

UNIVERSITY OF LJUBLJANA  
SCHOOL OF ECONOMICS AND BUSINESS

MASTER'S THESIS

CARA BECKER

EUROPEAN MASTER IN TOURISM MANAGEMENT

FACULTY OF HUMANITIES, UNIVERSITY OF SOUTHERN DENMARK  
SCHOOL OF ECONOMICS AND BUSINESS, UNIVERSITY OF LJUBLJANA  
FACULTY OF TOURISM, UNIVERSITY OF GIRONA

MASTER'S THESIS  
**THE INFLUENCE OF LOW-COST AIRLINES ON MILLENNIALS'  
DESTINATION CHOICES.**

Ljubljana, July, 2019

CARA BECKER



## **AUTHORSHIP STATEMENT**

The undersigned Cara Becker a student at the University of Ljubljana, Faculty of Economics, (hereafter: FELU), author of this written final work of studies with the title The Influence of Low-Cost Airlines on Millennials' Destination Choices., prepared under supervision of Ljubica Knežević.

### **DECLARE**

1. this written final work of studies to be based on the results of my own research;
2. the printed form of this written final work of studies to be identical to its electronic form;
3. the text of this written final work of studies to be language-edited and technically in adherence with the FELU's Technical Guidelines for Written Works, which means that I cited and / or quoted works and opinions of other authors in this written final work of studies in accordance with the FELU's Technical Guidelines for Written Works;
4. to be aware of the fact that plagiarism (in written or graphical form) is a criminal offence and can be prosecuted in accordance with the Criminal Code of the Republic of Slovenia;
5. to be aware of the consequences a proven plagiarism charge based on the this written final work could have for my status at the FELU in accordance with the relevant FELU Rules;
6. to have obtained all the necessary permits to use the data and works of other authors which are (in written or graphical form) referred to in this written final work of studies and to have clearly marked them;
7. to have acted in accordance with ethical principles during the preparation of this written final work of studies and to have, where necessary, obtained permission of the Ethics Committee;
8. my consent to use the electronic form of this written final work of studies for the detection of content similarity with other written works, using similarity detection software that is connected with the FELU Study Information System;
9. to transfer to the University of Ljubljana free of charge, non-exclusively, geographically and time-wise unlimited the right of saving this written final work of studies in the electronic form, the right of its reproduction, as well as the right of making this written final work of studies available to the public on the World Wide Web via the Repository of the University of Ljubljana;
10. my consent to publication of my personal data that are included in this written final work of studies and in this declaration, when this written final work of studies is published.

Ljubljana, July 27<sup>th</sup> 2019 Author's signature: 

## Table of Contents

List of Figures.....	IV
List of Tables.....	IV
List of Abbreviations.....	IV
1. Introduction.....	1
2. Literature Review.....	4
2.1. Traditional Airlines and LCCs.....	4
2.1.1. Southwest: The First LCC.....	4
2.1.2. LCCs in Europe.....	5
2.1.3. Airline Alliances.....	8
2.1.4. Successes and Threats of LCCs within Europe.....	9
2.2. Decision-Making.....	10
2.2.1. The Decision-Making Process.....	11
2.2.2. The Concept of Utility.....	13
2.2.3. The Concept of Rationality.....	14
2.2.4. Errors within Decision-Making.....	14
2.2.5. The Concept of Choice Architecture.....	15
2.2.6. Travel Related Decision-Making.....	16
2.3. Millennials.....	18
2.3.1. Defining Millennials.....	19
2.3.2. Millennial’s Characteristics.....	20
2.3.3. Millennials and Tourism.....	22
2.4. The Context for this Study.....	24
3. Methodology.....	26
3.1. Background.....	26
3.2. Philosophy.....	26
3.3. Data Collection.....	28
3.4. Data Collection Method Adopted.....	28
3.5. Stated Choice Experiment.....	28
3.5.1. Pilot Experiment.....	30
3.5.2. Designing the Self-completed Online Choice Experiment.....	30
3.5.3. Time and Location.....	32

3.5.4.	Sample .....	32
3.5.5.	Limitations.....	34
3.6.	Data Analysis .....	34
3.6.1.	Research Ethics.....	35
4.	Data Description and Analysis .....	36
4.1.	Response Rate.....	36
4.2.	Demographic Information.....	36
4.3.	Sample Characteristics.....	38
4.4.	Scenario Description and Analysis .....	39
4.4.1.	Scenario One.....	41
4.4.2.	Scenario Two.....	47
4.5.	Summary of Data .....	51
4.6.	Data Collection Limitations.....	52
5.	Discussion and Findings.....	52
5.1.	Discussion.....	52
5.1.1.	Scenario One.....	53
5.1.2.	Scenario Two.....	55
5.1.3.	Comparison of Findings .....	57
5.2.	Recommendations for LCCs.....	59
5.3.	Recommendations for Destinations .....	59
5.4.	Limitations .....	59
6.	Conclusion.....	60
	References .....	63
	Appendices .....	68
	Appendix 1 – Pilot 1.....	68
	Appendix 2 – Pilot 2.....	73
	Appendix 3 – Final Survey.....	75

## List of Figures

Figure 1: Framework to Travel Choice Decisions (Woodside & Macdonald, 1993, p.33).	17
Figure 2: Summary of Living Generations (Pendergast, 2010, p.2).....	19
Figure 3: Frequency of Choices Selected in Both Scenarios.....	40
Figure 4: Frequency of Combination of Choices .....	41
Figure 5: Frequencies Scenario 1 - Age .....	41
Figure 6: Frequencies Scenario 1 - Gender .....	42
Figure 7: Frequencies Scenario 1 - Educational Status .....	43
Figure 8: Frequencies Scenario 1 - Educational Background .....	44
Figure 9: Frequencies Scenario 1 - Income .....	45
Figure 10: Frequencies Scenario 2 - Age .....	47
Figure 11: Frequencies Scenario 2 - Gender .....	48
Figure 12: Frequencies Scenario 2 - Educational Status .....	48
Figure 13: Frequencies Scenario 2 - Educational Background .....	49
Figure 14: Frequencies Scenario 2 - Income .....	50

## List of Tables

Table 1: Participant's Demographics .....	37
Table 2: Participant's Demographics - Country of Birth and Residence.....	38
Table 3: Normality of Curve for Flights per Year.....	39
Table 4: Chi-Square Test Scenario 1 and 2 .....	40
Table 5: Chi-Square Test and Cramer's V Scenario 1 - Age .....	42
Table 6: Chi-Square Test and Cramer's V Scenario 1 - Gender .....	43
Table 7: Chi-Square Test Scenario 1 - Educational Status.....	44
Table 8: Chi-Square Test Scenario 1 - Educational Background.....	45
Table 9: Chi-Square Test Scenario 1 - Income.....	46
Table 10: Group Statistics Scenario 1 - Flights per Year .....	46
Table 11: Independent T-Test Scenario 1 - Flights per Year .....	46
Table 12: Chi-Square Test Scenario 2 - Age.....	47
Table 13: Chi-Square Test Scenario 2 - Gender.....	48
Table 14: Chi-Square Test Scenario 2 - Educational Status.....	49
Table 15: Chi-Square Test Scenario 2 - Educational Background.....	50
Table 16: Chi-Square Test Scenario 2 - Income.....	51
Table 17: Group Statistics Scenario 2 - Flights per Year .....	51
Table 18: Independent T-Test Scenario 2 - Flights per Year .....	51

## List of Abbreviations

LCC	low-cost carrier
EU	European Union
AMT	Amazon MTurk

## 1. Introduction

Travel behaviour and decision-making is an ever-changing concept which like many other trends has experienced changes driven by Millennials. This generation's behaviour has created changes in many industries through disrupted innovations and this can also be seen in the tourism sector. Low-cost airlines have had a great impact on the change in travel behaviour of many people. Not only do low-cost carrier (LCC) compete with traditional airlines but also with ground transport alternatives (Doganis, 2001). Especially in the generation of Millennials, it seems that many go against the traditional understanding of destination choices, selecting differently to previous generations (Veiga, Santos, Águas, & Santos, 2017). Nonetheless, there has been fairly limited research done on Millennials even though they will become an increasingly more important segment in the future of tourism (Glover, 2010). The increased accessibility of travel through LCCs has also given more possibilities for Millennials to travel (Glover, 2010). Further, many Millennials see air-travel as their preferred mode of transport (Gheorghie & Moraru, 2017). Nonetheless, a gap in the research will be established when looking into the impact the availability of LCCs has on the destination choices made by Millennials. Some literature was found looking at students' transportation and vacation choices, in for example the Netherlands (Grigolon, Kemperman, & Timmermans, 2012). This research discusses the decision between various transportation modes but does not take into consideration the choice of the destination itself. In addition, also the demographics of college students who travel as well as users of LCCs have been researched (O'Connell & Williams, 2005). Further, the choices of destinations and their preferred attributes have been looked at in terms of younger generations (Sirakaya & McLellan, 1997). Nonetheless, no research was found that questions the relationship between the availability of affordable airline tickets and the chosen destination. Often the offer of a cheap flight to an unknown destination is the driving factor for the choice to travel to this destination even though it would usually not be a primary choice. This change in behaviour can especially be anticipated within Millennials. Nonetheless, this research will conduct some primary data collection to refute or validate this assumption.

This research could benefit individuals but also businesses and destinations, whose future customers will be Millennials. In this thesis, Millennials will be defined as individuals born between 1982 and 2000 which also can be classified as Gen Y. In literature, there is a disagreement on which dates clarify as the border between generation Y and Z. This will also be discussed in the literature review and why these specific birth years were chosen will be explained. In addition to this, the way Millennials make choices and how they can be therefore attracted could be of great benefit to find out. Moreover, it could also be of use for LCCs to see the change in the decision-making of destination choices of Millennials. Furthermore, with airlines such as Norwegian Air Shuttle or LEVEL starting to offer low-cost long-haul options this research could in the future potentially also be



applied to this. As this research is limited to European Millennials and travels within Europe.

Consequently, the purpose of the thesis is to examine how the availability of LCCs impacts destination decision-making among Millennials. Moreover, trying to establish which factors influence the decision to use LCCs as well as what relevance the destination might have in this choice. This thesis aims to understand the factors influencing transport mode choice behaviour in terms of the destination choices for the generation of Millennials.

To fulfil the research aim, these objectives have been established for this thesis:

- 1) Critically analyse secondary data in a literature review regarding LCCs, the decision-making process and the generation of Millennials.
  - a) Providing an overview of the change from traditional airlines to LCCs and their influence on European tourism.
  - b) Generating an understanding of the decision-making process, choice architecture as well as travel-related choices.
  - c) Offering a summary about the generation of Millennials, their characteristics in addition to their behaviour within tourism.
  - d) Critically assessing the previous literature and the lack of research about Millennials' destination choices in relation to LCCs.
- 2) Critically analyse Millennials' destination choices and how they are influenced by LCCs by conducting:
  - a) A self-completed, quantitative, online survey with choice experiments of European Millennials from various backgrounds.
- 3) Critically analysing the findings of Millennials' choices in selecting destinations when provided with different alternatives.
- 4) Creating understanding and giving recommendations to businesses and individuals such as destinations and airlines.

After careful consideration and a move away from general vacation choices to a more specific concept of destination choices as well as keeping these thoughts and its implications in mind, the following research question was created. To what extent are Millennials' destination choices and their decision-making influenced by low-cost airlines?

To give a general overview of the structure of this thesis the following section will elaborate on this. First, this introduction gives a general overview of the background of the research itself. Then proceeding with the research purpose of the paper as well as the

overall aim of the thesis. Next, the research objectives are laid out to demonstrate which steps are taken to achieve the purpose and aim. This is followed by stating the research question for this paper. With the overall structure of the paper, this concludes the first chapter.

The second chapter is the literature review. It will discuss the emergence of traditional airlines and LCCs. The example of Southwest is examined as it is seen as the first LCC established and often used as a model for LCCs in Europe. The emergence of LCCs in Europe is then examined to understand the business model present. LCCs in Europe are strong competitors of traditional airlines which have made them build alliances to combat this threat which is the reason for the following section to discuss airline alliances and their influence. Next, the successes and threats of LCCs within Europe will be discussed to gain an understanding of the potential future of this business model within Europe. The next section discusses decision-making. First, looking at the process as a whole and different findings within literature. Next, the concept of utility and rationality is discussed as it has a great impact on the decision-making process. Potential errors within decision-making are discussed to create an awareness of what needs to be considered when working with choices within the research. Subsequently, the concept of choice architecture is elaborated on to gain greater knowledge about the influence the researcher has when creating choices. Lastly, travel-related decision-making is discussed and what type of decisions it produces. The next section discusses the generation of Millennials. First, they are defined and next their characteristics are demonstrated to gain a better understanding of the generation. Then, the current findings of Millennials and tourism are elaborated to allow for an understanding of the impact this generation has on the sector and how they might behave in certain circumstances. The last section of this chapter discusses the context of this study and where the gap in research is.

The third chapter discusses the methodology of this paper. First, giving some background as well as discussing the philosophy of this research paper. Next, the data collection in general and which one was adopted are discussed. This leads to the chosen method of a stated choice experiment. For this method comments are made on the pilot experiment, the design of the experiment, when and where it was conducted, the sample and the limitations this form of research bring. Next, the data analysis is discussed as well as the research ethics are demonstrated. This methodology section is presented to show how the research was conducted and what considerations were taken.

The fourth chapter discusses the data description and analysis. First, it discusses the response rate and demographics of the primary data collection method. Next, the sample main characteristics are discussed. Further, the survey findings are described and analysed. This will then lead to a discussion of the findings. Moreover, this will then be linked to the theory previously discussed in chapter two to see similarities and differences between the findings and the previous literature. Next, a summary of the findings is given, and some

data collection limitations will be discussed. This chapter will allow for a greater understanding of the results driven by the primary data. Moreover, it provides recommendations and general limitations.

The last chapter will elaborate on a conclusion. It will give an insight into the importance of the research at hand, discuss the objectives set in the introduction and its completion of these. Next, the findings will be concluded then is completed with suggestions for further research. This demonstrates the last chapter of the thesis which will be followed by a list of references and the appendices.

## **2. Literature Review**

### **2.1. Traditional Airlines and LCCs**

According to Liasidou (2013) to enable any form of tourism movement a transport network is necessary which can also include air travel. Gheorghe and Moraru (2017) agree that there is a symbiotic relationship between transport and tourism as the sector does not exist without it. Airplanes are the most widely used mean of transport for global tourists and an important part of the international travel market (Gheorghe & Moraru, 2017). The industry of aviation is directly linked to tourism especially in Europe where it generated receipts of over 700 million Euro per day in 2003 (Liasidou, 2013). Liasidou (2013) states that the accessibility of air travel is driven by connectivity and affordability. Within Europe the introduction of LCCs allowed the consumers to have more choices in the intra-European market. According to the author tourism industries and airlines are undergoing vast changes due to technological improvements, the creation of new business models, the accessibility to new consumers, liberalisation in policies, globalisation, international relations and changes in attitudes of consumers (Liasidou, 2013). The technological changes created comparison websites, which also are a driver for people searching the cheapest possible option to fly (Gheorghe & Moraru, 2017). In 2016, 98% of LCC passengers arranged the trip themselves demonstrating the importance of technology within the LCC segment (Hsu, Yen, Chang, & Woon, 2016). Southwest was the first airline to offer low-cost services (Gheorghe & Moraru, 2017). The phenomena of this airline will be discussed in the next section below to further understand the origin of this change.

#### **2.1.1. Southwest: The First LCC**

The airline started in the US in the 1970s and many European LCCs have adopted its business model since (Grigolon et al., 2012). Doganis (2001) gives an overview in his book of the case of Southwest's business model. It is important to recognise its journey to gain an understanding of the situation within Europe today. Southwest provides unrestricted fares, excellent on-time departures as well as only point-to-point service on short- to medium-haul flights. They acquired business from other airlines but also attracted

a completely new market segment which previously would have used ground modes of transport. This model let air traffic grow above average. Nonetheless, it also meant that Southwest's prices had to compete with other airlines as well as ground transport. Routes were chosen which no other airlines operated on. Therefore, they were able to dominate the routes and offer a high frequency at low fares. In addition, this allows Southwest to avoid head-on competition by using secondary airports. Moreover, revenue is not diluted as only point-to-point services are offered and often smaller less congested airports are chosen to guarantee a turnaround of 15 to 20 minutes. This quick turnaround allows the airline to fly its aircrafts for longer hours and therefore further spread annual fixed costs. In addition, Southwest also does not offer different seat categories, such as business class, which means the number of employees can be reduced and space is optimised. Besides, space optimisation is created through smaller pitch and gallery space which allows more seats in the aircraft. Moreover, wages are also lower for staff as they are usually young or are given shares in the company rather than money. Additionally, Southwest's own ticketing system is used and commission for travel agents is eliminated. Nonetheless, the yield generated by the airline is similar to traditional airlines, but the costs are substantially lower. These mentioned adjustments allow Southwest to operate at a 25% to 40% cost reduction towards their competitors. Regardless, within the US, time has shown that many LCCs do not survive but the large airlines that could benefit from economies of scale do (Doganis, 2001). Southwest is an exception to this which is why this case was demonstrated by Doganis (2001) to understand the foundation that led LCCs in Europe to develop, which will be examined in the following section.

### 2.1.2. LCCs in Europe

It is crucial to look at the impact that LCCs have on the European market to comprehend the current situation and why the understanding of this phenomena is so vital (Doganis, 2001). According to Doganis (2001), the liberalisation of policies in the mid- to late 1990s in Europe allowed for the appearance of LCCs such as EasyJet, Ryanair, Air One and Debonair based on the Southwest model discussed previously. Initially, most air travel was regulated by individual bilateral agreements between various countries which according to Doganis (2001) hindered the development of LCCs within Europe. Doganis (2001) states that this is due to the fact that these bilateral agreements were used to prevent LCCs to enter new markets and protected traditional airlines. Following the bilateral agreements within the European Union (EU) a single open aviation market was created. This single market policy was developed in 1993 and also meant that by the end of 1992 immigration and customs controls between the member states were eliminated and therefore within the EU, flights were treated like domestic journeys (Doganis, 2001). Which means that there were also no restrictions on capacity, between any EU country even outside the airline's origin country (The Council of the European Communities, 1992).

According to Doganis (2001), this deregulation was created in the phase of open skies. The liberations of market access spread within the EU and there are only regulations on

competition rules. This way no airline can become a monopoly in the markets, therefore hindering them from becoming anti-competitive and negatively impacting the consumers. For example, during the setup of the alliance of Lufthansa and SAS, a number of conditions were imposed on the airlines by the European Commission. The development of the single aviation market within the EU and the creation of the competition rule took place at the same time. In 2001, 28 countries were included and therefore most of Europe was covered by the open skies policy (Doganis, 2001). Doganis (2001) argues that the deregulation allowed for a more liberal fare regime as well as capacity sharing of routes and the entry of new airlines. When more carriers entered a route the competition significantly lowered prices. Nonetheless, international aviation still is regulated in other areas. For example, the aviation between the EU and third countries is still regulated with bilateral agreements and therefore there is no full deregulation of international air services. This means that all routes to points outside the EU, to a third country, are regulated by individual air service agreements between those countries. The seventh freedom, of operating a route completely outside of the origin of the airline, is rarely granted which means the skies are not fully open.

All EU airlines can be owned by non-EU nationals, but this foreign ownership must not exceed 49%. These ownership rules are in national economic interest to support and sustain national airlines. This also meant that countries which were not able to have their own airline previously are now able to develop successful, strong airlines due to the change in ownership rights. The previous policies did not allow for international airlines to operate in other countries and therefore limiting small nations from having access to air transport. Many third countries such as the US have not relaxed the ownership rules on operating outside their own country routes. Nonetheless, many airlines bypass this by building alliances with airlines from the third country through code sharing, which often is criticised as it confuses and misleads costumers. To create full global open sky regulations the ownership rule would have to be relaxed internationally. Some countries have implemented an ownership rule based on the location of headquarters rather than national ownership. Further deregulation would give states more choices on which carriers they could designate for their air traffic rights. Also, countries without airlines could designate non-national carries and therefore participate more in international air transport (Doganis, 2001). Any deregulation would have a positive impact on air travel as regulations are hindering for LCCs and aviation overall (O'Connell & Williams, 2005).

Due to the change in regulations, nonetheless, LCCs have been able to reshape the competitive environment within liberal markets and have made a significant impact on the intra-European market and around the world (O'Connell & Williams, 2005). Even though Castillo-Manzano and Marchena-Gómez (2011) argue that domestic travellers are less likely to choose LCCs than international tourists, as they might choose their domestic flag carrier if there is one. Therefore, the greatest niche for LCCs are intra-European continental flights which 36% of European travellers chose (Castillo-Manzano &

Marchena-Gómez, 2011). A dramatic change within the European air travel has been caused by LCCs as they have given more access to travellers in terms of connectivity and introduction of new routes (Doganis, 2001; Liasidou, 2013). After the entrance of LCCs, traffic grew, even doubled in some instances. LCCs have stimulated demand and generated higher traffic which was added rather than stolen from established airlines. This means LCCs increased air travel over the years enormously and encouraged movement that had not previously been taking place (Doganis, 2001). In Europe, 14% of air travel was provided by LCCs in 2005, a great proportion of 9% of the total was supplied by Ryanair and EasyJet. Ryanair increased its capacity by 44% in 2003 and seat capacity has tripled overall, between 2000 and 2005. In 2002, LCCs accounted for 1/3 of all flights between the UK/Ireland and Europe (O'Connell & Williams, 2005). This increase in competition and the deregulation of the markets allowed for discounted fares and a reduction in prices. Many rising economies generated business travel, as well as increased income, stimulated leisure travel. It was predicted that the growth rate of air travel in the world would grow at about 5% in the first decade within the new millennium. Air traffic is predicted to grow twice as fast as the world's GDP. Nonetheless, the growth in Europe is below or at the average world growth rate. Due to overcapacity in many markets especially on international routes, airlines have to fight over market share, and this decreases average yields which means that many airlines cut fares to fill up empty seats. Today, to be financially successful airlines have to consider cost reduction long-term (Doganis, 2001). This is also the reason why LCCs are 40% to 60% cheaper than traditional airlines within Europe (O'Connell & Williams, 2005).

The segmentation of users of LCCs lets various findings arise between authors. O'Connell and Williams (2005) argue that LCCs attract mainly leisure travellers whereas Doganis (2001) states that LCCs attract both business and leisure equally. Grigolon et al. (2012) agree with the first authors that LCCs are mainly used by leisure tourists and rarely by business travellers. This difference in opinions is supported by Clavé, Saladié, Cortés-Jiménez, Young and Young (2015) who state that there are differences between business and leisure travellers as well as mature and emerging destinations in terms of the use of LCCs, but research is limited. Whereas other authors argue that this is caused by a stronger airline preference of leisure tourists than business travellers (Hess, Adler, & Polak, 2007). Further, it is argued that frequent flyers prefer LCCs (Castillo-Manzano & Marchena-Gómez, 2011) which could also apply to business travellers. However, it can be seen that both mature and emerging destinations benefit from LCCs (Clavé et al., 2015). But due to the desire to go on short breaks and the LCC offerings, consumers are pushed towards different destinations away from traditional ones (Veiga et al., 2017). In addition, low-cost tourists often stay shorter in a destination than consumers who use traditional airlines (Clavé et al., 2015). Nonetheless, O'Connell and Williams (2005) show that many users of LCCs splurge on accommodation due to savings on flight prices. LCCs are especially appealing to people who seek low costs and have ample time such as Millennials or student (Grigolon et al., 2012; O'Connell & Williams, 2005). Many consumers of LCCs are young

adult friends travelling together (Clavé et al., 2015). Finding the cheapest option is one of the main drivers for this segment to choose LCCs, therefore prices were the greatest driver in the study by Hsu et al. (2016). In addition, there is a strong positive bias of young individuals towards LCCs (O'Connell & Williams, 2005). Nonetheless, the fare-sensitivity decreases with an increased income, independent of age (Hess et al., 2007). However, LCCs attract new users who previously could not afford to travel (Grigolon et al., 2012). Another niche segment is individuals who are visiting friends and relatives (VFR) (O'Connell & Williams, 2005). This is also supported by Castillo-Manzano and Marchena-Gómez (2011) who see a strong link between LCCs and VFR tourism. Furthermore, LCC customers are more used to using the internet as a research and booking tool and many consumers have shifted to using regional airports as LCCs have been based there (Grigolon et al., 2012; Liasidou, 2013). This shift to LCCs has been so strong that over 65% of LCC users did not look at traditional airlines when planning their travel (O'Connell & Williams, 2005). Another business model prevalent today are major airline alliances which will be looked at in the next section.

### 2.1.3. Airline Alliances

The rise of LCCs such as Ryanair and EasyJet also let established airlines such as British Airways and KLM to launch their own LCC subsidiaries Go and Buzz, respectively. However, big airlines have also managed to fight off LCCs due to their size as they have a marketing advantage and network scope. There are different alliances, airlines join into to gain an advantage towards competitors: strategic and marketing alliances. Many airlines also go into route-specific alliances sharing only a certain route or city pairs. Another common alliance is a global strategic alliance which should include joint sales offices, schedule coordination, frequent flyer programmes, maintenance activities etc. This alliance allows for coverage of great geographical areas and provides a world wide web as well as a large scale of operations. The biggest global alliance is Star Alliance. Nonetheless, large airlines were not able to achieve small unit costs no matter of their scale in comparison to LCCs, but they enjoy a distinct marketing and strategic advantage to survive. An alliance allows for an extension of geographical reach at a low cost. Competition can be reduced by forming alliances and building code sharing (Doganis, 2001). Doganis (2001) argues that there are two main ways of making profits within the airline industry today, either through a network approach by building alliances and the other is through the LCC business model approach. LCCs force traditional airlines to drop their own prices. There is a competitive advantage for established airlines as they often control the slots at airports. New airlines struggle to obtain sufficient terminal gates and runway slots to compete. Alliances between airlines will carry up to 60% of travellers and might completely dominate certain markets. When an airline becomes dominant at a certain airport through alliances it can happen that they abuse this opportunity and therefore stifle new entrants and LCCs. Slot dominance can create issues for new entrants even when the airlines do not use the slots, they will not be available to new entrants (Doganis, 2001). The question arises what the factors are that

make LCCs so successful within Europe even though they face such strong competition. This will be discussed in the next section.

#### 2.1.4. Successes and Threats of LCCs within Europe

The proportion of low-fare travellers has risen substantially and LCCs give fierce competition to established airlines domestically but also internationally especially on price (Doganis, 2001; Grigolon et al., 2012). One of the factors allowing LCCs to succeed is the relatively low aviation fuel prices and their stability over the years. In addition, disintermediation helps airlines to bypass traditional travel agents and deal directly with the consumers generating savings on commissions. Electronic commerce is used to reduce costs and improve services for consumers to sell and distribute their products (Doganis, 2001). Many travellers organise their travel independently with the suppliers directly over the internet (Liasidou, 2013). Therefore, ticketless travel has become normal and has been introduced by LCCs generating more savings. A higher proportion of LCC users would recommend LCCs to others, than users of traditional airlines, as new consumers do not mind the lack of service when the price is low enough. This means that airlines with low prices and no-frills were recommended more than airlines with frills. In addition, the seat density of LCCs allows for great savings on unit prices and the high frequency as well as the quick turnaround of an average of 30 minutes, achieves a higher daily aircraft utilisation (Doganis, 2001). Ryanair even often achieves a plane turnover of 25 minutes (O'Connell & Williams, 2005). Moreover, landing fees and airport costs are also lower when using secondary, smaller airports and a single type of aircraft is used which allows for low maintenance costs, the absence of free catering reduces cleaning time. Therefore, some LCCs can achieve up to 30% higher utilisation of their airplanes. The fixed costs are not affected by the higher amount of flights, but the cost per-km can drastically be reduced. In addition, staff costs are reduced due to shorter turnarounds and more flying per duty period, as well as less staff per aircraft is used by not offering different seating classes and services. These costs are further lowered by employing young staff whose pay is lower as well as costs can be saved by not allowing night-stopping away from their base. Many LCCs were able to negotiate low rates at airports as they bring a lot of traffic to secondary airports and maintenance requirements are outsourced which adds to the reduction in price due to only using one type of aircraft. Business lounges and offices at airports for traditional airlines also increase costs which are eliminated by LCCs not opting for this. Further, transit and baggage costs are reduced by only offering point-to-point service. All these measures allow for a 40-45% reduction in costs. Lastly, all LCCs generate cash flow before the flight as bookings are made prior to departure and therefore cash flow is high as well as reservations cannot be changed or reused which allows for departure without a loss for no-shows (Doganis, 2001). Traditional airlines try to compete by offering lower prices, simplifying their offering and also improving online sales. LCCs often offer fewer routes, less convenient travel times and less accessible airports which can be an advantage for established airlines. In addition, trade-offs between LCCs and traditional airlines are factors such as convenience and services (Grigolon et al., 2012). Another threat could be



the rapid growth of European LCCs, which could endanger their own survival. Growing too quickly will put pressure on reducing fares to fill up their capacities (Doganis, 2001). An example of this fast expansion is Ryanair who wants to become the largest airline in Europe with over 40 million passengers a year (O'Connell & Williams, 2005). In addition, leisure tourists are open to shifting from one airline to another based on the destination and trip itself (Liasidou, 2013). Further, most young travellers are not attached to one airline but use the cheapest one (Clavé et al., 2015). Therefore, it is crucial to understand how choices are made which will be examined in the next section.

## 2.2. Decision-Making

Decision-making is a subject studied extensively in various fields. It is often one of the most studied preference formations within especially marketing (Nicolau & Más, 2008). Depending on the circumstances, decisions can be complex or less so. Nicolau and Más (2008) argue that people have limited capacity for choices and the process becomes more manageable when it is linear. Whereas Jeng and Fesenmaier (2002) state that decisions follow a temporal, dynamic, successive and multistage decision-making process especially for more complex situations. Nonetheless, Simon (1955) agrees that in rational choices all alternatives are evaluated before making the choice but in reality, they are often examined sequentially. In addition, the author discusses that choices are constrained by the alternatives available, the payoffs of each choice and the preference of these payoffs. This also implies that often either the payoff maximums or minimums might be selected (Simon, 1955). Eymann and Ronning (1992) differentiate that when discrete-continuous choices are made, that the decision is based both on the type and amount of a commodity simultaneously. Whereas Simon (1955) sees it more as a complex matter influenced by six main components such as the alternatives, the alternatives that are actually considered, each outcome of the choices, what the pay-off will be as well as its outcome that would occur and which information is available about each outcome. These discussions also often evoke the value of choice, if the unconscious or conscious is a better decision-maker and how they influence each other (Simon, 1955). In addition, it is hard to determine to what extent choices are driven by passive information catching or incidental learning (Crompton, 1992). Therefore, a decision depends on the characteristics of the task, the factors that need to be considered and the information that is available to make the decision. This means when a decision with few alternatives is faced with reliable information it becomes a simple decision with a single-stage process. Whereas, when a decision is complex with many alternatives and non-reliable or accessible information the individual will use hierarchical decision strategies to make it less formal and easier to decide (Nicolau & Más, 2008). Seeing that there are multiple views on decision making it is important to gain a more detailed understanding of the matter at hand. Therefore, the decision-making process, the concepts of utility and rationality, errors in decision-making, as well as choice architecture, will be examined. Further, after looking at decision-making in general and its complexity one can see that it is important to see it in a context, therefore the section following will look at decision-making in terms of travel.

### 2.2.1. The Decision-Making Process

As mentioned before there are various approaches when looking at how decisions are made. It is a complex procedure which for the use in this paper must be understood more in detail. Human lives are based on decisions as everything is a choice in one way or another. In simple terms when making a decision the decision-maker has to weigh up all the alternatives and decide which one they will choose (Saaty, 2008). Nonetheless, how this weighing up can be performed is a complex process to understand. Saaty (1990) argues that the decision-making process appears as unstructured and therefore can often be challenging to understand when precise findings are sought. This motion is supported by Svenson (1979) who agrees that studying the final decision of the process might not yield the full understanding of the choices made. This is due to the fact, that the final decision does not show the evaluation of each of the alternatives and its aspects which consist of various attributes. These attributes in one way or another affect the overall attractiveness of the alternative chosen through a certain process (Svenson, 1979).

These processes can greatly vary, depending on the complexity and size of the choice, the decision-maker adopts different processes on how to make the final choice (Shafir, 2012). Especially in modern life choices can be interconnected and highly complex (Quadrat-Ullah, Spector, & Davidsen, 2010). If the number of choices is rather small and well understood by the decision maker the individual alternatives can often be evaluated separately and compared one by one (Shafir, 2012). Stanovich (2010) establishes that there are three main steps in the decision-making process: understanding the possible alternatives, their potential outcomes as well as evaluating the consequences of each choice. Saaty (2008) sees it as a more complex process of first establishing the overall as well as multi-level criteria for the decision at hand. Second, all alternatives are compared according to these criteria. Third, the alternatives are prioritised according to the criteria in terms of all levels which will then bring forward a most prioritised choice (Saaty, 2008).

Nonetheless, if there is a highly complex choice at hand a different strategy must be applied (Shafir, 2012). This will allow the decision-maker to select a clear decision of either a concrete choice or the understanding that none of the choices is preferred (Edwards, 1954). The decision-maker can decide to include or exclude any elements of the choice depending on their priorities to allow for a focused and less complex decision (Saaty, 1990). Shafir (2012) agrees that a preselection through the elimination of choices can be completed, which means that the decision-maker only selects one aspect that they deem most relevant and eliminate the choices according to it. This can be seen as a simplifying strategy which can be adopted when the choices are too complex (Shafir, 2012). Therefore, it is challenging to deal with complex and dynamic decisions which are often based on a set of choice stages rather than a singular choice. These dynamic decisions are based on a variety of choices which are interdependent and the environment surrounding the choices changes as a result of the decisions (Quadrat-Ullah et al., 2010). To

deal with this complexity Saaty (2008) argues that criteria with sub-criteria can be created. Therefore, a scale can be used to measure and understand the important or dominant aspects that need to be evaluated by the decision-maker. These scales and priorities must be set based on the criteria of the decision-maker as well as their higher goals. This means that these criteria might be personal and intangible therefore it can be difficult to understand and complete the decision task. Alternatively, the decision-maker can also decide to rate the categories and preferences which will allow them to select an alternative based on this technique (Saaty, 2008).

A highly complex process was established by Svenson (1979) including seven types of decisions and their processes where number one to three are non-compensatory and four to seven are compensatory decisions. These seven types will be further examined to understand the difference in decision types according to Svenson (1979). The first type of decisions is based on ordinary attractiveness and no commensurability where commensurability is defined as something that can be given a monetary value. When a choice falls under this type of decision there are three potential processes. The dominance rule argues that one alternative should be chosen over the other one if it is a better choice. The conjunctive decision rule affirms that the decision-maker should create a criterion for all the alternatives which the chosen choice must exceed to be selected. The disjunctive decision rule implies that also a standard should be created and the choice that is chosen must be at least greater than the criterion where the other choices must fall below the measure. The second type of decisions is based on ordinary attractiveness, lexicographic and no commensurability. The lexicographic decision rule explains that the most attractive choice in terms of the most important attribute must be chosen. If two choices are equal the next most attractive attribute will be compared until a choice can be made. The elimination by aspect rule touched upon before by Shafir (2012) discusses that the most important attribute must be investigated and all alternatives which do not satisfy this attribute completely, must be eliminated until one choice remains. The third type of decisions is based on ordinary differences, lexicographic and no commensurability. There is one rule for this type of decisions which is the minimum difference lexicographic rule which clarifies that each aspect has a minimal difference to the other aspects and the decision is based on these differences. The next type of decisions is based on ordinal attractiveness and commensurability. There are three processes within this type. The maximizing number of attributes with superior attractiveness rule states that the choices selected must have the greatest attractiveness in comparison to its alternatives. The next rule is based on elimination by the least attractive aspects which means that the decision eliminates alternatives based on their worst attributes, the remaining choice will be selected. The opposite of the previous rule is based on the choice made due to the most attractive aspect which means that it eliminates the other choices that did not qualify. The fifth type of decisions is based on ordinal attractiveness difference and commensurability. There is only one process for this type of decisions which is the choice by greatest attractiveness difference rule, this looks at the most attractive aspect which is used to make a choice

without regarding any other aspects. The sixth type discusses decisions which have interval attractiveness and commensurability. There are two process rules based on these types of decisions, the addition of utilities rule being the first. It looks at the sum of all utilities, a concept further discussed in the next section, and selects the one with the greatest utility overall. The second rule of this type is the addition of utility differences rule which generates a decision based on not the sum but the differences of utilities. The seventh, as well as last, kind of decision type is based on ratio attractiveness and commensurability. The subject expected utility model generates the utility for each aspect that should be weighed by its probability of the utility and a decision should be based on its outcome (Svenson, 1979). This seems a very complex framework to internalise when making especially intuitive decisions. Nonetheless, Svenson (1979) also states that when a decision-maker has dealt with a similar decision in the past the process of making a comparable choice again becomes streamlined and therefore might not include the whole complex process of decision-making. Further, the author states that to gain a full understanding of the decisions an individual makes also their emotions must be examined (Svenson, 1979). As mentioned before the next section will further discuss utility to understand its impact on decision making and to clearly understand all of Svenson's (1979) decision-making processes.

### 2.2.2. The Concept of Utility

As established before, most decisions are based on some maximisation in one way or another. This means that the decision-maker will choose the best alternatives among the choices provided (Edwards, 1954). Svenson (1979) explains that maximised utility is understood as the process where all aspects are evaluated by their greatest attractiveness to select the best choice. When researching decision-making processes the subject itself often does not matter as much as the decision made and its attractiveness or utility to the decision-maker (Svenson, 1979). Edwards (1954) argues that humans base their choices on the premise to seek pleasure or avoid pain. This can be seen as a utility, the idea of either positive utility being pleasure and the negative being pain. Therefore, the decision-maker will choose to create the greatest excess of positive over negative utility (Edwards, 1954). Further developing this idea, expected utility plays an important role in decision-making as it also takes into consideration the probability that the utility will actually occur. This means that the decision-maker tries to optimise and fulfil their goals through their choices based on the greatest expected utility. Hence, making a rational choice based on the utility together with its probability that it will actually occur. Therefore maximising the expected utility is not always based on generating the most pleasure possible but might also mean it is based on bringing the decision-maker closer to their goals (Stanovich, 2010). Edwards (1954) agrees that the decision-maker does not just prefer a choice but might add the probability to it to make their choices. Therefore, rather than just maximising utility they maximise the expected utility which does not have to be the same as expected value (Edwards, 1954). Expected values are based on numerical values and some choices have an expected utility outside a numerical value (Stanovich, 2010). This means that the

subjective importance of an outcome might be different from the actual numerical value. Therefore, the decision-maker often chooses to make a decision based on maximising the expected utility without regard to the expected numerical value of the decision (Edwards, 1954). Consequently, the expected utility can be seen as the basis for some complex decisions (Stanovich, 2010). Edwards (1954) further emphasises that expected utility becomes more important when decisions include risk due to its consideration of probabilities. Nonetheless, Stanovich (2010) points out that probabilities cannot always be calculated and have to be estimated by the decision-maker. To estimate these probabilities but also to understand decision-making in general rationality plays a great part in the process which will be further discussed in the next section.

### 2.2.3. The Concept of Rationality

Most literature on decision-making refers to making rational choices, therefore, it is crucial to understand how rationality influences this process. Rationality can be seen as one of the most important human values in psychological studies. When thinking rational the decision-maker selects choices based on their goals which will positively impact their decision but only if these goals are sensible in the first place. When the decision is good, it often also is rational (Stanovich, 2010). Nonetheless, people do not always act in a rational manner (Edwards, 1954). This can be due to the fact that they are influenced by emotions which can cloud their rationality (Selinger & Whyte, 2011). Edwards (1954) discussed riskless choices which are made by an economic man who is an individual who is fully informed, infinitely sensitive and rational. In this scenario fully informed means that the decision-maker knows all the available alternatives and which specific outcomes they have. Infinite sensitive means that the individual is given choices that are continuous and differentiable. Lastly, rational means that the decision-maker tries to maximise something within the choice. Nevertheless, Edwards (1954) also recognised that it is unrealistic that every decision-maker can always fully embrace these three factors which led to the elimination of the classical idea of riskless decisions. Further, riskless choices assumed that the alternatives are independent which is rarely the case as they are usually completing or competing (Edwards, 1954). Further, the decision-maker will also decide subjectively which context is irrelevant when making their decision. Therefore, the definition of rationality in terms of stable and not influenced by bias is often impossible to find in reality (Stanovich, 2010). Therefore, it can be seen that rationality is an important factor to consider when examining decision making especially as it is not always the case for each individual. In the next section, various factors that can influence the rationality within decision-making will be discussed.

### 2.2.4. Errors within Decision-Making

In reality, as mentioned before, emotions and other factors can play a part when choosing an alternative that gives the decision-maker most of what they want. For example, the decision-maker can experience mental contamination. This means that their decisions can be affected by factors that are not relevant directly to the decision at hand and therefore can

prevent the individual from making a fully rational choice. It has also been seen that it can be harder for the decision-maker to make a choice which will mean they have to give something up rather than acquiring something, as the loss is harder to deal with. Also, individuals depending on their backgrounds and cultures have different preferences which will influence their choices (Stanovich, 2010). Often decisions can also be driven by the environment of the individual as well as the choices of people who surround the decision-maker (Selinger & Whyte, 2011). Moreover, thinking biases can influence the rational choice by making an error interpreting the context of the choice (Stanovich, 2010). Further, there are various other decision biases that lead to choosing alternatives with negative outcomes. These can, for example, be the notion of staying with unusual or default options, which are driven by immediate rather than long-term benefits (Thorndike, Sonnenberg, Riis, Barraclough, & Levy, 2012). In addition, errors can also occur when deciding with wrongly estimated probabilities which therefore negatively impact the expected utility maximisation. Consequently, people often assess probabilities incorrectly or demonstrate other information-processing biases (Stanovich, 2010). Therefore, when researching decision-making the researcher must be aware of these errors but also must understand how their research design can influence the choices made by the subjects. This means that it becomes crucial for the researcher to understand choice architecture and its influence on decision-making, which will be discussed in the section below.

#### 2.2.5. The Concept of Choice Architecture

When researching decision-making a structural analysis is conducted of the final decision selected. Therefore, this process looks at the end result of the decision process and tries to understand the characteristics that lead to the choices. This means that the researcher must influence the factors and analyse the findings to understand the decision-making process. Nonetheless, different subjects perceive the same objective decision scenario in different ways and might react in relation to their own perceptions. Consequently, the same rules and scenarios provided may create different results as well as choices according to individual preferences (Svenson, 1979). Due to this, the researcher needs to be aware of the influence the design has on these outcomes and must understand the choice architecture they are creating. Choice architecture is the framework, the representation or the context which creates various choices presented to the decision-maker (Selinger & Whyte, 2011; Shafir, 1993; Thorndike et al., 2012). The design is very sensitive as it might create certain biases that the decision-maker will apply to it. Therefore, it is an important factor to consider when evaluating people's choices especially as they might vary depending on the cultural backgrounds of the decision-makers. The researcher or choice architect, in this case, is responsible to make sure that their created scenarios are ethical (Selinger & Whyte, 2011). Further, they also have to understand that the more complex the choices become, the greater the choice architect's influence is, for the better or the worse (Shafir, 2012). The decision-makers often do not notice any influence the choice architect has on their decision and even if they do, they often fail to anticipate the effects these changes or manipulations have on their decision. A choice architect can also be biased and might not



always have the best interest in mind. Therefore, any changes they make can influence the decision naturally or deliberately (Adjerid, Acquisti, & Loewenstein, 2018). This means that the choices made by individuals can also be altered by the way they are presented and choice architects need to keep this in mind (Stanovich, 2010). One example of this alteration within choice architecture is nudging. It describes an aspect of choice designs which change people's behaviour to make better choices voluntarily. Nonetheless, nudges can be seen as patronising when the assumption is made that the individuals cannot make the right decision on their own. Further, it could reduce the responsibility of the decision-maker to make good choices independently. Moreover, if there is a bias that can be nudged it does not always mean it should be nudged (Selinger & Whyte, 2011). After gaining a general understanding of decision-making and many of its factors influencing it, it becomes crucial for this thesis to look at decision-making in terms of travel which will be discussed in the section below.

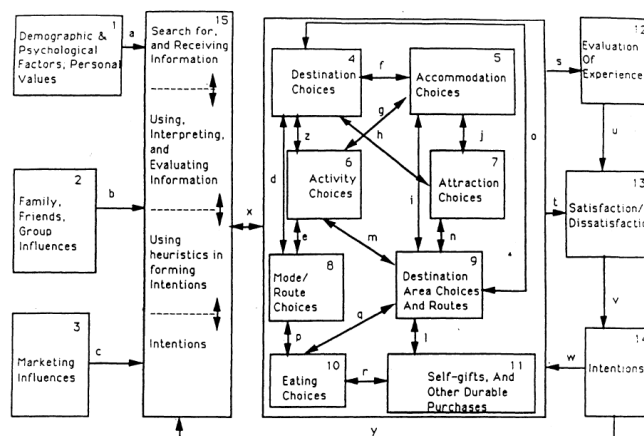
#### 2.2.6. Travel Related Decision-Making

There are various opinions and results that can be found about travel decision-making, therefore they will be demonstrated within this section to get an overview of the various frameworks established. Liasidou (2013) argues that tourism experiences are static and require a holistic approach by the consumer. Whereas Smeral (1985) sees it as a two-phase decision-making process: the choice falls between if either the travel will be domestic or international but other factors were not taken into consideration. A similar approach was given by Eymann and Ronning (1992) who state that most tourists make their decisions on vacations in one to three steps: travel at all, domestic or international and which destination. Therefore, according to Nicolau and Más (2008), previous literature sees destination choices as a single-stage decision where all destinations are considered at the same point in time with the same relevance. Other researchers such as Jensen (2011) place great emphasis on push and pull factors. Where push are factors that are used to explain the desire to travel and pull factors are used to explain preferences for travel types or destinations (Jensen, 2011). A more complex view is taken by Crompton (1992) who sees three stages for selecting a destination and six stages of travel choices. The three stages of choosing a destination are based on a consciousness set, an evoke set and a consideration set. The six stages for vacation choices are first problem acknowledgement, second passive inner search, third construction of an initial consideration sets, fourth active external pursuit of initial consideration sets leading to the creation of the late consideration sets, fifth the active external exploration of consideration sets leading to the selection of a destination and lastly the post-purchase assessment (Crompton, 1992). Hsu et al. (2016) add that a positive destination image has an impact on the decision made by the tourist and that it can be seen as the current perception of the destination but not the actual reality. Eymann and Ronning (1992) further state that rational individuals take into consideration more than just price and income such as alternative-specific and socio-economic variables which could include climate, scenery, age or household size. Even though Crompton (1992) sees it as a complex decision-making process, he differentiates that it can be a low-

involvement decision especially if the vacation is short, close and low-cost. Within this kind of vacation, he does not see a preference of the individual to a destination but rather other factors (Crompton, 1992). Grigolon et al. (2012) contrastingly see the decision more linear, they state that the first choice is if the traveller wants to make a trip at all, then the destination, the mode of transport, accommodation, travel party and length of travel. Nonetheless, this was not given in a specific order and for this research, it will be interesting to see what impact mode of transport, in this case, LCCs have on the decision-making process.

Morely (1994) looks at the subject from a perspective of tourism demand that according to the author begins with a rational decision that is subject to budget and time constraints. Therefore, he shows that demand can be modelled based on price, fares, income as well as other variables and that choices on destinations are intrinsically categorical, multinomial and unordered. Further, he states that airfares are the major price factor in the choice of destinations (Morely, 1994). This is one of the few authors taking this factor into consideration. Sirakaya and McLellan (1997) state it in more general terms as they see costs overall are a strong driver for decisions. Nonetheless, Jeng and Fesenmaier (2002) agree that research suggests that travel decision-making behaviour is not singular but multifaceted behaviour with many sub-decisions. Therefore, they are cognitive processes that are driven by motivations, beliefs and attributes whereas behavioural once are driven by information gathering and option/action plans. Which means that travel decision-making involves multiple choices such as destination, activities, travel mode, travel party, dates and length. Through the process, the travel decision is a development adapting and adjusting over time and it is a hierarchical as well as a multistage contingent process (Jeng & Fesenmaier, 2002). Woodside and Macdonald (1993) on the other hand established eight precise subsystems utilised for travel decision-making. These are the destination, accommodation, activities, visiting attractions, travel mode/routes, eating options, destination areas as well as self-gifts and other purchases. The authors formed this together to a complex framework which is demonstrated in Figure 1, showing a multifaceted set of choices and relationships (Woodside & Macdonald, 1993).

Figure 1: Framework to Travel Choice Decisions (Woodside & Macdonald, 1993, p.33)





Dellaert, Ettema, and Lindh (1998) agree that decisions are not single choices but multifaceted. Further, the authors agree with Jeng and Fesenmaier (2002) that they are evolving over time but add that the destination choice is key for the process and it is based on activities and attributes of the destination. Further, they argue that the choices are interdependent and made at different times.

These choices are driven by certain constraints such as by an authority for example work, by coupling, for instance, a person or family member, by the capacity of various modes of transport as well as resources and availability (Jeng & Fesenmaier, 2002). Dellaert et al. (1998) tried to measure in which order various decisions were made and found that first the destination was chosen and second the choice of who to travel with was completed. Third, the type of accommodation was selected, followed by the duration of the trip. Next the departure date was chosen and lastly, the booking was made. Unfortunately, nothing was collected about transport mode due to miscommunication during the data collection. From these findings, the authors concluded that the choices are subsequent and interrelated (Dellaert et al., 1998). According to Jönsson and Devonish (2008), some literature states that age is not a factor for travel motivation and decision-making. Whereas the authors found that young people's motivation is driven by interactive experiences, noisiness and activity possibilities, therefore their research disagrees with the findings that there are no differences in motivation by age (Jönsson & Devonish, 2008). All these factors within decision-making are complex, consequently for this research, it would be of great use to see how this multifaceted process would be completed by one of the least studied generations within tourism, the Millennials. The specifications and some of the findings about the generation will now be examined in the next section.

### 2.3. Millennials

According to Benckendorff, Moscardo and Pendergast (2010), generational studies help to understand the common and distinctive social character of generations shaped by their experiences. Each generation has unique values, attitudes and behaviours which will allow researchers to understand how they will respond to change (Benckendorff et al., 2010). Pendergast (2010) states that generational studies are not a new concept nor uncontested. These studies seek to characterise and understand the cohorts of people according to their generation which is determined by their year of birth. Nonetheless, it is difficult to determine the exact calendar years of each generation (Pendergast, 2010). An attempt of the classification by birth years was made in Figure 2 below.

Figure 2: Summary of Living Generations (Pendergast, 2010, p.2)

Birth years	Generation name	Age range in 2009
1901–1924	GI	85–108
1925–1942	Silent	67–84
1943–1960	Baby Boomer	49–66
1961–1981	Generation X	28–48
1982–2002	Generation Y	7–27
2003	Generation Z	6 or younger

Pendergast (2010) argues that members of each generation experience events at similar life stages and especially during their formative years, they have a profound impact on their traits, values and beliefs. Moscardo and Benckendorff (2010) agree that each generation will have different worldviews due to their shared experiences. This is further supported by Huang and Petrick (2010) who found that the time someone was born shapes their worldview as well as the value system which determines their interactions with the environment. Most researchers in this field seem to agree that being born at the same time allows individuals to experience the same economic, intellectual, political, cultural and social environment (Benckendorff & Moscardo, 2010; Glover, 2010; Huang & Petrick, 2010;). Santos, Veiga and Águas (2016) support this claim that generations share common features as they have lived through similar experiences but also call for caution as there will still be differences between individuals. This is also further backed up by Moscardo and Benckendorff (2010) who state that generations are not uniform across cultures and places. According to Huang and Petrick (2010), segmentation by generations is a tool within tourism to identify different types and groups of visitors to predict their behaviour. Therefore, it is best to take age and cohort characteristics into consideration to get a full picture of the segment (Huang & Petrick, 2010). Nonetheless, according to Benckendorff et al. (2010), surprisingly little research has been done on Millennials. This is a further factor that supports the necessity of this research, but to be able to gain a better understanding first the generation itself has to be defined which will be demonstrated in the section below.

### 2.3.1. Defining Millennials

When it comes to Millennials there are multiple names that can be used according to Benckendorff et al. (2010) such as Gen Y, Y Generation, Net or Web generation, Millennials, Nexters, Thatcher's children, Generation Next, Echo Boomers or Digital Generation. Within this research, they will be referred to as either Millennials or Gen Y. Multiple authors disagree with what the birth years of this generation should be. Benckendorff et al. (2010) define the years between 1977 and 2003 and Santos et al. (2016) between 1980 to 2000. The Future Foundation and Expedia (2016) selected the years 1982 to 1992 and Veiga et al. (2017) 1982 to 1994. Lastly, Pendergast (2010) defines them as 1982 to 2002 as seen in Figure 2 above, to name a few authors. Moscardo and Benckendorff (2010) have summarised that the start birth dates vary between 1977 and

1983 and the end dates between 1983 and 2009. For this research, it was decided to choose 1982 as the start date as three authors agreed to this date and 2000 as a finishing date as this will make Millennials of the legal age which is important for this study due to ethical considerations. The Future Foundation and Expedia (2016) argue that the group of Millennials is not cohesive. Pendergast (2010) estimated that there are 1.8 billion Millennials globally. In 2014, Millennials were 24% of the EU member states' population (Santos et al., 2016). According to Moscardo and Benckendorff (2010), Gen Y is the most challenging generation to study currently as they are still young and constantly changing. Glover (2010) supports this, in addition, she gives an explanation to the variation in dates as Gen Y is a recent generation in the process of finding themselves, therefore, it is difficult to set a distinct end date. After defining the generation, it will become important to see what characterises have been attributed to the generation to gain a greater knowledge of their behaviour which will be demonstrated in the following section.

### 2.3.2. Millennial's Characteristics

There has been some research conducted on this generation, but it seems like there was no consensus found yet. To see the findings so far previous literature to the characteristics of Gen Y will be examined. Overall, Pendergast (2010) states that Millennials are focused on brands, friends, fun and digital culture. In addition, they are also confident, relaxed, conservative and most educated ever (Pendergast, 2010). The educational status is also supported by Huang and Petrick (2010) who characterise the generation as the best educated and cultural diverted generation yet, therefore, making them more tolerant as well as open-minded. Jensen (2011) agrees that they are tourists with higher educational background and disposable income who are more likely to travel further from home. This notion is further supported by Liasidou (2013) who sees them as more experienced, educated and adventurous than previous generations. In addition, the Future Foundation and Expedia (2016) found that Millennials are willing to put many hours towards their self-development and education. To support Pendergast's (2010) claim that Millennials are focused on friends she states that they are strongly influenced by peers as they are more network focused and not as individualised. This is contradicted by Huang and Petrick's (2010) who claim that they are the most independent decision-makers in comparison to other generations. This is further supported by their notion that they have a more sophisticated choice of products, pricing and decision-making processes than previous generations (Huang & Petrick, 2010).

According to Pendergast (2010) Millennials have been exposed to constant change during their upbringing. This was driven by the change from industrial to information-based economies, a shift from print-based media to multi-media communication and a move from digital environments to the full integration of Information and Communications Technologies. These impacts have made them known as digital natives as they were born into this information age (Pendergast, 2010; Santos et al., 2016). Santos et al. (2016) agree with this finding that they are most engaged with technology yet, but also state that they

were the generation most affected by the worldwide economic crisis. This is further supported by Veiga et al. (2017) as they comment that currently, the level of youth unemployment is higher than average unemployment and that Millennials experience lower wages than previous generations. This means that disposable income is low for this generation. Further, this situation also causes them to be more credit and family income dependant, much later into their lives (Pendergast, 2010). Moreover, Veiga et al. (2017) also support the impact technology has on the Gen Y as they see it as a key driver for the generation in terms of information search, personal and professional use as well as reservations and purchases. The strong integration with technology is also driven by this generation getting more screen time than fresh air (Pendergast, 2010). This notion is also supported by the Future Foundation and Expedia (2016) as they state that the media consumption is the highest in this generation and they are actively seeking the influences of third opinions. This means that Millennials reach out to a higher number of sources when looking for information. They search reviews, blogs and forum posts on top of the traditional forms of information gathering (Future Foundation & Expedia, 2016). Santos et al. (2016) further argue that if Millennials cannot find information quickly, they abandon the search altogether. As mentioned before the opinion of others is crucial, especially the view of their peers and friends (Pendergast, 2010). Pendergast (2010) further explains that peers can be relatively unknown people of their network. Due to this reliance on peers according to Huang and Petrick (2010), Gen Y is anti-corporate, individualistic and resistant to common advertisement as word-of-mouth has become more important to them. Santos et al. (2016) agree with this statement as they found that Millennials are averse to traditional marketing campaigns and advertisement. Veiga et al. (2017) further found that reviews are more important than traditional marketing channels for this generation. Additionally, the Future Foundation and Expedia (2016) found that two in five Millennials admit that their travel decision is influenced by their networks and change day-to-day. Therefore, many brands use consumers as brand ambassadors (Santos et al., 2016). Furthermore, Pendergast (2010) states that they can be characterised as by being able to multitask, that they focus on immediacy and are driven by information connectedness.

The main factors influencing this generation during their formative years according to Pendergast (2010) are the digital revolution, terrorism and financial uncertainty. Further, she classifies them to have seven traits which are first the feeling of being special, as they grew up in small family units and their digital skills make them feel different, also most were planned and not accidental children due to improved birth control. Further, they feel sheltered and are sometimes also referred to as the cotton-wool generation as they were the first generation introduced to safety measures such as helmets and seatbelts. Third, they are seen as confident, forth as team-oriented and fifth as conventional due to the fact that they have fairly common aspirations. Sixth they often feel pressured due to educational and employment challenges and lastly, as achieving due to their high level of education. Moreover, another factor that will affect this generation in the future is an increase in population growth globally. By 2050 Gen Y will have experienced a doubling of the world

population (Pendergast, 2010). All these factors give an insight into certain characteristics of Millennials generally but not much in terms of travel and tourism which will be discussed in the following section.

### 2.3.3. Millennials and Tourism

Some authors have researched Millennials in terms of tourism which will be looked into in the following section. Oppermann (1995) argues that younger generations have an increased travel frequency compared to earlier generations. Further, they will be more experienced in travel than previous cohorts. In addition, he found that there will be a change in the travel life cycle between generations (Oppermann, 1995). Pendergast (2010) agrees that Millennials travel more often than previous generations and that they also explore more destinations. Glover (2010) explains this change is driven by the facts that they have a greater choice of destinations and activities, more freedom to travel and the growing range of tourism opportunities. Pendergast (2010) found some behaviours within this generation in terms of travel: they are spending more on travel, booking mainly over the internet, are hungry for experience as well as information and try to get a lot out of their travels. Moscardo and Benckendorff (2010) contrastingly found that there is little evidence that Gen Y travels more than other generations. This is backed up by a Eurobarometer series by the European Union (2001) that shows that there is a decrease in travel for 15 to 24-year-olds. Further, it stated that 71% of Gen X had travelled internationally whereas only 56% of Gen Y did so. This let Moscardo and Benckendorff (2010) conclude that there is no evidence that Gen Y is more interested or likely to travel than previous generations. Nonetheless, they found that they are participating more often in frequent short travel or spending longer in one destination (Moscardo & Benckendorff, 2010). This change in shorter travel was also supported by Huang and Petrick (2010) who found that Gen Y sees short trips to cities as great destinations more than Gen X and Baby Boomers. This can also be seen by Veiga's et al. (2017) findings that many Millennials prefer cities or emerging destinations. As Moscardo and Benckendorff (2010) mentioned some Millennials also spend more time in one destination which is also supported by the UNWTO (2011) who found that they often spend more days and therefore more money overall. Grigolon et al. (2012) support this, as they found that Millennials travel further and more than previous generations. Nonetheless, the Future Foundation and Expedia (2016) found that one out of three Millennials admit that many travel decisions are very last minute.

When looking at which drivers impact travel behaviour of Millennials it can be seen that they have high concerns for social and environmental impacts but are also leading in innovation and place emphasis on responsible travel (Benckendorff & Moscardo, 2010; UNWTO, 2011). Huang and Petrick (2010) argue that this makes the generation seek a great offering and desire consumer control. The Future Foundation and Expedia (2016) agree that they long for control but also convenience is important to them. This means that Gen Y has a great awareness of travel opportunities (Glover, 2010). According to Veiga et

al. (2017), factors which will impact tourism of Millennials are digital skills, permanent connectivity, the search for outstanding experiences and altruistic behaviour. Further Huang and Petrick (2010) add that they see 24/7 access to support as crucial. This is supported by the Future Foundation and Expedia's (2016) findings that Millennials expect 24/7 customer service. Park, Jang, Lee and Russell (2010) found that most travel and tourism products are purchased online by this generation. The UNWTO (2011) also saw a strong emphasis on technology and stated that Gen Y is open to innovation. The Future Foundation and Expedia (2016) agree that Millennials are reliant on technology but also have an unshakable faith in it. This means they are receptive towards using new, disruptive technologies and are open-minded about future technological possibilities (Future Foundation & Expedia, 2016; Veiga et al., 2017). It is important to understand Millennials due to the fact that by 2020 they will be the largest group of travellers and will generate about 300 million annual trips (Santos et al., 2016). Further, youth and student travel make up about 20% of the global travel market (Gheorghe & Moraru, 2017). Therefore, it is important to not just understand Millennials behaviour within tourism but also their motivations for travel.

Sirakaya and McLellan (1997) found that young travellers place emphasis on price, local hospitality and services, convenience, recreational activities such as entertainment, sporting and drinking as well as a change from their daily environment. Veiga et al. (2017) add that they seek authentic experiences closer to locals and see themselves as travellers, not tourists. Santos et al. (2016) agreed that Millennials are searching for authentic experiences which used to be a niche but has now become mainstream. Which is further supported by the Future Foundation and Expedia's (2016) findings, that Millennials value experiences over possessions. Furthermore, Gen Y thinks outside the box and wants to see new things, meaning they seek change and innovation (UNWTO, 2011). Somewhat contradicting, Jensen (2011) found that young people rated impression and prestige as a stronger motive than other age groups. Glover (2010) adds that Gen Y likes to explore destinations not previously visited. Therefore, destinations struggle to establish long-term relationships with Millennials (Glover, 2010). This is supported by UNWTO's (2011) finding that Millennials are often driven to travel more, for longer time periods and visit non-traditional destinations around the world. This is caused by the fact that they are money poor but time rich. Also interestingly, Millennials decide to continue travelling when things get tough (UNWTO, 2011). This is also supported by Veiga et al. (2017) who found that Millennials have a high likelihood to travel even though they face financial as well as time constraints. Nonetheless, they are sensitive to security and discard the idea of mass tourism (Santos et al., 2016).

Furthermore, the development of LCCs has had an impact on the travel behaviour of Millennials. LCCs attract many young people under 24 years old as passengers (O'Connell & Williams, 2005). Glover (2010) argues that LCCs have made travel more accessible. Many Millennials see air travel as their preferred mode of transport (Gheorghe & Moraru,

2017). Also reduced plane tickets have increased affordability to travel overseas (Glover, 2010). O'Connell and Williams (2005) found that older passengers prefer traditional airlines. Cheaper airfares are anticipated to increase travel domestically and international even further (Glover, 2010). The UNWTO (2011) found that young travellers were the first to use budget airlines and open to trying innovative methods of planning and booking through the internet. This will encourage further growth of travel for this generation as flight ticket prices are at a rock bottom (UNWTO, 2011). Gheorghe and Moraru (2017) found that Millennials are interested in cheap tickets and look for price over comfort, meaning they do not prioritise luxury. This push of the Gen Y towards LCCs can also be seen by the fact that many Millennials in Erasmus use the ESN and Ryanair partnership for discounts (Gheorghe & Moraru, 2017). The WYSE Travel Confederation (2014) found that airline punctuality is most important for Millennials which is one of the key factors LCCs concentrate on. Many Millennials (54%) even stated that they would stand in the airplane for a discount on ticket price. Nonetheless, they also commented that the new hand luggage restrictions are the most negative thing about LCCs (WYSE Travel Confederation, 2014). Often Millennials travel with family which is also due to them staying at home longer because of financial hardship as mentioned before (Benckendorff & Moscardo, 2010). This claim is contradicted by the Future Foundation and Expedia's (2016) finding that Millennials often travel with people who are not either their partners or family. This could be explained by Glover's (2010) statement that Millennials have travelled at a young age with their parents which in turn also made them interested in independent travel later on (Glover, 2010). The Future Foundation and Expedia (2016) also found that Millennials are significantly more international than other generations due to many studying abroad and having friendships online who they go and visit. This is also supported by Gheorghe and Moraru (2017) who found that many young adults are interested in travel during their studies. Santos et al. (2016) conclude that Millennials have travelled frequently prior to adulthood. In addition, Millennials show a unique behaviour due to their dependency on the internet within their travel and tourism overall (Park et al., 2010). Further, they see travel as an obligatory rite of passage (Glover, 2010). This notion is also supported by the UNWTO's (2011) finding that young people see travel as essential. The experiences they gain in their early 20s shape their future patterns for desirable destinations (Glover, 2010). This section gave a summary of some findings of Millennials in tourism. Nonetheless, it also established some gaps in research which will further be discussed below to demonstrate the context that will be evaluated in this research.

#### 2.4. The Context for this Study

When looking at the previous research done in the fields of airlines, decision-making and Millennials in general a gap of the three topics combined has been found which will be further elaborated in this section. Grigolon et al. (2012) established that only a few papers research the portfolio of choices that were made in travel decision-making which gives room to further explore this. Especially as multi-level decisions are complex and need further understanding of the generation of Millennials (Eymann & Ronning, 1992).



Grigolon et al. (2012) further add that research on LCCs is limited in terms of vacation choices. Clavé et al. (2015) agreed that there is a lack of understanding of the segment of tourist using LCCs. Further, Doganis (2001) established that LCCs will erode ticket prices especially in Europe and later also in Asia, therefore, gaining a greater understanding of LCCs' impact in Europe on travel decisions could be beneficial for future markets. Outside the US and Europe, the concept of LCCs is catching on slowly which further creates future importance of this research for emerging LCC markets. Some research has also speculated that the users of LCCs are often indifferent to the destination and are driven by the price which could cause a change in travel decision-making (Doganis, 2001). Doganis (2001) argues that for many tourists low prices become more important than the destination which at least for Millennials this paper will investigate. Hess et al. (2007) further add that airfares have the most power over consumer choice above any other factors. These arguments support the need for further research. Grigolon et al. (2012) found that LCCs and cost considerations were a driver of choices for young adults which some might be Millennials and therefore have become an interesting segment to look at for this paper.

Further, the authors state that there might be a change in vacation planning such as starting with the search of flight tickets (Grigolon et al., 2012). Clavé et al. (2015) further found that the existence of LCCs makes the visit of a destination more likely, but not guaranteed, which means that destinations could benefit from fully understanding if Millennials are driven to visit their destination more if there are LCCs available. This is argued by Clavé et al. (2015) but no detailed research was done for this generation. Grigolon et al. (2012) further support this gap in the literature by stating that research on vacation choices is limited and on transport mode, none was found for young adults. Nonetheless, there is a tendency to present negative stereotypes of Gen Y in media and reports, which makes unbiased research even more crucial (Moscardo & Benckendorff, 2010). Moscardo and Benckendorff (2010) further show that Gen Y has often been dismissed as a subject for research especially in tourism. They theorise that Millennials may have distinctive approaches to travel and that alone should be researched. Further Benckendorff and Moscardo (2010) state that Gen Y has not been given the same amount of research emphasis as other generations. This was also supported by Jensen (2011) who states that more research is needed for different segments and what their motives for travel choices are. Lastly, Millennials could cause some disruption to the industry and therefore further need to be understood (Veiga et al., 2017).

All these factors have led to this research paper to look into the impact LCCs have on the travel decision-making of Millennials as there was no research found that addressed this subject area directly. As mentioned before there have been some attempts done to look at transport modes in general and its impact on decision-making when planning travel but even that has been rather limited. Therefore, the author of this paper has seen it as a gap in the literature and decided to further look into the subject matter to allow a better understanding of these factors in combination. It was surprising to see how little research



has been done on Millennials in tourism generally but also the potential correlation of change in choices caused by LCCs.

### **3. Methodology**

#### **3.1. Background**

The literature review above has highlighted a broad range of knowledge available on various factors that influence destination choices such as airline accessibility, decision-making processes as well as factors specific to the generation of Millennials. However, to create a better understanding of the relationship between these factors as well as their impact on the chosen generation, primary research will be conducted to collect more data. As demonstrated, some previous papers have looked at the factors in isolation, but none were found that collected primary data on the influence that LCCs have on the destination choices by Millennials. Therefore, this will be attempted by collecting primary data including these findings in mind.

To explore the overall aim and objectives of this research paper, the collection of data will focus on a quantitative method which is based on quantities to gain a generalisable result (Veal, 2006). In addition, this kind of data allows the researcher to test theories and examine relationships between variables. A variable is a characteristic or attribute that can be measured or observed which can differentiate between the subjects studied (Creswell, 2013). Quantitative research allows for numerical comparison and analysis based on statistics (Bryman, 2012; Creswell, 2013; Veal, 2006). This gained numerical data could become generalisable in terms of validation of different choices (Bryman, 2012). As this type of research is based on numerical findings it can be used to draw conclusions or test hypotheses from the results (Veal, 2006). Moreover, it allows the researcher to test theories and frameworks to answer a problem or question. This is established by examining the relationship between variables to see why one independent variable influences another dependant one. Therefore, this kind of research is based on hypotheses, if-then logic statements or visual models (Creswell, 2013). Qualitative methods rely on feelings, attitudes and words, therefore creating data which describes experiences and emotions (Ruane, 2005). This method was not chosen for this research paper as a quantitative approach yields more generalisable findings and allows to examine the correlation between LCCs and destination choices of Millennials. Morely (1994) as well as the authors Grigolon et al. (2012) have used quantitative data to explore vacation and destination choices in the form of choice experiments. Keeping these research papers in mind the same method has been adopted for this paper.

#### **3.2. Philosophy**

In any research paper, it becomes crucial to understand the philosophy it is based on to further acknowledge the methods used as well as the viewpoint the researcher takes. There

are various factors to take into consideration when conducting the research based on a philosophy or paradigm. The way the researcher views the world around them is defined as the ontology, whereas how the researcher knows the reality is the epistemology. The axiology is the position the researcher takes on values and the methodology are the techniques that are chosen for the study. All these levels of research are influenced by the philosophy or paradigm of the research which is the belief set that guides all actions of the study conducted (Creswell & Poth, 2018). Therefore, the philosophical epistemology of the research has an influence on the methods employed as well as the research itself (Creswell, 2013). In the mid-1990s there was a common type of epistemology called positivism which was based on the understanding that any knowledge is generated by scientific and quantitative findings (Takai, 2015). This view established that the researcher sees individuals from the outside, therefore, any behaviour is explained through observation and facts gathered (Veal, 2006). It was a strict worldview which did not account for knowledge generated in another way nor did it consider bias (Creswell & Poth, 2018; Hicks, 2018). Followed by this paradigm was postpositivism which believed that cause and effect have a probability to may or may not occur (Creswell & Poth, 2018). Therefore, this new view acknowledged that findings might not be objective or might even be flawed (Hicks, 2018). The postpositivist paradigm was adopted for this research.

Postpositivism seeks to explain the world how it really is and therefore is closely linked to realism (Hicks, 2018). This worldview focuses on observations and measurements of the real world (Creswell, 2013). It enables a scientific approach to research and brings forward quantitative findings. This quantitative data collection based on logical steps will then be used for analysis purposes (Creswell, 2013; Creswell & Poth, 2018). With this form of research, the researcher first begins looking at available theory to then collect data which confirms or refutes the findings within the theory (Creswell, 2013). This is achieved by looking at the probability of cause and effect, therefore, looking at the causes that influence the outcomes. Due to this, this paradigm is often the foundation of experiments (Creswell, 2013; Creswell & Poth, 2018). It has been used in various fields but is often based on natural science but also social science (Hicks, 2018). The connection to social science is caused due to the reason that the findings studied can often be based on human behaviour (Creswell, 2013).

Nonetheless, to make this kind of research valid the interaction with the research subjects must be kept at a minimum. Further, the researcher must limit their bias and should express it, if present, to make the research valid (Creswell & Poth, 2018). This is one of the main differences between positivism and postpositivism that bias is acknowledged as it can never be fully eliminated but the researcher can try to reduce it as much as possible. Further, postpositivism states that knowledge can be generated without having a solid foundation in the theory. Nonetheless, the researcher needs to ensure that the findings of their study are fallible and have warrant (Hicks, 2018). To achieve this, careful

considerations need to be done to ensure this validity of the study which will be further discussed below.

### 3.3. Data Collection

Data collection is an integral part of the research process of a thesis and therefore also for this research paper. It is mainly based on theoretical research which seeks to gain a general understanding of the subject studied within the thesis (Veal, 2006). Due to this, secondary data was examined in the literature review by focusing on peer-reviewed journals, industry reports, conference proceedings as well as book sections which gave a deep understanding of factors influencing the airline industry, decision-making processes as well as the generation of Millennials. First, the airline industry and the changes in terms of LCCs were examined to gain an understanding of how these changes might have an impact on the tourism industry. Secondly, the theory behind decision-making was explored including decision-making processes, choice architecture and travel-related decision-making. This section generated an understanding of the foundation of decision-making and the importance it has for the tourism industry. Thirdly, the generation of Millennials was looked at in terms of defining them and their characteristic also in relation to travel behaviour as well as choices. Lastly, the context for this study was demonstrated to see where the gap in research exists and to establish the importance of this research. Resulting from this examination of literature, it was established that further research should be conducted to gain deeper knowledge about the influence LCCs have on Millennials' destination choices in the form of a choice experiment. In addition, the collected data would allow the researcher to establish relationships between various factors.

### 3.4. Data Collection Method Adopted

To be able to combine theoretical and empirical research as well as allowing them to support each other, primary data will be collected to be applied to the existing theoretical knowledge (Veal, 2006). Primary data will be created through a quantitative method approach through an online self-completed choice experiment. This will take place in the month of May 2019 and will be administrated online. To collect a wide range of population parameters a large sample size is needed. Therefore, it will be aimed to reach about 415 participants to evaluate a great variety of data and to allow for outliers to be excluded while still guaranteeing a big sample size. Nonetheless, this sample size will allow for some generalisations but will not represent the generation as a whole. The combination of primary and secondary data generates a vast pool of information. This allows for an increased understanding of the relationship and confirmation as well as legitimisation of the data acquired.

### 3.5. Stated Choice Experiment

Stated choice experiments were introduced in 1983 to be used for marketing research (Zwerina, 1997). They are based on elements of rational choice, consumer behaviour and

preference theory (Louviere, Hensher, Swait, & Adamowicz, 2000). Over the years they have gained a lot of popularity in research especially in areas such as marketing, tourism, transportation and more. Therefore, they are often used to examine travel decisions and identify responses in certain choice situations (Hensher, 1994). A stated choice experiment is an experiment where choices are given to respondents (Street & Burgees, 2007). Often it is based on a questionnaire which gives the respondents one or more choice experiments to complete (Train, 2009). Within this questionnaire, they are presented with a variety of alternatives and are asked to select their choice or choices from it (Dwyer, Gill, & Seetaram, 2013). This kind of experiment shows the respondents' choices amongst a combination of alternatives and attributes (Hensher, 1994; Train, 2009). Each participant of the experiment makes individual decisions based on a high variety of factors and therefore these decisions can become highly complex (Louviere et al., 2000). This also means that the respondents make a decision by comparing the alternatives and selecting the choice that seems most appropriate to them (Hensher, 1994). Therefore, stated choice experiments are based on the conjecture that the participant will choose the alternative with the greatest utility as discussed before (Zwerina, 1997). This means that the researcher makes the assumption that utility-maximizing behaviour will be demonstrated by the decision-maker (Train, 2009).

To be able to collect data from this kind of experiment, it is crucial that it gives alternatives which are simple, realistic and none-ambiguous while still being of hypothetical nature (Zwerina, 1997). This is the case so that the participant can choose according to what they would do in reality (Train, 2009). Therefore the data collected in the choice experiment demonstrates the potential choices of a hypothetical scenario (Hensher, 1994). This hypothetical situation is used to observe which choices will be made by the respondents based on changes to the alternatives (Train, 2009). Dwyer et al., (2013) point out that this means that the researcher can observe the decision-making process as it is being simulated in the experiment. Further, they argue that therefore a hypothetical decision is demonstrated (Dwyer et al., 2013). This offers some advantages when the researcher achieves a realistic but hypothetical scenario for their research (Zwerina, 1997). Due to the hypothetical nature, the experiment becomes flexible and controlled by the researcher (Louviere et al., 2000). This means that the researcher can form the circumstances of the experiment according to their research (Train, 2009). Stated choice experiments allow for estimations based on the variables that the researcher selects, which can be useful especially in a field where no data exists or it is difficult to obtain (Zwerina, 1997). As a result of these factors, this approach can be seen as a precise device to make predictions about the decision-making behaviour of individuals (Dwyer et al., 2013). These predictions are based on choices out of a well-defined set of possibilities chosen by the researcher (Eymann & Ronning, 1992). In the past, stated choice experiments have worked well in practice and give a solid framework to analyse data about the individuals' evoked choices (Dwyer et al., 2013). This is especially the case when respondents understand the experiment as they are very reliable tools to discover the participants' choices (Louviere et

al., 2000). However, this form of experiment looks at the imagined decisions made and therefore the respondents could choose differently in reality (Dwyer et al., 2013). Nevertheless, it allows the researcher to generate data about choices and trade-offs that are involved in making decisions (Morely, 1994).

Within a stated choice experiment the researcher controls the context and only includes suitable variables in the experiment (Morely, 1994). This allows the researcher to regulate the environment and measure to what extent changes affect the decision made by the individuals (Veal, 2006). Therefore, this control allows the researcher to measure the responses while controlling the factors by regulating the alternatives tailored to the research conducted (Dwyer et al., 2013). The number of choices or alternatives are called choice set (Street & Burgees, 2007; Zwerina, 1997). These alternatives can be forced, where the subject has to make a choice but can also include a none option where no choice has to be made (Street & Burgees, 2007). Alternatively, the researcher can also limit the set of alternatives to two, therefore just giving the option to choose between two choices which makes it a binary response (Louviere et al., 2000). No matter what kind of choice sets are selected by the researcher, this experimental research aims to establish a specific variable that influences the outcome (Creswell, 2013). Therefore, the researcher needs to decide what is appropriate for the research at hand.

#### 3.5.1. Pilot Experiment

Prior to distributing the experiment two phases of pilot experiments were conducted to ensure that the questionnaire and its experiment are conveying the information correctly. The first stage was prior to finalising the form of the experiment. Two people were selected to complete the questionnaire and asked for extensive feedback. Some feedback towards the wording of the demographical questions was altered. Further, together with feedback from the supervisor, it was concluded that the experiment section was too lengthy and did not provide the data that would be useful enough for the research at hand (see Appendix 1 – Pilot 1). A second design was created where there were only minor changes to the demographic section of the questionnaire, but the experiment section was completely changed. This was then again trailed with two new individuals to see how the new experiment would perform (see Appendix 2 – Pilot 2). Small details were adjusted after this, but the main frame of the experiment and the questionnaire was completed. This was provided to the supervisor who had also some small recommendations for changes which were implemented and then distributed (see Appendix 3 – Final Survey). This loop of feedback allowed the researcher to get a greater insight into how questions were interpreted and if the alternatives provided in the choice experiment invoked the considerations planned by the choice architect.

#### 3.5.2. Designing the Self-completed Online Choice Experiment

For this research, a questionnaire was created that included two choice experiments. This questionnaire is based on 13 questions and therefore a fairly short survey. It can be

completed within under five minutes by the participants. First, it demonstrates the research consent for the respondents to ensure that all ethical precautions were implemented and that the respondents are aware of the use of their anonymous data. Following the acceptance of these terms, seven demographical questions are asked to be able to collect data about certain demographical characteristics potentially influencing the choices made. Next, a question about the average annual taken flights is included to see if there is a relationship between the amount of annual travel and choices made. Next, the two choice experiments are presented, and binary alternatives are provided for the respondents to select. There is no possibility for no-choice for the participants in these scenarios. To conclude the survey, the respondents are thanked for their participation and given the possibility to provide any comments or concerns they have. Then the payment code for Amazon MTurk (AMT) is provided to allow for approval on the platform on completion (see Appendix 3 – Final Survey).

The researcher has to decide which alternatives are created for the choice experiments to conduct their research (Hensher, 1994). For the first choice experiment, the setting of the scenario was that the participant should imagine planning a leisure trip where a destination has not been chosen but some alternatives have been looked at and they were narrowed down to two choices. Both destinations have similar touristic offerings and are a Mediterranean destination. The type and price of accommodation and other expenses are similar and therefore excluded from the choice. Both destinations are in a two-hour reach by flight. Factors that were then included in the choices were the destination itself and the prior knowledge of it by the participant, one being an unknown destination and the other a well-known one. Next, the price in choice A for the flight is 40% lower than for choice B. Further, the factor for the punctuality of the flight was given, one being high and the other can vary more. Last, the attribute of the departure and arrival airports' location was given one being less convenient than the other. Therefore, the main factors considered in this experiment are destination image, price of the flight ticket, punctuality and convenience of airport locations. The second experiment had a fairly similar scenario setup. The difference is that the second is a city destination and that the flight duration now is four hours. The attributes included in this experiment also varied. The destination image was considered again one being a known but not major destination whereas the other is a prime destination. Further, the price of the flight ticket was given in monetary values one being twice as much as the other, 45€ for choice A and 90€ for choice B. Punctuality was given as before in the first choice experiment and the convenience of the airports was similar to the previous experiment with the variation that in option A only the destination airport is mentioned as being inconvenient. In addition, additional services are considered in this experiment. The availability of meals is noted that there are none provided in alternative A but a small one in alternative B. Further, the issue of hand and cabin luggage is mentioned. Where A has none included, and B has both included. To compare the two scenarios are set up fairly similar but the differences are the monetary value of the flight ticket and the additional services provided by the airline. Some literature has argued that LCCs new

policies on luggage have driven people to make a different choice, therefore this was chosen for the second experiment to see if that changes the initial choice (WYSE Travel Confederation, 2014).

The survey software was accessed through Syddansk Universitet's provision of SurveyXact created by Ramboll. The link of the survey was extracted to be distributed on AMT to the participants. It was chosen to be distributed as a computer-based questionnaire as it is a method of data collection that reduces the bias that could be introduced by face-to-face completion (Zwerina, 1997). Furthermore, it allows the researcher to reach a large sample size in an inexpensive manner.

### 3.5.3. Time and Location

The choice experiment will be open to respondents for about 14 days starting in the month of May which should allow for sufficient time to collect enough data. This further allows for adequate time and flexibility to generate, analyse and discuss the data collected. The choice experiment was published online on AMT and distributed to Millennials. It was selected that only people from certain nations can complete the survey as this study is focused on the European market. This included the following countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK. These were selected as they belong to either the EU or some of the EEA countries as they all have the same air rights and therefore similar possibilities for LCCs. It was hoped to include more of European countries but there was a limit set of how many nations can be selected which resulted in this choice. AMT was selected as an appropriate collection medium which will be discussed further below in the next section.

### 3.5.4. Sample

When looking at sampling for this paper as it is quantitative, the sample should be relatively large to allow for the generation of analysable data. This is especially important as a relatively small amount of information is collected within a great sample. When using a random sample there is a 95% to draw a true representation of the population which in turn also means that the confidence interval is 95 (Veal, 2006). Veal (2006) suggests that if a population is greater than 10 million, a minimum sample of 384 must be drawn on. As mentioned by Santos et al. (2016) before in 2014 of all the EU member states 24% were Millennials which means about 120 million, therefore, a sample size of at least 415 will be collected to allow for a solid representation while also allowing for some outliers to be excluded. Therefore, this large number of observations will allow for a sufficient amount of data and shows aggregated findings but does not show any individual ones (Zwerina, 1997). Further, participants should be selected at random, meaning the individuals have equal probability to be selected or not. A convenience sample might also be a possibility

when the researcher has access to a naturally formed group such as employees or a classroom (Creswell, 2013).

For this research, as mentioned before, AMT was employed as it is a highly popular tool used when conducting online experiments (Adjerid et al., 2018). It is a reliable method to collect a large convenience sample (Woo, Keith, & Thornton, 2015). Further, it is an inexpensive and effective way to collect data for many forms of research. It is usually a fast process with low-costs and diverse data (Goodman, Cryder, & Cheema, 2013). The sample collected on AMT can be more representative than a convenience sample at a university and of equal quality (Adjerid et al., 2018; Buhrmester, Kwang, & Gosling, 2011; Woo et al., 2015). In addition, it covers a well-balanced range of demographics and has a greater diversity than other internet samples (Buhrmester et al., 2011; Woo et al., 2015). Moreover, it can be seen as bringing very similar results to traditional samples while being just as reliable (Buhrmester et al., 2011; Goodman et al., 2013). AMT has access to over 100,000 workers from over 100 countries with and fairly even split in gender representation of 55% females and 45% males (Buhrmester et al., 2011).

Nonetheless, when using AMT, the motivation for completion is often seen as a potential point of criticism. It can be argued that people who participate in surveys for so low money might not represent the main population. Nevertheless, there have not been any findings in differences between traditional samples and AMT samples in this regard (Buhrmester et al., 2011). Adjerid et al. (2018) support this as they have found no different results between experiments conducted on AMT and traditional samples. This could be due to the fact that participants have many different reasons why they participate in the study other than just money. Further, the quality of the work is not impacted by the money that is provided to the respondents (Woo et al., 2015). This monetary reward is the base of the completion of the tasks at hand at AMT but still, it is an inexpensive method, nonetheless. In addition, participants complete tasks no matter the amount of compensation but an increase in compensation allows for a quicker response rate. A lower monetary amount means that the collection speed is lower but not the quality of the data itself (Buhrmester et al., 2011).

Another point of concern is that AMT participants could potentially complete the same study more than once or that they often complete similar studies and therefore could have more underlining knowledge than a completely random sample. Further, all responses are anonymous which means that there is no way to know if the information given is actually true. It can be argued that face-to-face interactions have more accuracy than anonymous responses (Woo et al., 2015). Nonetheless, the anonymous type of collection can also reduce bias from the researcher being too involved in the collection (Buhrmester et al., 2011). Goodman et al. (2013) found that responses collected on AMT are to 95% accurate and often more reliable than other types of sampling. These are the reasons this sampling method has been chosen for this research paper and some more general limitations will be discussed below to give some considerations to these.



### 3.5.5. Limitations

Every method of research has its benefits and limitations. To ensure the validity of a stated choice experiment the collected information has to reflect the topic studied. Further, to ensure reliability a design needs to be established which produces the same findings when repeated with a different sample (Veal, 2006). Moreover, it is important to keep the alternatives to a minimum to ensure that the experiment does not become too large to be completed successfully (Dwyer et al., 2013). In addition, this fact also affects the quality of the data if it is too long or difficult (Grigolon et al., 2012). Surveys and experiments that are conducted at the destination are observational data and therefore suffer from a selection-bias as that excludes individuals who did not choose a certain destination. This can be avoided when the data is collected from potential travellers in their home countries. Nonetheless, the prime disadvantage of this method is that it is based on intent and not on actual behaviour as mentioned before (Morely, 1994; Train, 2009). This disadvantage is also created by the experiment's hypothetical nature. On one hand side, it gives the researcher the control and flexibility to create a wanted scenario but on the other hand side, it also can lack realism (Grigolon et al., 2012). In addition, the researcher has to be aware of the potential that some respondents might create a game value which means that they seek to give a well-distributed set of responses rather than giving a true representation of their choices. This is a problem within stated choice experiments which cannot be fully controlled by the researcher (Morely, 1994). In addition to game values, there are also other factors within a choice experiment that the researcher cannot fully control. First, there are nonobservable factors that affect the choices of the individuals which they are not even aware of themselves. Second, there are nonobservable factors in the individual utilities that are variances of favouritism, these just demonstrate personal preferences which can be based on many unknown factors. Third, there are measurement errors when the researcher does not know the observable factors or when they measure them incorrectly. Lastly, there are also functional misspecifications in the previous assumptions made by the researcher when setting up the research which might be unintentionally flawed (Zwerina, 1997). Nevertheless, keeping these limitations in mind stated choice experiments have given good predictions in the past and therefore are a solid framework to predict decision-making behaviour when the experiment is designed well (Dwyer et al., 2013).

### 3.6. Data Analysis

The data generated for the sample was quantitative attitude data which was used to perform a statistical analysis. Often researcher tests a theory or hypotheses with their data through this kind of analysis (Creswell, 2013). In this case, first, the response rate of the overall survey will be looked at to see how the completion rate compares to other surveys conducted in a similar manner. This section will also comment on how many responses were used in the analysis and how many had to be excluded and why. Further, demographic information will be demonstrated to see what kind of demographical

background the participants have. Moreover, this allows for an understanding if there is an under- or overrepresentation of any demographical group. Other demographical factors which will be examined are the country of birth and country of residence. As this study only applies to the European market this will guarantee that the participants either are from Europe or reside there. This is crucial to make sure they have an understanding of the LCC availability in Europe. Next, the sample characteristics will be looked at by looking at the normality of the responses to flight per years. This was used as it is a numerical value which therefore can be compared to a normal curve to see how representative it might be to a general population. Further, the curve that would appear is commented on in terms of skewness, symmetry and steepness.

After this, the main part of the description and analysis will follow. This will mainly be focused on the two scenarios provided and which demographics might have an impact on the choice selected. Therefore, first, the general frequencies of choices made in both scenarios will be demonstrated. Followed by the frequencies of the combination of choices to see what the behaviour is. After this general view, the first scenario will be examined. Therefore, the factors age, gender, educational status, educational background and income will be looked at in terms of frequencies. Further, a chi-square test will be completed for each factor to see if there is a relationship. Within scenario one also the factor flights per year will be examined by frequency and through an independent t-test as this is a nominal value. This examination of the first scenario will allow for an understanding of the relationship between choosing LCCs and demographic backgrounds. The same procedure will then also be completed for the responses in scenario two. This analysis is then concluded by summarising the data as well as pointing out some data collection limitations. The findings of this analysis will then be discussed in the chapter following: 5. Discussion and Findings.

### 3.6.1. Research Ethics

Prior to starting this exploration and to comply with research ethics the author received universities' approval to conduct this study. In addition, the following measures were taken to protect individuals' privacy (Creswell & Poth, 2018). Prior to the stated choice experiment, all participants were informed that the data collected will be anonymised. This allowed the researcher to collect data without any information that would make the respondents identifiable. This is important to consider as the researcher is obliged to ensure the confidentiality and anonymity of the data collected (Veal, 2006). In addition, the data collected was stored safely and not accessible by people outside of the research process. Further, the measures below were taken to ensure that participants know that they have the right to exclude their participation if desired (Creswell & Poth, 2018). At the beginning of the experiment, participants were informed that they could leave the questioning at any stage and that their given responses, therefore, would not be included in the analysis. This means that the information which is provided is given on voluntary nature and not

collected through coercion (Veal, 2006). Moreover, no individuals were pressured into giving any responses. Additionally, the respondents were informed of the purpose of the study and the researcher ensured that they did not have any vested interest in the outcome of the study (Creswell & Poth, 2018). Further, the experiment implemented was applicable and suitable to the topic at hand as well as adequate and not excessive (Veal, 2006). In addition, measures were taken to accommodate the code of conduct when completing research such as that the researcher committed to showing negative and positive results alike. Further, it will be avoided to falsify data, evidence, findings or the conclusion. Lastly, no plagiarism was conducted in this paper and sources were acknowledged when drawn upon in an appropriate manner (Creswell & Poth, 2018).

## **4. Data Description and Analysis**

### **4.1. Response Rate**

The self-completed online questionnaire, including a choice experiment, was distributed to 565 participants of which 96 were never completed. Therefore 17% of the sent-out surveys were uncompleted. For an online survey that is a fairly small number of none-completion (Fan & Yan, 2010). Further, 32 were only partially completed which accounts for 6% of all surveys distributed. In addition, 29 completed entries had to be excluded as outliers, as they were either completed by non-Europeans meaning they were neither born nor currently living in Europe. Another factor for exclusion, was when the number given for the question about annual flights was completed incorrectly meaning respondents either gave a monetary value or a year such as '2018' as a response. Therefore, 5% of the distributed surveys were excluded due to these outliers as they would taint the results of this research. This leaves a total of 408 responses that will be considered for this research which is a total of 72% of all questionnaires sent out. Often online surveys only generate a completion rate of 11% which therefore makes this a survey with a high response rate (Fan & Yan, 2010). Moreover, it can be seen that using AMT was a highly effective method for this approach.

### **4.2. Demographic Information**

Table 1 below demonstrates the demographics of the participants, including the frequencies as well as percentages to get a better understanding of their backgrounds. This includes gender, age, whether they are currently in education, their educational background and their income bracket.

Table 1: Participant's Demographics

<b>Question</b>	<b>Answer</b>	<b>Freq.</b>	<b>Percentage</b>
<b>Gender</b>	Females	157	38.48%
	Males	248	60.78%
	Prefer not to say	3	0.74%
	Other	0	0.00%
<b>Age</b>	18-22	67	16.42%
	23-27	153	37.50%
	28-32	109	26.72%
	33-37	79	19.36%
<b>Currently in Education</b>	Yes	171	41.91%
	No	238	58.09%
<b>Educational Background</b>	Less than high school degree	2	0.49%
	High school degree or equivalent	65	15.93%
	College qualification but no degree	55	13.48%
	Associate degree	16	3.92%
	Bachelor's degree	182	44.61%
	Graduate degree (Master and PHD)	86	21.08%
	Other	2	0.49%
<b>Income Bracket</b>	Under 10,000€	126	30.88%
	Between 10,001€ and 14,999€	54	13.24%
	Between 15,000€ and 29,999€	91	22.30%
	Between 30,000€ and 49,999€	56	13.73%
	Between 50,000€ and 74,999€	49	12.01%
	Between 75,000€ and 99,999€	7	1.72%
	Over 100,000€	0	0.00%
	Rather not say	25	6.13%

It can be seen that most demographics have some form of representation but the balance of this is not always quite representative of the general population. When looking at the genders there is an uneven representation with about 38% females and over 60% males. This could be argued is not a true representation of the population itself but potentially of the sample that is available on AMT. Further, the respondents' ages are distributed around the median age of the generation with about 16% being between 18 and 22, circa 38% being between 23 and 27 which is the age of the majority of the respondents in this sample. Further, about 27% are between 28 and 32 as well as around 19% being between 33 and 37 years old. Next, approximately 42% of the participants are currently in education whereas around 58% are not. Moreover, all forms of educational background were represented with the majority holding a bachelor's degree. Lastly, all income brackets were represented except an income of over 100,000€ annually. The majority of 31% have a relatively low income of under 10,000€ a year which could be representative, as Millennials are the generation with the lowest income so far (Pendergast, 2010). Another demographical factor that needed to be considered for this research is the country of birth or residence of the participants. One of the two should be within Europe to allow for an understanding of the LCC situation in Europe, examined within this study. The responses to these questions

are therefore demonstrated in Table 2 below. Three values of the country of birth were excluded and two of the country of residence as they were either unclear or a numerical value.

Table 2: Participant's Demographics - Country of Birth and Residence

<b>Countries of Birth</b>		<b>Country of Residence</b>			
<b>52 Nations</b>		<b>22 Nations</b>			
Albania	2	Moldova	1	Canada	1
Argentina	3	Morocco	1	Croatia	1
Australia	1	Mozambique	1	Denmark	2
Austria	1	Nepal	1	Finland	2
Belgium	2	Netherlands	3	France	29
Brazil	2	New Zealand	2	Germany	53
Bulgaria	5	Norway	2	Greece	3
Colombia	3	Pakistan	1	Hungary	1
Croatia	2	Poland	5	Ireland	9
Denmark	1	Portugal	5	Italy	84
Egypt	1	Romania	11	Japan	1
Finland	1	Russia	1	Malta	2
France	23	Saudi Arabia	1	Netherlands	6
French Polynesia	1	Singapore	1	Norway	1
Germany	30	Slovakia	1	Poland	1
Greece	3	South Africa	1	Portugal	3
Hungary	1	Spain	30	Romania	2
India	21	Sri Lanka	3	Russia	1
Iran	1	Switzerland	1	Slovakia	1
Ireland	8	Trinidad and Tobago	2	Spain	41
Italy	73	Turkey	4	United Kingdom	161
Kenya	1	United Arab Emirates	1	USA	1
Kuwait	1	United Kingdom	132		
Libya	1	USA	2		
Malaysia	1	Uzbekistan	1		
Malta	1	Vietnam	1		

As it can be seen there are 52 nations given as country of birth and 22 as country of residence. There was a high number of respondents born in France, Germany, India, Italy, Spain and especially the United Kingdom. Further, the majority of participants currently reside in France, German, Italy, Spain and the United Kingdom. LCCs are present in these European markets and therefore will give a good knowledge about the current aviation situation.

#### 4.3. Sample Characteristics

To test the accuracy and consistency of the responses given, the only numerical question not concerning demographics, flights per year, was used to inspect the normality of the

curve created. This was done by using SPSS and its descriptives as shown in Table 3 below.

Table 3: Normality of Curve for Flights per Year

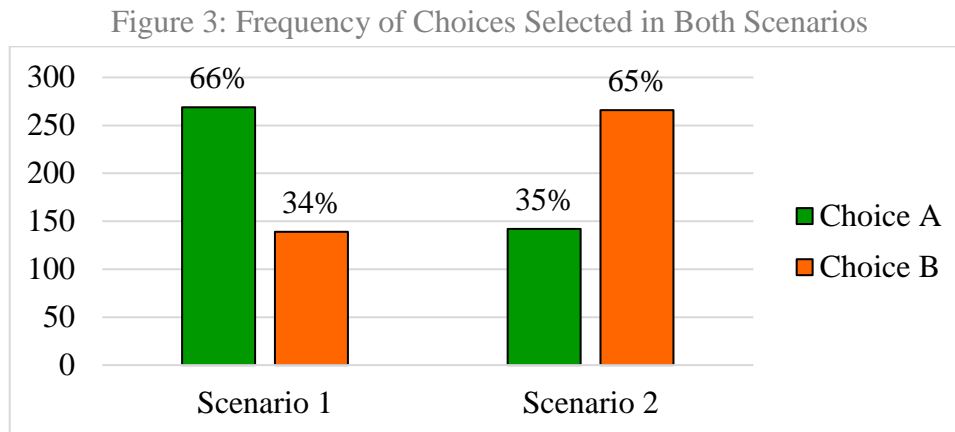
		<b>Statistic</b>	<b>Std. Error</b>
<b>Average Flights</b>	<b>Mean</b>	3.34	.180
	<b>95% Confidence Interval for Mean</b>	<b>Lower Bound</b> <b>Upper Bound</b>	3.08 3.78
	<b>5% Trimmed Mean</b>	2.95	
	<b>Median</b>	2.00	
	<b>Variance</b>	13.257	
	<b>Std. Deviation</b>	3.641	
	<b>Minimum</b>	0	
	<b>Maximum</b>	24	
	<b>Range</b>	24	
	<b>Interquartile Range</b>	3	
	<b>Skewness</b>	2.844	.121
	<b>Kurtosis</b>	10.240	.241

This shows that the data provided does not coincide with the normal curve as mean and median are not the same and the standard deviation is not zero. This description shows that the mean is 3.43 flights on average per year within this sample. Further, the standard error is for this range of data small, therefore the values seem to be a good representation of the population. Further, due to the large sample, the confidence interval for the mean is relatively narrow which means that if this question would be asked again it is likely that the mean with a similar sample would result in similar findings to 95% confidence. This is due to the rather large size of the sample and makes it fairly reliable. When excluding the most extreme lower and upper values, the mean is calculated at 2.95 which does not vary that greatly from the 3.43 mean of the overall sample. Further, the median is 2 which means that the middle of the set excluding outliers lies at 2. The variance of the data set is fairly high with 13.257 meaning that the data is scattered quite far from the mean. Moreover, the standard deviation indicates that the data is more spread out which is also supported by a greater range. Next, it can be seen that since the mean is larger than the median the curve is right-skewed, which can also be seen by the value given under skewness indicating the extent to which the data is not symmetrical. Additionally, the Kurtosis shows that the curve is fairly peak and therefore high around the mean.

#### 4.4. Scenario Description and Analysis

To complete this description and analysis section, Excel and SPSS were used to generate graphs and figures. For this section, it is crucial to understand that in both scenarios, choice A represented the LCCs whereas choice B represented traditional airlines. Therefore, it will become important to see what influenced respondents to choose one over the other.

One of the first things that will be looked at from the generated choice experiment is the frequency of the choices made, see Figure 3 below. For the first scenario choice, A was selected 269 times and choice B 139 times. Whereas in scenario two A was selected 142 times and B 266 times. Giving the premise that choice A represented LCCs and choice B traditional airlines it is interesting to see a change in the decision between the two scenarios.



Using this understanding it was tested if there is a statistical significance between choosing A and therefore LCCs in both scenarios. As it can be seen the chi-square test result is  $p=0.001$  which means that there is a relationship between choosing A in scenario one and two.

Table 4: Chi-Square Test Scenario 1 and 2

	<b>Chi-Square Test</b>				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<b>Pearson Chi-Square</b>	11.371 <sup>a</sup>	1	.001		
<b>Continuity Correction<sup>b</sup></b>	10.644	1	.001		
<b>Likelihood Ratio</b>	11.769	1	.001		
<b>Fisher's Exact Test</b>				.001	.001
<b>Linear-by-Linear Association</b>	11.343	1	.001		
<b>N of Valid Cases</b>	408				

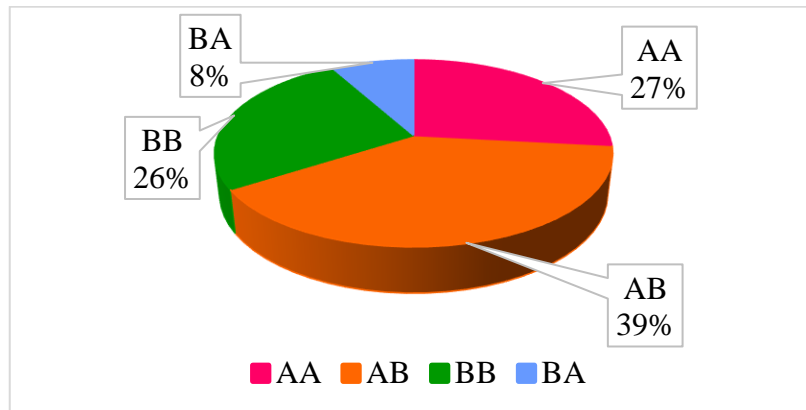
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 48.38.

b. Computed only for a 2x2 table

Looking at the combination of choices that were made their frequencies were also collected in Figure 4 below. It shows that the combination AB and AA were most common closely followed by BB. The least often, BA was chosen. This demonstrates that the majority of 74% of participants chose LCCs in at least one instance (AA, AB or BA) and only 26% did not choose them at all. Nonetheless, the cases of AB and BA are most

interesting to see what made these individuals change their preferences between the two choices.

Figure 4: Frequency of Combination of Choices

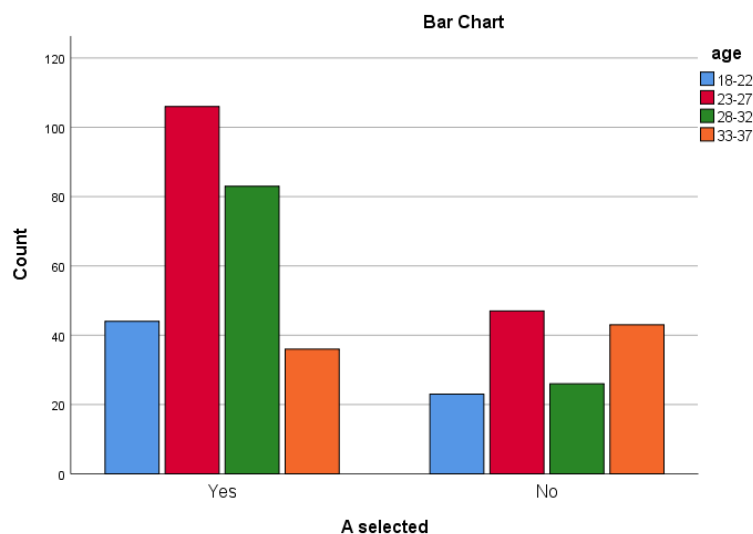


Looking at these frequencies, it will be interesting to see what the background of the participants was selecting either choice. Therefore, both scenarios will be looked at individually in relation to the background factors of the participants.

#### 4.4.1. Scenario One

The first scenario was divided between choice A and B. A represented the LCCs and B represented traditional airlines. 66% of the participants selected A and 34% selected B (see Figure 3 above). To understand the responses better the first scenario will be looked at and what the demographic background the respondents had and how that might have impacted their choices. First, the factors such as age, gender, currently in education, education background, income and annual flights will be looked at in terms of frequencies and means. Then, a chi-square or t-test is conducted to see if there is a relationship between the categorical or numerical variables and the choices made.

Figure 5: Frequencies Scenario 1 - Age





When looking at age, the following frequencies were found for the first scenario (Figure 5). It shows that there was a high frequency of 23-27-year-olds (39.4%) who selected A in scenario one. Followed by 28 to 32-year-old, then 18 to 22-year-old and 33 to 37-year-old last.

Table 5: Chi-Square Test and Cramer's V Scenario 1 - Age

<b>Chi-Square Test</b>			
	<b>Value</b>	<b>df</b>	<b>Asymptotic Significance (2-sided)</b>
<b>Pearson Chi-Square</b>	20.412 <sup>a</sup>	3	.000
<b>Likelihood Ratio</b>	19.856	3	.000
<b>Linear-by-Linear Association</b>	4.907	1	.027
<b>N of Valid Cases</b>	408		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 22.83

<b>Symmetric Measures</b>			
		<b>Value</b>	<b>Approximate Significance</b>
<b>Norminal by Norminal</b>	<b>Phi</b>	.224	.000
	<b>Cramer's V</b>	.224	.000
<b>N of Valid Cases</b>		408	

When evaluating the chi-square test it is important to look at the significance of the Pearson Chi-Square as well as the Cramer's V to see if there is a relationship between the values selected (Table 5). In this case, as the significance of the chi-square  $p=0.000$  is below  $p=0.05$  there is a relationship between age and the selection of A. Further, Cramer's V ranges between 1 and 0. The closer it is to 0 the greater is the significance between the values. Therefore, this further supports the findings that there is a relationship between age and selecting A which means LCCs. Next, gender is taken into consideration.

Figure 6: Frequencies Scenario 1 - Gender

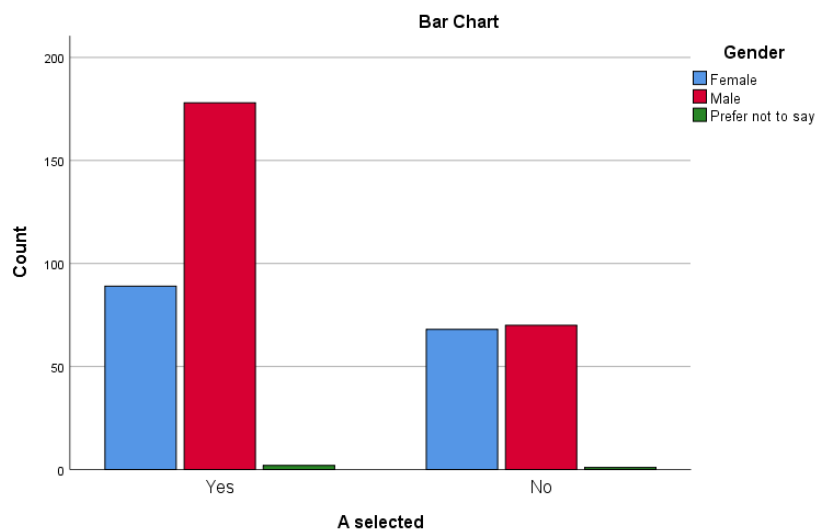


Figure 6 above shows that a greater majority of men selected A over females, where the selection of B was more equally distributed. Therefore, the chi-square test was completed again to see what the relationship is between the two.

Table 6: Chi-Square Test and Cramer's V Scenario 1 - Gender

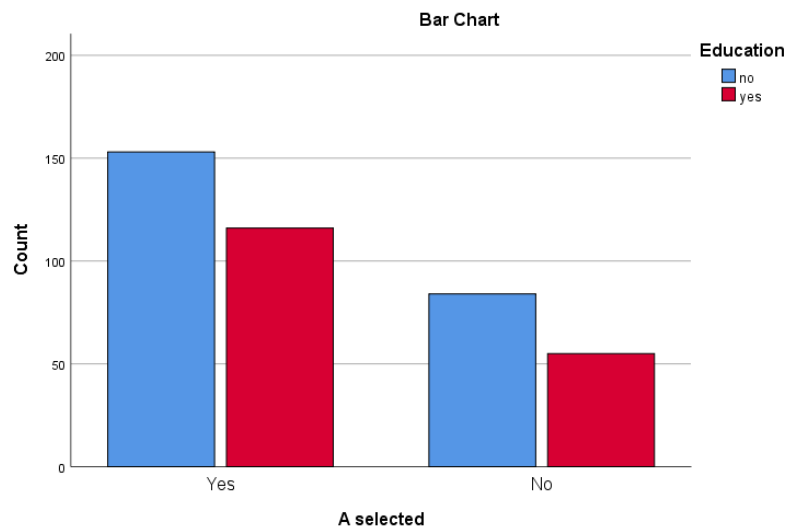
<b>Chi-Square Test</b>			
	<b>Value</b>	<b>df</b>	<b>Asymptotic Significance (2-sided)</b>
<b>Pearson Chi-Square</b>	9.742 <sup>a</sup>	2	.008
<b>Likelihood Ratio</b>	9.649	2	.008
<b>Linear-by-Linear Association</b>	9.209	1	.002
<b>N of Valid Cases</b>	408		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.02

<b>Symmetric Measures</b>			
		<b>Value</b>	<b>Approximate Significance</b>
<b>Norminal by Norminal</b>	<b>Phi</b>	.155	.008
	<b>Cramer's V</b>	.155	.008
<b>N of Valid Cases</b>		408	

According to the chi-square value  $p=0.008$ , there is a relationship between gender and selecting A in scenario one (Table 6). This is again supported by Cramer's V which in this case is even more significant than it was for the factor before. Next, it will be looked at, if the fact that the participant was a student or not had an impact on the choice selected.

Figure 7: Frequencies Scenario 1 - Educational Status



It can be seen in Figure 7 above that more participants, who were not in education currently, completed the survey. But there does not seem to be a relationship between them being in education and the choice selected. Nonetheless, this will now also be demonstrated in the chi-square test.

Table 7: Chi-Square Test Scenario 1 - Educational Status

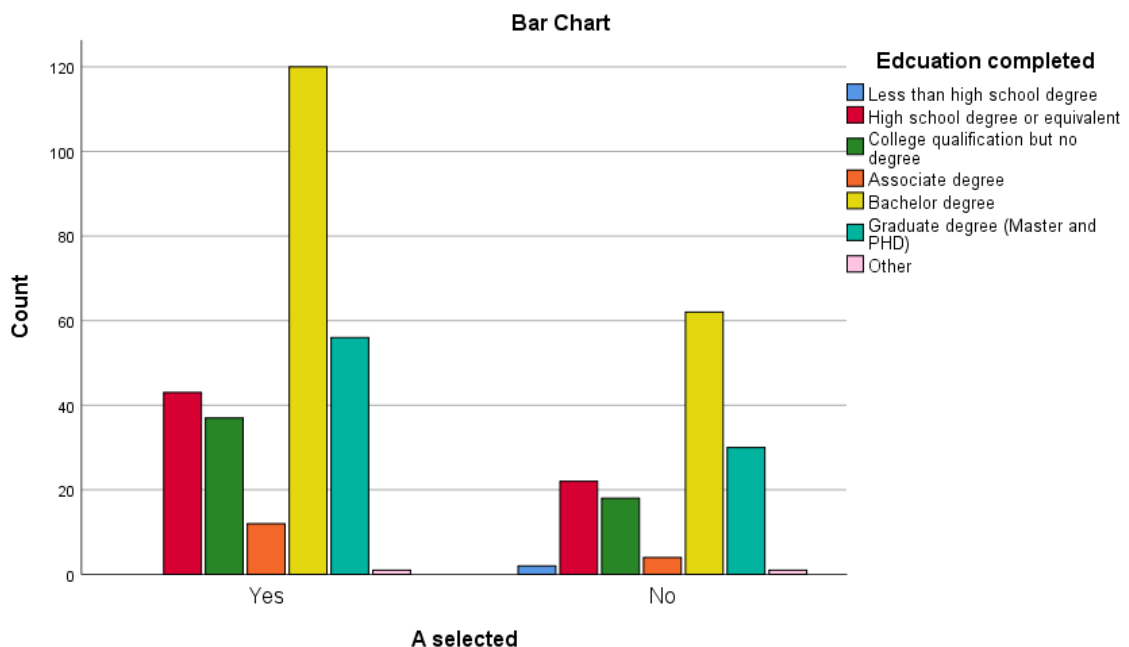
	Chi-Square Test				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<b>Pearson Chi-Square</b>	.476 <sup>a</sup>	1	.490		
<b>Continuity Correction<sup>b</sup></b>	.341	1	.559		
<b>Likelihood Ratio</b>	.477	1	.490		
<b>Fisher's Exact Test</b>				.526	.280
<b>Linear-by-Linear Association</b>	.474	1	.491		
<b>N of Valid Cases</b>	408				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 58.26.

b. Computed only for a 2x2 table

Due to this being only a 2x2 table, the Fisher's Exact Test is also given. Nonetheless, as the sample is larger than 40 the Pearson Chi-Square can still be used and the value of  $p=0.490$  which is larger than the 0.05 (Table 7). This means there is no significant relationship between the educational status of the participant and their selection of A. Therefore, also the results of Nominal by Nominal were not looked at, as the chi-square test already demonstrated the lack of a relationship. Next, the educational background will be looked at to see if this factor has an impact on the choice of LCCs.

Figure 8: Frequencies Scenario 1 - Educational Background



In Figure 8 above it can be seen that the majority of participants had a bachelor degree (44.6%) or a graduate degree (21.6%). Nonetheless, this says nothing about the

relationship between these educational backgrounds and the choice of A. Therefore, this is now looked at by completing a chi-square test below.

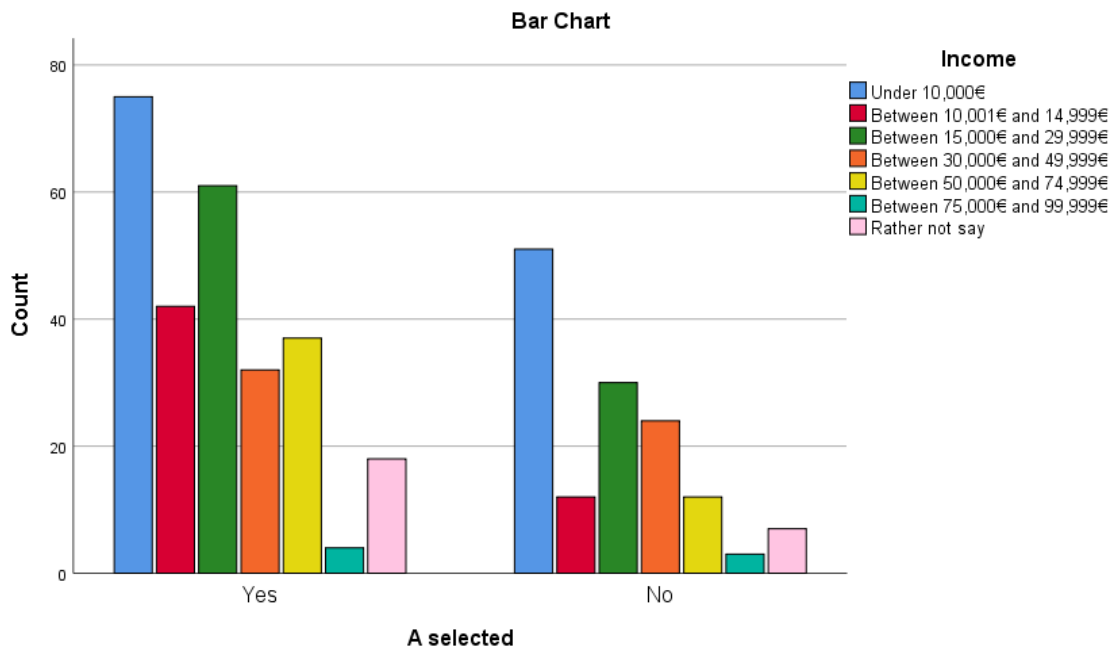
Table 8: Chi-Square Test Scenario 1 - Educational Background

<b>Chi-Square Test</b>			
	<b>Value</b>	<b>df</b>	<b>Asymptotic Significance (2-sided)</b>
<b>Pearson Chi-Square</b>	4.753 <sup>a</sup>	6	.576
<b>Likelihood Ratio</b>	5.209	6	.517
<b>Linear-by-Linear Association</b>	.002	1	.966
<b>N of Valid Cases</b>	408		

a. 4 cells (28.6%) have expected count less than 5. The minimum expected count is .68

Table 8 shows that there is no relationship between the educational background and that A was selected as  $p=0.576$  which is too big. Therefore, also the Cramer's V was not examined as the chi-square value already disproved a relationship. Next, the various levels of income are looked at to see if this factor has an impact on the choice selected.

Figure 9: Frequencies Scenario 1 - Income



This figure above shows that the majority of participants has an income below 10,000€ (30.9%). The second highest value selected was between 15,000€ and 29,999€ with 22.3% selecting this option. Conducting a chi-square test will show if there is a relationship between income and the selecting of choice A.

Table 9: Chi-Square Test Scenario 1 - Income

<b>Chi-Square Test</b>			
	<b>Value</b>	<b>df</b>	<b>Asymptotic Significance (2-sided)</b>
<b>Pearson Chi-Square</b>	10.304 <sup>a</sup>	6	.112
<b>Likelihood Ratio</b>	10.549	6	.103
<b>Linear-by-Linear Association</b>	1.181	1	.277
<b>N of Valid Cases</b>	408		

a. 2 cells (14.3%) have expected count less than 5. The minimum expected count is 2.38

From Table 9 above, it can be seen that there is also again no significance between the income of the participant and them selecting LCCs for their choice. Therefore, also again the Cramer's V value was not evaluated as it becomes irrelevant when there is no relation between the values. Next, the number of annual flights and the selection of LCCs will be looked at below. Due to the fact that the factor flights per year is a nominal value and not a categorical value, like the ones before, an independent t-test will be conducted to see if there is a relationship.

Table 10: Group Statistics Scenario 1 - Flights per Year

<b>Group Statistics</b>					
	<b>A Selected</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
<b>Flights per year</b>	<b>Yes</b>	269	3.420	3.4928	.2130
	<b>No</b>	139	3.451	3.9248	.3329

The table above shows that the average mean between selecting LCCs or not is very similar with 3.420 for yes and 3.451 for no. The standard deviations vary a bit more between the two groups. Nonetheless, the t-test will now demonstrate if there is a relationship between the number of flights and selecting LCCs.

Table 11: Independent T-Test Scenario 1 - Flights per Year

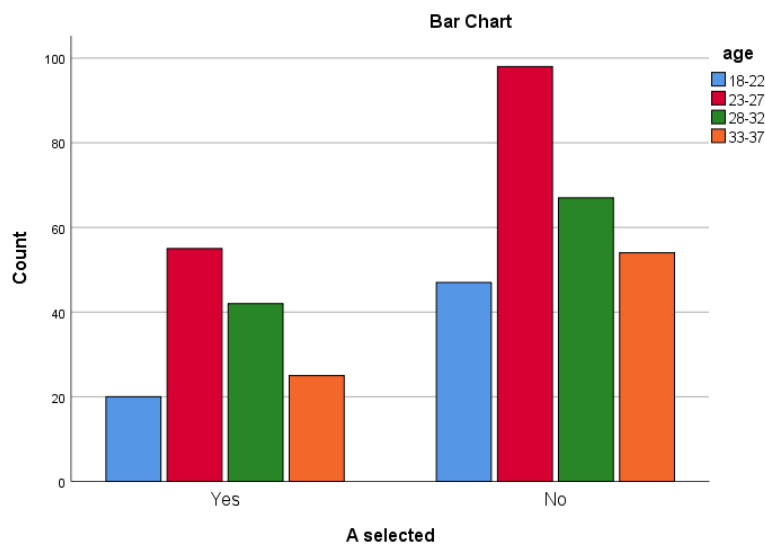
<b>Independent Samples Test</b>						
	<b>A Selected</b>	<b>F</b>	<b>Sig</b>	<b>T</b>	<b>df</b>	<b>Sig. (2-tailed)</b>
<b>Flights per year</b>	<b>Equal variances assumed</b>	.769	.381	-.081	406	.935
	<b>Equal variances not assumed</b>	139		-.078	252.301	.938

In Table 11 above it can be seen that the sig. (2-tailed) for both selecting A or not are almost equal with p=0.935 and p=0.938 These values again show that there is no relationship between the number of annual flights taken and the selection of LCCs. P should have been below 0.05 to show a relationship. Now the scenario two will be examined.

#### 4.4.2. Scenario Two

The second scenario was structured similarly to scenario one where also choice A represented LCCs and B represented traditional airlines. 35% of respondents selected A and 65% selected B (see Figure 3 above). This is a very different result than in scenario one where choice A was selected more. Therefore, it becomes important to understand the background of the respondents more. This will then allow for comparing the differences between the two scenarios. Therefore, first the age, then gender, educational status and educational background will be looked at. Followed by income and flights per year in terms of frequencies and mean. To see if there is a relationship the chi-square or t-test will be completed.

Figure 10: Frequencies Scenario 2 - Age



The figure above shows that the majority in both choices was the age bracket of 23 to 27. Therefore, most people selecting choice B were 23 to 27-year-olds followed by 28 to 32-year-olds. Now a chi-square test was completed to see if there was a relationship between the two, age and choice selected.

Table 12: Chi-Square Test Scenario 2 - Age

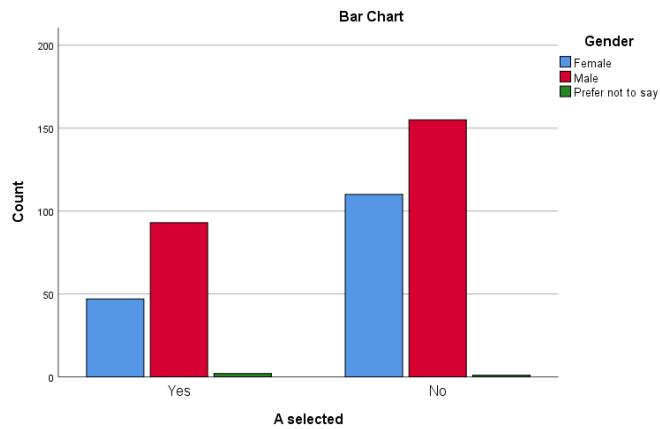
<b>Chi-Square Test</b>			
	<b>Value</b>	<b>df</b>	<b>Asymptotic Significance (2-sided)</b>
<b>Pearson Chi-Square</b>	1.829 <sup>a</sup>	3	.609
<b>Likelihood Ratio</b>	1.840	3	.606
<b>Linear-by-Linear Association</b>	.064	1	.800
<b>N of Valid Cases</b>	408		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.32

It can be seen above in Table 12 that  $p=0.609$  which means there is no relationship between age and choosing LCCs in this scenario. Therefore, also the Cramer's V has not

been looked at as it becomes irrelevant when there is no relationship. Now gender is looked at to see if there is a relationship.

Figure 11: Frequencies Scenario 2 - Gender



When looking at gender it can be seen that the greater proportion of completing the survey was male. Nonetheless, it seems that the genders are fairly equally distributed between selecting A or not. The chi-square test will be used to see if this assumption is correct.

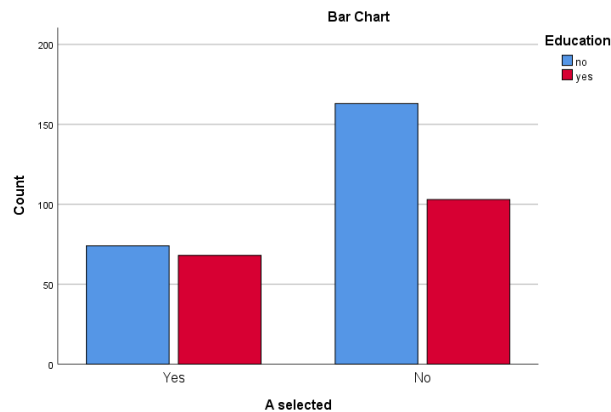
Table 13: Chi-Square Test Scenario 2 - Gender

Chi-Square Test			
	Value	df	Asymptotic Significance (2-sided)
<b>Pearson Chi-Square</b>	3.776 <sup>a</sup>	2	.151
<b>Likelihood Ratio</b>	3.723	2	.155
<b>Linear-by-Linear Association</b>	3.190	1	.074
<b>N of Valid Cases</b>	408		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.04

Therefore, looking at the chi-square test it can be seen that there is no relationship between gender and choosing A or B as  $p=0.151$ . This confirms the assumption just stated above. Next educational status is looked at to find if there is a relationship.

Figure 12: Frequencies Scenario 2 - Educational Status



It can be seen above that there are more people who are not in education that would select A but also the same can be seen in B. Further, the difference within A and the educational status is much lower than in selecting B.

Table 14: Chi-Square Test Scenario 2 - Educational Status

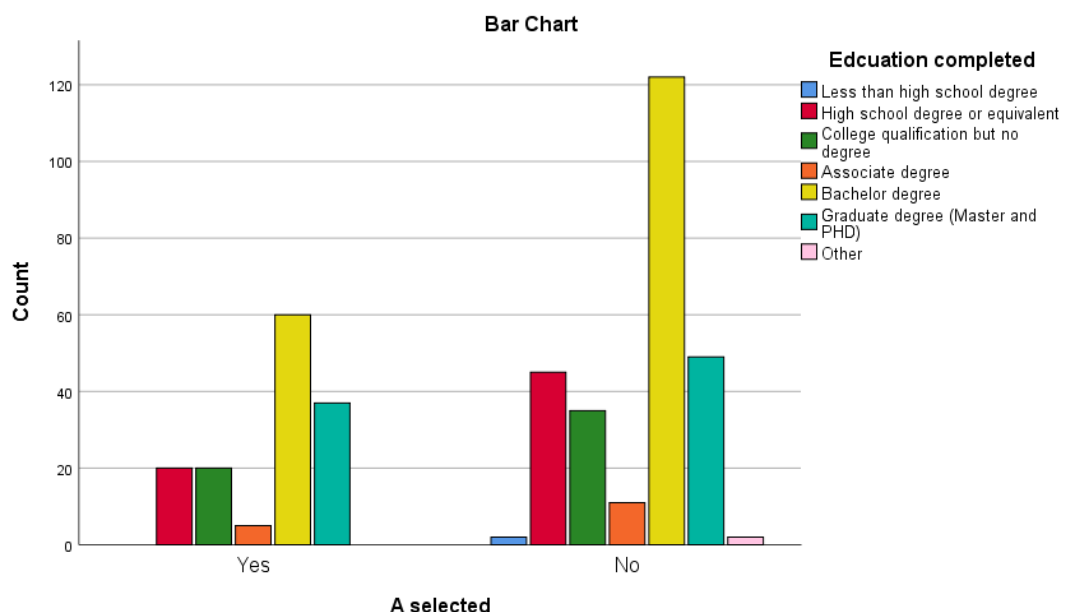
	Chi-Square Test				
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<b>Pearson Chi-Square</b>	3.194 <sup>a</sup>	1	.074		
<b>Continuity Correction<sup>b</sup></b>	2.829	1	.093		
<b>Likelihood Ratio</b>	3.181	1	.074		
<b>Fisher's Exact Test</b>				.092	.046
<b>Linear-by-Linear Association</b>	3.187	1	.074		
<b>N of Valid Cases</b>	408				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 59.51

b. Computed only for a 2x2 table

Due to this being two variables that have only two categories the Fisher's Exact Test is also given. But as mentioned before due to the fact that the sample is larger than 40 sets collected the Pearson Chi-Square can still be used. Here the value for  $p=0.074$  which is close to the margin of 0.05 but not lower than that, which means that there is no relationship between educational status and choosing LCCs. Due to this lack of significance, the symmetric measures were not looked at. Now, the educational background will be examined.

Figure 13: Frequencies Scenario 2 - Educational Background





The figure above shows that the main educational background is a bachelor's degrees and that all the backgrounds seem to have equally selected either choice. Nonetheless, the chi-square test will confirm or reject this assumption.

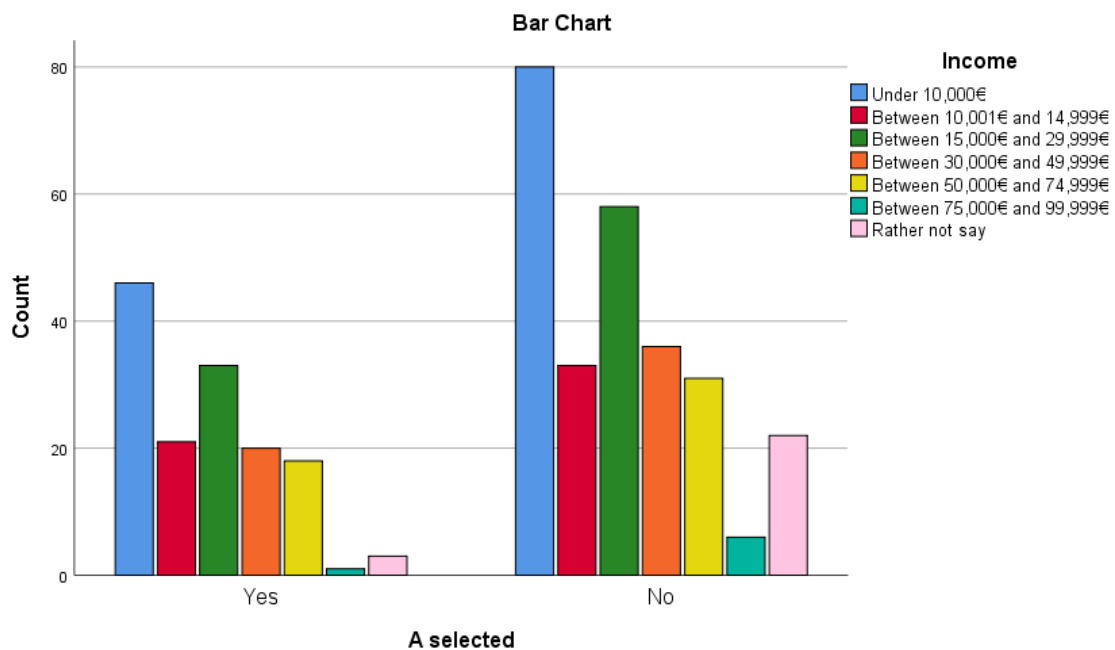
Table 15: Chi-Square Test Scenario 2 - Educational Background

<b>Chi-Square Test</b>			
	<b>Value</b>	<b>df</b>	<b>Asymptotic Significance (2-sided)</b>
<b>Pearson Chi-Square</b>	5.581 <sup>a</sup>	6	.472
<b>Likelihood Ratio</b>	6.803	6	.339
<b>Linear-by-Linear Association</b>	1.256	1	.262
<b>N of Valid Cases</b>	408		

a. 4 cells (28.6%) have expected count less than 5. The minimum expected count is .70

Here, again it can be seen that there is no relationship between educational background and LCCs selected. This can be seen as  $p=0.472$ , therefore, is above the margin of 0.05. Now the last categorical factor, income is examined below.

Figure 14: Frequencies Scenario 2 - Income



Looking at the figure above it can be seen that most of the respondents were of the lowest income bracket but also that the different groups were represented fairly evenly between the two choices. Therefore, the chi-square test will below test the relationship.

Table 16: Chi-Square Test Scenario 2 - Income

<b>Chi-Square Test</b>			
	<b>Value</b>	<b>df</b>	<b>Asymptotic Significance (2-sided)</b>
<b>Pearson Chi-Square</b>	7.773 <sup>a</sup>	6	.255
<b>Likelihood Ratio</b>	9.047	6	.171
<b>Linear-by-Linear Association</b>	3.999	1	.046
<b>N of Valid Cases</b>	408		

a. 2 cells (14.3%) have expected count less than 5. The minimum expected count is 2.44

As previously assumed, it can be seen that there is no relationship between the two values as  $p=0.255$ . Now, the number of annual flights in relation to the chosen alternative is demonstrated below. As mentioned before due to the fact that it is a nominal value the independent t-test will be conducted rather than the chi-square test.

Table 17: Group Statistics Scenario 2 - Flights per Year

<b>Group Statistics</b>					
	<b>A Selected</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
<b>Flights per year</b>	<b>Yes</b>	142	3.952	4.6396	.3893
	<b>No</b>	266	3.152	2.9467	.1807

Table 17 above shows that there is a difference in mean between the annual flight and selecting A or B. The mean is higher for A than it is for B. Further, the standard deviation is much higher for A than it is for B as well. This does not mean that there is a relationship but could be an indicator, so an independent t-test must be conducted.

Table 18: Independent T-Test Scenario 2 - Flights per Year

<b>Independent Samples Test</b>						
	<b>A Selected</b>	<b>F</b>	<b>Sig</b>	<b>T</b>	<b>df</b>	<b>Sig. (2-tailed)</b>
<b>Flights per year</b>	<b>Equal variances assumed</b>	12.195	.001	2.123	406	.034
	<b>Equal variances not assumed</b>			1.863	203.251	.064

Looking at the t-test above it can be seen that the significance of selecting A or B are different. A is  $p=0.034$  and B is  $p=0.065$ . Therefore, there is a relationship when selecting A and annual flight as  $p=0.034$  which is smaller than  $p=0.05$ . This means we can see a relationship between selecting A and the number of annual flights.

#### 4.5. Summary of Data

To summarize scenario one, it can be seen that there was a relationship between age and gender in selecting choice A, therefore LCCs. Whereas there was no relationship for the factors educational status, educational background, income or annual flights when choosing A. Therefore, the same analysis was conducted for scenario two, to see what the

differences are and what might have made participants change from one choice to the other. To summarize scenario two, there were no relationships found between the following factors and the choice of LCCs: age, gender, educational status, educational background and income. But there was a relationship found between the number of annual flights and the choice of LCCs. The implications, as well as similarities and differences between the two scenarios, will be discussed in chapter 5. Discussion and Findings.

Further, it is important to state that the data that was collected by the survey was completed by people of the public who are not experts in the matter at hand. Therefore, the data is based on opinions and views rather than facts, which makes it not objective but biased. Since choices and preferences for this matter were examined in this study this can still be perceived as valid data.

#### 4.6. Data Collection Limitations

The primary data which was collected in the survey and its experiment can have the following limitations which therefore need to be mentioned:

- As discussed before online, self-completed surveys can cause data that might not be fully reliable, therefore if more time would have been available a face-to-face questioning could have been considered even though the biased that this might cause would have to also be reflected on.
- As mentioned before in section 4.3 Demographic Information, many European countries were represented but not all. Therefore, it would have been beneficial to find a more balanced sample within all of the Europe countries as this creates a lack of ability to draw a complete conclusion about the entire market.
- Another limitation is that the genders and age ranges were unequally represented as seen in Table 1 above. Making generalisations for the genders and certain age groups difficult. For example, there was a higher proportion of males participating and only 16.42% were of the youngest age bracket.
- There were also some responses that were excluded such as the annual flight which was completed incorrectly as well as the country of residence or origin. Therefore, rephrasing the questions or limiting the answers to a more restricted style could have made the responses more reliable.

## 5. Discussion and Findings

### 5.1. Discussion

This section is dedicated to the discussion of the analysis of the previous chapter. First, some findings from both scenarios overall will be examined and then an overview of each scenario is given and the two will be compared. It is hoped to gain a better understanding of the differences and similarities between the two. Further, this knowledge will aid to build an interpretation of why certain choices were made and what the influence various

factors had, on these decisions. Looking at each scenario individually and then, in contrast, it is aimed to allow for a comparison of the two scenarios.

When looking at the two scenarios in frequencies, it can be seen that in scenario one about 66% of the participants selected choice A. This is a strong difference to choice B of 34% (Figure 3). When creating the scenarios, it was aimed for choice A to represent the offering of LCCs. Therefore, it was seen that the assumption that Millennials prefer LCCs seemed to be confirmed when looking at this result. Contrastingly when looking at scenario two 35% chose choice A and 65% selected B (Figure 3). In this scenario again A was representing LCCs and B traditional airlines' offering. This response was surprising to see as the variation between the scenarios was rather limited but did provoke a change in choice. Therefore, the frequencies of choice combinations were also demonstrated in Figure 4. It showed that the majority with 39% of the respondents selected AB. Followed by AA with 27% and BB with 26%. The minority selected BA with 8% (Figure 4). It is notable that in total 74% (AB, AA, BA) of all participants selected A in one or more incidents of the scenarios and only 26% did not. But it is also important to acknowledge that 47% changed their initial choice (AB, BA). Therefore, it can be seen that LCCs (choice A) were selected only slightly more frequently than choice B with 73% (AB, BB, BA). This is only a small margin of difference. Further, it is interesting to see why 47% changed their minds. For this, the scenarios will be looked at in isolation in terms of demographic backgrounds to allow for a comparison of them.

#### 5.1.1. Scenario One

First, to better understand the scenario itself the attributes and their levels will be mentioned again to keep these factors in mind. The destination in this scenario was a Mediterranean destination and flying time was two hours for the scenario as a whole. The first attribute was the destination image unknown for A and well-known for B. The next attribute was the flight ticket price which was 40% lower for A and 40% higher for B. After this the attribute punctuality was introduced where A was high and B with more variation. For this scenario also the attribute convince of the location of the airports were given, where in A both airports were inconveniently located and in B both were very conveniently located. These were all the attributes with their levels to consider for this scenario (see Appendix 3 – Final Survey).

The first factor that was looked at in the analysis for scenario one was age. This was done to understand if there is a relationship between age and choice A or B. The analysis showed there was a relationship between these factors. As the p-value was 0.000 and therefore below 0.05 a relationship was established. This means that the age of the participants influenced if they chose LCCs. In literature before, it was stated that the choice of LCCs is often made by young individuals (Clavé et al., 2015; O'Connell & Williams, 2005; UNWTO, 2011). Therefore, it could be seen that this choice supports these literature findings. Further, it has to also be noted that the highest frequency in selecting A was by

23 to 27-year olds with almost 40%. Further, it can be seen that the oldest bracket of the generation the 33 to 37-year-old individuals chose B more than A (Figure 5). This further supports the finding that age has an influence on selecting LCCs, rather than traditional airlines. Another explanation could be that young individuals do not have a loyalty to an airline and therefore are more likely to choose LCCs. In the literature review, it was also found that young travellers are not loyal to one airline but go with the cheapest one, therefore, LCCs (Clavé et al., 2015). This was further supported by this finding.

When looking at the next demographic background factor, gender. It can be seen that this survey had a majority of males in comparison to the general population (Table 1). Nonetheless, when looking if there is a relationship the p-value is 0.008 which demonstrates that there is one. Further, when looking at Table 6 it can be seen that there are more male respondents overall but also the majority, with a great difference to females, chose LCCs. This is a finding that was previously not found in literature and therefore a new finding to the researcher. The difference between males choosing LCCs in comparison to females is quite significant. Further, the Cramer's V test also supports that there is quite a strong relationship as its value is 0.155. The Cramer's V varies between 0 and 1 where 0 is very strong and 1 less significant. Therefore 0.155 can be seen as a strong result. These results are somewhat surprising and should be further examined in future studies.

The next factor for this scenario was educational status. This was used to see if the respondents are currently in education and if that has an impact on their choice for LCCs. It was found that there was no relationship between the two factors. This means that there is no difference between students and non-students choosing LCCs. One of the studies looked at previously focused on students and their transportation as well as vacation choices (Grigolon et al., 2012). Even though no relationship was found within this study it makes sense to look at students as many Millennials are still in education. Nonetheless, this seemed to not have impacted the choice within this scenario.

After this, the factor educational background was looked at. Some literature before has discussed that Millennials are the most educated generation yet (Huang & Petrick, 2010; Liasidou, 2013; Pendergast, 2010). Therefore, it was used as a factor to see if this educational status has an impact on choosing LCCs over traditional airlines. With a  $p=0.576$  it was found that there is no relationship between the two variables. This means, that there is no association between what educational background an individual has and their choice of LCCs. Even though this survey had a high number of participants with a bachelor's degree (Table 1).

The last categorical factor looked at in scenario one was income. The premise from previous research was that fare sensitivity decreases with increased income. Meaning, that people with higher income would decide not to choose LCCs (Hess et al., 2007). Morley (1994) states that there are more factors than just income that needs to be considered when

choices are made. Further, some research has found that Millennials have a low disposable income and therefore might be more price-sensitive (Pendergast, 2010). The findings of this survey showed that it can also be seen in this data that Millennials have a low disposable income as most were stating that their income is below 10,000€ annually. When testing if there is a relationship between choosing LCCs and income, none was found in this study as  $p=0.112$  showed no significance (Table 9). Therefore it does not support the findings that an increased income would have an impact on choosing traditional airlines over LCCs as demonstrated in literature before (Hess et al., 2007).

The last factor looked at for scenario one, was flights per year. This was a nominal factor, so an independent t-test was conducted to see if there is a relationship between this factor and choosing LCCs. In the literature review before it was found that frequent travellers are more likely to choose LCCs (Castillo-Manzano & Marchena-Gómez, 2011) therefore this factor was examined in this research as well. Nonetheless, in this scenario, no significance was found between these two factors. It is therefore as likely to choose LCCs or traditional airlines no matter how much someone flies. Therefore, the annual flight number is not an indicator for choosing LCCs. To compare these findings the second scenario will be examined now.

#### 5.1.2. Scenario Two

To gain a greater understanding of the second scenario the attributes and their levels will be looked at again to keep these factors in mind during the discussion. The destination in this scenario was a city destination with a four-hour flight. The first attribute was the destination image which in A was a completely unknown destination and the prime location in B. Next the ticket price was given in numerical values 45€ in A and 90€ in B. Punctuality was high in A and can vary a lot in B. In A the departure airport was located inconveniently whereas B both airports were located conveniently. This overall are the same attributes used in scenario one but with different levels. Then two new attributes were introduced, meals and luggage. Further, numerical values for money were added and the flight time was increased. In scenario A, no meals were supplied whereas B included a small meal. Further, in A no luggage, carry-on and cabin, were part of the ticket whereas in B this was included in the price (see Appendix 3 – Final Survey). These attributes were added as in previous literature it was found that Millennials think the highest inconvenience of LCCs are their new luggage restrictions (WYSE Travel Confederation, 2014).

The first factor that was looked at in the analysis of scenario two was age. It was tested if there is a relationship between age and choosing LCCs. As  $p=0.609$  it can be seen that there is no relationship between the two values (Table 12). This means that the different ages did not influence the decision made for or against LCCs. Therefore, in this case, all age groups made a similar decision and there was no variation due to age. This contradicts findings of some of the literature previously (Clavé et al., 2015; O'Connell & Williams,

2005; UNWTO, 2011). Nonetheless, this could also be an indicator that in this scenario other factors played a bigger role and the respondents acted on them, rather than their usual behaviour.

The next factor to look at is gender to see if it had an impact on the choices made. When looking at the frequencies it can be seen that the distribution of genders between the two choices seems very balanced (Figure 11). It can also be seen that there are more male participants but there is no big difference between the choices of the two genders. When testing for a relationship between gender and choosing LCCs the chi-square test generated the value for  $p=0.151$  which demonstrates that there is no relationship between the two values (Table 13). This confirms the observation of the frequencies and again leaves the assumption that another factor had an impact on the choices made.

Following, the factor educational status was examined. Looking at the frequencies it can be seen that more respondents were not currently in education than the ones that there are. Further, it can also be seen that more participants not in education selected option B (Figure 12). Just looking at the frequencies one could think there might be a relationship between the two values. When completing the chi-square test it can be seen that  $p=0.074$  which means it is bigger than the 0.05 but closer than previous values (Table 14). As the confidence level of this sample is 5% therefore  $p=0.074$  is too large. Would this sample have a different confidence interval the result might change. Nonetheless, it still shows that there is no relationship and that therefore there are other factors that have influenced the choices made.

Next, the factor of educational background is looked at. Again, looking at the frequencies it can be seen that most respondents had a bachelor's degree within this sample. Further, it seems that all the educational groups are balanced between the two choices (Figure 13). Therefore, it could be assumed that there is no relationship. This is confirmed by the chi-square test that generated a  $p=0.472$  which means there is no relationship between this value and the choices made (Table 15). This again could mean that there was another factor that influences the behaviour of the participants.

The next factor is the last categorical factor looked at which is income. When looking at the frequencies it can be seen that they seem to again be balanced between the two choices (Figure 14). This means that it could be assumed that there is no relationship between income and selecting A or B. Therefore, the chi-square test supports this assumption as  $p=0.255$  which is way above the margin of 0.05 and therefore shows that there is no relationship (Table 16). It again could mean that there was another factor that influenced the choices made. Further, it will be interesting to compare the two scenarios findings to see what the differences are and what could have caused this.

But before, the last factor, annual flights, will be examined to see if frequent travellers make different choices. As this is a numerical value the independent t-test was completed. It was seen that the mean, as well as standard deviation, varied more within this variable (Table 17). This could indicate that there might be some form of relationship. Therefore, the t-test was looked at. It found that for choosing A  $p=0.034$  which means that there is a relationship between annual flights and choosing LCCs (Table 18). In the literature review previously it was found that there is a relationship between frequent travellers and that they are more likely to choose LCCs (Castillo-Manzano & Marchena-Gómez, 2011). This finding from this scenario could support this as there was a relationship established with this factor.

### 5.1.3. Comparison of Findings

After looking at the two scenarios in isolation it becomes crucial to look at them in comparison to see their similarities and differences. The individual factors will be looked at with their findings to see what this could mean, also in terms of the literature discussed before. As mentioned before the main difference between the two scenarios are some levels of alternatives, the introduction of numerical values, the flight time, the destination kind and the inclusion of meals as well as luggage in the second scenario. First, when looking at the factor age it can be seen that in scenario one it had an impact on the decision made whereas it did not in the second scenario. The same applies to gender where it had a significance in the first scenario but not for the second. Further, educational status and background did not have a relationship to the choice made in either scenario. The same applied to income. Lastly, the number of annual flights had no impact on the choices made in scenario one, but they did in scenario two. Therefore, the questions arise why these differences occurred.

One of the possibilities could be the influence of the destination image and its importance to the participants. In the literature previously, it was often theorised that the destination image has a major impact on the choices made (Crompton, 1992; Hsu et al., 2016). The first scenario had a Mediterranean destination whereas the second was a city destination. In scenario one the destination was either unknown in choice A or a well-known destination in B. Further, in scenario two the attribute destination image had the level, known but not a major destination and a prime destination for A and B, respectively. As mentioned in the literature it could be that this difference in destination image attribute levels had an impact. It seems that for a beach destination the image is less crucial as more choose an unknown destination. Whereas in the city destination this seemed to vary as there was a change in scenario choice towards the prime location. As mentioned before by Jeng and Fesenmaier (2002), this could be caused by the fact, that available activities have a great impact on choices. It becomes even more crucial, especially in a city destination. This assumption is also supported by Woodside and Macdonald (1993) who state that visiting attractions has an impact on the decision made. Which means, this factor could have had an influence on the choice more than the offering LCCs have.



Another possible assumption why participants changed their choice from LCCs to traditional airlines might be biased towards numerical money values of the flight tickets. In scenario one, flight prices were mentioned in percentage, either 40% lower or 40% higher. This is a more abstract value for the participants than 45€ and 90€. Even though the difference in the ticket price is lower in scenario one than two. Still, it could be possible that people see more worth in a numerical money value than a percentage one. The participant can decide if they consider that cheap or expensive and what they would be willing to pay. Whereas with a percentage value this is much more conceptual and therefore harder to image. Even though Morley (1994) argues that air ticket prices are a major factor for choosing a destination, within this study, it seems that the offering in scenario two is more important than the price sensitivity. Often also LCCs give the illusion to be cheaper but then have add-ons that cost more than a traditional airline ticket would cost. By giving the numerical value of the ticket it could, therefore, have made the participant chose B over A in scenario two.

Looking into this assumption further, in scenario B services such as meals and luggage were added to the scenario. This could have had an impact on the choices made. As stated in the executive summary by the WYSE Travel Confederation (2014), luggage restrictions have been one of the most negative factors concerning LCCs. Therefore, this could have a great impact on the choices made by Millennials in this study. Most might prefer paying more money but therefore enjoying the convenience of having luggage and meals included. This might have further been fostered by providing a numerical ticket price as this made them consider if this inconvenience is worth the 45€ difference. Moreover, many could have considered this difference in price to be about the same amount of money as add-on prices for LCCs. Further, it can be seen that if this factor is excluded like in scenario one the majority of participants chooses LCCs. The only thing to consider could be that many of the frequent fliers still chose A in scenario two as they know they can also easily travel without luggage and therefore that might have not been one of their concerns.

In this chapter, it can be seen that there were different findings in the two scenarios. In scenario one the factor age and gender had a relationship with the choices made. Whereas in scenario two this was only present for annual flights per year. Moreover, it was seen that many respondents changed their choice from A to B between the two scenarios. This could have been caused by a few reasons such as the influence the destination image has on the choices made. Further, it could also be that the given numerical value for the second scenario made people select a different choice. Lastly, the restriction on luggage and the potential costs that could incur due to the restrictions of LCCs could also change the participants' choices.

## 5.2. Recommendations for LCCs

From the findings of this research paper the following recommendations can be given to LCCs:

- Airlines should consider understanding the importance of the segment of Millennials, their future impact and target them more closely as they have not developed any loyalties to specific airlines yet.
- LCCs need to consider that the new luggage restrictions, even if lucrative, could have negative impacts on consumer moving away from choosing LCCs due to the inconvenience created by these restrictions.
- An analysis into the aversion of females choosing LCCs could be conducted to understand why males are more likely to choose LCCs and therefore also allow for better targeting of females in the future.

## 5.3. Recommendations for Destinations

From the discussion within this paper there are some recommendations that can be made for destinations:

- LCCs have a strong impact on the destination, arguably they can be the deciding factor for someone choosing a destination. This applies for the mature and arising destinations, therefore cooperating with LCCs will increase traffic to a destination. This means it could be seen as a tool for destinations to attract LCCs to increase visitation.
- Building infrastructure that makes airports more accessible will also increase tourism flows as an inconveniently located airport can deter travellers to visit the destination.

## 5.4. Limitations

There are some limitations that need to be reminded of within this study. First, the sample is not representative of the whole population of Millennials but only of the population found on AMT. The tool is useful when finding participants but cannot be seen as a representation of the generation as a whole. Further, participants on AMT are motivated by money and therefore it is questionable if that has an impact on the reliability of the data collected. There was literature found stating that it is not the case, but it is just a consideration as respondents motivated by money might not be representative for the generation as a whole. Moreover, looking at the demographics of the sample it was obvious that they were not as balanced as they would be in the true population. It would have been good, to aim to get a more representative sample especially in terms of some demographics. In addition, as a factor for this study, only the European market was looked at and there might be differences found in other markets and the generation as a whole.

## 6. Conclusion

This study has demonstrated a number of valuable findings through secondary and primary research, which will support a deeper understanding of the impact LCCs have on Millennials' destination decision-making. The findings provided in this paper have given a vast insight into the complexity of this topic at hand but also provided some answers moving forward in this area of research. The primary data collected provides information on a relatively small proportion (408 respondents) of the overall population of Millennials and their views on LCCs. The limitations of scope, time and resources influenced the detail of information provided as well as a more balanced selection of participant's demographics. Due to the high number of all Millennials and the limitations of looking only at the European Market, the findings cannot be used to generalise the generation as a whole. Further, this section will give some more insight into the importance of this research as well as its objectives. It will give an overview of the findings established. Lastly, the ground is given for future research in this closing chapter.

This study was conducted to fill a gap in research as well as gaining a greater understanding of new markets and demonstrate the impact LCCs have on decision-making. Further, Millennials will become a growing segment of the tourism market. Therefore, gaining better knowledge of them will be beneficial. In addition, this research could be useful for emerging markets of LCCs, such as certain areas in Asia, to further understand how it will influence Millennials' choices. Therefore, there is an urgency to understand the relationship between LCCs and the generation of Millennials as well as their destination choices.

The first objective of this research paper was to critically analyse secondary data in a literature review regarding LCCs, decision-making and the generation of Millennials. This was established by providing an overview of the changes from traditional airlines to LCCs and their influence on European tourism. Furthermore, understanding of the decision-making process, choice architecture and travel-related choices was generated. This was followed by a summary about the generation of Millennials as a whole, their characteristics in addition to their travel-related behaviour. Finally, the previous literature and the lack of research about Millennial's destination choices in relation to LCCs were critically assessed. All these objectives were achieved through the literature review.

The second objective was to critically analyse Millennials' destination choices and how they are influenced by LCCs. This was implemented by collecting primary data through a self-completed, quantitative, online survey with a choice experiment of Millennials from different backgrounds. This objective was fulfilled in chapter four and five where the findings were described, analysed and discussed. The third objective was to critically analyse the findings of Millennials' choices in selecting destinations when provided with different alternatives. This objective was also fulfilled in chapter five where the findings

were discussed and linked to the themes of the literature review. The last objective was to create an understanding and give recommendations to business and individuals such as destinations and airlines regarding Millennials' decision-making. This objective was fulfilled in chapter five above, where recommendations were given to these two groups.

One of the main findings in scenario one was that age had an impact on the choices made. Further, it was seen that the younger participants were more likely to choose LCCs than the older ones in this survey. Many Millennials are open to innovation and change which could also explain the attraction of Millennials towards LCCs as they are disruptive and innovative (Moscardo & Benckendorff, 2010; UNWTO, 2011). Further, it was stated in the literature review that Millennials are less loyal to an airline and therefore more open to choosing LCCs (Clavé et al., 2015). This lack of loyalty can be very important to the choices made. Millennials are not loyal to any specific airline but users of LCCs often do not look at traditional airlines when looking for flight tickets (O'Connell & Williams, 2005). Some of these discoveries from the literature were also supported through the findings in this paper. Another aspect that was found and is worth discussing is the finding that in scenario one there was a relationship found between gender and LCCs. It was seen that males were more likely to choose LCCs over women. This was a result not found before and therefore not present in the found literature and its review in this study. The convenience and service by traditional airlines such as connecting flights and customer service could attract women as they can seek security more. Often men, especially young men, can be seen as more of risk-takers and therefore might be more attracted to LCCs. Nonetheless, this is just an assumption as no secondary data was found about this, in this study. Further, it was interesting to see that in scenario two there was a relationship between choosing LCCs and frequent flying. Castillo-Manzano and Marchena-Gómez (2011) stated that individuals who fly more frequently are more likely to choose LCCs than other flyers. This was confirmed by this finding but only in scenario two. Moreover, it could also be assumed that frequent fliers are used to different airlines and have found methods to fully utilise the offering of LCCs. In addition, they might be more aware of promotional offers and cheap prices that are available with LCCs than other travellers. Therefore, the findings supported the literature reviewed. As discussed in the executive summary of the WYSE Travel Confederation (2014) one of the factors that cause the most inconvenience to Millennials when using LCCs is their change in luggage restrictions. Often when travelling with LCCs there is a lot of inconveniences caused by the baggage rules and the potential fines when not following them. Recently, Ryanair introduced even more limitations on hand luggage and therefore the finding in scenario two that the addition of luggage as a factor to consider might have had an impact on the choices made. Many Millennials are irritated by these rules and due to this might decide to choose a traditional airline if the ticket price is reasonable, but therefore this service is included. Further, it can be assumed that the add-on costs for luggage might not make LCCs so affordable anymore. Therefore, this was a very interesting finding in this study and

supported the findings in the executive summary of the WYSE Travel Confederation (2014).

The main objective of this study was to see if LCCs impact the destination choices. In scenario one, it was seen that most people preferred the choice that had a low destination image. A lot of literature found, discussed how crucial the destination is and that it is often the first factor chosen when planning a vacation (Crompton, 1992; Hsu et al., 2016). Whereas Jeng and Fesenmaier (2002) discussed that it is not the destination itself but the activities that are offered. In contrast, Woodside and Macdonald (1993) examined that there are many factors in no specific order that have an impact on the choice made. Due to the fact that there was no clear preference for the level of destination image and rather other factors that influenced the choices made this research supports Woodside and Macdonald's (1993) findings. Further, this finding also contradicts other literature found stating that the destination is the prime factor (Crompton, 1992; Hsu et al., 2016). This could mean that the assumption made that LCCs have an impact on destination choices is true but also that the concept of how the choice is made has changed. At least this can be seen in this sample of Millennials.

For further research, there are some possibilities arising from this paper. First, it would be interesting to conduct this study again with other generations to be able to draw a comparison between the generations. This would show if there is a difference between for example Baby Boomers and Millennials and their relationship with LCCs. Moreover, this could allow for a cross-generational study and comparison. Next, another theme that would be of interest in perusing further, is seeing if the differences in genders and their relationship to LCCs, is just a phenomenon for this sample or if that is a factor not considered previously. It would help to understand if there is a relationship between gender and choosing LCCs. Especially to also allow for better targeting of the segment for LCCs in the future and to see what the reasons are why women might be less inclined to choose LCCs. Another topic to consider for future research is looking more closely into the impact luggage restrictions have and how attitudes change due to this. Within this study, it was seen that the inclusion of luggage restrictions made respondents choose traditional airlines. Therefore, it would be interesting to see what exact factors influence these choices and therefore what impact these changes in policies have on the current demand of LCCs. Lastly, it would be a fascinating study to repeat this analysis in a different market and see if similar findings would be found. Repeating this research in, for example, the Northern American or an emerging market could bring new findings which would be interesting to compare to the findings made in this study.

## References

- Adjerid, I., Acquisti, A., & Loewenstein, G. (2018). Choice Architecture, Framing, and Cascaded Privacy Choices. *Management Science*, 1–24. <https://doi.org/10.1287/mnsc.2018.3028>
- Benckendorff, P., & Moscardo, G. (2010). Understanding Generation-Y Tourists: Managing the Risk and Change Associated with a New Emerging Market. In P. Benckendorff, G. Moscardo, & D. Pendergast (Eds.), *Tourism and Generation Y* (pp. 38–46). Oxfordshire: CAB International.
- Benckendorff, P., Moscardo, G., & Pendergast, D. (2010). *Tourism and Generation Y*. Oxfordshire: CAB International.
- Bryman, A. (2012). *Social Research Methods* (4th ed.). Oxford: Oxford University Press.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk. *Perspectives on Psychological Science*, 6(1), 3–5. <https://doi.org/10.1177/1745691610393980>
- Castillo-Manzano, J. I., & Marchena-Gómez, M. (2011). Analysis of determinants of airline choice: Profiling the LCC passenger. *Applied Economics Letters*, 18(1), 49–53. <https://doi.org/10.1080/13504850903425108>
- Clavé, S. A., Saladié, Ò., Cortés-Jiménez, I., Young, A. F., & Young, R. (2015). How different are tourists who decide to travel to a mature destination because of the existence of a low-cost carrier route? *Journal of Air Transport Management*, 42, 213–218. <https://doi.org/10.1016/j.jairtraman.2014.11.001>
- Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Thousand Oaks: SAGE Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches* (4th ed.). Thousand Oaks: SAGE Publications.
- Crompton, J. (1992). Structure of vacation destination choice sets. *Annals of Tourism Research*, 19(3), 420–434. [https://doi.org/10.1016/0160-7383\(92\)90128-C](https://doi.org/10.1016/0160-7383(92)90128-C)
- Dellaert, B. G. C., Ettema, D. F., & Lindh, C. (1998). Multi-faceted tourist travel decisions: A constraint-based conceptual framework to describe tourists' sequential choices of travel components. *Tourism Management*, 19(4), 313–320. [https://doi.org/10.1016/S0261-5177\(98\)00037-5](https://doi.org/10.1016/S0261-5177(98)00037-5)
- Doganis, R. (2001). *The Airline Business in the 21st Century* (1st ed.). London: Routledge.
- Dwyer, L., Gill, A., & Seetaram, N. (2013). *Handbook of Research Methods in Tourism: Quantitative and Qualitative Approaches*. Cheltenham: Edward Elgar Publishing.
- Edwards, W. (1954). The theory of decision making. *Psychological Bulletin*, 51(4), 380–417. <https://doi.org/10.1037/h0053870>
- European Union. (2001). *Young Europeans: Eurobarometer 47.2*. Brussels.

- Eymann, A., & Ronning, G. (1992). Discrete Choice Analysis of Foreign Travel Demand. In H.-J. Vosgerau (Ed.), *European Integration in the World Economy* (pp. 641–670). Berlin, Heidelberg: Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-662-07133-5>
- Future Foundation & Expedia. (2016). *Millennial Traveller Report*. Retrieved from <https://www.foresightfactory.co/wp-content/uploads/2016/11/Expedia-Millennial-Traveller-Report-Final.pdf>
- Gheorghe, C. M., & Moraru, A. (2017). STUDENT MOBILITY – DRIVER OF GROWTH IN THE TRAVEL AND TOURISM INDUSTRY; CASE STUDY: ERASMUS STUDENTS’ TRAVEL PREFERENCES. *Romanian Economic and Business Review*, 12(4), 65–71.
- Glover, P. (2010). Generation Y’s Future Tourism Demand: Some Opportunities and Challenges. In P. Benckendorff, G. Moscardo, & D. Pendergast (Eds.), *Tourism and Generation Y* (pp. 155–164). Oxfordshire: CAB International.
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples. *Journal of Behavioral Decision Making*, 26(3), 213–224. <https://doi.org/10.1002/bdm.1753>
- Grigolon, A. B., Kemperman, A. D. A. M., & Timmermans, H. J. P. (2012). The influence of low-fare airlines on vacation choices of students: Results of a stated portfolio choice experiment. *Tourism Management*, 33(5), 1174–1184. <https://doi.org/10.1016/j.tourman.2011.11.013>
- Hensher, D. A. (1994). Stated preference analysis of travel choices: the state of practice. *Transportation*, 21(2), 107–133. <https://doi.org/10.1007/BF01098788>
- Hess, S., Adler, T., & Polak, J. W. (2007). Modelling airport and airline choice behaviour with the use of stated preference survey data. *Transportation Research Part E: Logistics and Transportation Review*, 43(3), 221–233. <https://doi.org/10.1016/j.tre.2006.10.002>
- Hicks, T. (2018). Postpositivism. In B. B. Frey (Ed.), *The SAGE Encyclopaedia of Educational Research, Measurement, and Evaluation* (pp. 1276–1278). Thousand Oaks: SAGE Publications. <https://doi.org/https://dx.doi.org/10.4135/9781506326139>
- Hsu, C. J., Yen, J. R., Chang, Y. C., & Woon, H. K. (2016). How do the services of low-cost carriers affect passengers’ behavioral intentions to revisit a destination? *Journal of Air Transport Management*, 52, 111–116. <https://doi.org/10.1016/j.jairtraman.2015.12.006>
- Huang, Y.-C., & Petrick, J. F. (2010). Generation Y’s Travel Behaviours: A Comparison with Baby Boomers and Generation X. In P. Benckendorff, G. Moscardo, & D. Pendergast (Eds.), *Tourism and Generation Y* (pp. 27–37). Oxfordshire: CAB International.
- Jeng, J., & Fesenmaier, D. R. (2002). Conceptualizing the Travel Decision-Making Hierarchy: A Review of Recent Developments. *Tourism Analysis*, 7(1), 15–32. <https://doi.org/10.3727/108354202108749925>

- Jensen, J. M. (2011). The relationships between socio-demographic variables, travel motivations and subsequent choice of vacation. In *2nd International Conference on Economics, Business and Management* (Vol. 22, pp. 37–44). [https://doi.org/10.1016/S0261-5177\(00\)00057-1](https://doi.org/10.1016/S0261-5177(00)00057-1)
- Jönsson, C., & Devonish, D. (2008). Does nationality, gender, and age affect travel motivation? A case of visitors to the Caribbean Island of Barbados. *Journal of Travel and Tourism Marketing*, 25(3–4), 398–408. <https://doi.org/10.1080/10548400802508499>
- Liasidou, S. (2013). Decision-Making for Tourism Destinations: Airline Strategy Influences. *Tourism Geographies*, 15(3), 511–528. <https://doi.org/10.1080/14616688.2012.726266>
- Louviere, J. J., Hensher, D. A., Swait, J. D., & Adamowicz, W. (2000). *Stated Choice Methods*. Cambridge: Cambridge University Press.
- Morely, C. L. (1994). Experimental Destination Choice Analysis. *Annals of Tourism Research*, 21(4), 780–791.
- Moscardo, G., & Benckendorff, P. (2010). Mythbusting: Generation Y and Travel. In P. Benckendorff, G. Moscardo, & D. Pendergast (Eds.), *Tourism and Generation Y* (pp. 16–26). Oxfordshire: CAB International.
- Nicolau, J. L., & Más, F. J. (2008). Sequential choice behavior: Going on vacation and type of destination. *Tourism Management*, 29(5), 1023–1034. <https://doi.org/10.1016/j.tourman.2008.01.004>
- O’Connell, J. F., & Williams, G. (2005). Passengers’ perceptions of low-cost airlines and full-service carriers - A case study involving Ryanair, Aer Lingus, Air Asia and Malaysia Airlines. *Journal of Air Transport Management*, 11(4), 259–272. Retrieved from <https://www.sciencedirect.com/science/article/pii/S096969970500013X>
- Oppermann, M. (1995). Travel Life Cycle. *Annals of Tourism Research*, 22(3), 535–552. Retrieved from [http://www.climateaudit.info/data/mask/TREN/tourism/cd/Annals\\_Tour\\_Res\\_1995\\_535.pdf](http://www.climateaudit.info/data/mask/TREN/tourism/cd/Annals_Tour_Res_1995_535.pdf)
- Park, M., Jang, H., Lee, S., & Russell, B. (2010). Tourism and the N Generation in a Dynamically Changing Society: the Case of South Korea. In P. Benckendorff, G. Moscardo, & D. Pendergast (Eds.), *Tourism and Generation Y* (pp. 85–97). Oxfordshire: CAB International.
- Pendergast, D. (2010). Getting to Know the Y Generation. In P. Benckendorff, G. Moscardo, & D. Pendergast (Eds.), *Tourism and Generation Y* (pp. 1–15). Oxfordshire: CAB International.
- Quadrat-Ullah, H., Spector, J. M., & Davidsen, P. (2010). *Complex Decision Making: Theory and Practice*. New York: Springer Berlin Heidelberg.
- Ruane, J. M. (2005). *Essentials of Research Methods: A Guide to Social Science Research*. Oxford: Blackwell Publishing.



- Saaty, T. L. (1990). How to make a decision: The analytic hierarchy process. *European Journal of Operational Research*, 48(1), 9–26. [https://doi.org/10.1016/0377-2217\(90\)90057-1](https://doi.org/10.1016/0377-2217(90)90057-1)
- Saaty, T. L. (2008). Decision making with the analytic hierarchy process. *International Journal of Services Sciences*, 1(1), 83–98. <https://doi.org/10.1504/IJSSCI.2008.017590>
- Santos, M. C., Veiga, C., & Águas, P. (2016). Tourism services: facing the challenge of new tourist profiles. *Worldwide Hospitality and Tourism Themes*, 8(6), 654–669. <https://doi.org/10.1108/WHATT-09-2016-0048>
- Selinger, E., & Whyte, K. (2011). Is There a Right Way to Nudge? The Practice and Ethics of Choice Architecture. *Sociology Compass*, 5(10), 923–935. <https://doi.org/10.1111/j.1751-9020.2011.00413.x>
- Shafir, E. (1993). Choosing versus Rejecting. *Memory & Cognition*, 21(4), 546–556. <https://doi.org/10.3758/BF03197186>
- Shafir, E. (2012). *The Behavioral Foundations of Public Policy*. Princeton: Princeton University Press.
- Simon, H. A. (1955). A Behavioral Model of Rational Choice. *The Quarterly Journal of Economics*, 69(1), 99. <https://doi.org/10.2307/1884852>
- Sirakaya, E., & McLellan, R. W. (1997). Factors Affecting Vacation Destination Choices of College Students. *Anatolia: An International Journal of Tourism and Hospitality Research ISSN:*, 8(3), 31–44. <https://doi.org/10.1080/13032917.1997.9687119>
- Smeral, E. (1985). Ökonomische Erklärungsfaktoren der langfristigen Entwicklung der touristischen Nachfrage. *The Tourist Review*, 40(4), 20–26. <https://doi.org/10.1108/eb057934>
- Stanovich, K. E. (2010). *Decision Making and Rationality in the Modern World*. New York: Oxford University Press.
- Street, D. J., & Burgees, L. (2007). *The Construction of Optimal Stated Choice Experiments: Theory and Methods*. Hoboken: John Wiley & Sons. Retrieved from [http://doi.wiley.com/10.1111/j.1541-0420.2008.01082\\_13.x](http://doi.wiley.com/10.1111/j.1541-0420.2008.01082_13.x)
- Svenson, O. (1979). Process descriptions of decision making. *Organizational Behavior and Human Performance*, 23(1), 86–112. [https://doi.org/10.1016/0030-5073\(79\)90048-5](https://doi.org/10.1016/0030-5073(79)90048-5)
- Takai, J. (2015). Positivist Research Paradigm. In J. M. B. Book (Ed.), *The SAGE Encyclopedia of Intercultural Competence* (pp. 679–681). Thousand Oaks: SAGE Publications. <https://doi.org/http://dx.doi.org/10.4135/9781483346267.n223>
- The Council of the European Communities. (1992). COUNCIL REGULATION (EEC) No 2408 / 92 of 23 July 1992 on access for Community air carriers to intra-Community air routes. *Official Journal of the European Communities*, 240, 8–14. <https://doi.org/10.1039/ap9842100196>

- Thorndike, A. N., Sonnenberg, L., Riis, J., Barraclough, S., & Levy, D. E. (2012). A 2-phase labelling and choice architecture intervention to improve healthy food and beverage choices. *American Journal of Public Health, 102*(3), 527–533. <https://doi.org/10.2105/AJPH.2011.300391>
- Train, K. E. (2009). *Discrete Choice Methods with Simulation*. Cambridge: Cambridge University Press. Retrieved from <http://ebooks.cambridge.org/ref/id/CBO9780511805271>
- UNWTO. (2011). *The Power of Youth Travel. The World Youth Student and Educational Travel Confederation*.
- Veal, A. J. (2006). *Research methods for leisure and tourism: A practical guide* (3rd ed.). Harlow: Financial Times Prentice Hall.
- Veiga, C., Santos, M. C., Águas, P., & Santos, J. A. C. (2017). Are millennials transforming global tourism? Challenges for destinations and companies. *Worldwide Hospitality and Tourism Themes, 9*(6), 603–616. <https://doi.org/10.1108/WHATT-09-2017-0047>
- Woo, S. E., Keith, M., & Thornton, M. A. (2015). Amazon Mechanical Turk for Industrial and Organizational Psychology: Advantages, Challenges, and Practical Recommendations. *Industrial and Organizational Psychology, 8*(2), 171–179. <https://doi.org/10.1017/iop.2015.21>
- Woodside, A., & Macdonald, R. (1993). General system framework of customer choice processes of tourism services. In *International Conference on Decision Making Processes and Preference Changes of Tourists: Intertemporal and Intercountry Perspectives* (pp. 31–59). Innsbruck. Retrieved from <http://hdl.handle.net/2345/3020>
- WYSE Travel Confederation. (2014). *Millennial Traveller II - Executive Summary*. Amsterdam. Retrieved from <https://www.wysetc.org/wp-content/uploads/2015/01/Millennial-Traveller-II-Executive-Summary.pdf>
- Zwerina, K. (1997). *Discrete Choice Experiments in Marketing*. Heidelberg: Physica-Verlag HD. Retrieved from <http://link.springer.com/10.1007/978-3-642-50013-8>

# Appendices

## Appendix 1 – Pilot 1

### Research Consent

Dear Participant,

Please read the following and tick the box below if you agree with what it says.

1. I freely and voluntarily consent to participate in the research project on the topic of the influence of low-cost airlines on Millennials' vacation choices.
2. I understand that my responses will be anonymous. My name will not be linked with the research materials, and I will not be identified or identifiable in any report subsequently produced by the researcher.
3. I understand that if at any time during the survey I feel unable or unwilling to continue, I am free to leave. That is, my participation in this study is completely voluntary, and I may withdraw from it without negative consequences. However, after data has been anonymised or after publication of the results it will not be possible for my data to be removed as it would be untraceable at this point.
4. I have read and understand the above given conditions and consent to participate in this study.

Please answer the questions honestly, there is no 'right' or 'wrong'!

Thank you in advance for your participation.

I agree to take part in this questionnaire and further agree for the collected data to be used for the thesis.

I agree

What is your gender?

- Female  
 Male  
 Rather not say  
 Other

How old are you?

- younger than 18  
 18-22  
 23-27  
 28-32  
 33-37  
 older than 37

Are you currently still in education?

- Yes  
 No

What is the highest level of school you have completed or the highest degree you have received?

- Less than high school degree  
 High school degree or equivalent  
 Some college but no degree  
 Associate degree  
 Bachelor degree  
 Graduate degree (Master and PHD)  
 Other \_\_\_\_\_

What is your current income annually in Euros?

- Under 10,000€  
 Between 10,001€ and 14,999€  
 Between 15,000€ and 29,999€  
 Between 30,000€ and 49,999€  
 Between 50,000€ and 74,999€  
 Between 75,000€ and 99,999€  
 Over 100,000€  
 Rather not say

What is your country of birth?

---

Which country do you currently reside in?

---

On average annually, how often do you travel for leisure?

---

On average annually, how often do you travel for business?

---

### Choice Experiment

This is a choice experiment.

Please imagine you are able to take a travel in the near future. So far you have nothing planned. There are no negative impacts on your occupation or constraints on whom you can travel with. Consider though that money and time are a factor to consider when making your choices.

Each choice set will have a small variation, **please read them carefully** to make sure you make a choice that represents your opinion.

Have you understood and agree with the conditions above?

Yes

Please chose one of the following choices.

<i>Factors</i>	<i>Option 1</i>	<i>Option 2</i>
<i>Airfare</i>	134€	134€
<i>Flight Duration</i>	2:15h	2:15h
<i>Time to Airport</i>	30m	30m
<i>Destination</i>	Malta	Malta
<i>Accommodation Type</i>	Hotel	Hotel
<i>Kind of Airline used</i>	Low-cost Airline	Traditional Airline

Option 1

Option 2

Which factor influenced your choice above the most?

Airfare

Flight Duration

Time to Airport

Destination

Accommodation Type

Kind of Airline used

Please chose one of the following choices.

<i>Factors</i>	<i>Option 1</i>	<i>Option 2</i>
<i>Airfare</i>	134€	134€
<i>Flight Duration</i>	2:15h	2:15h
<i>Time to Airport</i>	30m	30m
<i>Destination</i>	Malta	London
<i>Accommodation Type</i>	Hotel	Hotel
<i>Kind of Airline used</i>	Low-cost Airline	Traditional Airline

Option 1

Option 2

Which factor influenced your choice above the most?

- Airfare
- Flight Duration
- Time to Airport
- Destination
- Accomodation Type
- Kind of Airline used

Please chose one of the following choices.

<i>Factors</i>	<i>Option 1</i>	<i>Option 2</i>
<i>Airfare</i>	24€	134€
<i>Flight Duration</i>	2:15h	2:15h
<i>Time to Airport</i>	30m	30m
<i>Destination</i>	Malta	Malta
<i>Accommodation Type</i>	Hotel	Hotel
<i>Kind of Airline used</i>	Low-cost Airline	Traditional Airline

- Option 1
- Option 2

Which factor influenced your choice above the most?

- Airfare
- Flight Duration
- Time to Airport
- Destination
- Accomodation Type
- Kind of Airline used

Please chose one of the following choices.

<i>Factors</i>	<i>Option 1</i>	<i>Option 2</i>
<i>Airfare</i>	24€	134€
<i>Flight Duration</i>	4:15h	2:15h
<i>Time to Airport</i>	30m	30m
<i>Destination</i>	Malta	Malta
<i>Accommodation Type</i>	Hotel	Hotel
<i>Kind of Airline used</i>	Low-cost Airline	Traditional Airline

- Option 1
- Option 2

Which factor influenced your choice above the most?

- Airfare
- Flight Duration
- Time to Airport
- Destination
- Accomodation Type
- Kind of Airline used

Please chose one of the following choices.

<i>Factors</i>	<i>Option 1</i>	<i>Option 2</i>
<i>Airfare</i>	24€	134€
<i>Flight Duration</i>	2:15h	2:15h
<i>Time to Airport</i>	2h	30m
<i>Destination</i>	Malta	Malta
<i>Accommodation Type</i>	Hotel	Hotel
<i>Kind of Airline used</i>	Low-cost Airline	Traditional Airline

- Option 1  
 Option 2

Which factor influenced your choice above the most?

- Airfare  
 Flight Duration  
 Time to Airport  
 Destination  
 Accommodation Type  
 Kind of Airline used

Please chose one of the following choices.

<i>Factors</i>	<i>Option 1</i>	<i>Option 2</i>
<i>Airfare</i>	134€	134€
<i>Flight Duration</i>	2:15h	2:15h
<i>Time to Airport</i>	30m	30m
<i>Destination</i>	Malta	Malta
<i>Accommodation Type</i>	Airbnb	Hotel
<i>Kind of Airline used</i>	Low-cost Airline	Traditional Airline

- Option 1  
 Option 2

Which factor influenced your choice above the most?

- Airfare  
 Flight Duration  
 Time to Airport  
 Destination  
 Accommodation Type  
 Kind of Airline used

Please chose one of the following choices.

<i>Factors</i>	<i>Option 1</i>	<i>Option 2</i>
<i>Airfare</i>	34€	134€
<i>Flight Duration</i>	2:15h	2:15h
<i>Time to Airport</i>	30m	30m
<i>Destination</i>	Lublin	Paris
<i>Accommodation Type</i>	Airbnb	Hotel
<i>Kind of Airline used</i>	Low-cost Airline	Traditional Airline

- Option 1  
 Option 2

Which factor influenced your choice above the most?

- Airfare
- Flight Duration
- Time to Airport
- Destination
- Accomodation Type
- Kind of Airline used

When planning this trip according to the scenario in which order would you plan?

So imagine you are planning a trip what do you look for first?

Please only select one choice per factor.

	1st	2nd	3rd	4th	5th
Who to travel with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type of Accommodation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mode of Transport (eg. Flight)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Length of stay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Destination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you very much for your participation. If you have any comments or concerns about this submission please indicate them below.

## Appendix 2 – Pilot 2

### Research Consent

Dear Participant,

Please read the following and tick the box below if you agree with what it says.

1. I freely and voluntarily consent to participate in the research project on the topic of the influence of low-cost airlines on Millennials' vacation choices.
2. I understand that my responses will be anonymous. My name will not be linked with the research materials, and I will not be identified or identifiable in any report subsequently produced by the researcher.
3. I understand that if at any time during the survey I feel unable or unwilling to continue, I am free to leave. That is, my participation in this study is completely voluntary, and I may withdraw from it without negative consequences. However, after data has been anonymised or after publication of the results it will not be possible for my data to be removed as it would be untraceable at this point.
4. I have read and understand the above given conditions and consent to participate in this study.

Please answer the questions honestly, there is no 'right' or 'wrong' answers.

Thank you in advance for your participation.

I agree to take part in this questionnaire and further agree for the collected data to be used for the thesis in a form that prevents identifying my individual identity.

I agree

Which gender do you identify as?

- Female  
 Male  
 Prefer not say  
 Other

How old are you?

- younger than 18  
 18-22  
 23-27  
 28-32  
 33-37  
 older than 37

Are you currently still in education?

- Yes  
 No

What is the highest level of educational qualification you have completed?

- Less than high school degree  
 High school degree or equivalent  
 College qualification but no degree  
 Associate degree  
 Bachelor degree  
 Graduate degree (Master and PHD)  
 Other \_\_\_\_\_

What is your current personal income annually in Euros?

- Under 10,000€  
 Between 10,001€ and 14,999€  
 Between 15,000€ and 29,999€  
 Between 30,000€ and 49,999€  
 Between 50,000€ and 74,999€  
 Between 75,000€ and 99,999€  
 Over 100,000€  
 Rather not say



What is your country of birth?

---

Which country do you currently reside in?

---

On average annually, how often do you take a flight for leisure?

---

**Imagine the following scenario...**

You are planning a leisure trip. You have not selected a specific destination yet. You have investigated the different alternatives and have narrowed it down to two options. The alternatives are similar - Mediterranean destinations with extensive outdoor offerings and good possibilities of nightlife and fun. The prices for accommodation and other expenses at the destination are the same for both alternatives. Flying time to both destinations is 2 hours.

If you chose alternative **A**, the destination is one you have never heard of before but with the same offering, price of the flight ticket is 40% lower, punctuality is high, but the departure and arrival airports are inconveniently located.

If you chose alternative **B**, the destination is familiar to you as it is well-known, the flight ticket price is higher, and punctuality of the flight can vary more but the departure and arrival airports are very conveniently located.

Which alternative do you choose to buy?

- Alternative A
- Alternative B

**Now imagine a similar scenario...**

Now imagine a similar scenario. You are planning a leisure trip. You have not selected a specific destination yet. You have investigated the different alternatives and have narrowed it down to two options. The alternatives are similar - city destinations with extensive sightseeing options and good possibilities of cultural experiences such as food and nightlife. The prices for accommodation and other expenses at the destination are the same for both alternatives. Flying time to both destinations is 4 hours.

If you chose alternative **A**, the destination is one you have heard of before but it is not a major destination, price of the flight ticket is 50% lower, punctuality is high, but the departure airport is inconveniently located, no meals are served and luggage (carry-on and cabin) are not included. Luggage and meals can be added in addition to the ticket price.

If you chose alternative **B**, the destination is one of the prime destinations, the flight ticket price is significantly higher, and punctuality of the flight can vary more but the departure and arrival airports are very conveniently located, a small meal is included in the ticket price as well as luggage (carry-on and cabin).

Which alternative do you choose to buy?

- Alternative A
- Alternative B

Thank you very much for your participation. The next page will complete the survey and you can close the page. If you have any comments or concerns about this submission please indicate them below.

## Appendix 3 – Final Survey

### Research Consent

Dear Participant,

Please read the following and tick the box below if you agree with what it says. I freely and voluntarily consent to participate in the research project on the topic of the influence of low-cost airlines on Millennials' vacation choices. I understand that my responses will be anonymous. My name will not be linked with the research materials, and I will not be identified or identifiable in any report subsequently produced by the researcher. I understand that if at any time during the survey I feel unable or unwilling to continue, I am free to leave. That is, my participation in this study is completely voluntary, and I may withdraw from it without negative consequences. However, after data has been anonymised or after publication of the results it will not be possible for my data to be removed as it would be untraceable at this point. I have read and understand the above given conditions and consent to participate in this study. Please answer the questions honestly, there is no 'right' or 'wrong' answers.

Thank you in advance for your participation.

**I agree to take part in this questionnaire and further agree for the collected data to be used for the thesis in an form that prevents identifying my individual identity.**

(1)  I agree

**Which gender do you identify as?**

(1)  Female

(2)  Male

(3)  Prefer not to say

(4)  Other

**How old are you?**

(2)  18-22

(3)  23-27

(4)  28-32

(5)  33-37

**Are you currently still in education?**

(1)  Yes

(0)  No

**What is the highest level of educational qualification you have completed?**

- (1)  Less than high school degree
- (2)  High school degree or equivalent
- (3)  College qualification but no degree
- (4)  Associate degree
- (5)  Bachelor degree
- (6)  Graduate degree (Master and aPHD)
- (7)  Other \_\_\_\_\_

**What is your current personal income annually in Euros?**

- (1)  Under 10,000€
- (2)  Between 10,001€ and 14,999€
- (3)  Between 15,000€ and 29,999€
- (4)  Between 30,000€ and 49,999€
- (5)  Between 50,000€ and 74,999€
- (6)  Between 75,000€ and 99,999€
- (7)  Over 100,000€
- (8)  Rather not say

**What is your country of birth?**

---

**Which country do you currently reside in?**

---

**On average annually, how often do you take a flight (round trip equals 2 flights) for leisure?**

---

**Imagine the following scenario...** You are planning a leisure trip. You have not selected a specific destination yet. You have investigated the different alternatives and have narrowed it down to two options. The alternatives are similar - Mediterranean destinations with extensive outdoor offerings and good possibilities of nightlife and fun. The prices for accommodation and other expenses at the destination are the same for both alternatives. Flying time to both destinations is 2 hours.

If you chose alternative **A**, the destination is one you have never heard of before but with the same offering, price of the flight ticket is 40% lower, punctuality is high, but the departure and arrival airports are inconveniently located.

If you chose alternative **B**, the destination is familiar to you as it is well-known, the flight ticket price is 40% higher, and punctuality of the flight can vary more but the departure and arrival airports are very conveniently located.

**Which alternative do you choose to buy?**

- (1)  Alternative A
- (2)  Alternative B

**Now imagine a similar scenario...** Now imagine a similar scenario. You are planning a leisure trip. You have not selected a specific destination yet. You have investigated the different alternatives and have narrowed it down to two options. The alternatives are similar - city destinations with extensive sightseeing options and good possibilities of cultural experiences such as food and nightlife. The prices for accommodation and other expenses at the destination are the same for both alternatives. Flying time to both destinations is 4 hours.

If you chose alternative **A**, the destination is one you have heard of before but it is not a major destination, price of the flight ticket is 45€, punctuality is high, but the departure airport is inconveniently located, no meals are served and luggage (carry-on and cabin) are not included. Luggage and meals can be added in addition to the ticket price.

If you chose alternative **B**, the destination is one of the prime destinations, the flight ticket price is 90€, and punctuality of the flight can vary more but the departure and arrival airports are very conveniently located, a small meal is included in the ticket price as well as luggage (carry-on and cabin).

**Which alternative do you choose to buy?**

- (1)  Alternative A
- (2)  Alternative B

**Thank you very much for your participation. The next page will complete the survey and you can close the page. If you have any comments or concerns about this submission, please indicate them below.**

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

To receive payment, type this access code into the box on Amazon MTurk and click "Finish".

CB159634