literature, electronic publications and sites covering the subject of air travel, comfort in the air and experiences. The theory examines experience as a whole, with emphasis on perception over different components related to comfort, needs and satisfaction. In the thesis factors such as emotions, preferences and expectations are carefully investigated.

A qualitative method was chosen for the empirical part of the study. Participant observation method was used during the field study in a natural environment on behalf of the nature of the research. The observation was conducted during four separate long haul flights. The results provide a direction to develop the long haul experience in the future.

Key words experience, observation, long haul flight, air travel

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Matkailun koulutusohjelma

TIIVISTELMÄ

Tekijä	Sonja Broo
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Opinnäytetyön tarkoituksena on tutkia miten pitkän matkan lento koetaan elämyksenä ja miten siitä voitaisiin tehdä parempi ja nautittavampi kokemus matkustajille. Muut päämäärät olivat selvittää miten konkreettiset ja epäkonkreettiset asiat sekä sosiaaliset tilanteet koetaan pitkän matkan lennon aikana.

Teoriaosuus kerättiin kirjallisuudesta, sähköisistä julkaisuista ja sivuilta jotka käsittelevät lentomatkestusta, lentomukavuutta ja elämystä. Teoria tutkii elämystä kokonaisuutena ja painottaen havainnointia erinäisissä asioissa liittyen mukavuuteen, tarpeisiin ja tyytyväisyyteen. Tunteet, mieltymykset ja odotukset ovat suuri osa tutkimusta.

Kvalitatiivinen tutkimusmenetelmä valittiin tutkimustyöhön, ja tutkimuksen aikana käytettiin osallistuvaa havainnointia luonnollisessa ympäristössä eli lentokoneessa. Havainnoinnit suoritettiin neljän eri lennon aikana. Tulokset ovat suuntaa antavia pitkän matkan lennon elämyksen kehittämiseen tulevaisuudessa.

Avainsanat	elämys, havainnointi, pitkän matkan lento, lentomatkestus
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1 INTRODUCTION

The idea for the thesis was derived from own experiences. I am extremely fond of the ‘travelling part’ of travelling. With this I mean the time spent on transportation before and after the actual trip or time in the destination. I am interested in finding out about the experience of a flight, comfort level and especially the one on long-haul flight that require long distances of journey. The journey of a long distance flight is minimum of 6 hours and the longest flight has measured to be as much as 18 hours and 50 minutes in duration and 15 345 km in distance. This flight occurs between Singapore and Newark, USA. (AirlineTicket.org) The long distance flight can be exhausting and uncomfortable for the most travelers, for some travelers the journey is just a mean to get from place A to place B, and for some the transportation can be comfortable and a pleasant part of the trip.

1.1 Aim of the thesis

The aim of this research is to find out how people perceive and experience the long-haul flights. Can long haul flight be called as an experience? I want to find out what there is to do to make the flight more of an experience. Is it possible to improve the comfort level of, e.g. economy class? What can passengers, airline companies and service attendants do in order to make the flight feel more comfortable? What do passengers need to do before the flight, during the flight and after the flight to get the best experience out of the long flight? The thesis is a guide towards more comfortable flight experience on long haul flights with duration of 6 hours or more.

The different parts of comfort level consist of service level, physical comfort, and psychological comfort within the experience of long haul flight. The study aims to find ways of how to observe the tangible and intangible environment and what is the opinion of service level and safety level. The results of this research can provide helpful information for the air companies regarding the comfort level on the plane. It can also help passengers to decide if air transportation is a mean for them to travel. This research is also a way to measure how to observe the

surroundings of a flight and does that observing make the experience in itself more comfortable or uncomfortable.

1.2 Restrictions

The research is aimed for long-haul flight travelers only. The target of the research is aimed for long-distance flight customers flying from Finland to long haul destinations such as Asia or North America. In this research the flights being observed are from Helsinki to Tokyo, Japan and from Japan to Sydney, Australia, from Brisbane, Australia to Singapore, and from Singapore to Helsinki. There will be together four different flights that are being observed and analyzed. The original plan was to have two flights with Finnair, and the other two with Qantas Airlines. Due to delays with Qantas we had only one flight with Finnair and three with Qantas. A matter to be taken into consideration is if the flights are night-flights or day-flights. During a night-flight passengers spend most of their time sleeping in the cabin and during day-flight they have time to explore the environment and service.

People travel with different airline companies, different kinds of aircrafts and the service staff is never the same. But the overall experience of a flight is mostly the same. This fact might give unreliable results because the study is not limited only to one specific airline company. The main goal is to study the experience of a long haul flight, and in this case the results from the study are going to be wide ranged.

There is a conflict between costs and the services and equipment provided for the long haul flights. Since the costs for long haul travel are high, it becomes harder to maximize comfort and flight experience and keep the flight tickets at affordable prices. Travel business consists of fitting price and quality together, and it is dependable on the travel markets; some destinations are popular and some are not, different political, religious, or cultural happenings around the world gives limits and opportunities which guide the business. Getting a perfect seat from the first class can cost a lot more than normal economy class but it is also possible to book with the same price with updating points received from flights booked previously. The cost for a flight ticket is also dependable on tourist seasons. The service

received on airplane is a result from education, payment and motivation to serve customers. The nature of the service is to serve meals quickly to all passengers.

The limits of certain comfort aspects become dominant at some point. While now the flight business is developing towards increasing capacity within aircraft seating, and some low cost airlines develop the idea of the standing seats. That can be the limit for passengers. How uncomfortable would it be to stand for hours in plain? The idea is not rational when considering health and comfort and how that would affect people or the transportation business in the long run?

The needs for short haul and long haul flights are different. Short haul flight being less than 6 hours and long haul over six hours in duration changes the experience. The needs for the short haul flight are smaller, and all the comfort aspects are not always as important as with the long haul flights. Long haul flights require several meals to be offered for passengers, there is more need for comfort, the need for change is more important, need for using time effectively is important to not feel useless or wasting time. In the plane a passenger cannot affect the speed or happenings and just have to adjust to the situation. During the short haul flight passengers do not necessarily have a need for any meals, depending on the duration. A few hours lasting flight is survived without a meal but a flight lasting 4-6 hours makes passengers hungry at some point. During a short haul flight passengers do not have time to even think about the comfort when they already start to land to the destination. 1-3 hour lasting flights pass by quickly and people hardly have much time to do anything.

2 AIR TRAVEL

When considering international tourism, the air travel is the most important link between tourists and destinations. Air service can be divided into two basic categories of scheduled service and charter service. Scheduled service flights provide regular service for the general public, while charter service flights are privately aimed to a defined group, such as tour group or association. The primary air service is scheduled air service even though charter service plays also an important role in air travel, and especially in Europe. (WTO 1999: 53)

2.1 Beginning of commercial aviation

Since the development of airplane, the ocean liners were replaced, and in 1914 the first scheduled passenger service began in the USA. Commercial aviation began in the beginning of 1920's. Government in America made a mail contract with private airline companies. The first flights did not attract many passengers, and only few people were brave enough to use air transportation. During 1930's and furthermore in 1940's an increasing amount of Americans started to adapt air travelling as a way to travel faster and more comfortably longer distances. During World War II the world used air transportation more frequently and it was one common way to move around. The common customer segment during 1950's and after the war was business travelers. There was a rapid growth in the late 1950's and in the beginning of 1960's. This time was also the beginning of jet aircrafts. Due to their three-times-more-faster speed people started to use more air transportation for leisure purposes also. (Semer-Purzycki 2000: 106; WTO 1999: 47)

2.2 International air travel

After the high-speed jets have generalized, the world has gotten smaller; what seemed unattainable only a century ago, is now commonplace. Due to proliferation of airlines, new routes, and discounted fares, people can travel across the world easily. Destinations such as China, Soviet Union or eastern Germany

used to be unreachable, but now they are common destinations for leisure and business travelers. International flights are increasing on yearly basis due to ease of traveling and the competition between different airlines. (Semer-Purzycki 2000, 164-165)

2.3 Types of aircraft and development

Aircraft types are divided according to the seating configuration, passenger capacity and other technical aspects such as wing span, velocity, range and configuration of engines. These aspects affect the comfort level both physically and psychologically. Two types of aircrafts are narrow-body (Figure 1.) which has only one walking isle and wide-body (Figure 2.) which has two walking isles. (Semer-Purzycki 2000: 118)

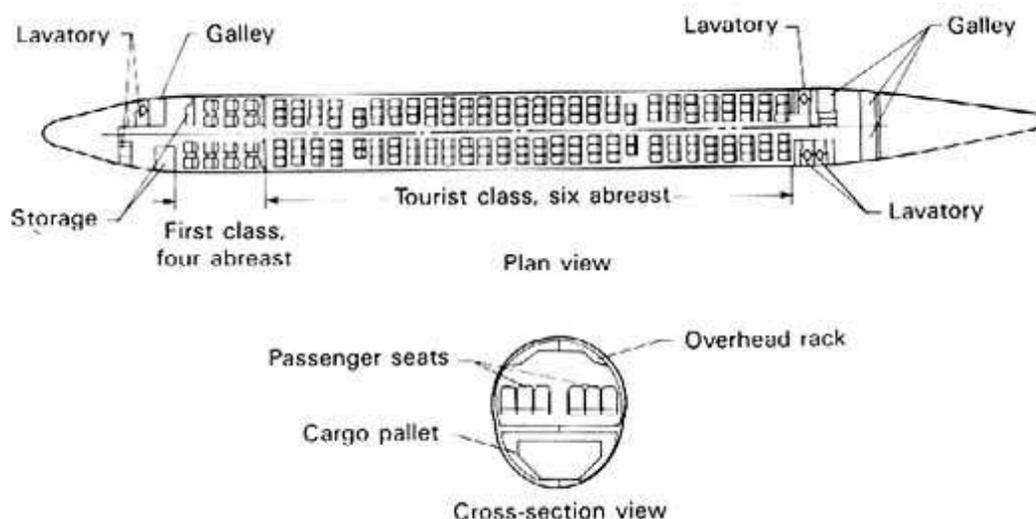


Figure 1. Narrow-body aircraft (<http://www.hq.nasa.gov/office/pao/History/SP-468/ch13-5.htm>)

In figure 1, there is presented the narrow-body aircraft (single-aisle jet), such as Boeing 707 or 727. The passenger cabin is divided into small first-class division with four-abreast seating system and a large economy class with six-abreast seating. The fuselage of this model is usually very long, which causes landing to be more problematic and delays the passenger loading, and also complicates the work of cabin attendants serving meals and beverages. (Loftin, 1985)

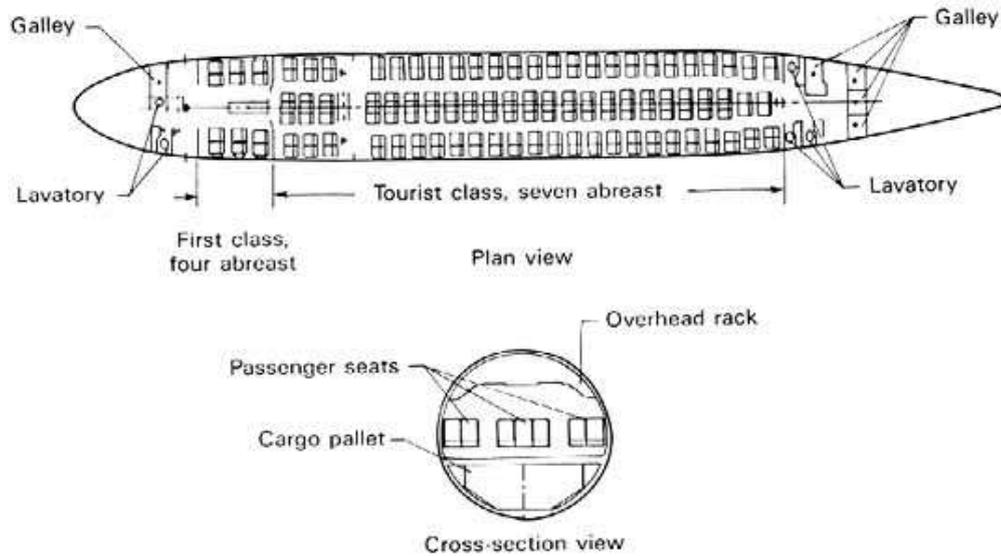


Figure 2. Wide-body aircraft (<http://www.hq.nasa.gov/office/pao/History/SP-468/ch13-5.htm>)

In figure 2, is presented the interior arrangement of wide-body (double-aisle jet) aircraft. The first class cabin has a small four-abreast compartment in the front part of the plane and a large seven-abreast tourist economy cabin. Some wide-body aircrafts can accommodate also 10-abreast seats. Boeing 747, for example, can seat as many as 550 passengers in 10-abreast interior arrangement. (Loftin, 1985)

In the 1970s and 1980s the dominative aircraft type on the long-haul flights was the Boeing 747 which carried around 400 passengers. The market share of Boeing 747 in 1985 was 62% of North Atlantic Services and in Europe-Asia sector even higher. Later on, Boeing 767, the first long-range twin jet raised competition on the markets, but however the Boeing 747 remained dominant. In the years 2000-2005 there has been a total new generation of long-haul aircraft that have adapted the leading role; Boeing 777, Airbus A330 and A340. The USA airlines have almost completely abandoned the 747, but still many Asian operators carry on using the aircraft. Also in Europe some major carriers continue using 747, but

smaller long-haul operators rather favor lower capacity aircraft. (Nigel, 2005: 18-20)

2.4 Development of long-haul flight

Long distance flight is a flight that has a duration of more than six hours by air. They are often non-stop flights and made by wide-body-aircraft. The growth of long-haul travel has been fast and there are many reasons for it. After the development in jet technology, the planes were able to fly longer periods without re-fuelling and furthermore people could get to destinations in less time. Media and other forms of telecommunication, i.e. the Internet, have increased people's awareness of the world outside Europe which makes them to have expectations and desires of the destinations. Today many popular and traditional European destinations are being over commercialized and people are not able to receive the 'escape' and the feeling of 'getting away from it all' anymore. As a result, travelers seek places from more remote places of the world. The competition between tour operators and airlines has increased quite a lot, and this has led to reduction of the long distance travel costs. Now the possibility to fly oversea is more affordable to a greater number of people. (Cambridge Training and Development Ltd. 2000: 149)

2.5 Safety and Security

According to WTO, air travel is one of the safest modes of transportation in the world. Air travel has reached this level of safety due to the quality of the aircraft, the skill of pilots, maintenance personnel, and other persons involved with aircraft operation, and the control of airline traffic. The regulations and laws are in a critical role in all areas of air travel to maintain the trust towards air travel. All the standards have to be strictly encountered with design and materials in the aircraft. Also the air traffic controllers, flight crew and pilots are trained according to the high standards. Aircrafts are to be inspected constantly for the maintenance. These actions reduce the risk of major accidents. The security concerns include acts of sabotage and terrorism. The most critical aspect of this concern is the security

system on the airport. The security technology is improving, but widespread use of all the newest devices is not possible due to high costs. (WTO 1999:54-55)

Airline accidents and acts of terrorism are rare, but when they occur they draw worldwide attention. These accidents can leave a mark on air travelers and create psychological effects, causing fear of flying amongst the people. This has a negative impact on air travel. After incidents the security policies are tightened and this also impacts on tourists by lessening the enjoyment of the travel. (WTO 1999: 64)

2.6 Airline and airplane services

Airline services are a wide concept, including the staff service, aircraft cabin design and seating systems, airport lounges and catering. The best airline service for the year 2012 was Qatar Airways, the second year in a row. The second was Asiana Airlines and third place went for Singapore Airlines. The best airline was chosen over from 200 airlines through a survey that was based on analysis of business and leisure travelers from every class types. The survey studied the passenger satisfaction on different performance indicators such as check-in, boarding, onboard seat comfort, cabin cleanliness, food beverages, in-flight entertainment and staff service. (World Airline Awards, 2012)

2.6.1 Airplane meals

Fritz Gross, the director of culinary excellence at LSG Sky Chefs Asia Pacific, recommends passengers to always order stew if possible on flights. Other good options for airplane meals are fried rice and fatty fish but he advises to stay away from pasta, noodles, chicken breast and anything deep-fried. Gross says that the most important fact in making airline meals is not the taste but the preserving of the food. (CNN International GO, 2012)

The best airline meal voted by Airline Meals, in the year 2011 went to Thai Airways International. The winner meal was served in economy class and it was a breakfast consisting fish, calamari and shrimp skewer with mash potatoes and

vegetables, and croissant with strawberry jam and fresh fruit. The webpage AirlineMeals collects reviews and pictures from different airline meals served during flight, and they are posted there by passengers. The reviews are presented from all the main airline companies. The site gives a view what to expect and check out for possible special need meals. (Airline Meals /Aussie Travel Advice, 2012)

Finnair Economy class:

When you are flying with Finnair between continents, the economic class offers a warm meal which includes salad, warm main course, cheese and dessert. Almost on all flights between continents passengers are given a warm snack before landing. On all flights, they also offer delicious snack products. On flights headed to China, Japan, Korea or Singapore, they have a versatile selection of beverages. Free of charge are soft drinks, juices, water, beer and red and white wine, but other beverages including alcohol are chargeable. On flights between New York, Toronto or Bangkok, Finnair offers in addition with non-alcoholic beverages, beer and wines free of charge during eating. At other times all alcohol beverages are chargeable. (Finnair, 2011)

Finnair business class:

The flights between continents in business class offer two high-quality meal entities. In the main meal there is a starter, soup, chosen main course option, cheeses, dessert and fresh fruits. In addition, there is always a wide selection of breads available. Carefully selected beverage selection and rewarded high class wines fulfill the meal experience. There is also a possibility to have espresso, cappuccino and different teas during the whole flight. During the flights Finnair offers versatile snacks and sweets. In many Airbus A340-300 and A330-300 planes there are separate snack bars beside the main entrance from where the passengers may pick some beverages or snacks on their own. (Finnair, 2011)

3 COMFORT IN AIR

The informal definition of condition or degree of comfort level is that it is a set of physical or psychological circumstances in which somebody feels most at ease and free from physical discomfort or stress. (The Free Dictionary, 2009) In aircraft physical conditions are e.g. the environment, air quality and oxygen level, mobility and temperature. Psychological conditions in an aircraft are service quality and safety issues such as the technical functions of airplanes and are tourists afraid of increased threat of terrorism or other phobias related to flying.

The aircrafts are changing all the time. New requirements and improvements in technology and comfort are constant and this occurs in the development of aircraft interior design. Cabin seats turn into lightweight seats, new materials are occupied, the air in the cabin improves coherently, entertainment develops with technology, and other changes that make the experience of a long haul flight more enjoyable are developed constantly. Most of the improvements are done due to the development of technology. The question, according to Prof. dr Peter Vink is, if the improvements are experienced by passengers. Are they just changes that customers think are according to the requirements, and do these improvements actually solve any of the main problems passengers experience during the flight. (Delft University of Technology, 2004-2005)

3.1 Physical comfort

The conditions in the airplane are known to be cramped and dry. The flying experience is not comfortable and often travelers experience flu-like symptoms after boarding the plane. Headaches, light-headedness, sore throats, coughing, dry lips and dry or watery eyes are also common results from lack of fresh air. In airplane passengers breathe about 25% less oxygen than on sea level due to pressure in cabin. When setting the cabin altitudes there are three main factors that affect passenger comfort and they are oxygen, carbon dioxide and humidity levels. Oxygen's air composition ratio remains at 21% regardless of altitude. Even though the overall air pressure drops along with altitudes, the number of oxygen

molecules per breath reduces. When the plane passes 6000 feet the carbon dioxide level increases in bloodstream and this may lead to shortness of breath, nausea, loss of appetite, mild headache and fatigue. The third affecting factor is humidity and it is more related to temperature than to air pressure. When cabin temperature is decreased the activity of a passenger also decreases. This leads to overall reduction in the need for oxygen in passengers' bloodstreams. (John, 2007)

3.1.1 Cabin air pressure, humidity and hydration

The cabin air pressure at cruising altitude is lower than the air pressure at sea level. This may or may not have an effect on passengers on board. When cruising at typical altitudes of 11 000 – 12 200 meters, the air pressure in the cabin is comparable to the outside air pressure at 1800 – 2400 meters above sea level. As a result, hypoxia where less oxygen is taken up by the blood occurs and gases within the body expand. Usually these circumstances in the cabin are well tolerated by healthy passengers. The cabin air is calculated to be sufficient for the crew and passengers but however, the amount of oxygen reduces in blood compared to sea level because of relatively low cabin air pressure. Passengers suffering from heart and lung disease, and blood disorders such as anemia, are in high risk of not tolerating the reduced oxygen levels in their blood. (International Travel and Health 2005: 12)

The change of altitudes have an effect on the comfort, decreasing air pressure causes gases to expand and the increase in the air pressure causes gases to contract. Usually the gas expansion during the climb causes air to escape from the middle ear and the sinuses without causing problems. The airflow can lead to a “popping” sensation in the ears. When the aircraft is landing the air must flow back into the middle ear and sinuses to equalize the pressure, and if this does not occur, ears and sinuses feel as they were blocked and this might result with pain. Usually swallowing, chewing or yawning relieves the discomfort. If these operations do not relieve the pain, a short forceful expiration against a pinched nose will help. This is called Valsalva manoeuvre. Passengers who have ear, nose or sinus infections should avoid flying because pain and injury may occur from the inability to equalize the pressure differences. The expansions of the gases

might lead to abdominal pain while the aircraft climbs but this is usually very mild. (International Travel and Health 2005: 12-14)

The humidity in the aircraft cabins is usually less than 20%, which is low. The normal humidity in the home is normally over 30%. These circumstances of low humidity may cause different kinds of symptoms such as skin dryness and discomfort of the eyes, nose, mouth and exposed skin. But overall, this does not present any risk to health. Preventing discomfort can be done by using a skin moisturizer lotion, nasal spray to moisturize the airways and always rather wear eye glasses than contact lenses. The low humidity does not cause dehydration and thus there is no need to drink extra water. (International Travel and Health 2005)

3.1.3 Ozone & Cosmic radiation

It is possible that ozone and cosmic radiation may enter the cabin with fresh air supply in high altitudes. In older aircrafts it is possible to have such a high amount of ozone levels that lead to irritation of the lungs, eyes and nasal tissues. Nowadays the modern aircrafts are filled with equipment such as compressors in the engines that remove the ozone from inbound air and catalytic converters that break down any remaining ozone. Cosmic radiation arises from the sun and from outer space. Cosmic radiation levels are higher over Polar Regions than they are over the equator due to the shape of the earth's magnetic field and the flattening of the atmosphere over the poles. The research has not shown any significant health effects for the passengers or crew even though the cosmic radiation levels are higher in the aircraft altitudes than in the sea level. (International Travel and Health 2005)

3.1.4 Motion sickness, Immobility, circulatory problems and Deep Vein Thrombosis (DVT)

The movement of the aircraft is not always comfortable. Sometimes a severe turbulence can cause motion sickness for passengers, but in rare occasions. Those who do suffer from motion sickness should always request a seat in the mid-section of the cabin where movements are less pronounced, and keep the motion

sickness bag available at all times. Sitting on the preserved seat in airplane is not the most comfortable thing. When passengers are seated the immobility is prolonged and for that reason it is important to keep the blood flowing through the veins, and particularly in the legs. If there occurs pooling of blood in the legs this can cause swelling, stiffness and discomfort. The avoidance of immobility is important because it may lead to deep vein thrombosis which is a clot in a deep vein. The research has shown that it is a common result for certain travelers travelling long distances by air, car, bus or train. For the most cases in DVT, the clots are small and symptom-free, and they gradually break down by themselves without causing danger on long term basis. Sometimes the clots can be severe and a piece may break off and travel with the bloodstream into the lungs (pulmonary embolism) where it gets lodged causing chest pain, shortness of breath and sometimes, sudden death. This does not always occur right away, but after several hours or days when the clot has emerged. (International Travel and Health 2005)

3.2 Psychological comfort

Some people experience psychological difficulties while flying. This happens because the travel by air is not a natural activity for humans. The most common problems that passengers encounter are stress and fear of flying. These problems occur together or separately and at different times before and during the period of air travel. Other psychological symptoms that a travel can develop are air rage, jet lag and culture shock or reverse culture shock which means when a traveler returns home after a long period of time spent in different culture. (International Travel and Health 2005; Students Abroad, 2012)

International travelling generates stress and flying can be extremely stressful because it often involves a bad-slept-night, long journey to the airport and the need to walk long distances in the airport terminal. The people who travel face separation from their families and familiar social support systems. During travel they also need to interact with foreign cultures and languages, and unfamiliar threats to health and safety. These interactions might lead to high levels of stress that result in physical, psychological and social problems. Passengers should seek

medical help for their behavior if there is no other ways to calm down and they are extremely stressed out of air traveling. Usually when the travel has been planned good by taking care of passports, tickets, medications etc. and allowing plenty of time to get to the airport the stress relieves. (International Travel and Health, 2005)

3.2.1 Flight phobia

Fear of flying has been classified as a specific phobia of the situational type. This stands for an individual who suffers persistent and excessive fear triggered by flying or the thought of flying. The fear of flying includes one or several conditions listed: fear of heights, fear being over water or having the aircraft land in water, fear of the dark (flying at night), fear of the unknown, concerns about airline accidents or from hijackings, bombings, and other deliberate attacks, being in an enclosed or crowded space, being idle for long periods of time, loss of personal freedom, the security screening process, concerns about turbulence and other weather conditions, not understanding the sights, sounds, and sensations of a normal flight, loss of control, or being dependent on technology or people or issues from past psychological or physical trauma. (Air Safe, 2000)

A passenger suffers anxiety that may lead to a panic attack. 20-30% of people get distressed about flying and 2-10% of people suffer from the actual phobia at some point. Most people suffering from flight phobia are women. There are individuals who fear flying because they suffer from panic disorder with agoraphobia, which means that they fear having a panic attack because they are in an airplane. These people also fear other situations than just flying. (Ponton, L. 2006)

Fear of flying can be just slight anxiousness against flying or fear that leads to a person not being able to travel by air at all. For a longer-term solution to the flight phobia, travelers should seek specialized treatment to reduce the psychological difficulties associated with air travel. (International Travel and Health 2005)

3.2.2 Air rage

Air rage or sky rage is linked to high levels of general stress but not necessarily to flight phobia. The air rage can be recognized as a disruptive behavior associated with air travel. The most common reason for air rage emerging is the excessive consumption of alcohol before or during the flight. Other reason for air rage can be smoking bans, crowding, long exhausting flights, psychological feelings of a loss of control, or problems with authority figures. (International Travel and Health, 2005; Air Safe, 2006)

3.2.3 Travelers with special conditions

The airlines have the right to remove passengers suffering from medical conditions that may get worse such as people suffering from any disease, or physical or mental condition. Infants who are less than 7 days old should not be travelling by air. The changes in the cabin air pressure may affect infants and upset them. Mostly pregnant women can travel safely by air but most airlines restrict travel on mothers who are after the 28th week of pregnancy, they should carry a letter from doctor showing the expected date of labor and that the pregnancy is normal. Normal single pregnancies allow women be on board up to the end of 36th week. (International Health and Travel, 2005)

3.2.4 Jet Lag

Jet Lag is both physical and psychological comfort aspect that occurs after the flight. It affects both body and mind. There are several classic symptoms that are a sign of a jet lag. Fatigue and disorientation is the strongest, and this can occur for days after arriving in the destination. Travelers feel the lack of concentration and motivation for any activity requiring a skill or effort. Interrupted sleep is likely to happen, and crossing time zones causes people to wake up during the night and emerges with difficulties when trying to get sleep because the built-in circadian rhythm has been disturbed. The time zone readjustment can take several days, and according to NASA's estimation the readjustment takes one day for every one-hour time zone crossed. Confusion and fuzziness are common symptoms, and this

may be seen in actions such as having to check if the hotel room was left unlocked or locked repeatedly. People suffering from jet lag are in danger to get uptight by “losing it” when the long haul travelling becomes a challenge after several hours spent in the airplanes and airports. The dry air in the cabin gives headaches, irritates nostrils and dries out the skin, causing dehydration. Legs and feet get uncomfortable when they become swollen, and some people are not able to wear their normal shoes even up to 24 hours. Jet lag causes many other health problems, such as diarrhea that can occur after microbes contaminate your food and beverages, according to World Health Organization. The causes of jet lag are crossing time zones, your pre-flight condition, dry atmosphere, cabin pressure, stale air, alcohol, food and drink, and lack of exercise. (No Jet Lag, 2012)

4 GUIDE: How to Be Comfortable on a Long Airplane Trip

For the passengers travelling long haul flights often or rarely, I collected an information package of useful tips and guidelines of how to survive long haul flight and be comfortable the whole trip starting from the departure airport through the actual flight experience and ending at the arrival airport destination. Most of the “tips” are from internet database publications.

4.1 Before the flight

The travel starts when booking the flight. The question starts from which airline to choose, which type of aircraft, night- or day flight, and the pricing of the services. The best way to ensure a comfortable flight is to reserve a good seat. There will be seats that are superior to others, even if the class or the fare of the seat place is same. The best seat for wanting more leg room is to book an aisle or exit row seat. A window seat is the best choice for passengers willing to sleep on flight. It is best not to reserve seats close or next to the toilets because there will be a lot of traffic while other passengers access these frequently during the flight. Also, it is not unusual that there will be lines to the toilets, so people may bump or knock the seats of others. And close to the lavatories the noise and light escaping while the door is being opened and closed may be disturbing if a passenger wishes to sleep. If the possibility to choose the best seat is given, people should take the chance. To find out the best seats, SeatGuru is an excellent site of showing specific feedback on the quality of individual seats on each plane type for major airlines. Another good site to recommend for reading is Skytrax/Airline Quality, which is the world’s leading airline and airport review site. It is comprehensive site covering the reviews of world’s airports and most major airlines. The site includes both reviews from passengers and from the crew (Independent Traveler, 2012)

If a passenger wants to get the best experience out of a long haul flight, upgrading is the choice. If there are possibilities to upgrade and if a passenger can afford it, it is recommended. First and Business Class are the most comfortable places in the

airplane. For a frequent flyer who earns mile point, for example, an upgrade is simple. (Independent Traveler, 2012)

Pre-flight preparations are very important for the well being along the whole trip. Before the flight it is important to have all affairs, both business and personal, in order. A passenger should not be stressed out with excitement or worry, nor tired or suffering a hangover. Getting plenty of exercise before the departure, trying to avoid sickness such as flu, and getting plenty of sleep the night before, are vital matters towards a comfortable trip. Anti jet lag diet is for people who have plenty of time to focus and devote several days before and also after the trip. (No Jet Lag, 2012)

4.2 During the flight

Moving around on long haul flights is important. The body starts to ache from bad blood circulation if the body is in the same position for hours. Doing light exercise on the aisle or on the seat is important. Walking back and down the aisle, standing for spells and doing small twisting and stretching exercises will help to reduce discomfort. Sitting near the back of the aircraft is good if people do not mind listening the noise produced by engines. There can be a large area in the back where passengers can stretch. But if choosing the last row in the plane, passengers may be exposed to the smell and noises from passengers using the lavatories. (No Jet Lag, 2012)

Some passengers require sleeping aids that help to get quality sleep while flying. Useful gears are blindfolds, earplugs, neck rests and blow-up pillows. During the flight it is better to take off shoes to ease the pressure on the feet, and put on warm socks that some airlines provide or take a pair from home. (No Jet Lag, 2012)

Time goes slowly in the air. Limited space and many other people around who needs to be taken into consideration. A long haul flight lasting more than 10 hours might seem impossible, and after five minutes a need to check the watch is urging. A good way to pass the time “quicker” is to schedule the flight time into smaller segments. As an example, the first two hours are for settling down and enjoying

the airplane meal and looking through the entertainment systems. The next 3-4 hours are devoted to watching movies or reading, and the rest of the hours are spent in sleep. This might help during the long flights. (Landlopers, 2011)

4.3 After the flight

After a long haul flight people feel exhausted. And it is important to remain feeling good, no matter if it is a business trip or a leisure trip. The worst case scenario after crossing time zones is the jet lag. There are many ways that a person can do to prevent jet lag from occurring.

There are medical supplements that are a safe and effective remedy against jet lag. The effectiveness of the medicine called No-Jet-Lag has been proved scientifically with round-the-world passengers and confirmed by long haul flight attendants in a test that was conducted in cooperation with flight crew union. No-Jet-Lag has no side effects, and no connection to the hormone melatonin. There are five homeopathic remedies that are activating ingredients in the medicine; Leopard's Bane, Daisy, Wild chamomile, Ipepac and Clubmoss. The medicine is available at luggage stores, health stores, pharmacies and international airports. By avoiding alcohol drinks after the flight and drinking lots of water and keeping oneself hydrated is an important step to make jet lag appear less powerful. (No Jet Lag, 2012)

A shower after the flight or in-between flights will refresh after flying several hours. A shower also gets the muscles and circulation going again and it is easier to continue boarding for another flight towards the destination. According to the Trans-Pacific pilots, the shower helps to recover more quickly from the general effects of jet lag after the flight. (No Jet Lag, 2012)

Melatonin is a controversial treatment for jet lag. It involves adding the manipulated hormones into the body, and starting days before the travel has started. But if miscalculating the time of taking melatonin, jet lag symptoms will be even worse. Also other medicine that is not recommended is sleeping pills. First of all, sleeping pills cause a comatose state with little or no natural body

movement, and while the immobility is prolonged while sitting for hours, the fatal blood clot (DVT) danger grows. The conclusion is that sleeping pills and flying multiple hours do not combine well. Also, sleeping pills are variants of anti-histamines which tend to dehydrate the body. (No Jet Lag, 2012)

5 EXPERIENCE

In this chapter the term experience is explained, and specifically travel experience and how it is perceived. Five different modes of tourism experience are shortly presented to give introduction how experiences can change among tourists.

When talking about tourism products, the most central aspect is the experience. For the modern traveler the inner most need becomes the longing for an experience. As a concept, experience means emotional experience, which has a positive and raising impact. In modern western cultures the emotional experience has been emphasized in decision making and as a trigger for anxiety. Unlike before, the emotions are seen rather as a foundation for making decisions than as something that blurs the rational thinking. The experience is connected to a person, an individual – it is all about a human experience. (Borg & Kivi & Partti 2002: 8, 25)

The first level of awareness consists of observations and perceiving, physical environment and senses, and this is an important dimension in generating experiences. In the process of making experiences, the sensations are the basic starting point. In the travel and tourism context the senses have been found to become more alert. The attention is focused for example, to the taste of the food or to the light coming from the sun and to the warmth of the destination. Psychology cannot give a specific theory or causation for the travel experience but it is not worthless to study it. The most centric in the experience making process for a travel service provider is to make these circumstances where an experience can be received. It must occur in a commercial environment and still be as human and natural according to the standard circumstances. (Borg et. al, 2002: 26-27)

5.1 Experience modes

Experience modes are a theory that has been presented by Erik Cohen in 1979. The phenomenology of tourist experiences has five different modes; recreational, diversionary, experiential, experimental and existential. People travelling for pleasure beyond the boundaries of their life-space want to have experiences

available which cannot be found within the life-space and that make travelling worthwhile. A person who finds relief within life-space will not therefore travel for pleasure. (Defining Travel, 2001: 33)

Tourist on a *recreational mode* enjoys trip because it restores the physical and mental powers and fills them with a sense of wellbeing. This mode is focused on the individual's centre. *Diversionary mode* is much similar to the recreational one but it is rather meaningless pleasure of a centre-less individual. When a tourist is on an *experiential mode* of experience, he or she is alienated in a center-less space and the person looks for meaning in the lives of others. *Experimental mode* includes individuals who do not follow the spiritual centre of their society but experiment with alternative life styles towards seeking the meaning of their life. The fifth mode is existential, where the meaning for everything is being in the centre and about the centre; life away from it is like being in exile. The tourist gets strength from the pilgrimage to centre and from the time at centre. (Defining Travel, 2001: 34-38)

5.2 Hierarchy of needs

The experience of a flight can be analyzed by using the Hierarchy theory made famous by Maslow. Abraham Maslow's theory of personalities describes the personal experiences. As a humanistic psychologist he does not believe that humans are pushed and pulled by mechanical forces, stimuli and reinforcements as in behaviorism, or of unconscious instinctual impulses, as in psychoanalysis. Humanistic approach focuses on potentiality, and that humans strive for upper levels of capability. Maslow's hierarchy of needs consists of five levels of basic needs (Figure 3). These are typical instincts that all living creatures possess, and beyond these needs, higher levels of needs exist. After the basic needs have been fulfilled, a person might strive to gain needs for understanding, esthetic appreciation and spiritual. (Simons, Irwin & Drinnien, 1987)

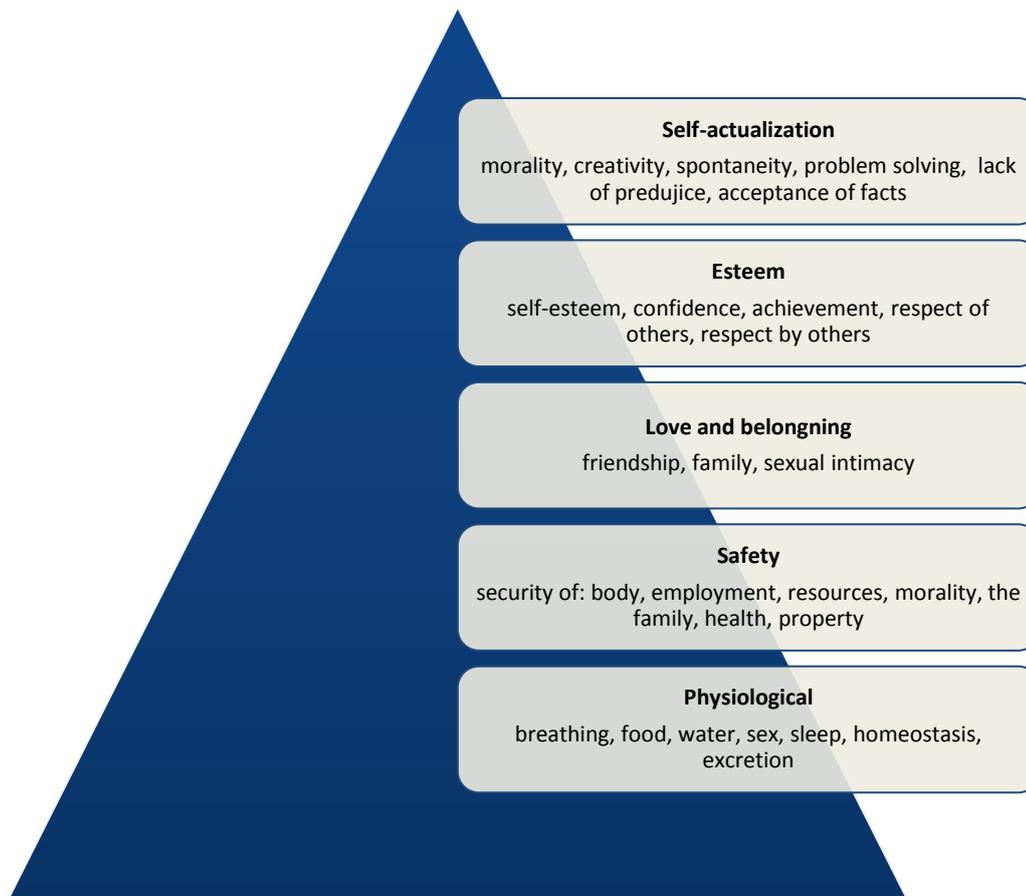


Figure 3. Experience pyramid

Physiological Needs are biological. The strongest needs of all, because a person would first want these needs fulfilled in search for satisfaction. In travelling, food and rest are dominant ones before one can start achieving experiences. (Simons et. al, 1987; Borg et. al, 2002: 25)

Safety Needs become active after the physiological needs are satisfied and no longer controlling thoughts and actions. Adults feel the need for security but their awareness of it becomes urgent only in times of emergency or if they feel disorganization in society. Children are more often seen to display signs of insecurity and they require the need to be safe. In travelling, people are more easily unsecure and need protection or guidance, and some kind of guarding, especially in a strange environment. (Simons et. al, 1987; Borg et. al, 2002: 25)

Needs of Love, Affection and Belongingness - After the needs for safety and for physiological well-being are satisfied, the next level consisting of needs for love, affection and belongingness is wanted. First of all, according to Maslow, people seek to overcome feelings of loneliness. Giving and receiving love is the key to fulfill this level. In traveling, the travel group can bring feeling of belonging, and the travel company, such as a friend, lover or a family member can help reach this third level of needs. (Simons et. al, 1987, Borg et. al, 2002: 25)

Needs for Esteem - after the three first needs, the need for esteem can become dominant. Both needs for self-esteem and the esteem a person gets from others are involved. Humans desire a high level of self-respect and respect from others. In this level a person wants to feel self-confident and valuable to the world as a human. When these needs are not fulfilled, the person feels weak, helpless and worthless. In traveling, the state of roles and status becomes important for a traveler. The traveler has a mission and knowledge for his/her actions and travelling needs. (Simons et. al, 1987, Borg et. al, 2002: 25)

Needs for Self-Actualization get activated after all the other four basic needs are satisfied. According to Maslow, the self-actualization is a person's need to be and do that which the person was "born to do". As an example, "a musician must make music, an artist must paint, and a poet must write". When a person desires for these needs, he/she is feeling on the edge, tense, lacking something, and restless. It is quite difficult to know what the person wants when the need for self-actualization is there. The need is not as clear as the first four levels: when the person is hungry, unsafe, not loved or accepted, or lacking self-esteem, it is easy to know why he is restless. From the traveler's point of view, the whole experience of the travel can be the need for self-actualization level. (Simons et. al, 1987, Borg et. al, 2002: 25)

6 SATISFACTION AND SERVICE NEEDS

Satisfaction is a key towards better experience. By achieving the wanted satisfaction from the service delivered by the staff and from the satisfying environment in the long haul flight the experience is measured through passenger's personal needs. In this chapter the customer satisfaction and needs, and service quality are presented with the help of Kano model and the dimensions of service quality by Christian Grönroos.

6.1 Customer satisfaction and needs

Customer satisfaction is the ultimate measurement of quality. Customers judge the quality of goods and services and furthermore the quality of the end products is determined by the external customers. These external customers utilize the goods and services and they live in the environment created by company, products, production, interested parties or stakeholders. Customer satisfaction is related to how well the customer's needs and expectations are fulfilled. It is not always enough to satisfy the customer and so the challenge is to aim at exceeding their expectations – we need to delight our customers. (Bergman & Klefsjö, 2004: 301-303)

6.2 Service quality

Customer satisfaction can also be explained with other models. Zeithaml, Parasuraman & Berry (1990) have developed a method for measuring service quality and this is called SERVQUAL. The SERVQUAL model (Table 1.) has five dimensions which are reliability, responsiveness, assurance, empathy and tangibles. The model explains these dimensions by first weighing the percentage value of them and then gives a definition of all dimension.

DIMENSIONS:	WEIGHT:	DEFINITION:
Reliability	30%	Doing what has been promised
Responsiveness	25%	Willingness to help and provide prompt service
Assurance	20%	Conveying trust and confidence
Empathy	16%	Ability to see through the customers eyes
Tangibles	10%	Equipment, physical abilities, etc.

Table 1. Dimensions of service quality (Grönroos 2000: 47)

Christian Grönroos created one of the earliest models of service quality. Grönroos describes service as a process that consists of *activities* rather than *things*. Other common characteristics for services are also that services are at least to some extent produced and consumed simultaneously and the customers participate in the service production process at least to some extent. Service quality in Grönroos' model focuses on functional and technical quality. In the model, customer's experience of the service depends on these two qualities which are also known as what-quality (technical quality) and how-quality (functional quality). Technical qualities are related to the result of the service, e.g. the flight from New York to Amsterdam. This dimension is related to the question: "What has been provided?" Functional qualities are related to the way the service has been delivered, e.g. the check in at the airport. The dimension is related to the question: "How has the service been provided?" and is closely linked to the dimensions studied by developers of SERVQUAL. (Grönroos 2000: 47; Bergman & Klefsjö, 2004: 90)

7 PERCEPTION

In this chapter the psychology of perception is presented to understand how the customers will eventually perceive the experience in the airplane. The chapter introduces how perception is studied and what people perceive in order to experience. The chapter contains a brief introduction to customer perception.

7.1 Studying perception

The study of perception is the oldest branch of science involved with humans. The meaning of conducting research about perception is to explain the observations made of the surrounding world. Why do we need a separate research for perception? - Because there are several problems involved with the perception processes:

- The perceptions might be incorrect.
- The real world wishes to be replaced with some substitute.
- The human observer wants to be replaced with a machine.
- The physiological processes to which the perception are leaned on, wants to be understood.

The perceptions are made by different senses and modalities (sense circles). The distant senses are sense of sight and hearing. The skin senses are the senses of touch, heat, cold and nociception (sense of pain), and also the senses of taste and smell that are placed in connection with each other. The senses of body are the senses that give information about the location and movement of muscles and joints (kinesthetic senses), equilibrioception; the sense of balance (vestibular senses) and the senses of internal organs. (Hochberg, J.E. 1970: 7-17)

7.2 What do we perceive?

The knowledge of identifying the objects and features in the surrounding environment is valuable for people. The stability and permanence of most of them creates a feeling of security and furthermore enables people to react rapidly and in

an appropriate way. People learn how to react appropriately on moving objects, such as vehicles, animals or other people. Once we have learnt what to do about and with the objects, we may proceed without further thought to act in the same way when we encounter the objects or features again. Sometimes, when the objects or features do not behave in the expected way, we get surprised and maybe annoyed. (Vernon, 1970: 11-12)

7.2.1 The perception of space and movement

For the most part we feel the stability of objects around us is because we perceive them in a stable relation with the spatial background. Our bodies are related with the horizontal and vertical co-ordinates of space through visual perception and internal gravitation forces of body. In the ear we possess an organ called the 'labyrinth' which registers all movements of the head and tells us whether our head is not parallel to the gravitation. Furthermore, when travelling in a vehicle that tilts from side to side, we automatically adjust our body position until it is vertical. Sometimes we lose the impression of stability in our spatial surroundings and the awareness of the position of objects and our body in space. This may occur in flying when rapid and unfamiliar vertical movement of the body is experienced. (Vernon, 1970:120-123)

The perception of moving objects and of various types of movements is important to our knowledge of the world around us, and also to the preservation of life and safety. (Vernon, 1970: 138)

7.2.2 Attention and perception

Attention is difficult to define, but we are perfectly aware when we wish to perceive something clearly and correctly, we concentrate our attention on it. If we are not interested greatly of the surroundings or willing to perceive anything particular, we might notice very little happening around us, and we are not 'attending'. Attention can be directed by an outside force to be towards a specific object or whatever there needs to be observed. (Vernon, 1970: 157-162)

7.2.3 The relation to perception of motivation and emotion

The way the objects or the environment are perceived by the observer, is linked to observer's 'interest' in perceiving them. Whenever the observer has an emotional relation to the object/environment he perceives, the more accurate and clear the results and the motive to perceive there will be. (Vernon, 1970: 195)

7.2.4 Perceptual 'types' and their relation to personality

There are different kinds of attitudes and methods of perceiving, and they seem to be derived from different personalities. The most popular classification of perceiver personalities are 'synthetic' and 'analytic'; also known as 'introvert' and 'extrovert'. The observer who possesses the 'synthetic method of perceiving tends to see the perceptual view as an integrated whole, while the observer adopting the 'analytic' method breaks the view into parts of details studying each separately. (Vernon. 1970: 221)

7.3 Customer perceptions

The definition for perception is that it is the process of how individual receives, selects, organizes and interprets information to create an understandable picture of the "world", and in the case of comfort level in the long distance flight, the person creates the picture of it individually within the air travel experience. Every individual tourist has a unique profile and this means that their perceptions will also be different from each other. This is a problem, because the same message can then be interpreted differently by different audiences. To understand perceptions, one needs to be introduced to concept of *perceptual bias*, defined as "the distortion of the information that results from the way in which it is perceived by the receiver". Perceptual bias allows individuals to deal with information that does not connect with what they prefer, know or believe. A way to filter different stimuli is to categorize people, behavior, objects, places or areas of the world, and this is also called stereotyping. Stereotyping is a convenient way to simplify the process of choice and to make quick categorizing. (Pizam & Mansfeld, 1999: 208-209)

In tourism, people create images of destinations and travel from personal characteristics such as motivations and past experiences. These alone do not create expectations, but play a great role in tourism. Expectations of travelers can be both positive and negative, but fortunately proper marketing techniques can change negative perceptions. Perceptions are highly correlated with other measure of satisfaction due to facts that past experience is vital in learning what provides tourists satisfactory experiences. (Pizam & Mansfeld, 1999: 205-206)

8 RESEARCH

In tourism and leisure, the research is not emphasized on the logic and objectivity of research, such it is mainly in business research. According to Preece, who offers a broader conceptualization, 'research is conducted within a system of knowledge and that research should be probing or testing that system with the aim of increasing knowledge'. This knowledge can be something entirely new or it can consist of checking, testing, expanding and refining ideas of already conducted research problem. The research should 'continually question the nature of knowledge itself, what it is and how it is known'. (Finn, Elliott-White & Walton, 2000: 2)

There are two types of research: pure and applied research. Pure research is about expanding the limits of knowledge by adding theory. Applied research is conducted to analyze and find a solution to a problem that has direct relevance to the recreation and travel industry. A researcher can use different research styles and the three main styles are survey method, experimental method and ethnographic method. (Finn et al. 2000:3-5)

When carrying out a research, there are two methods to use: quantitative and qualitative. They can be used as either one or combined according to the type of research and research question. Quantitative research method is usually structured, collects numerical data and tests and confirms theories. The qualitative research approach explores meaning through words and text, and is more flexible and develops theory. (Finn et al. 2000:8-10)

8.1 Qualitative research method

The research method chosen for the research is qualitative. The goal is to figure out how the customers perceive the flying environment and the comfort level rather than finding out how many customers feel of different parts of comfort. The chosen method is observation and more specific, I will be conducting a participant observation in parts where I analyze the interactions of myself with the flight environment, and also direct observation is used while I observe the

passengers around me. When using observation as a research method, researchers collect data with participant and non-participant observations, ethnographic diaries, and more recently photography and video. (Social Research Methods, 2006)

Participant observation is one of the used methods for qualitative data collection, and also one of the most demanding. The researcher becomes a participant in the culture or context that is being observed. Many times, participant observation is conducted in months or years of intensive work because the researcher needs to become accepted as a part of the observed culture or context to assure the reliability and validity of the observation, so that what is being observed is a natural phenomenon. (Social Research Methods, 2006)

Direct observation differs from participant observation in a multiple ways. It is not typical for a direct observer to try to become a participant in the context. The direct observer tries to be as unnoticeable as possible and does not influence the observations but attempt to be neutral and objective. This method of observation suggests a more detached perspective, and the researcher is rather watching than taking part. Often technology is used as a supporting element such as videotaping, taking pictures or observing behind one-way mirrors. Direct observation seems to be more focused than participant one. Usually the observer focuses on a certain group of people and sample situations while in participant observation the observer tries to see the happenings as an entire context. Finally, direct observation does not usually take as long as participant observation; as an example “one might observe child-mother interactions under specific circumstances in a laboratory setting from behind a one-way mirror, looking especially for the nonverbal cues being used”. (Social Research Methods, 2006)

The biggest disadvantage in observation method is that the observation is done by individuals who systematically observe and collect a phenomenon, and it is very complicated to reproduce the events into scientifically beneficial information. While collecting data through observations, there are decisions to be made connected to participants, non-participants, laboratory- and field environment. This is presented in Figure 4. In my research I will be using manual method,

where the researcher will follow one's own values and expectations, and is limited by personal limits. The objects of the observation might capture these values and limits and place the researcher into a certain class or category. (Räsänen, 2011)

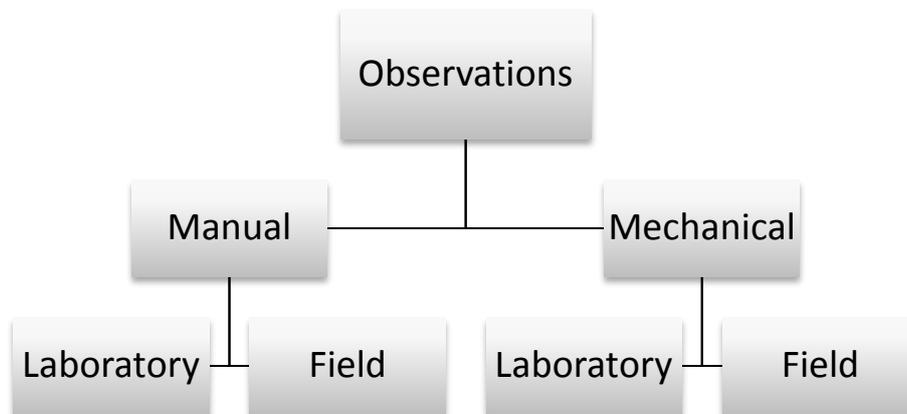


Figure 4. Options for collecting first data information by observing method (http://portal.hamk.fi/portal/page/portal/HAMK/koulutus/Ylempi_AMK_tutkinto/kudos/menetelmat/4_Kvalitatiiviset_tutkimusmenetelmaet.pdf)

8.2 Reliability and validity

The reliability in a research is about the consistency of the results gained from measuring the research. Validity tells us whether a measuring instrument used measures what it is supposed to be measuring. For many tourism researchers, qualitative research exists only to provide information for developing further quantitative research, and there are some lack of objectivity and generalizability associated in qualitative research. Also reliability and validity are questioned. (Finn et al. 2000; Qualitative Research in Tourism, 2004: 156-159)

There are several ways to enhance the trustworthiness in qualitative research. The used techniques for enhancing credibility are prolonged engagement, persistent observation and referential adequacy. Enhancing transferability is enabled by using purposive or theoretical sampling and by writing thick descriptions. Dependability is enhanced by having a research plan and allowing it to be flexible. Confirmability is enhanced by using an external auditor. Triangulation is a method that limits personal and methodological biases and enhances the

trustworthiness of the study. Triangulation means information coming from different angles or perspectives that is used to corroborate, elaborate or illuminate the research problem. Different basic types of triangulation used are data triangulation, method triangulation, investigator triangulation and theoretical triangulation. (Qualitative Research in Tourism, 2004: 160-162)

8.3 Implementing the field work observation

The field work will be implemented during four different long haul flights during a time period of December 26, 2012 until January 21, 2013. The flights are, in the order of appearance: Helsinki – Tokyo (9h 25min), Tokyo – Sydney (9h 6min), Brisbane – Singapore (6h 50min) and Singapore – London (14h 10min). The first flight is conducted with Finnish Finnair carrier and the three remaining are with Qantas Airways carriers, an Australian airline company. During each flight I will be analyzing the environment of the cabin by carefully examining the conditions of comfort through physical and psychological aspects, food & beverage and service quality. On each flight I will be completing a form based on the theory of my thesis, and examine all areas important for the flight experience.

The research method chosen for this thesis is the best because the nature of analyzing comfort and experience requires immediate observation and qualitative approach. The participant observation method is best to get the valid outcome, and to analyze emotions and feelings. To improve the reliability of the thesis it would have been even better to have multiple observers instead just having the researcher's observations to describe the experience. To have multiple observers on different flights and seated in different classes would make the outcome comprehensive and give a multi-dimensional view over the long haul flight experience.

9 RESULTS ANALYSIS

During every flight I examined the different aspects regarding the theory of my thesis. (Appendix 1) Before the actual flight I also took notes of the airport functionalities and actions carried out by me and my companions. The activities to be studied were the check-in process, spare time before the flight at home or at the airport, boarding procedure and departure. I kept track on departure and arrival times of the flights to count the flight duration, which became unexpectedly difficult, so after I had arrived back to Finland I checked the detailed flight time information from web page Flight Aware, which is specialized in flight tracking with live tracking maps, flight status, and airport delays for airline flights, private/GA flights, and airports.

The most important research started in the cabin. Before the flights I had gathered an information package about the aircrafts used in this research and in-flight amenities available in every flight, as well as comparison charts for Finnair and Qantas aircrafts. After I was seated on my seat and calm enough I started to study the environment, service and comfort. During the whole flight I tried to gather up a time schedule of events; how I started my trip and what time I began with a certain activity and how long I performed these activities. I also studied the seat I was seated in. I looked from the seat map what kind of seat I was seated and compared it to other seats. In the beginning I examined the first impression such as what were my observations of the environment individually and technically. Then I studied the people around me: who were they and how did they act during the flight? After that I started with the comfort aspects. I carefully examined physical aspects, such as air pressure, humidity and hydration, temperature, mobility, entertainment system and food & beverage. Then I studied the psychological comfort in me and in other passengers around me, safety issues were highly linked to this comfort aspect. Then I studied the service quality: how crew performed in their tasks and how satisfied I was with their performance.

After the flight was over, the research was still applying. Either continuation research at the airports waiting for the next flight or after the flight -actions were examined carefully. After every long haul flight I analyzed the overall experience.

9.1 Flights occupied: Finnair and Qantas

The information regarding the aircraft amenities and technical aspects of each aircraft is collected from the airline information pages SeatGuru hosted by Tripadvisor. Seat pitch is the distance from any point on one seat to the exact same point on the seat in front or behind it. Seat width is the distance from armrest to another. The signs shown in the seat maps for all of the flights used in this research (Figure 5) are presented and explained in Table 2.

The aircraft Finnair uses between Helsinki and Tokyo (Narita) is Airbus A330-300 (333) Version 1. (Figure 5) There are seven of these carriers in the Finnair fleet, and this version operates in a two class layout of business (rows 1-7) and economy (rows 21-57). I was seated in an economy class on the row 53 seat H which was an aisle seat, a standard seat with some drawbacks. There are 221 economy seats in this air craft type, and the seat pitch is 81,2cm and seat width is 45,7cm. The seat map configuration for economy class is 2-4-2. There are 42 angled lie flat seats in the business class and the seat configuration is 2-2-2.

The next two flights were operated with Qantas Boeing carrier. The flight between Tokyo and Sydney was using a Boeing 747-400GE 3-Class (Figure 5) and this carrier is primarily used for international long haul flights. The economy class has 270 seats with a seat pitch of 78,7cm and a width of 44,5cm. As the name implies, this carrier has three classes: business, economy and premium economy. The carrier has an upper deck as well. My seat was on the row 68 seat C, which is a standard seat on an aisle. The seating configuration in the economy class is 3-4-3. Business class has 58 seats and premium economy class has 36 seats.

The second flight with Qantas Boeing was between Brisbane and Singapore and the carrier used was 747-438 3-class version 2 (744). (Figure5) This plane is

nearly identical with the 747-400 used on the previous flight. Differences are that this plane has more business class seats and less economy seats. The seats on the economy class are also slightly smaller in width (43,7cm) but the seat pitch is the same. The three class layout is divided between first-, business-, and economy classes. I was seated in the economy class on the seat 64 H which is a standard aisle seat. The economy class has 265 seats with adjustable headrests and lumbar. The seat map configuration in the economy class is 3-4-3. Business class has 64 lie-flat Skybeds and first class has 14 flat bed sleeping pods. Upper deck is reserved for business class.

The fourth long haul flight on this research was conducted on a Qantas carrier Airbus A380-800 (quad-jet), (Figure 5) and the route was from Singapore to London Heathrow. This aircraft operates in three-class configuration according to the SeatGuru, but still it has four classes: first, business, premium economy and economy. The economy class has 332 standard seats and the seat pitch is 78,7cm and seat width 46cm. I was seated on the row 61 seat D, which is a standard seat located on the aisle. The seat map configuration in the economy class is 3-4-3. First class has 14 closed suites, business class has 72 lie-flat seats and premium economy has 32 standard seats. Upper deck is preserved for business and premium economy classes.

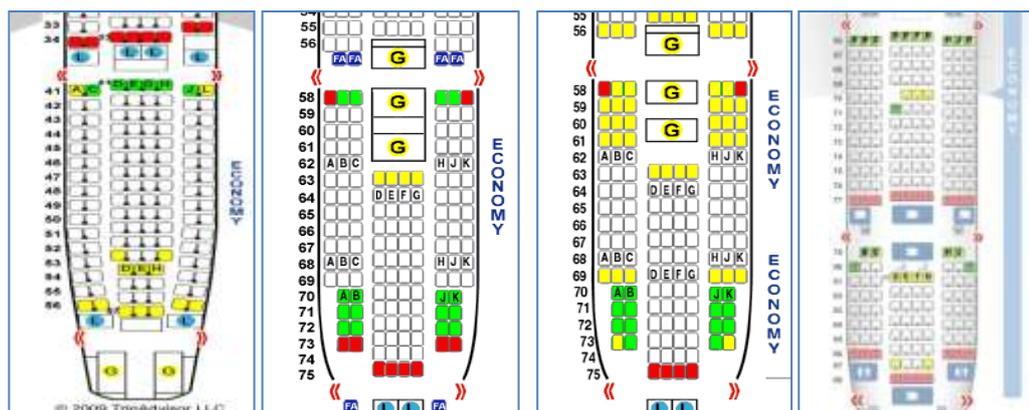


Figure 5. 1# Finnair Airbus A330-300 (333) Version 1/ 2# Qantas Boeing 747-400GE 3-Class/ 3# Qantas 747-438 3-class version 2 (744)/ 4# Qantas Airbus A380-800 (quad-jet) (www.seatguru.com)

The signs in the aircrafts	Explanation
Green seat	Good seat
Yellow seat	Some drawbacks
Red seat	Poor seat
White seat	Standard seat
Grey seat	Blocked seat
Blue seat	Crew seat
Black dot	Power port
Red lines	Emergency exit
Yellow G	Galley
Blue L	Lavatory

Table 2. Explanations for the signs in the aircrafts (www.seatguru.com)

9.2 Expectations for the flights

The expectations were good, I had previous experiences from Finnair airline and I was expecting to receive excellent service, good food and good overall experience from their flights. I had not flown with Qantas before so I did not have previous experience from them, but I did know that they had been voted amongst the best Top 10 airlines in the world. It did raise my expectations a bit, and I assumed they would be somehow better in quality than Finnair. Qantas has a good reputation but during recent years they have suffered from negative media attention, due to the problems with the aircrafts and in the employment field.

9.3 Analyzing safety and security

Safety needs are the second in importance when measured with the hierarchy of needs by Maslow. After basic needs are fulfilled the experience revolves around safety and security. During the research I examined the safety levels on every flight. The first flight with Finnair, for example, had no safety instructions shown by the flight attendants or shown by the overhead TV. The seat pocket included safety and security instructions that were advised to read. The three other flights

with Qantas were more secured. On the flights we were shown safety instructions by the flight crew and the overhead TV. When a passenger is shown literally what is written in the instructions it is easier to follow them if an actual danger would appear. On all airports the security checks were as expected, but in Australia we experienced more strict examinations. First, when we arrived to Sydney, the customs were quite strict and after the passport control our backpacks were examined by police dogs in case of drugs or illegal substances. When we were leaving the country in Brisbane airport, we experienced more throughout searches. My hand luggage and I were examined in case of exposure to explosives. And my accompanying friend got to walk through an X-ray machine. Here we see how Australian government is taking care of their security controls at the airport. The costs of maintaining high quality x-rays and other security machines can be overwhelming for many airports, and even though the “search” of illegal items or invalid entries to the country might lessen the enjoyment of a travel, they are necessary for the aviation business to operate in the future so that passengers will furthermore respect the safety regulation and rules.

9.4 Analyzing Food & Beverage

The theory suggested always ordering stew and avoiding pasta, noodles, chicken breast or anything deep-fried. I had the advice in mind every time we could choose a meal option, and managed to stay away from chicken even though normally that would be the option number one.

The overall level of Finnair food and beverage was okay. The dinner received was extremely poor but the beverages and the breakfast were good. For dinner (Figure 6) Finnair offered risotto with beans and mushrooms, salad, crackers, bread, cheese, chocolate-coconut-treat. The other option, chicken, was out of stock at the time the food cart got to our end of the plane. Risotto was very creamy and greasy, and extremely heavy making it inedible. The breakfast (Figure 7) was very good including bread with cucumber and cheese, berry yoghurt and a lemon muffin. The drinks were offered often and the only minus point was the green tea that appeared to give me some stomach ache.



Figure 6. Flight #1 dinner



Figure 7. Flight #1 breakfast

During the second flight with Qantas from Tokyo to Sydney the meals offered were very good in quality. The meals were tasteful and comprehensive. The dinner consisted of (Figure 8) beef stroganoff with roast potatoes and broccoli, sushi kobachi with braised mushrooms and lotus root, a slice of bread, butter, cheese and vanilla-cherry compote mousse. For the breakfast the options to choose from were hot breakfast and Japanese breakfast. This time I was unavailable to choose while asleep.



Figure 8. Flight #2 dinner



Figure 9. Flight #3 dinner

Flight number three flew from Brisbane to Singapore. Me and my company at the trip were not hungry due to the meal vouchers given at the Brisbane airport because of the 6 hour delay of our flight. There were two dinner options from which I chose (Figure 9) slow cooked lamb with mushrooms and leek, egg pasta and sugar snaps. As a side there were cookies and cream mousse, cheese and crackers, and variety of drinks to choose from. I chose red wine and water. As a refreshment, at the end of the flight we were offered vegetable pizza and

chocolate, but I was sleeping during that time. During the whole flight we were offered tea, hot chocolate, ice cream and fresh fruits.



Figure 10. Flight #4 dinner



Figure11. Flight #4 breakfast

The food and beverage on the flight from Singapore to London was extremely good, and I enjoyed it all. For dinner (Figure 10) we had braised beef in red wine sauce, mashed potatoes and green peas. As a side we had ginger pannacotta, a bread roll and sour salad. The breakfast (Figure 11) was tasteful, and we had two options, hot breakfast or continental. I chose the hot breakfast which included cheese omelette with grilled bacon, spinach and cooked cherry tomatoes. On the tray there were coffee or tea, pain au raisin, orange juice, strawberry yoghurt and seasonal fresh fruit salad. We received a Refresh bag during the flight that included bottled water and snacks such as raisins, candy and chips. Fresh fruit was available if requested.

The food and beverage part of the flights responded to my expectation quite well even though the disappointments with Finnair food were not expected.

9.5 Analyzing comfort aspects

The average age of carrier Airbus A330-300 of the Finnair fleet is 2.9 years. (Finnair Group) This is the newest carrier in the Finnair group. The carriers Boeing 474-400 and 474-438 of Qantas fleet have an average age of 16.5 years, and carrier Airbus A380-800 has an average age of 3.4 years. (Air Fleets) The Qantas Airbus is the newest in their fleet and Boeing carriers are third oldest. Due

to the age differences between aircrafts I noticed changes in some physical comfort aspects and I will explain them furthermore during next chapters.

9.5.1 Physical comfort aspects

Differences in the air quality were noticeable between flights: in the newer aircrafts the air was fresher, but colder and less humid than in the older aircrafts. When compared my condition during different flights, I was more irritated with dry throat, skin and nostrils when flying with the newer aircrafts. The worst flight regarding air quality was the fourth flight, and a reason for affecting it could be the length of the flight (14h 10min). The best quality of air concerning temperature and air pressure was received on flights number one and two. I was better prepared on those flights wearing right clothing and drinking water and moisturizing skin as well. And the change from dry Finnish winter air versus humid Australian summer climate to the dry airplane air has a significant difference. The air pressure was good on three first flights. During the fourth flight I was having a lot of pressure moderating problems. This was linked to my health condition as well, as I started to develop flu-like symptoms. The landing gave me nauseous feelings and even performing valsalva maneuver did not help to my condition.

As a frequent flyer I did not experience much mobility issues during flights because I was well prepared and knew what to expect. The motion sickness I had was during the fourth flight and it was either caused by my health condition or the motion of the aircraft. I experienced turbulence a few times during flights, but they were not affecting comfort, instead adding some excitement to the experience. When comparing the four aircrafts with each other, the Finnair A330-300 had the best seat quality in pitch and width, which ranks Finnair the most comfortable in mobility. Also, Finnair's aircraft has not got as many seats compared to Qantas seats, which means there will be less people on the plane, and more room to move around. During flight number four with Qantas the passengers were moving constantly and people sitting next to me were jumping back and forth the aisle and to the lavatories multiple times which led to discomfort for me while I was sitting in the aisle. Qantas flight number three from Brisbane to

Singapore had the smallest seat width but luckily there was no-one seated next to me which gave me extra space. I made my trip more comfortable by booking aisle seats to be able to stretch my legs and get off easily but it was also uncomfortable being bumped to other passengers and crew moving around the aisle. I was concerned about clots and deep vein thrombosis but as a healthy person I had no reasons to worry.

9.5.2 Psychological comfort aspects

I did not suffer significantly from any psychological comfort aspects such as stress, flight phobia, air rage or other during flights. I did suffer minor stress during flights three and four while I was flying back to Finland. The stress could have been due to the delay of the BRI-SNG flight which led us to be late from our continuation flight to Helsinki and therefore resulted in two more flights. The prolonged time schedule was a stress increase factor. I noticed some stress/air rage-a-like behavior in one passenger who was seated behind me on the flight number four. This male in his forties was behaving normally the whole flight but after a flight attendant accidentally poured some beverage on him, he got furious. As a researcher of air rage for this thesis I was interested in hearing how this event would develop. After the crew member had apologized her unintentional behavior multiple times the man still was not satisfied and blamed her for doing it intentionally.

Jet lag usually occurs after crossing multiple time zones, and after arriving to Sydney with two separate long haul flights I was mainly exhausted. We arrived in the morning at 7:06 local time and had to travel for about an hour to reach our final destination. Me and my friends stayed awake the whole day, and I spent as much time in the sun as possible to adjust my inner clock in different time zone. During the trip I noticed some jet lag but it was not affecting my everyday activities. Mostly I felt tired earlier in the evening and woke up earlier than I usually would. According to the NASA's estimation of readjustment (chapter 3.2.4) I would have suffered from jet lag for 9 days after crossing 9 time zones. But after flights three and four when I was coming back to Finland, I suffered from jet lag noticeably. The long exhausting flights with delays were of course

making me disoriented but during several days I noticed changes in my sleep rhythm and in physical and psychological everyday actions. After analyzing the results it might have been that during in Australia I did not realize and have time to think about jet lag symptoms while experiencing new culture, environment, people and situations. But when back in Finland the symptoms came out clearly due to the continuation of normal rituals of everyday life and state of mind. I did not have any specific precautions to prevent jet lag from occurring except I tried to eat healthy and stay away from alcohol products on the day when I was planned to have a long haul flight, get a good sleep on the previous night and to leave all my worries behind. The stress was slightly present because I was conducting a research during flights.

9.6 Experiencing the flights

Overall experience from the flights was good. The results were not negative but they were not overly positive either. Flights correlated my expectations for the most part, but they were more positive than expected. I was prepared that the amount of long haul flights would have affected my experimenting causing discomfort, but I experienced a positive travel in many ways. I had planned a time schedule for every flight to do certain things in order but mostly I abandoned that time schedule and just did those activities I felt like doing at the moment, for example, I did not read anything at all during flights, even though that was a great part of my time sparing plan.

The flights did have an emotional experience of positive and raising impact. I was very pleased during the travel and I did not suffer from negative feelings towards anyone or anything. After this notice I can say that a flight can be an experience, but the most important factor is the attitudes of the person experiencing. As I was doing my research as a participant observer I needed to be a part of my research and study my own behavior as well as others. This notice made me wonder if my observations affected the experiences of the flights differently because I was aware of all comfort aspects and analyzing every detail. If I had been a normal passenger, how would I have reacted in the same situations experienced in the

aircrafts? The answer is: I would have acted the same way, but as a researcher I could have improvised some situations and seen how they would have affected the total flight experience, e.g. improvise a scene in the airplane.

According to the experience modes presented by Erik Cohen (chapter 5.1) only people travelling for pleasure will find experience from travelling. This means that, for example business travelers cannot get experience from flying because their purpose for travelling is business. For this segment flying is just a transportation mean from place A to place B. But the theory is not so short-sighted because the theory also says that a person who does not find relief within life-space will travel for pleasure as well, and this can be adapted to business travelers as well, in an individual basis. When choosing to which category the flight travel fits in the experience modes, we think of the traveler who is experiencing. The flight experience mode can be any of the five modes, but when analyzing deeper into the core of the flight experience, the modes that can describe it the best are recreational and diversionary ones. The recreational mode describes a tourist focused on the basic wellbeing which is the main focus during flight and the diversionary mode being much alike the previous one but rather focusing on meaningless pleasure such as entertainment which is also a big part of the activities on the plane. The other three modes are more psychological and seek for higher meanings for travelling which an experience of a long haul flight cannot reach.

After the modes of experience I will be presenting my ideas about the Maslow's hierarchy of needs and how the needs were fulfilled during the flights of my research. The basic level of physiological needs is the strongest and can be seen in the plane when food and rest become dominant. During the flights they were achieved but sometimes disturbed. This applies especially for the resting part, because sleep during flight was bad in quality and dispersed. Safety is extremely important in the airplane experience. The aircraft is a technical machine man-made and in its best in thin and smooth air high in the sky, while passengers are in their best at sea level. (Air & Space Smithsonian, 2002) During the flight I had no worries about any threats such as technical failures, terrorism acts nor did I feel

any need for guidance. Flight number three was delayed because of engine failure but I trusted the airlines and stepped on board to that same plane. In plane we receive guidance from the flight attendants and we are secured when we hear the captain announcing that everything is going as expected, so they give us a feeling of safety on board. Without safety instructions or service passengers would feel unsecured and unsure of what to do. For example, passengers who fly rarely need more assistance than frequent flyers. The third need of love, affection and belongingness is not extremely important in the flight experience. A company, friend or a travel group gives passengers feel of being part of something, in this case, a long exhausting travel shared by hundreds of other people. Individually I would have enjoyed my flight more alone, when company was mainly a distraction while trying to analyze the flight. The company was also affecting the observations and helpful in noticing certain details.

The fourth need is for esteem, and during flight experience the need for self respect and respect from others might not be the most important but convenient when thinking about the order, functionality and comfortability in air. When passengers respect each other and behave human like the need for esteem can be fulfilled. It depends also if seated in the economy class, first class or business class. In the business and first classes passengers are treated as more special persons because they have paid more money for better service and better comfort. In the economy class people cannot feel like they are worth of something, they are just trying to fit in their seats and take into consideration the other passengers while enjoying their own travel. The need for esteem might be difficult to actually identify during flight experience. While my experience I had a mission to fulfill, and it was conducting a research with the observation method, and I was focused on analyzing comfort during flights. The fifth need is for self-actualization, and this need is required when all the other four ones have been fulfilled. This is individual, but the result is that during flight experience in the economy class this need is difficult to reach. In the theory of Maslow (chapter 5.2), “the person must do what a person was born to do” in order to reach the fifth level of need, so in this case ‘a traveler must travel’.

9.7 Analyzing Service quality

During the flight I analyzed the service level of four different flights. In the end my plan was to compare the service of my countrymen serving on Finnair and Qantas crew with each other, but as the original plan changed, I got to experience only one flight with Finnair and three with Qantas. I will be analyzing the overall satisfaction with the service quality and pointing out detailed information that is relevant for the character of the research. With the help of Zeithaml et al.'s model of service quality, SERVQUAL, (chapter 6.2) I will be presenting my observations.

The first dimension is reliability with the most weight on satisfaction. During the flight I studied if the flight crew did what was promised at all times, and did they reach reliability. During all flights I received reliable service and the staff did what they were supposed to do. There were some details during Qantas flights that were indicated in the hand-programme but not received. For example, the notice of saying the staff was sharing fresh fruits and ice cream throughout the flight was too much highlighted comparing to the implementation of what was promised. The second dimension of Grönroos's SERVQUAL model is responsiveness with second highest percent on weight of importance. Responsiveness was studied with analyzing how well the crew was responding to different situations and how willing they were to give help and provide prompt service. The response of the crew was good and affective. Mostly moderate, some people prefer crew to be available at all times, but for me it is enough that they are available at the most critical times like dinner and breakfast. The third dimension is assurance. I studied from their behavior if they were confident in their work and if I received trust and confidence. During Finnair flight I trusted on the crew and the reasons for that could be that they are also Finnish and speak my language which makes it easy to ask help or questions if needed. During Qantas flights I was relying on the crew less than with Finnair. The reason is because Qantas is less known in my airline knowledge and I have not experienced flying with them before. The fourth dimension is empathy. This dimension studies the ability to see through customers eyes in every situation. I observed the behavior of the crew and to compare the

two airlines, the Finnish crew, and especially women were more human and the crew on Qantas preferred robot-a-like serving. During Finnair flight I saw more actions from crew involving speaking to children and talking to customers.

The last dimension is tangibles. It has least of weight of importance on the satisfaction but it is also an important factor in conveying quality service. It is connected to service, and without good equipment and physical abilities the overall service experience is not going to be good quality. I studied the tangibles used in the flight and this involves the eating cutlery, beverages, meals, pillows, blankets, comfort kits, snacks and other equipment available on request. During the Finnair flight, all equipment received and physical abilities were good but we did not receive comfort kit or snacks. During all Qantas flights we received also comfort kits and snacks except on flight number three that was supposed to be a day flight but changed into a night flight.

9.8 Perceiving the environment and experience

Perception is a huge part of participant observation method. Observation equals perceiving the environment with all senses. I used different senses and modalities in my observations; sight, hearing, touch, heat, cold, nociception, taste, smell, kinesthetic senses, balance sense and organ senses. (Chapter 7.1)

Sight was used to observe other passengers, colors, esthetics, and shapes. Hearing was used to listen the announcements, the hum of the aircrafts engine and air conditioning, the languages spoken, entertainment and music. Heat and cold sensations were received from the air conditioning, temperature changes, blanket, clothing and sun shining from the airplane window. Nociception, also known as a sense of pain, was used when suffering from pain caused by the air pressure and pain in the legs and knees after immobility of hours. Taste sense was used to taste the food and beverages and the dryness of the air. Smell was used to sense the food and beverages, smells around such as the passenger odors and odors from the seats and lavatories and other environment. The senses of body were also used, when the different muscles and joints were moving in the body during trying to find more comfortable position to sleep, eat or sit in. especially the leg muscles

and joints were informing their existence. The sense of balance was used when the aircraft was turning or changing altitude, and during turbulence the body responded to air pockets by distracting the ear labyrinth and this leads to internal organs to lose gravity for a short period of time.

Since I had previous experience from perceiving the environment of an airplane, I continued my perceiving the learned way. During all flights the similar perceptions were repeated but the results were different. When I perceived the space and movement of the aircraft, all senses were used except taste and smell, and nociception senses. Most of the time during flying, the body was parallel to the gravitation except when rapid movement or turbulence occurred. By perceiving the space around me and every time noticing, that it is similar to previous aircrafts, the safety is perceived and makes passengers more comfortable in plane. For example, if the aircraft seat plan would change constantly and be different every time, it would be more difficult to adjust to new environment continuously. Since now passengers know where the emergency exits and oxygen masks are located, the feeling of security is confirmed. Attention in perception is usually focused on something or someone. After flights I analyze what things I find interesting and what things I block from my attention and perceive less important for me. My attention was mostly focused on hearing sense: during flights I watched movies a lot, and my attention was focused on hearing the sound of music or speech or other noises in the movies. I was not interested in listening what people around me talked. This means I blocked all background noises while watching or listening entertainment. The linkage between my perceptions and motivation or emotions had an appearance but it was minimal. For example watching a movie was an emotional experience at times. I have an emotional linkage with flying because many times it has been a start for something new. While being in exchange from school two times for a long period of times, and both destinations in reach of a long-distance flight, so while travelling with a purpose of plain research those thoughts came across my mind while doing perception of motivation and emotion.

When analyzing my behavior during flights I need to categorize myself into a perceptual type. I was both synthetic and analytic because at the same time I was observing the surroundings as a whole and also analyzing every part with detailed information.

9.9 Analyzing the aspects affecting comfort and experience

After the analyze of the results gathered from the long haul flights the work needs to have an explanation of different issues related to flying. Several issues that are faced during the flight can limit the experience and cause either negative or positive influence amongst the passengers and atmosphere.

Issues	Things that can be done in order to improve the comfort and experience	Things that cannot be affected with the issue in order to improve comfort and experience
Blood circulation	Exercising, moving legs and arms	Health problems related, flu
Dryness of skin, eyes and throat	Moisturizing, eye drops, drinking plenty of water	Born skin conditions of dryness etc.
Air pressure	Valsalva maneuver, yawning, chewing gum	Aircraft requires pressure to keep passengers safe and the plane in air
Motion sickness	No eating before flight	The ear labyrinth is different with everyone
Flight phobia	Therapy, comforting music	Individual help
Stress	Calm environment, leaving worries behind	Travelling for work
Sleeping	Pillows, blankets, eye pads, sleeping aid	Time zone adjustment
Passing time effectively	Entertainment; music, movies, books, magazines	The individual limit for boredom
Food & Beverage	Choose safe options, pre-order, no alcohol consumption during flights	The food production and selection within airlines
Space and mobility	Book a seat that exceeds individual comfort	The cost for a better seat is

	standards	unaffordable for most
Company	Book a seat from business or first class, or by the window if need for peace, and from economy if need for company	Never sure who the company on the flight will eventually be, even business class can surprise

Table 3. Issues related to long haul flights

The most important points in comparing the issues that affect the total long haul experience are explained by dividing them into things that can be done in order to improve the comfort and experience and to things that cannot be affected with the issue in order to improve the comfort and experience (Table 3) The issues presented in the table have been gone through with several ways in the theory and empirical study, but this layout helps to give guidance for understanding what can and cannot be done in order to improve the experience. The views are to be examined from a passenger's perspective.

10 CONCLUSIONS

The research studied how the long haul flight experience is perceived. The goal was to find out if the comfort level can be improved and how physical and psychological aspects affect the flight experience. I implemented the research with participant observation where I was studying my personal actions and other passengers as well before, during and after the long haul flights. The results provide guidance for people who wish to fly to long haul destinations.

The results provide information that is both helpful and difficult at the same time when considering how to improve the environment of the long haul flight through tangibles and intangibles. There are several things that can be done in order to improve the comfort level, the question is if an airline is willing to do them and will improvements be productive in the long run. The worst that aircraft designers can do is to build seating to fit in more and more passengers.

To improve the comfort level with tangible equipment is to provide better food and beverages. There is room for development, for example, why make those meals that will almost always disappoint passengers when airlines can stick to few meal options that are excellent. It is good to have versatile meals but more research into developing and preparing the airplane meals is needed. The quality of coffee is poor on all flights, and it should be improved. The entertainment systems can also be improved, for example while now airlines offer newspapers for passengers, they could offer magazines and books as well. The video system needs to be updated in some planes and airlines should invest on better headphones. Air quality is as good as it can get at the moment. The temperature and humidity is also individual but there are differences with aircrafts due to their model type and age. One of the biggest improvements that can be made is the noise levels. In airplane the humming of the engine is always there but it can be very controlling at times. The mobility is difficult to improve and especially in the economy class. The technology is developing continuously and might bring the aviation business lighter and lighter seats but it is a matter of time only. One solution would be to take out seats so that economy class would be more comfortable, but it would lead to increase of flights and building of new aircrafts and that would not be ecologically friendly. To improve the level of service is in the hands of each airline. Every airline has their image and brand that they need to fulfill. There should be more interaction between passengers, and the crew could be more aware and make sure the passengers are doing well. This includes direct communication and taking care of the facilities of an airplane. The lavatories are used multiple times, and often it seems like they are not cleaned during flights. They might smell bad and are quite dirty at times. How to improve the psychological health and comfort among the passengers? The results show that it is not something an airline company can affect severely. The condition of someone's mind is not to be fixed by airline but the passenger him/herself. The airlines can affect the safety and security on air and on the airports and furthermore convey the trust towards the passengers. The results show that it is important what actions are done before, after and during flights. To maintain a

healthy lifestyle the comfort will be better than if avoiding 'the rules' towards better flight comfort physically and psychologically.

The experience of a long haul flight is individual, but it is possible to achieve. I figured out that for some passengers certain things might feel uncomfortable that are clearly comfortable for others. This can be due to differences and preferences of age, size and personality. The comfort is affected with the previous experience and the needs that a passenger has. Since perceptions are individual and different from each other it is quite difficult for marketers to develop the experience that should be conveyed for the passengers.

An interesting fact I noticed during flights, was that the travel to the destination and travel back to home affected the experience in different ways. On the way to the destination the feelings were more optimistic and wishful; I was waiting for something that is still ahead. The thought of an adventure lingering in the air made the travel more exciting and non-worrisome. The travel back to home was different, while being relaxed after long holiday of meeting friends and experiencing new country, also anxious feelings rose up. The worry of starting a normal life with work and school and everyday rituals was bothersome during the flights back home. At the same time the return travel was making people anxious but developed comfortable feelings as well.

From the results of this research I have learned that comfort and experience is tied with the preferences of every individual but the basic needs are similar with all long haul passengers. The experience of a long haul flight is a multi-dimensional project that needs to be developed since the demand for flights increases all the time. While all long haul flights are not travelled by the same aircraft or with the same airline, the experiences change. The service crew is never the same and passengers only wait for what is expected but never know what the final outcome is. The conclusions are drawn to the fact that this research problem needs further study on different components affecting comfort and experience.

10.1 Future Research

The results provide information that can lead to a further research in different areas. The thesis subject was wide ranged and there are several possibilities to continue research. Future research is recommended because the airlines and technologies develop all the time.

Future research can be made for next components: different segments such as age, sex, families, groups, friends, couples, alone travelers and business travelers. The research can be done with the comparison with different flight classes of economy, business and first class. Also the comfort can be different between frequent flyers and rare flyers, these passengers do not necessarily share similar needs for experiences.

Further research can be made through different airlines or through passengers. Airlines would provide more technical information and would not provide answers to the experience questions. If the research was done with the help of passengers the emotions and opinions would be more carefully investigated and therefore provide more information on the flight experience.

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12 APPENDICES

OBSERVATION FORM

Taking notes of all aspects and analyzing technical qualities and explaining own feelings and emotions:

Date: _____ FLIGHT # ____: ROUTE: _____

1. Flight carrier:
2. Check in procedure:
3. Boarding time/departure time/ arrival time:
4. Flight duration:
5. Before the flight:

IN CABIN

6. Time schedule:
7. Seat:
8. First impression:
9. People around:
10. Air pressure:
11. Humidity and hydration:
12. Temperature:
13. Mobility:
14. Entertainment:
15. Food and Beverage:
16. Service:
17. Psychological comfort:

18. Overall experience:
19. After the flight: