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## The association of frequent flyer programs with affective and behavioral customer loyalty in the European airline market.

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### Abstract

*This research has inquired into the association of frequent flyer programs with affective and behavioral customer loyalty in the European airline market. The contribution this study makes to scholarly literature derives from divergent findings of prior studies concerning the significance of airline loyalty programs as impact factors of airline choice through the lock-in mechanisms and switching costs they introduce. While customer loyalty programs are in wide use in the airline industry, due to their effect on airline selection, customer loyalty is likely to be significantly affected by switching costs, brand involvement and perceived benefits. For the purposes of data collection, in the framework of this study an online convenience sample survey of European airline passengers has been conducted. All study participants have been 18 years of age and above. Data collection for the present study took place in September-October 2016. Since the general population of a European country has been sampled, research participants have been recruited from across different country regions and income groups in a statistically representative manner. After the present survey has been completed, 536 complete survey results have been obtained. In the present study, a correlation analysis and an exploratory factor analysis have been applied to empirical data. The present study has found that frequent flyer membership status is positively correlated with airline loyalty, additional consumer choice-related variables such as preference to book tickets with a traditional carrier or a low cost airline, are likely to mediate this relationship. Based on the conclusion of the present factor analysis, it is possible to indicate that frequent flyer program membership is not either significantly or positively related to customer loyalty across all consumer profiles. This conclusion especially holds for airline customers travelling for leisure purposes. In contrast to the latter customer group, relatively frequently flying customers have not been found to exhibit significant levels of airline loyalty.*

Keywords: Frequent flyer programs, affective loyalty, behavioral loyalty, airline choice, customer loyalty

### 1. Introduction

Customer loyalty and frequency reward programs have long been recognized as important drivers of customer retention and purchase likelihood, due to their contribution to relationship marketing. Frequent flyer programs offer loyal customers tangible and intangible rewards, such as free flights, after they accumulate a sufficient number of service use points, such as travel miles, which is expected to increase the probability of repeated service purchases (Meyer-Waarden,

2008, pp. 87-88). At the same time, in many cases loyalty programs can represent significant liabilities for companies offering related customer rewards, due to their management and benefit costs. In case these programs prove to be ineffective, it could be advisable to terminate these customer loyalty programs, as some corporations have done to reduce their operations costs (Meyer-Waarden, 2007, p. 223).

Therefore, customer loyalty programs, such as frequent flyer programs, may be expected to affect airline choice, due to the impact of attitudinal variables, given that these programs enable airlines to establish long-term relations with their customers. In this respect frequent flyer programs are likely to be similar to customer loyalty programs in other market sectors that are deployed by companies as part of customer relations management strategies that are expected to lead to higher levels of brand loyalty, customer retention and purchase intentions (Bolton, Lemon, & Verhoef, 2004, p. 271). In other words, loyalty card programs are widely implemented by different company types as means for improving customer satisfaction, affecting consumer choice and developing customer relationships. As firms seek to have more enduring relationships with their clients, customer loyalty programs are, thus, perceived as an effective impact factors able not only to stimulate purchase intentions, but also to encourage repeated service usage or product buying behavior (Oliver, 2010, pp. 442-443).

The existence of loyalty programs at both low cost and full service carriers makes it important to pay research attention to the factors that affect customer retention in the process of decision making in the airline industry, when a customer choice is made between alternative airline types. The continued predominance of regular carriers in the consumer market indicates that low cost airlines likely face marketing, adoption and loyalty challenges related to the varied levels of consumer retention that these airlines achieve (Chang, & Sun, 2012, p. 15). Moreover, previous studies indicate that customer loyalty programs are one among multiple other factors, such as fare prices, airline size, flight frequency, lounge facilities, and in-flight service, which are significantly likely to affect passenger choice between full service carriers and low cost airlines. While these findings hold for airline customers in both developed and developing countries, in emerging markets airfare price levels and flight frequency are likely to have a stronger effect on airline choice than other factors (Fourie, & Lubbe, 2006, p. 98).

Despite the wide variety of loyalty programs and schemes, they can be generally defined as the programs that reward loyal customer behavior through continuously offered incentives that encourage repeat purchases through lock-in mechanisms, rather than being aimed at influencing buying decisions at a single point in time (Sharp, & Sharp, 1997, p. 474). These loyalty programs can take the form of frequent flyer, frequent shopper or point card programs that foster attitudinal and behavioral loyalty, increase customer retention rates and augment the client income share that is spent on products and services. In this respect, loyalty programs contribute to building the relationship between the focal brand, service provider or supermarket chain and consumers aimed at increasing their purchase frequency, amounts and likelihood, such as through membership-based promotions (Stone et al., 2004, p. 305). Furthermore, given that, to join these loyalty programs, customers are required to provide detailed personal information, these programs provide opportunities for long-term, targeted marketing efforts that affect purchasing behavior through making discounts and benefits conditional on bonus point accumulation. As they approach an award-granting point-collection threshold, customers are likely to experience psychological pressure to make extra purchases, in order to obtain their rewards. This rewarded behavior is likely to be triggered by attitudinal or affective responses that increase customer

attachment, loyalty or trust vis-à-vis the company offering bonus-point rewards (Palmatier, Jarvis, Bechkoff, & Kardes, 2009, p. 1).

However, insufficient research exists concerning customer behavior vis-à-vis alternative choices, such as between competing service providers (Meyer-Waarden, 2008, p. 88). Additionally, in many cases prior studies have examined the influence of only a subset of airline-related choice criteria, such as ticket change penalties, airfare prices, pre-departure customer handling, in-flight comfort and amenities, gratis food offers, schedule convenience, flight frequency and general service level. Consequently, while all of these factors have been found to exercise a significant impact on airline choice, survey findings have shown that holiday travelers are particularly swayed by ticket prices and discount availability, whereas business travelers are likely to pay closer attention to destination arrival time and non-stop flight availability, than to other airline choice factors (Espino, Martín, & Román, 2008, p. 593).

Despite the widely held theoretical assumption that customer loyalty programs representing an important component of customer relations management significantly affect consumer behavior, the empirical evidence demonstrating the effectiveness of loyalty programs is relatively scarce, contradictory and inconsistent, especially with regard to product or service sales (Bolton, Lemon, & Verhoef, 2004, p. 271). At the same time, while customer loyalty and airline choice have been amply researched, customer loyalty in the airline industry continues to be insufficiently understood, since it refers to repeated choices and taking into consideration alternative carriers in the process of customer decision making. Whereas acceptable service standards are likely to represent minimum preconditions for airline loyalty, air flight price levels, in-flight services frequency and frequent flyer programs have been found to be the factors that have a significant impact on customer retention (Suzuki, 2007, p. 1).

Therefore, this study that will inquire into the association of frequent flyer programs with affective and behavioral customer loyalty in the European airline market will make a significant contribution to the scholarly literature, due to the lacking consensus in recent studies concerning the significance of airline loyalty programs as factors affecting airline choice through the lock-in mechanisms and switching costs that they introduce.

## **2. Airline Choice**

According to previous studies, frequent flyer program members are likely to experience the influence of switching costs and lock-in mechanisms in regard to their airline choice to a stronger extent than that of low fares, schedule convenience and airline timeliness. Therefore, significant changes to existing frequent flyer programs are likely to affect both the choice of airlines and their customer bases, especially among low-frequency air travelers (Proussaloglou, & Koppelman, 1999, p. 193). While elite-status frequent flyer program members have been found to exhibit preference for more expensive than average air fares, across membership categories frequent flyer programs have been found to increase purchase volumes, such as fares charged, by between 3.5% and 5% only (Lederman, 2007, p. 1155). Nevertheless, recent studies indicate that the deployment of frequent flyer programs leads to a significant, albeit limited, increase in purchase volumes, due to a higher willingness to pay price premiums among program members than among non-members. This is likely be due to the points-related lock-in mechanisms and membership status-related benefits that frequent flyer programs introduce (McCaughey, & Behrens, 2011, p. 28).

Though the membership in particular frequent flyer status categories depends on the accrual of status points, members of these exclusive programs receive both psychological benefits, such as priority treatment, and economic benefits (e.g., lounge access and accelerated loyalty points accumulation). Thus, it is this combination of psychological and economic perks that advanced membership levels of frequent flyer programs offer that is likely to increase the switching costs in direct relation to the membership level (McCaughey, & Behrens, 2011, p. 6). This effect can be expected to be higher for customers whose transition to another program membership level is imminent, given the non-linear improvement in benefits that a higher membership status is likely to offer, while increasing customer willingness to pay higher fares than otherwise. Airline customers underperforming in terms of their purchase volume can also be downgraded from their existing frequent flyer membership status upon yearly reviews. Transition to a different airline can, thus, be expected to involve a significant loss of membership status, accumulated points and associated benefits. This indicates that frequent flyer programs can be a significant driver of customer retention and behavioral loyalty (McCaughey, & Behrens, 2011, pp. 6-7).

On the one hand, frequent flyer programs that allow loyalty point accumulation in direct relation to tickets purchased and flights taken may be considered a form of bulk discount programs, since these points allow free of charge access to flights, goods and services. On the other hand, the existence of multiple tiers of loyalty program membership with different degrees of exclusivity allows distinguishing between standard frequent flyer programs that enable point collection through both flight-related and non-flight transactions, such as via credit card purchases, and status-related program member targeting through status points that are closely related to actual flights made, status points accumulated, overall distances travelled and air fares paid. In other words, status levels, such as bronze, silver and gold, do not lead to discounts or special offers in exchange for points, but designate point accumulation thresholds that have been passed. These frequent flyer status levels are hierarchically organized with the degree of their exclusivity sharply increasing from the basic level to the highest, which reflects the difficulty of earning the corresponding status points (McCaughey, & Behrens, 2011, p. 5).

Furthermore, while frequent flyer programs are likely to be associated with higher willingness to accept proposed air fares, their in-built switching costs can also deter airline customers from joining these customer loyalty programs. This is likely to be especially the case when the choice between competing carriers is involved and the scale and scope of corresponding frequent flyer programs are significantly different. In other words, frequent flyer programs do not necessarily lead to the expected effect on airline or fare choice, on which the revenues of airlines depend. Thus, the empirical case for the effectiveness of frequent flyer programs as significant airline profitability factors remains to be made (Lederman, 2007, p. 1134). Nevertheless, recent empirical findings indicate that variations in the structure of frequent flyer programs are likely to determine customer choice between different fare types, since frequent flyer program membership has been found to increase the probability that more expensive air fare options are chosen from different fare types. At the same time, the impact of frequent flyer programs on consumer choice is likely to be marginal, especially when the cost of point-related awards is taken into account. Thus, while frequent flyer programs are likely to have a positive effect on purchase volumes, they do not necessarily represent a significant barrier against airline market competition (McCaughey, & Behrens, 2011, p. 3).

While loyalty program members have been found to exhibit higher levels of behavioral loyalty, this effect may be due to self-selection, when individuals with high levels of expenditure tend to

enroll into loyalty programs. At the same time, as opposed to promotional periods within loyalty programs that can be highly effective in particular market sectors, continuous loyalty programs deployed by airlines have been found to be moderately successful in increasing purchase frequency, as their members have been found to exhibit slightly more than 4% in purchase volumes than general airline customers (Liu, & Yang, 2009, p. 106). For this reason, customer loyalty programs may not necessarily be cost effective, since sales increases that customer loyalty can be expected to cause might fail to exceed their attendant costs in the form of customer rewards and discount offers, especially in the long-term perspective (Bolton, Kannan, & Bramlett, 2000, p. 98).

In other words, frequent flyer programs are highly likely to have a significant effect on airline choice among business travelers, due to their mobility-stimulating influence on travel, consumption and route preferences. Thus, traditional airlines with highly developed networks of air travel hubs offering lounge services and connection flights can be expected to derive higher utility from frequent flyer programs, in terms of ticket booking volume and frequency, than low cost carriers that may not necessarily be able to offer comparable membership benefits, due to their limited-service business models. Additionally, the impact of customer loyalty programs is likely to be less pronounced among economy-class travelers, since this passenger group can be expected to either pay more attention to airfare prices or accord less importance to social status connotations than business travelers (Gössling, & Nilsson, 2010, p. 250). Moreover, since they are designed to increase airline revenues, frequent flyer programs might also make some airlines more preferable than other carriers, due to high switching costs than opting out of these programs can involve, such as significantly more expensive ticket prices for non-member airline customers. Frequent flyer programs also penalize their members if they fail to achieve certain travel frequency targets by making their benefits, such as faster check-ins, free tickets and discounted service upgrades, conditional on accumulating particular mileage or bonus point amounts above airline-defined threshold values. However, these practices can both increase and decrease the influence of customer loyalty programs on airline selection. Especially if their award points can be used for other consumption choices, such as restaurant dining or daily shopping, loyalty programs can increase airline customer loyalty. Conversely, the impact of airline loyalty programs can decline, if customer benefits, such as discounts, for retail purchases done with program-associated companies exceed those for air travel reservations (Löfgren, & Carlsson, 2004, pp. 1-2).

For this reason, it is likely that frequent flyer points will affect airline choice, because they reduce travel costs, reward particular mobility types, such as business travel, more than other ones, and give access to exclusive amenities and perks, such as airport lounges, special offers and express service tracks. In other words, in particular market segments, such as business-class travelers, the frequent flyer programs of low cost carriers are likely to be significantly less appealing than customer loyalty schemes of full service airlines, due to a wider range and higher value of membership-related benefits that can comprise more spacious seating, increased baggage allowances, special in-flight assistance and special menu choices (Coles, 2008, p. 69). However, the effect of loyalty program is likely to be moderated by usage levels, since consumers with moderate and heavy service usage levels may perceive loyalty programs as more attractive than light service users that may need to wait longer before they obtain program-related rewards. Conversely, the motivational attractiveness of loyalty programs may be positively related to the challenges that they are associated with on the customer level. Additionally, the effectiveness of loyalty programs can be limited by consumption limits that differentially apply to particular

customer groups, such as budget constraints on frequent flying (Eisenberger, & Rhoades, 2001, p. 728). Thus, loyalty programs can be expected to have a stronger effect on psychological variables, such as perceived switching costs, than on behavioral variables. This is supported by empirical longitudinal studies that have found that service usage levels mediate the relationship between loyalty programs and customer loyalty, since the effect of loyalty schemes on customer behavior, such as purchase frequency and brand loyalty, is primarily limited to light and medium service or service users and relatively decreases over time (Liu, 2007, p. 31).

### 3. Customer Loyalty

Whereas customer loyalty schemes have been deployed in different formats in the late nineteenth and early twentieth century, as instruments for increasing customer retention loyalty schemes began to be widely deployed after the deregulation of the aviation industry in the North America and Europe since the 1980s. The increasing deployment of computer and data storage technologies has enabled the digital management of frequent flyer programs that all carriers offer in response to domestic and international market competition. While American Airlines was the first company to introduce a frequent flyer program in 1981, presently more than 200 frequent flyer programs exist around the world. In terms of enrollment, the largest frequent flyer program is that of Delta Airlines that has over 74 million members (McCaughey, & Behrens, 2011, p. 4). For companies, developing customer relationships has expected benefits in the form of customer loyalty and repeat purchases. For consumers, a special relationship with firms is likely to comprise special treatment by company employees, price discounts, and faster or individualized service (Gwinner, Gremler, & Bitner, 1998, p. 101). For this reason, previous research has indicated that company relationship benefits, such as special treatment, are significantly and positively related with customer satisfaction, loyalty levels and word-of-mouth behavior. At the same time, it cannot be ruled out that interrelations between these variables influence the link between overall satisfaction and customer loyalty (Hennig-Thurau, Gwinner, & Gremler, 2002, p. 230).

In other words, a special relationship with a firm may be expected to reinforce the interrelation between satisfaction levels and customer loyalty, due to the positive impact of benefits that this relationship involves. By contrast, the effect of switching costs on customer loyalty is predicated on their status as negative consequences or monetary penalties that changing service providers can incur. While switching costs can be expected to lead to behavioral loyalty, such as purchase intentions, they are not necessarily positively related to customer satisfaction (Jones, Reynolds, Mothersbaugh, & Beatty, 2007, p. 335). Therefore, especially if they are economically sizable, switching costs are likely to act as a significant moderator variable affecting the interrelationship between overall satisfaction and customer loyalty, since companies deploy switching costs as a mechanism that can assist with retaining customers irrespective of their satisfaction levels. If switching costs outweigh the expected benefits of changing to another service provider, low satisfaction levels with company services may fail to lead to a significant decrease in customer retention. By contrast, low perceived switching costs can be expected to lead to a strong interrelationship between satisfaction and loyalty (Bell, Auh, & Smalley, 2005, p. 169).

However, relationship benefits, such as customer convenience, time savings and personalized service, can also be considered as obstacles to switching between firms, while reinforcing the effect that switching costs have on loyalty. In other words, customer loyalty programs, such as frequent flyer schemes, not only establish a special relationship between consumers and companies, but also increase the influence of switching costs on customer retention by acting as

additional lock-in mechanisms (Patterson, & Smith, 2003, p. 107). Thus, while customer loyalty programs may have a significant association with customer loyalty, this association may be mediated or moderated by other variables, such as psychological or economic switching costs which special relations with firms can generate over time through the perceived benefits that they provide (Burnham, Frels, & Mahajan, 2003, p. 112). Thus, recent empirical studies have shown that the connection between customer satisfaction and loyalty is moderated by both switching costs and perceived relationship benefits (Dagger, & David, 2012, pp. 460-461).

In other words, loyalty programs may have no direct or significant interrelationship with behavioral loyalty, since customer loyalty programs have not been found to significantly improve purchase frequency or repeat purchase likelihood, especially if frequent flyer points can be redeemed across multiple unrelated service or product providers, such as grocery shops (Liu, 2007, p. 21). In other words, membership in multiple-outlet loyalty programs may reduce behavioral loyalty to particular companies, since purchase behavior vis-à-vis one firm can be motivated by rewards that will be collected with another company, while diminishing intrinsic motivation for performing purchasing activities in the former firm (Kivetz, 2005, p. 725). Likewise, empirical comparisons between loyalty program members and non-members indicate that customer loyalty program membership has no significant effect on customer retention, even though program membership has been found to lead to higher service use rates among program members than among non-members. In other words, loyalty programs can be expected to be relatively ineffective as a means for encouraging customer loyalty operationalized in behavioral terms (Verhoef, 2003, p. 30).

Moreover, customer loyalty programs introduce economic and psychological switching costs that severing the relationship with the company will entail, since the aim of these programs is to encourage repeat purchase behavior via making customer rewards conditional on buying-related point accumulation. Since customer loyalty program points, such as frequent flyer miles, cannot be transferred to another company, these programs make switching to another service provider or product seller psychologically, economically and socially costly (Kivetz, & Simonson, 2003, p. 454). Thus, these loyalty programs contribute to the creation of affective and mutually beneficial relationships between companies and customers, since the latter relate loyalty program rewards and discounts to feelings of achievement, special customer status, and identification with the organization. Therefore, loyalty programs are likely to be particularly beneficial for product or service providers in competitive industries with interchangeable suppliers, such as the airline industry (Bhattacharya, & Sen, 2003, p. 76).

#### **4. Frequent Flyer Programs**

At the same time, other than theoretically increasing the likelihood of repeat service or product purchase behavior by offering customer retention-oriented rewards, loyalty programs can be an important component of customer relationship management, due to the detailed consumer-related data that they yield which can be used for calibrating these programs according to the needs and characteristics of particular customer groups (Kivetz, & Simonson, 2003, p. 454). More specifically, a marginal increase in customer loyalty can translate into a significant improvement in profitability levels. Prior studies have indicated that beyond customer satisfaction as a variable with a positive significant association with customer loyalty other customer- and context-related factors are highly likely to affect customer loyalty and its interrelationships with other variables (Dagger, & David, 2012, pp. 447-448). For this reason, both legacy airlines utilize frequent flyer programs as a device for narrowly targeting their customers with rewards in exchange for

continued patronage and low cost carriers offer modified versions of loyalty programs. While these frequent flyer programs can incur additional costs, airlines widely deploy these loyalty programs in their efforts to improve customer retention, increase airline use frequency and make expensive air flight options more attractive (McCaughey, & Behrens, 2011, p. 1).

These findings indicate the importance that tailoring frequent flyer programs to different consumer market sector has for airline profitability, especially since in saturated markets the overall impact of loyalty programs on aggregate consumer behavior can be limited (Lacey, 2009, p. 392). In terms of empirical research, studies inquiring into the effectiveness of frequent flyer programs may need to control for the influence of the self-selection bias on consumer behavior by sampling both loyalty program members and customers that are not enrolled into airline card programs, in an effort to ascertain whether significant differences in purchase frequencies and volumes between various customer groups exist (Liu, & Yang, 2009, p. 106). Thus, across different airline customer groups, the positive effect of loyalty program membership can be expected to be relatively limited. However, since previous studies have used a wide range of consumer behavior indicators, such as retention rates, behavioral intentions and customer expenditures, there is a need for additional research into the effectiveness of loyalty programs in view of divergent empirical findings (Verhoef, Van Doorn, & Dorotic, 2007, p. 105).

Furthermore, for frequent flyers the economic switching costs of loyalty programs are not likely to play a significant role, since their ticket purchase volumes allow them to meet reward criteria with relatively little effort. Likewise, for infrequent flyers customer loyalty programs can be expected to be relatively unimportant as factors influencing airline choice, since they rarely accumulate sufficient frequent flyer points to qualify for program rewards. This makes this customer group also insensitive to switching costs (Hartmann, & Viard, 2008, p. 109). Thus, loyalty programs are most likely to be effective among moderate and light buyers of airline services both in the short and the long term, especially since frequent flyers tend to already reach their maximum purchasing capacity, which limits their ability to increase their usage levels of air travel services (Bolton, Kannan, & Bramlett, 2000, pp. 106-107). This consumer market segmentation has important implications for airline profitability, since frequent flyers with high loyalty levels are more likely not only to respond to ticket price promotions, but also to redeem their card membership rewards than other customer groups. By contrast, airline customers with light to moderate service purchase frequency are most likely to respond to loyalty program incentives with higher sales volumes. However, these market segments are oftentimes underestimated as potential sources of company profitability (Cortiñas, Elorz, & Múgica, 2008, pp. 52-53).

Furthermore, due to the association between frequent flyer programs and social status, the behavioral effect of higher customer loyalty levels they are aimed to have, as marketing programs, is likely to be restricted to business travelers, since they are less price-sensitive than other airline passenger groups and have relatively inelastic demand for airline services (Klophaus, 2005, p. 348). Additionally, business travelers can be expected to be particularly influenced in their airline choice by flight schedules, in-flight comfort, and carrier reliability as opposed to airfare costs and service quality as variables that are likely to affect airline preferences in the general population of airline customers (Martín, Román, & Espino, 2011, p. 364). Since in some cases airline passengers are not covering the costs of air travel at their own expense, it is likely that socio-demographic characteristics, such as education level, will either mediate or moderate the interrelationship between frequent flyer program membership and airline



preference. This may lead airlines to target these customer loyalty programs to market sectors that are most likely to generate revenues that can compensate for the extra costs that premium services offered to program members involve (Martín et al., 2011, p. 367).

For this reason, airline services use is likely to be closely associated with income levels, social status and social identity. However, the interrelationship between the effectiveness of frequent flyer programs and these variables that may exert moderating or mediating influence on airline loyalty only begins to receive research attention. Descriptive studies consistently indicate that in Western European countries, such as Sweden and France, between 3.8% and 5% of their populations respectively account, according to estimates, for between 28% and 50% of the flights made nationally or internationally (Gössling, & Nilsson, 2010, pp. 241-242). Therefore, strategically targeted frequent flyer programs can provide a significant competitive advantage to legacy carriers in their effort to maintain their market share, as low cost carriers are entering the airline industry. Given that loyalty programs are routinely deployed in other industries, such as credit card, hospitality and car rental sectors, in the airline industry, carriers also make efforts to use frequent flyer programs for strengthening their market position. These frequent flyer programs are deployed not only due to their expected effect on customer choices, but also due to the opportunities they provide to retain particular customer groups, such as business class travelers. In many cases, loyalty benefits take the form not only of gratis travel miles, but also of non-air travel-related rewards, that can be especially attractive to particular passenger groups. In other cases, targeted conditions on the use of frequent flyer benefits can be imposed, which can increase the economic benefit that airlines are likely to derive from loyalty programs, as many customers can be expected not to redeem their frequent flyer miles (Martín, Román, & Espino, 2011, p. 364).

Prior studies indicate that airline choice factors significantly differ depending on the market segment that airline passengers belong to. Thus, while holiday and business travelers have been found to be equally influenced in their airline choice by airfare prices and flight time, research findings indicate that for leisure travelers frequent flyer programs are significantly less important than for business travelers. For holiday travelers, the importance of airfare prices has been found to be positively related to total miles traveled during the flight and inversely related to income levels (Hess, Adler, & Polak, 2007, p. 221). In contrast, other studies have shown that business travelers primarily base their airline choices on the breadth of air flight options, the total air travel time toward their destinations, and the presence of direct flight possibilities, whereas frequent flyer programs, on-time arrivals and airfare prices play a less important role in their carrier choice decisions. In other words, despite the relative dearth of studies on airline choice within different air travel market segments, it can be hypothesized that airline customer loyalty is likely to be influenced by different factors within different customer groups. In this respect, air travel market can be segmented not only according to travel purpose, such as business or vacation travel, but also in accord to more complex criteria, such as socio-demographic characteristics (Dolnicar, 2007, p. 129).

## **5. Research Methodology**

For the purposes of data collection, in the framework of this study an online convenience sample survey of European airline passengers has been conducted. The research questionnaire to be used for data collection has measured the independent variables, such as frequent flyer programs, customer satisfaction, ticket prices and other factors, that are highly likely to affect customer retention and airline loyalty.

The research questionnaire has been composed of three main components. The first component of the questionnaire has collected information on the travel experiences of research participants, such as regional and international air travel frequency and the characteristics of recent trip they have undertaken, or have completed last time before they took part in the survey. The second component of the questionnaire has collected the information on the degree to which passengers are satisfied with frequent flyer and customer loyalty programs that full service and low cost airlines offer. The third component has collected data regarding the socio-economic characteristics of the sampled passengers, such as their age, gender, income and occupation.

Therefore, this study has applied the cross-sectional research methodology. This research approach has enabled the primary researcher to conduct this survey through the distribution of the link to the online questionnaire via e-mail, social media and Internet forums to potential research participants. The aimed-for sample size has been 500 survey participants, in order to ensure the representativeness of the findings of this study in respect to the general population. The closed research questionnaire that has served as the basis for this quantitative study has deployed standard measurement scales for the majority of variables, to ensure the replicability of this research (Chang & Hung, 2013, p. 30).

## 6. Research Questionnaire

Based on the research question of this study, in its first component, the research questionnaire has comprised variables measuring airline choice and recent trip characteristics. Thus, the extent of frequent flyer program membership has been measured on the following 5-point scale: 1 (“None”), 2 (“Basic/Entry-Level Membership”), 3 (“Medium-Level Membership”), 4 (“High-Level Membership”), 5 (“Highest-Level/Premium Membership”) (Gössling, & Nilsson, 2010, p. 247).

The business purpose of air travel has been measured with the item “What percentage of your flights is made for business purposes?” on a 7-point scale ranging from 1 (“0%-15%”) to 4 (“50%”) to 7 (“85%-100%”). The leisure purpose of air travel has been measured with the item “What percentage of your flights is made for leisure purposes?” on a 7-point scale ranging from 1 (“0%-15%”) to 4 (“50%”) to 7 (“85%-100%”) (Chang & Hung, 2013, p. 30). The degree to which air travel costs are covered by the traveler has been measured with the item “What percentage of your air travel costs is paid for by yourself?” on a 7-point scale ranging from 1 (“0%-15%”) to 4 (“50%”) to 7 (“85%-100%”) (Martín, Román, & Espino, 2011, p. 367).

The flight frequency questionnaire item has been measured on a 7-point scale ranging from 1 (“very infrequently”) to 7 (“very frequently”): “How often do you fly each year?” The usage of the traditional airline services has been measured with the item “What percentage of your flights is booked with a traditional airline?” on a 7-point scale ranging from 1 (“0%-15%”) to 4 (“50%”) to 7 (“85%-100%”). The usage of the low cost carrier services has been measured with the item “What percentage of your flights is booked with a low cost carrier?” on a 7-point scale ranging from 1 (“0%-15%”) to 4 (“50%”) to 7 (“85%-100%”) (Dolnicar, Grabler, Grün, & Kulnig, 2011, p. 1021).

Furthermore, research participants have been asked to indicate the importance of the following criteria for their choice of airlines on a 7-point Likert-type scale ranging from 1 (“not important at all”) to 7 (“extremely important”): “flight connections availability,” “frequent flyer programs,” “airline reputation,” “airfare prices,” “flight availability,” “departure and arrival schedules,”

“airline safety record,” “ticket booking channels,” “airline image,” and “national carrier status” (Chang & Hung, 2013, p. 31; Dolnicar, Grabler, Grün, & Kulnig, 2011, p. 1022).

In its second component, the research questionnaire has measured the overall satisfaction with the services that airlines provide, using a 5-item measurement instrument estimating the agreement of respondents with the following statements on a 7-point Likert-type scale ranging from 1 (“completely disagree”) to 7 (“completely agree”): “My decision to use this airline was a wise one”, “I am always delighted with the airline’s service”, “Overall I am satisfied with this service provider”, “I think I did the right thing when I decided to use this airline”, “I feel good about using this service provider.” The special treatment that the airline client may receive via customer loyalty programs will be measured with the help of the following 5-item questionnaire using a 7-point Likert-type scale ranging from 1 (“completely disagree”) to 7 (“completely agree”): “I get discounts or special deals”, “I get better prices”, “I receive special services from the airline”, “I am placed higher on the priority list in the boarding line”, “I get faster service” (Dagger, & David, 2012, p. 468). Additionally, the questionnaire has measured on a 7-point Likert-type scale ranging from 1 (“not satisfied at all”) to 7 (“highly satisfied”) the satisfaction of passengers with the following aspects of flight experience: “reservation and staff,” “the suitability, comfort and modernity of planes,” “the cleanliness and attractiveness of plain interior,” “catering, sales, and entertainment on board,” “flight punctuality and the handling of baggage,” “available price rates,” “flight schedule” (Dolnicar, Grabler, Grün, & Kulnig, 2011, p. 1021).

The dependent variable of customer retention has been measured with the help of 5 behavioral loyalty items the agreement with which will be assessed on a 7-point Likert-type scale ranging from 1 (“completely disagree”) to 7 (“completely agree”): “I say positive things about the airline to other people”, “I consider the airline my first choice when I purchase airplane tickets”, “I will continue to do business with the airline for the next few years”, “I am willing to maintain my relationship with the airline”, “I am loyal to the airline” (Dagger, & David, 2012, p. 468).

Likewise, empirical data on the following socio-demographic characteristics of airline passengers has been collected: gender (male/female), age (“20 or younger,” “21-30,” “31-40,” “41-50,” “51-60,” “61-70,” “71 or older”), monthly income in local currency (“499 or less,” “500-999,” “1,000-1,499,” “1,500-1,999,” “2,000-2,499,” “2,500-2,999,” “3,000 or more”), education level (“high school education or less,” “technical or trade education,” “Bachelor’s Degree,” “Master’s Degree,” “Doctoral Degree,” “Postdoctoral Experience”) (Chang & Hung, 2013, p. 31). Given that for the purposes of data collection, the services of the Survey Monkey website have been used, for the measurement of the three last socio-demographic items of the questionnaire standard measurement scales have been used, to increase the reliability of research findings.

## **7. Data Collection**

The present survey has been administered using the Survey Monkey Internet platform. The sampling procedure utilized for this survey has not applied any restrictive conditions on survey participants. All study participants have been 18 years of age and above. Data collection for the present study took place in September-October 2016 via various digital devices, such as iOS or Android phones and tablets and MacOS and Windows computers. Since the general population of a European country has been sampled, research participants have been recruited from across different country regions and income groups in a statistically representative manner.

## 8. Empirical Results

### *Descriptive Statistics*

After the present survey has been completed, 536 complete survey results have been obtained. Since the sample has been drawn from the general population, rather than targeted to a particular customer group, frequent flyer program membership statistics indicate relatively low membership rates in these customer loyalty programs (24.25%). Moreover, present finding indicate steeply rising exclusivity with increasing frequent flyer program membership levels. Whereas 17.72% of respondents are enrolled in a basic frequent flyer program, only 5.04% have medium-level loyalty program membership, solely 0.75% have high-level frequent flyer membership, and only 0.56% have indicated highest-level program membership.

*Table 1: Frequent flyer program membership status distribution.*

<b>Frequent flyer program membership status</b>	<b>Frequency</b>	<b>Percent</b>
None	406	75.75%
Basic/Entry-Level Membership	95	17.72%
Medium-Level Membership	27	5.04%
High-Level Membership	4	.75%
Highest-Level/Premium Membership	3	.56%
<i>Missing values</i>	1	.19%
<b>Total</b>	<b>536</b>	<b>100.0</b>

As the below table indicates for the absolute majority of respondents (84.89%), business trips represent between 0% and 13% of their flights made in recent years.

*Table 2: Percentage of flights made for business purposes distribution.*

<b>The percentage of flights made for business purposes</b>	<b>Frequency</b>	<b>Percent</b>
0%-13%	455	84.89%
14%-28%	16	2.99%
29%-43%	8	1.49%
44%-58%	15	2.80%
59%-73%	14	2.61%
74%-88%	12	2.24%
89%-100%	12	2.24%
<i>Missing values</i>	4	.75%
<b>Total</b>	<b>536</b>	<b>100.0</b>

By contrast, for a significant share of research participants (61.38%), leisure represents the purpose of their flights in 89% to 100% of cases, even though for a significant minority (22.01%) only 0% to 13% of their air travel is leisure-related.

*Table 3: Percentage of flights made for leisure purposes distribution.*

<b>The percentage of flights made for leisure purposes</b>	<b>Frequency</b>	<b>Percent</b>
0%-13%	118	22.01%
14%-28%	23	4.29%
29%-43%	11	2.05%
44%-58%	17	3.17%
59%-73%	10	1.87%
74%-88%	23	4.29%
89%-100%	329	61.38%
<i>Missing values</i>	5	.93%
<b>Total</b>	536	100.0

This study has found that fully 25% of respondents tend to book between 89% and 100% of their flights with traditional airlines, even though for 31.16% of research participants flights with established carriers are booked in only 0% to 13% of cases, whereas for 14.18% of respondents traditional carriers are preferred in between 44% to 58% of cases.

*Table 4: Percentage of flights booked with a traditional airline distribution.*

<b>The percentage of flights booked with a traditional airline</b>	<b>Frequency</b>	<b>Percent</b>
0%-13%	167	31.16%
14%-28%	27	5.04%
29%-43%	27	5.04%
44%-58%	76	14.18%
59%-73%	37	6.90%
74%-88%	62	11.57%
89%-100%	134	25.00%
<i>Missing values</i>	6	1.12%
<b>Total</b>	536	100.0

At the same time, a lower percentage of respondents (17.54%) tend to book flights with low cost airlines in 89% to 100% of cases and a higher percentage of research participants (36.38%) have their flights booked with low cost airlines, than with traditional carriers. Nevertheless, for 15.86% of respondents, low cost carriers are the preferred option for flight booking in 44% to 58% of cases.

*Table 5: Percentage of flights booked with a low cost carrier distribution.*

<b>The percentage of flights booked with a low cost carrier</b>	<b>Frequency</b>	<b>Percent</b>
0%-13%	195	36.38%
14%-28%	45	8.40%
29%-43%	34	6.34%
44%-58%	85	15.86%
59%-73%	28	5.22%
74%-88%	49	9.14%
89%-100%	94	17.54%
<i>Missing values</i>	6	1.12%
<b>Total</b>	536	100.0

Over half of research participants (57.09%) fly either very infrequently or infrequently, even though 21.08% of respondents fly occasionally, whereas only 1.49% of research participants have been found to be engaged in very frequent flying.

*Table 6: Flight frequency distribution.*

<b>Yearly flight frequency</b>	<b>Frequency</b>	<b>Percent</b>
very infrequently	238	44.40%
infrequently	68	12.69%
rather infrequently	33	6.16%
from time to time	113	21.08%
rather frequently	48	8.96%
frequently	28	5.22%
very frequently	8	1.49%
<b>Total</b>	<b>536</b>	<b>100.0</b>

The present sample is not biased in terms of gender distribution, since females represent 51.31% of respondents versus 47.20% of male research participants, which corresponds to the gender composition of the general population.

*Table 7: Gender distribution.*

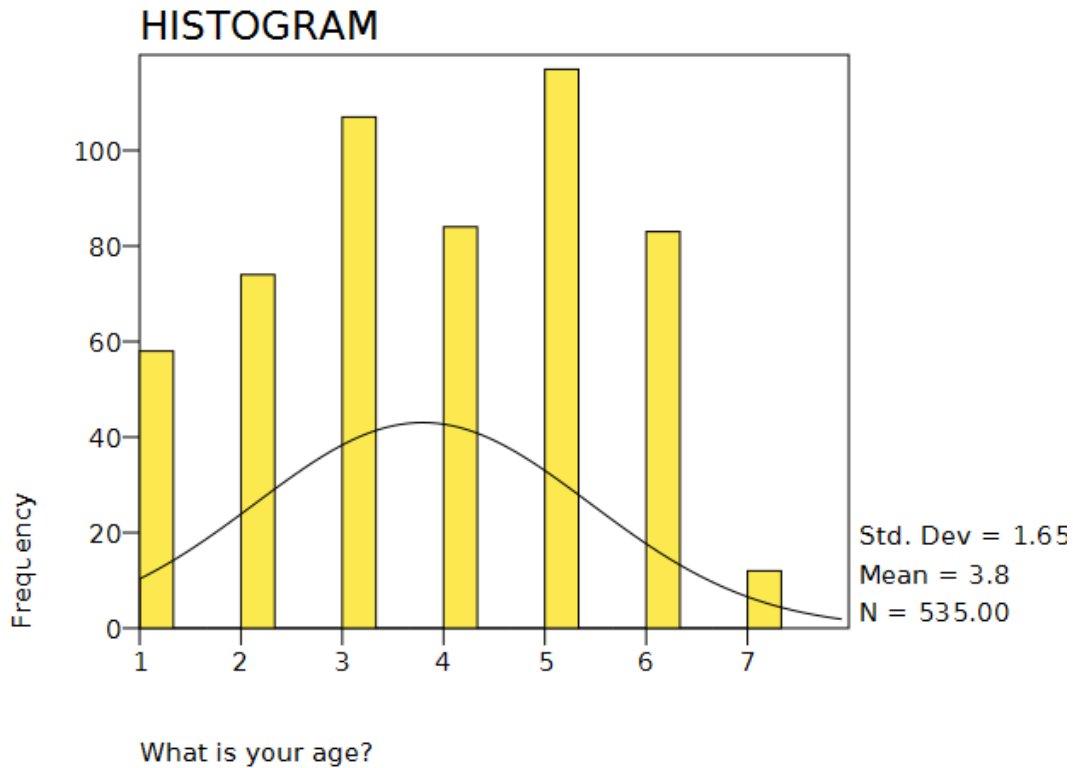
<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Female	275	51.31%
Male	253	47.20%
<i>Missing values</i>	8	1.49%
<b>Total</b>	<b>536</b>	<b>100.0</b>

Likewise, the age structure of the present sample largely follows the normal distribution and covers working-age population from 18 to over 75 years of age.

*Table 8: Age distribution.*

<b>Age</b>	<b>Frequency</b>	<b>Percent</b>
18 to 24	58	10.82%
25 to 34	74	13.81%
35 to 44	107	19.96%
45 to 54	84	15.67%
55 to 64	117	21.83%
65 to 74	83	15.49%
75 or older	12	2.24%
<i>Missing values</i>	1	.19%
<b>Total</b>	<b>536</b>	<b>100.0</b>

Figure 1: Age distribution.



At the same time, in the present study lower and lower middle income groups account for 67.88% of respondents, whereas high income percentiles represents no more than 3% of the present research sample.

Table 9: Approximate average household income distribution.

Approximate household income in local currency	average income in local	Frequency	Percent
0-24,999		179	33.40%
25,000-49,999		176	32.84%
50,000-74,999		74	13.81%
75,000-99,999		51	9.51%
100,000-124,999		22	4.10%
125,000-149,999		7	1.31%
150,000-174,999		4	.75%
175,000-199,999		5	.93%
200,000 and up		5	.93%
Missing values		13	2.43%
<b>Total</b>		<b>536</b>	<b>100.0</b>

Nevertheless, over a third of respondents (34.70%) have completed graduate school, while only 20.52% are college graduates and 11.01% have education levels no higher than high school.

Approximate household income in local	average income in local	Frequency	Percent
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<b>currency</b>		
Did not attend school	2	.37%
1st grade	6	1.12%
2nd grade	3	.56%
3rd grade	2	.37%
4th grade	3	.56%
5th grade	3	.56%
6th grade	5	.93%
7th grade	5	.93%
8th grade	1	.19%
10th grade	1	.19%
11th grade	15	2.80%
Graduated from high school	59	11.01%
1 year of college	21	3.92%
2 years of college	33	6.16%
3 years of college	22	4.10%
Graduated from college	110	20.52%
Some graduate school	22	4.10%
Completed graduate school	186	34.70%
<i>Missing values</i>	37	6.90%
<b>Total</b>	536	100.0

## 9. Factor Analysis Results

In the present study, in the first stage of data analysis exploratory factor analysis has been applied to empirical data. Given that these study seeks to uncover the interrelations between frequent flyer program membership and behavioral loyalty, in this analysis only relevant questionnaire items have been included. Based on the literature review, variables pertaining to gender and age have been left out of this analysis for the sake of parsimony and limited theoretical relevance. Since general airline satisfaction is expected to act as a moderating variable in the interrelation between frequent flyer program membership and customer loyalty it also has been left out of this analysis, in order to enable the discovery of patterns in customer characteristics and preferences. For this purpose, exploratory factor analysis based on correlations between variables, principal component factor extraction method and Varimax factor rotation method has been performed. According to rotation sums of squared factor loadings results, only the rotated factor solution consisting of 5 factors will be presented, since they cumulatively explain 65.80% of variation in the empirical data, while considering additional factors does not significantly add to the explanatory power of the factor solution. The original analysis output can be found in Appendix I.

*Table 10: Total variance explained.*

	<i>Initial Eigenvalues</i>	<i>Rotation Sums of Squared Loadings</i>
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<i>Component</i>	<i>Total</i>	<i>% of Variance</i>	<i>Total</i>	<i>% of Variance</i>
<b>1</b>	11.64	32.34%	11.64	32.34%
<b>2</b>	5.11	14.20%	5.11	14.20%
<b>3</b>	3.33	9.24%	3.33	9.24%
<b>4</b>	1.89	5.24%	1.89	5.24%
<b>5</b>	1.72	4.76%	1.72	4.76%
<b>6</b>	1.40	3.88%	1.40	3.88%
<b>7</b>	1.22	3.38%	1.22	3.38%
<b>8</b>	.90	2.49%	.90	2.49%
<b>9</b>	.76	2.10%	.76	2.10%
<b>10</b>	.73	2.02%	.73	2.02%

In the table below only the rotated exploratory factor solution is presented. For the sake of simplicity only positive and negative factor loadings above 0.30 and below -0.30 respectively are indicated.

Table 11: Rotated component matrix.

<b>Variables</b>	<b>Rotated Factors</b>				
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<i>What is your of frequent flyer program membership status?</i>			.31	.48	-.31
<i>What percentage of your flights is made for business purposes?</i>				.37	-.37
<i>What percentage of your flights is made for leisure purposes?</i>	.38	-.60			.31
<i>What percentage of your air travel costs is paid for by yourself?</i>	.36	-.63			
<i>What percentage of your flights is booked with a traditional airline?</i>	.42				
<i>What percentage of your flights is booked with a low cost carrier?</i>		-.46			.44
<i>How often do you fly each year?</i>			.30	.60	
<i>flight connections availability</i>	.47		.36		
<i>frequent flyer programs</i>	.45	.45	.42		
<i>airline reputation</i>	.71		.40		
<i>airfare prices</i>	.60	-.46	.30		
<i>flight availability</i>	.67	-.44	.37		
<i>departure and arrival schedules</i>	.66	-.35	.40		
<i>airline safety record</i>	.66		.38		
<i>ticket booking channels</i>	.65		.39		
<i>airline image</i>	.61		.43	-.32	
<i>national carrier status</i>	.56		.41	-.39	
<i>I get discounts or special deals</i>	.44	.72			
<i>I get better prices</i>	.45	.67			.37
<i>I receive special services from the airline</i>	.44	.77			.30
<i>I am placed higher on the priority list in the boarding line</i>	.39	.77			.34
<i>I get faster service</i>	.41	.76			.34
<i>reservation and staff</i>	.77		-.33		

Variables	Rotated Factors				
	1	2	3	4	5
<i>the suitability, comfort and modernity of planes</i>	.76		-.39		
<i>the cleanliness and attractiveness of plane interior</i>	.76		-.37		
<i>catering, sales, and entertainment on board</i>	.67		-.38		
<i>flight punctuality and the handling of baggage</i>	.68		-.43		
<i>available price rates</i>	.67		-.39		
<i>flight schedules</i>	.74		-.40		
<i>I say positive things about the airline to other people</i>	.77		-.35		
<i>I consider the airline my first choice when I purchase airplane tickets</i>	.68				
<i>I will continue to do business with the airline for the next few years</i>	.78				
<i>I am willing to maintain my relationship with the airline</i>	.78				
<i>I am loyal to the airline</i>	.61	.34			-.30
<i>What is your approximate average household income?</i>				.58	
<i>What is the highest level of education you have completed?</i>				.33	

The above exploratory factor analysis findings demonstrate, over 65% of the variation in empirical data can be explained with reference to 5 underlying factors. For the purposes of this study, these factors are interpreted as statistically distinct airline customer profiles.

Thus, the first factor indicates that about 30% of respondents tend to engage in air travel primarily for leisure purposes, pay for their travel expenses by themselves, and book their flights with traditional airlines. For this consumer group, while the possibility of enrolling into frequent flyer programs is important, membership in these frequent flyer programs does not seem to play a role in their airline choices, due to their relatively high levels of airline loyalty. At the same time, airline choice can be expected to significantly depend on other airline service characteristics, such as flight connections availability, airline reputation, airfare prices, flight availability, departure and arrival schedules, airline safety record, ticket-booking channels, airline image, and national carrier status. In other words, this consumer group represents average airline customers that do not have a distinct socio-economic profile and fly infrequently. For this reason, while frequent flyer program are appreciated by these customers for the benefits they are expected to provide, such as discounts, special deals, better prices, special services, faster service or aircraft boarding priority, the eventual loyalty is more likely to depend on airline service quality. Thus, customer satisfaction can be expected to play a significant role in airline choice. This is supported by high levels of importance that reservation convenience, staff-provided services, in-flight comfort, plane interior attractiveness, food catering, sale deals, on-board entertainment, flight punctuality, baggage handling, price options and flight schedules can be expected to have for this customer group. It can be assumed that it is these service characteristics that traditional airlines

tend to offer that make these carriers their first choice, contribute to their positive image, encourage repeat purchase behavior, inspire sentiments of association with the airlines, and produce significantly high levels of customer loyalty.

By contrast, another significant group of customers that the second factor reflects has significantly lower airline loyalty levels. Though it accounts for only 14.20% of respondents, it has a distinct customer profile since its non-enrollment in frequent flyer programs is combined with a significantly low probability that they will engage in air travel for leisure purposes, will pay their air travel costs by themselves and will book their flights with low cost carriers. For this customer groups, frequent flyer groups are of significant interest not because they give access to lower prices, wider air travel opportunities or improved flight arrival and departure schedules, but because these programs provide access to special deals, special treatment, optimized prices, priority aircraft boarding, and faster service. This indicates a narrower, more utilitarian attitude concerning both frequent flyer programs and airline loyalty that this group of infrequent flyers can be expected to have as opposed to the first group. This is supported by the insignificance of airline characteristics, such as airline reputation and image, for this customer group. Therefore, these variables are not likely to affect airline choice in this group. Similarly, airline service characteristics and quality are mostly disregarded by these customers. This is reflected in their very low affective loyalty levels toward airlines and low probability of their membership in frequent flyer programs.

In other words, as the analysis of the third customer group will indicate, frequent flyer program membership can primarily be expected from frequently flying customers. This group comprising 9.24% of respondents has, however, not been found to be loyal to either traditional or low cost airlines either behaviorally or affectively. While these customers demonstrate interest in frequent flyer programs, their airline choice is primarily motivated by airline characteristics, such as national carrier status, airline image, airline reputation, safety record, and the degree to which airline services fit the flying purposes of these customers. More specifically, these customers pay attention to flight connections, airfare prices, flight availability, flight schedules and booking channels, when choosing specific airlines as service providers. This is supported by the significantly low importance that service quality characteristics consistently have for this customer group.

As the fourth respondent group consisting of 5.24% of research participants demonstrates, higher levels of frequent flyer program membership are not associated with airline loyalty. This can be explained by the business nature of the flights these respondents undertake. Since they engage in air travel with high frequency, they are highly unlikely to pay attention to the national carrier status or airline image, when making their airline choices. In other words, high income and education levels of these customers are likely to make the switching costs that frequent flyer programs introduce insignificant as factors affecting their airline choice. The more frequently these customers fly, the higher levels of loyalty card membership they achieve across different airlines with which they book their tickets. This suggests that for this customer group higher frequent flyer program membership may be associated with non-utilitarian motives, such as social prestige.

The fifth group of customers comprising 4.76% of respondents provides a contrasting example to the previous consumer group. In correspondence to its highly infrequent flying, it tends to have entry-level or medium-level membership in frequent flyer programs, while exhibiting low customer loyalty levels. In this group booking flights for business purposes is inversely related to

traveling for leisure purposes. Similarly, the more these customers fly with low cost carriers, the lower membership levels in frequent flyer programs they tend to have. For these customers, frequent flyer programs are unimportant, due to the influence that airfare prices, special airline services, boarding times and service promptness can be expected to exert on their airline choice. For this reason, this group has low levels of both customer loyalty program membership and airline loyalty.

At the same time, these consumer profiles cross-cut frequent flyer membership categories, since as the below correlation table indicates airline loyalty programs are highly significantly related to the affective and behavioral loyalty of airline customers.

More specifically, correlation analysis indicates that frequent flyer membership status is positively associated with the percentage of flights booked with a traditional carrier, yearly flight frequency, frequent flyer program importance, and various airline loyalty measures, such as being loyal to the airline and willingness to maintain a relationship with the airline, while being negatively associated with the percentage of flights booked with a low cost carrier. In this study, the percentage of flights made for business purposes has been found to be negatively related to the percentage of flights made for leisure purposes and to the percentage of travel costs paid by the respondent, while being positively related to yearly flight frequency and frequent flyer program importance. By contrast, the percentage of flights made for leisure purposes has been found to be positively related to the percentage of travel costs paid by the research participant, the percentage of flights booked with a traditional airline, with the percentage of flights booked with a low cost carrier and yearly flight frequency. The percentage of flights made for leisure purposes has also been found to be positively related to saying positive things about the airline, the intention to do business with the airline and willingness to maintain a relationship with the airline.

Similar to the tendency to book flights for leisure purposes, the percentage of travel costs paid by the respondent has been found to be positively related to the percentage of flights booked with a traditional airline, the percentage of flights booked with a low cost carrier and yearly flight frequency. Likewise, travel costs paid by the research participant has also been found to be positively related to saying positive things about the airline, the intention to do business with the airline and willingness to maintain a relationship with the airline.

In this research, the percentage of flights booked with a traditional airline has been found to be negatively related to the percentage of flights booked with a low cost carrier, while being positively related to yearly flight frequency and frequent flyer program importance. Additionally, this variable has been found to be interrelated with various indicators of airline loyalty, such as saying positive things about the airline, being loyal to the airline and willingness to maintain a relationship with the airline. In contrast, the percentage of flights booked with a low cost carrier has been found to be negatively related to and frequent flyer program importance, while being positively, but weakly related to yearly flight frequency. Additionally, while the tendency to book flights with a low cost carrier has been found to be positively interrelated with the intention to continue to do business with the airline and willingness to maintain a relationship with the airline, this variable was found to be negatively related to being loyal to the airline.

At the same time, yearly flight frequency has been found to be positively related to both frequent flyer program importance and different measures of airline loyalty. Moreover, frequent flyer program importance has been found to be positively related to all measures of airline loyalty.

Additionally, all indicators of airline loyalty have been found to be positively interrelated with each other.

These findings reinforce the outcomes of the preceding factor analysis, by indicating that the positive relationship between frequent flyer membership status and airline loyalty is highly likely to be mediated by passenger characteristics, such as airline preferences and prevalent travel purposes.

## 10. Conclusions

While this study indicates that frequent flyer membership status is positively correlated with airline loyalty, additional consumer choice-related variables such as preference to book tickets with a traditional carrier or a low cost airline, are likely to mediate this relationship. Given that particular consumer groups are likely to exhibit similar preferences and attitudes in relation to travel choices, airline loyalty and airline services, this study has performed a factor analysis, to examine whether significant interrelations between these variables exist on the level of particular data clusters that correspond to distinct consumer profiles. Based on the conclusion of the present factor analysis, it is possible to indicate that frequent flyer program membership is not either significantly or positively related to customer loyalty across all consumer profiles. This conclusion especially holds for airline customers travelling for leisure purposes. In contrast to the latter customer group, relatively frequently flying customers have not been found to exhibit significant levels of both affective and behavioral airline loyalty. These factor analysis findings contradict the theoretical expectations of Bolton, Lemon, and Verhoef (2004, p. 271) that frequent flyer programs significantly affect airline choice, even though correlation analysis results suggest a significant positive relationship between frequent flyer program membership and airline loyalty. This study also does not unequivocally support Oliver's (2010, pp. 442-443) position that customer loyalty programs can be effective tools for stimulating purchase intentions and consumer behavior.

At the same time, this research reinforces the conclusion of Chang and Sun (2012, p. 15) that traditional airlines are likely to maintain their market dominance due to high levels of loyalty that they continue to command. However, the exploratory factor analysis findings of this research do not support Fourie and Lubbe's (2006, p. 98) argument airfare price levels and flight frequency are likely to affect airline choice that this study has operationalized in terms of behavioral and affective loyalty. Thus, this study tentatively casts doubt on the assumption that frequent flyer programs serve as lock-in mechanisms that significantly influence customer decisions across all consumer groups (Sharp, & Sharp, 1997, p. 474). More specifically, from this study follows that frequent flyer program membership may not necessarily serve as a causal factor likely to increase the level of association between customers and airlines, as Stone et al. (2004, p. 305) argue in their research.

At the same time, in contrast to the study of Espino, Martín, and Román (2008, p. 593), the present research indicates that business travelers do not tend to pay significant attention destination arrival times and flight connection availability. Furthermore, in contrast to previous research, this study provides a more refined picture of holiday travelers' preferences, since not all of them have been found to be significantly affected by ticket prices and discount availability, even though air travelers that fly more frequently for leisure purposes than other customer groups undertaking occasional air travel have been found to pay closer attention both to airfare prices and other airline choice factors, such as airline reputation and flight availability. In this respect,

holiday travelers whose expenses tend to be paid not by themselves, such as by their employers have mostly been found to be affected by frequent flyer programs and their benefits, such as special deals, as factors that are positively associated with customer loyalty to primarily traditional airlines. As this study has shown, the fragmentation of consumer market into distinct segments may account for mixed empirical findings concerning the effectiveness of frequent flyer programs as lock-in mechanisms leading to higher airline sales (Bolton, Lemon, & Verhoef, 2004, p. 271).

More specifically, this study has found that, as opposed to Suzuki's (2007, p. 1) argument acceptable service standards are not likely to lead to airline loyalty among frequent flyer program members, even though they are likely to be highly important for leisure travelers and marginally important for medium-frequency travelers. At the same time, similar to McCaughey and Behrens (2011, p. 6), this study indicates that frequent flyer programs introduce significant switching costs for airline customers, in direct relation to membership level. Yet, this research does not support McCaughey, & Behrens's (2011, pp. 6-7) proposition that frequent flyer programs represent a significant driver of behavioral loyalty, since this relationship has not been found to hold across all customer groups. The present findings, thus, concur with previous empirical studies that have cast doubt on the effectiveness of frequent flyer programs as significant airline profitability factors (Lederman, 2007, p. 1134). In other words, frequent flyer programs do not necessarily affect airline choice as a behavioral aspect of airline loyalty across different consumer groups (McCaughey, & Behrens, 2011, p. 3).

This study, thus, supports the argument that the effect of frequent flyer programs on customer behavior may follow from the self-selection of their members based on other factors, such as income level (Liu, & Yang, 2009, p. 106). However, while this study supports Gössling, and Nilsson's (2010, p. 250) findings that associate frequent flyer program enrollment with business travel and frequent flying, this research also corroborates Löfgren, and Carlsson's (2004, pp. 1-2) position that airline loyalty programs do not necessarily increase customer loyalty. At the same time, this study does not indicate that either membership or non-enrollment in frequent flyer program leads to a preference for traditional airlines over low cost carriers, even though the present findings also indicate a positive association between traditional carrier preference and frequent flyer program membership and customer loyalty, on the one hand, and a negative association between low cost airline preference frequent flyer program membership and customer loyalty, on the other hand. These findings partially correspond to Coles's (2008, p. 69) argument that traditional airlines are likely to elicit higher customer loyalty levels than low cost airlines, due to the higher service quality of the former. This study also partially supports the conclusions of Eisenberger and Rhoades's (2001, p. 728) conclusions that light and leisure travelers can be expected to find enrollment into loyalty program less attractive than frequent and business flyers.

Nevertheless, this study indicates that, for some consumer groups, the switching costs that frequent flyer program introduce do not represent lock-in mechanisms in terms of airline choice or loyalty, in contrast to Patterson, and Smith (2003, p. 107). The present findings support, therefore, Verhoef's (2003, p. 30) conclusion that airline customer loyalty programs are primarily associated with service usage levels, while having no significant general effect on customer retention or loyalty. Thus, similar to Lacey (2009, p. 392), this study indicates that the effect of loyalty programs on aggregate airline customer behavior can be expected to be limited. This study also concurs with Liu, and Yang (2009, p. 106), since it indicates the presence of behaviorally distinct customer groups. Yet, this research does not unequivocally show that airline

loyalty programs are effective among moderate and light flyers, even though it tentatively supports studies that have found that these programs are ineffective among frequent flyers (Bolton, Kannan, & Bramlett, 2000, pp. 106-107). This study, however, clearly indicates an association between frequent flying and business travel and frequent flyer program enrollment, which sets corresponding customer groups apart from leisure travelers, while being in accord with correlation analysis results (Klophaus, 2005, p. 348). Accordingly, in contrast to Martín, Román, and Espino, (2011, p. 364), but similar to Dolnicar (2007, p. 129), this study has found that business travelers are not likely to be influenced by frequent flyer programs, flight schedules, in-flight comfort, airfare costs, service quality, airfare prices, on-time arrivals and carrier reputation in respect to their behavioral or affective airline loyalty.

### 11. Managerial Implications

The primary managerial implications of the present study concern the necessity to tailor frequent flyer programs to different consumer groups, since the reasons for enrollment into medium-level loyalty programs are likely to be significantly different for either entry-level or premium-level frequent flyer programs, as this study demonstrates. Furthermore, this study indicates that airlines are likely to significantly benefit from lowering the barriers for enrollment into frequent flyer programs, especially among customers travelling for leisure purposes, since these programs may reinforce their loyalty toward airlines. By contrast, the benefits that frequent flyers already enrolled medium-level loyalty programs enjoy may not necessarily translate into customer loyalty. Thus, airlines may be advised to place an emphasis on their service quality, while minimizing the benefits that their frequent flyer programs confer. This also is likely to apply to entry-level frequent flyer program members that can be expected to be motivated by utilitarian considerations to join these programs that do not lead to either affective or behavioral loyalty, such as repeat ticket bookings, in this customer group. Nevertheless, for customers traveling for non-leisure purposes, the presence of frequent flyer programs and the opportunity to receive special service or improved pricing might lead to higher airline loyalty levels. Thus, traditional airlines can be recommended to retain frequent flyer programs, but to provide different customer groups with distinct sets of benefits that different levels of these programs give access to.

### Bibliography

- Bell, S. J., Auh, S., & Smalley, K. (2005). Customer relationship dynamics: service quality and customer loyalty in the context of varying levels of customer expertise and switching costs. *Journal of the Academy of Marketing Science*, 33(2), 169-183.
- Bhattacharya, C. B., & Sen, S. (2003). Consumer-company identification: A framework for understanding consumers' relationships with companies. *Journal of marketing*, 67(2), 76-88.
- Bolton, R. N., Kannan, P. K., & Bramlett, M. D. (2000). Implications of loyalty program membership and service experiences for customer retention and value. *Journal of the academy of marketing science*, 28(1), 95-108.
- Bolton, R. N., Lemon, K. N., & Verhoef, P. C. (2004). The theoretical underpinnings of customer asset management: A framework and propositions for future research. *Journal of the Academy of Marketing Science*, 32(3), 271-292.
- Burnham, T. A., Frels, J. K., & Mahajan, V. (2003). Consumer switching costs: a typology, antecedents, and consequences. *Journal of the Academy of marketing Science*, 31(2), 109-126.
- Chang, L. Y., & Hung, S. C. (2013). Adoption and loyalty toward low cost carriers: The case of Taipei–Singapore passengers. *Transportation Research Part E: Logistics and Transportation Review*, 50, 29-36.

- Chang, L. Y., & Sun, P. Y. (2012). Stated-choice analysis of willingness to pay for low cost carrier services. *Journal of Air Transport Management*, 20, 15-17.
- Coles, T. (2008). Citizenship and the state: Hidden features in the internationalisation of tourism. In Coles, T., & Hall, C. M. (Eds.). *International business and tourism: Global issues, contemporary interactions*, 55-69. London: Routledge.
- Cortiñas, M., Elorz, M., & Múgica, J. M. (2008). The use of loyalty-cards databases: Differences in regular price and discount sensitivity in the brand choice decision between card and non-card holders. *Journal of Retailing and Consumer Services*, 15(1), 52-62.
- Dagger, T. S., & David, M. E. (2012). Uncovering the real effect of switching costs on the satisfaction-loyalty association: The critical role of involvement and relationship benefits. *European Journal of Marketing*, 46(3/4), 447-468.
- Dolnicar, S. (2007). Market Segmentation in Tourism. In Woodside, A. G., & Martin, D. (Eds.). *Tourism Management: Analysis, Behaviour, and Strategy*, 129-150. Wallingford, Oxfordshire: CABI Pub.
- Dolnicar, S., Grabler, K., Grün, B., & Kulnig, A. (2011). Key drivers of airline loyalty. *Tourism Management*, 32(5), 1020-1026.
- Eisenberger, R., & Rhoades, L. (2001). Incremental effects of reward on creativity. *Journal of personality and social psychology*, 81(4), 728-741.
- Espino, R., Martín, J. C., & Román, C. (2008). Analyzing the effect of preference heterogeneity on willingness to pay for improving service quality in an airline choice context. *Transportation Research Part E: Logistics and Transportation Review*, 44(4), 593-606.
- Fourie, C., & Lubbe, B. (2006). Determinants of selection of full-service airlines and low-cost carriers—A note on business travellers in South Africa. *Journal of Air Transport Management*, 12(2), 98-102.
- Gössling, S., & Nilsson, J. H. (2010). Frequent flyer programmes and the reproduction of aeromobility. *Environment and Planning A*, 42(1), 241-252.
- Gwinner, K. P., Gremler, D. D., & Bitner, M. J. (1998). Relational benefits in services industries: the customer's perspective. *Journal of the academy of marketing science*, 26(2), 101-114.
- Hartmann, W. R., & Viard, V. B. (2008). Do frequency reward programs create switching costs? A dynamic structural analysis of demand in a reward program. *Quantitative Marketing and Economics*, 6(2), 109-137.
- Hennig-Thurau, T., Gwinner, K. P., & Gremler, D. D. (2002). Understanding relationship marketing outcomes an integration of relational benefits and relationship quality. *Journal of service research*, 4(3), 230-247.
- 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.
- Jones, M. A., Reynolds, K. E., Mothersbaugh, D. L., & Beatty, S. E. (2007). The positive and negative effects of switching costs on relational outcomes. *Journal of Service Research*, 9(4), 335-355.
- Kivetz, R. (2005). Promotion reactance: The role of effort-reward congruity. *Journal of consumer research*, 31(4), 725-736.
- Kivetz, R., & Simonson, I. (2003). The idiosyncratic fit heuristic: Effort advantage as a determinant of consumer response to loyalty programs. *Journal of marketing research*, 40(4), 454-467.
- Klophaus, R. (2005). Frequent flyer programs for European low-cost airlines: Prospects, risks and implementation guidelines. *Journal of Air Transport Management*, 11(5), 348-353.
- Lacey, R. (2009). Limited influence of loyalty program membership on relational outcomes. *Journal of Consumer Marketing*, 26(6), 392-402.



- Lederman, M. (2007). Do enhancements to loyalty programs affect demand? The impact of international frequent flyer partnerships on domestic airline demand. *The RAND Journal of Economics*, 38(4), 1134-1158.
- Liu, Y. (2007). The long-term impact of loyalty programs on consumer purchase behavior and loyalty. *Journal of Marketing*, 71(4), 19-35.
- Liu, Y., & Yang, R. (2009). Competing loyalty programs: Impact of market saturation, market share, and category expandability. *Journal of Marketing*, 73(1), 93-108.
- Löfgren, Å., & Carlsson, F. (2004). Airline choice, switching costs and frequent flyer programs. *Working Papers in Economics, Report nr. 123*: Göteborg, Sweden: Department of Economics, Gothenburg University.
- Martín, J. C., Román, C., & Espino, R. (2011). Evaluating frequent flyer programs from the air passengers' perspective. *Journal of Air Transport Management*, 17(6), 364-368.
- McCaughey, N. C., & Behrens, C. (2011). *Paying for Status?—The effect of frequent flier program member status on air fare choice* (Discussion paper No. 04-11). Monash University, Department of Economics, 1-40.
- Meyer-Waarden, L. (2007). The effects of loyalty programs on customer lifetime duration and share of wallet. *Journal of Retailing*, 83(2), 223-236.
- Meyer-Waarden, L. (2008). The influence of loyalty programme membership on customer purchase behaviour. *European Journal of Marketing*, 42(1/2), 87-114.
- Oliver, R. L. (2010). *Satisfaction: A behavioral perspective on the consumer*. Armonk, N.Y: M.E. Sharpe.
- Palmatier, R. W., Jarvis, C. B., Bechhoff, J. R., & Kardes, F. R. (2009). The role of customer gratitude in relationship marketing. *Journal of marketing*, 73(5), 1-18.
- Patterson, P. G., & Smith, T. (2003). A cross-cultural study of switching barriers and propensity to stay with service providers. *Journal of retailing*, 79(2), 107-120.
- Proussaloglou, K., & Koppelman, F. S. (1999). The choice of air carrier, flight, and fare class. *Journal of Air Transport Management*, 5(4), 193-201.
- Sharp, B., & Sharp, A. (1997). Loyalty programs and their impact on repeat-purchase loyalty patterns. *International journal of Research in Marketing*, 14(5), 473-486.
- Stone, M., Bearman, D., Butscher, S. A., Gilbert, D., Crick, P., & Moffett, T. (2004). The effect of retail customer loyalty schemes—detailed measurement or transforming marketing?. *Journal of Targeting, Measurement and Analysis for Marketing*, 12(3), 305-318.
- Suzuki, Y. (2007). Modeling and testing the “two-step” decision process of travelers in airport and airline choices. *Transportation Research Part E: Logistics and Transportation Review*, 43(1), 1-20.
- Verhoef, P. C. (2003). Understanding the effect of customer relationship management efforts on customer retention and customer share development. *Journal of marketing*, 67(4), 30-45.
- Verhoef, P. C., Van Doorn, J., & Dorotic, M. (2007). Customer Value Management: An Overview and Research Agenda. *Marketing Journal of Research and Management (Marketing JRM)*, 3(2), 105-120.