



Istanbul Business Research

Submitted: 15.01.2021

Revision Requested: 10.06.2021

Last Revision Received: 31.08.2022

Accepted: 23.04.2023

Published Online: 29.11.2023

RESEARCH ARTICLE

The Antecedents of Economy-class Passenger Loyalty The Moderating Role of Airline Business Models: Full-service and Low-cost Airlines

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Abstract

In recent decades full-service airlines have targeted price-sensitive passengers, traditionally targeted by low-cost airlines, by promoting their economy class options. This paper aims to guide both types of airlines in promoting their economy-class options by utilizing factors influencing passenger preferences and loyalty. This paper identifies the relationship between the factors influencing economy-class passengers' airline preferences and passenger loyalty. It also shows the moderating role of the airline business models, i.e., full-service and low-cost, in this relationship. The data was collected at airports from 418 passengers who had just traveled or would soon travel. The results indicate that schedule convenience influences the airline choice of economy-class passengers the most. Furthermore, passenger loyalty is significantly influenced by in-flight experience, schedule convenience, and punctuality, but not by affordability, assurance, and booking experience. Additionally, the type of airline business model moderates the influence of affordability on passenger loyalty. Full-service and low-cost airlines targeting price-sensitive passengers with economy class options are recommended to ensure schedule convenience and punctuality.

Keywords

Passenger Loyalty, Passenger Preferences, Economy-Class, Airline Business Model, Full-Service Airline, Low-Cost Airline

Introduction

The most prominent airline business models are full-service carriers and low-cost carriers. The competition between full-service and low-cost airlines in many countries has never been fiercer. Having seen the market size of price-sensitive passengers, full-service airlines have started competing against low-cost airlines by creating their second brands as low-cost carriers (Gillen & Lall, 2004). Furthermore, some full-service airlines have begun to offer very competitive economy class prices in recent years, with their prices often the same or even lower than those of low-cost airlines (Fourie & Lubbe, 2006). During the last decade, full-service airlines have been launching ads to promote their economy class by targeting

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To cite this article: Kethüda, O., Dil, E., & Öncü, M. E. (2023). The antecedents of economy-class passenger loyalty the moderating role of airline business models: full-service and low-cost airlines. *Istanbul Business Research*, 52(3), 543-563. <http://doi.org/10.26650/ibr.2023.52.861811>



price-sensitive passengers (Emirates Airlines, 2018). These developments point to the fact that it is now even more critical to understand the factors influencing economy-class passengers' choices, perceptions, preferences, and behavioral intentions (Caber, 2018; Mehta et al., 2019).

The general differences between full-service and low-cost airlines are the factors which distinguish their target markets. Full-service airlines target quality-seekers and are preferred by those who seek superior service quality, whereas low-cost airlines target price-sensitive customers and are generally preferred for their cheaper prices (Akpur & Zengin, 2019a; Baker, 2013; Caber, 2018; Chiou & Chen, 2010; Sezgen et al., 2019). Accordingly, full-service airlines differ from low-cost airlines regarding free luggage capacity, catering services, loyalty programs, early-booking opportunities, punctuality during take-off or landing, the number of direct flight options, and other services. Therefore, factors influencing passengers' airline preferences (FIPAPs) differ between these airline business models, i.e., full-service and low-cost carriers, since there are significant differences between these models (Caber, 2018; Kilinc et al., 2012; Koklic et al., 2017; Kurtulmuşoğlu et al., 2016; Rajaguru, 2016).

The literature on this topic includes papers determining the differences between full-service and low-cost airlines in terms of FIPAPs (Evangelho et al., 2005; Fourie & Lubbe, 2006; Mason, 2000, 2001). However, comparisons made in those papers have been based on either general or business class passengers. As yet, no article focusing on the differences between their economy classes in terms of FIPAPs has been found in the literature. An elaboration on these differences is required to be able to lead both types of airlines on how to promote their offerings, particularly when full-service airlines have targeted price-sensitive customers traditionally targeted by low-cost airlines. Furthermore, as the competition gets fiercer for economy-class passengers, retaining passengers, i.e., ensuring passenger loyalty, is getting more crucial than ever (Shen & Yahya, 2021).

Both full-service and low-cost airlines, therefore, need to aim to create passenger loyalty, which can be defined as a positive attitude towards an airline fostering repetitive ticket purchases in the future (Akamavi et al., 2015). A large number of research papers focusing on passenger loyalty in the airline industry have been published (Akpoyomare, Patrick Ladipo Kunle, & Ganiyu, 2016; An & Noh, 2009; Atalık, 2009; Boubker & Naoui, 2022; Chang & Hung, 2013; Chang & Chang, 2010; Chen & Hu, 2013; Chonsalasin et al., 2021; Chung et al., 2022; Curry & Gao, 2012). Although the papers in the relevant literature have compared the antecedents of passenger loyalty, those papers have collected data from either quality-seekers or price-sensitive passengers. Therefore, there is a need to unveil the influence of FIPAPs on the loyalty of economy-class passengers by collecting data from both full-service and low-cost airline passengers. A research paper covering this gap is vital, particularly when full-service airlines target price-sensitive passengers traditionally targeted by low-cost airlines.

This paper aims to guide both full-service and low-cost airlines in promoting their economy class options from a passenger perspective. To this aim, this study identifies factors influencing economy-class passenger preferences of both full-service and low-cost airlines and draws a comparison between the two. This paper also unveils the influence of FIPAPs on the loyalty of economy-class passengers and tests the role of the airline business model in this influence. In the following section the literature covering passenger loyalty and the theoretical background for the hypotheses are explained. The paper then describes the sampling, data gathering, and analyzing procedures used in the research process. After the results section, a discussion and conclusion are presented, along with suggestions, limitations, and directions for further research.

Conceptual Background and Hypotheses

A Comparison between Full-service and Low-cost Airlines in terms of FIPAPs

The two most critical FIPAPs are the service quality and affordability of the ticket prices (Boubker & Naoui, 2022; Caber, 2018). These two factors separate passenger groups into those seeking a superior service and those seeking cheaper prices (Dennis, 2007; Forgas et al., 2010; Mikulić & Prebežac, 2011). While full-service airlines target passengers who seek qualified service, low-cost airlines target passengers with high price sensitivity (Curry & Gao, 2012). In other words, while passengers of low-cost airlines make their preferences primarily on prices, passengers of full-service airlines make their purchase decisions based on service quality. For this reason, full-service airlines provide a full range of services from pre-flight to after-flight (Lee et al., 2018).

Another factor influencing passenger preferences is the provision of direct flights offering convenient flight times for passengers. While low-cost airlines tend to operate flights to highly preferred destinations to guarantee occupancy, full-service airlines may have the option of operating numerous direct flights to a greater variety of locations due to their larger fleet capacity. Additionally, low-cost airlines prioritize only rush-hour flights to reduce airport payments. In conclusion, full-service airlines provide more direct flights between destinations and more convenient flight times than low-cost airlines, thanks to having a larger fleet (Çetin et al., 2016).

Today's highly regulated air transportation environment in terms of security and safety forces airline business models to increase safety levels. However, Mehta et al. (2019) provide evidence that passengers' risk-taking tendencies are not one of the significant predictors of passengers' preference between full-service and low-cost carriers. That being said, fleets of full-service airlines that provide a superior service may be more modern than low-cost ones. For this reason, passengers may assume and perceive that full-service airlines are more reli-

able due to their relatively new fleet. Therefore, they may prefer full-service airlines in terms of flight safety and security.

Both full-service and low-cost airlines aim to minimize their ground time at airports and keep their aircraft flying as much as possible. Moreover, by seeking to use their fleets more efficiently and minimize airport turnaround time, low-cost airlines typically reduce boarding and disembarking time, thus increasing the frequency of their scheduled flights more than full-service ones. In summary, the turnaround periods of low-cost airlines are shorter than full-service airlines (Acar & Karabulak, 2015). When everything is in good working order, this method significantly reduces costs. However, in case of unexpected circumstances, it may result in the frequent delay of flights.

By comparison, full-service airlines are under relatively less pressure due to the higher cost of their tickets, so they generally keep the time between their flights longer, thus enabling them to tolerate unexpected problems without any inconvenience to their passengers. In conclusion, full-service airlines may be more punctual in operating in a timely manner and they may have shorter delay periods than low-cost airlines. Therefore, passengers may prefer full-service airlines for their punctuality. In line with this notion, the following hypothesis is formulated:

H₁: There are significant differences between full-service and low-cost airlines regarding FIPAPs.

The Relationship between FIPAPs and Passenger Loyalty

Loyalty can be defined as the highest level of commitment on behalf of a customer and it manifests itself in positive attitudes toward the brand and in behavior of repeat purchases (Oliver, 2014). Passenger loyalty consists of four steps: conative loyalty, affective loyalty, cognitive loyalty, and behavior loyalty. Conative loyalty is formed when a brand leads among alternatives according to its functional features, such as price and quality. This type of loyalty is the weakest one since the rivals may exceed functional features at any time. The second phase of loyalty refers to customers' feelings and emotions. Oliver (1999) stated that true loyalty starts during the affective loyalty phase since emotional ties are formed between the customer and the brand. Therefore, effective loyalty is the beginning of true loyalty in those stages. The next level of loyalty is cognitive loyalty, representing the customer's tendency to make recurring purchases and brand recommendations. The last loyalty level, action loyalty, is formed as a result of these three loyalty levels. Thus, the most substantial loyalty level represents a strong bond between the brand/company and the customer (Blut et al., 2007; Oliver, 2014).

Those four critical stages of customer loyalty are summarized in two categories: attitudinal and behavioral dimensions (Lee et al., 2018). Attitudinal loyalty refers to a favorable

attitude to a particular brand, whereas behavioral loyalty implies recommendations and repeating purchasing behaviors. Attitudinal loyalty contains the first three stages (conative, affective, and cognitive), while behavioral loyalty involves action loyalty, which results from attitudinal loyalty (Han et al., 2011; Lee et al., 2018; Namukasa, 2013; Oliver, 2014).

Academic papers focusing on passenger loyalty may be categorized into four groups. The first group of papers focuses on identifying the antecedents of customer loyalty (Akamavi et al., 2015; Akhter et al., 2011; Boubker & Naoui, 2022). The research in the second group aims to determine the effect of perceived value, service quality, public opinion, and satisfaction on passenger loyalty (Akpoyomare, Patrick Ladipo Kunle, & Ganiyu, 2016; An & Noh, 2009; Atalık, 2009; Chang & Hung, 2013; Chang & Chang, 2010; Chen & Hu, 2013; Chonsalasin et al., 2021; Chung et al., 2022; Curry & Gao, 2012). Those in the third group examine customer loyalty to low-cost airlines (Akamavi et al., 2015; Evangelho et al., 2005; Shen & Yahya, 2021). Those in the fourth group compare full-service and low-cost airlines regarding the antecedents of passenger loyalty (Forgas et al., 2010; Koklic et al., 2017; Mikulić & Prebežac, 2011).

The FIPAPs reflect passenger expectations in terms of the transportation service they purchase. Fulfilling passengers' expectations results in passenger satisfaction. Satisfaction is the most important antecedent of passenger loyalty in both full-service and low-cost airlines (Akamavi et al., 2015; Chonsalasin et al., 2021; Forgas et al., 2010; Leong et al., 2015). Namukasa (2013) argued that the quality of services provided before, during, and after the flight influenced passenger loyalty through satisfaction. Therefore, meeting passenger expectations regarding FIPAP results in passenger loyalty (Boubker & Naoui, 2022).

Additionally, service quality, one of the most critical factors influencing airline preferences, positively affects passenger loyalty (Boubker & Naoui, 2022). Furthermore, punctuality, modern airplanes, and loyalty programs are other FIPAPs. These factors also affect the passengers' tendency to make recurring purchases and to recommend services to others positively (Vlachos & Lin, 2014). Additionally, ticket price, another factor influencing passenger preferences, directly affects passenger loyalty (Boubker & Naoui, 2022; Jiang & Zhang, 2016). In light of the information above, the following hypothesis is suggested:

H₂: FIPAPs significantly influence passenger loyalty.

Passenger Loyalty in Full-service and Low-cost Airlines

The most crucial rivalry elements used by full-service airlines are the service variety they provide their passengers and their loyalty programs (Atalık, 2009; Escobari, 2011; Klopheus, 2005; Lee et al., 2018; Yang & Liu, 2003). Saha and Theingi (2009) and Mikulić & Prebežac (2011) have concluded that passenger loyalty may be affected positively or negati-

vely by the quality of cabin services provided and the internal cabin environment (comfort, atmosphere, ambiance, and interior design). Gilbert and Wong (2003) stated that the internal cabin environment influences passenger loyalty directly. In addition to this, ticket prices also significantly affect passenger loyalty (Jiang & Zhang, 2016). Chang and Hung (2013) concluded that ticket price is the second-most important factor influencing passenger loyalty in low-cost airlines.

Both full-service and low-cost airlines aim to create passenger loyalty, although they use different instruments to achieve it. While low-cost airlines use the instrument of low ticket prices, full-service airlines use superior service quality instruments. Low price addresses the cognitive aspect of passengers, and rivals easily imitate it. Cognitive loyalty is the weakest loyalty level (Oliver, 1999). Furthermore, full-service airlines’ superior service quality and loyalty programs target passengers’ emotional aspects by creating affective, conative, and action loyalties (Lee et al., 2018). Therefore, passengers’ loyalty to full-service airlines is more robust than passengers’ loyalty to low-cost airlines. Based on this information, the following hypothesis is formulated:

H₃: Passenger loyalty to full-service airlines is significantly greater than passenger loyalty to low-cost airlines.

FIPAPs and passenger loyalty are assumed to differ in the same way as the previous hypothesis by providing theoretical backgrounds. Furthermore, FIPAPs are assumed to affect passenger loyalty. In line with this, when the airline business model is full-service, the influence of FIPAPs on passenger loyalty is greater than when it is low-cost. In this regard, the following hypothesis is formulated:

H₄: Airline business model moderates the relationship between the FIPAPs and passenger loyalty.

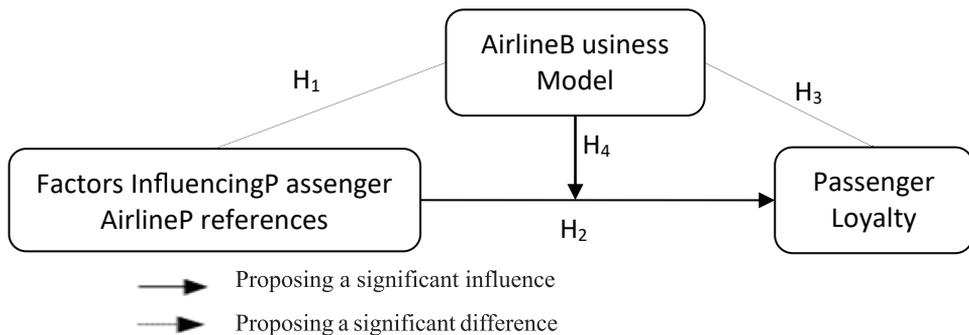


Figure 1. The theoretical model.

Methodology

Population and Sampling

This quantitatively designed research aims to identify the differences between full-service and low-cost airlines regarding FIPAPs and their influence on passenger loyalty. People who had recently traveled or would soon travel were chosen to take part in the research. Airports are the right places to find people who have purchased airline tickets. Most domestic and international flights in Turkey are operated from Atatürk and Sabiha Gökçen Airports (Caber, 2018). Therefore, the data was gathered from passengers traveling from/to Atatürk and Sabiha Gökçen Airports in Istanbul. Selection of respondents was made using a convenience sampling method. Passengers waiting either for their flights or their luggage were requested to participate in the research. Questionnaires were handed over to those who were willing to participate. These had been prepared in both Turkish and English. The data was collected from passengers who could speak Turkish or English and who had just traveled / would travel domestically or internationally. In total, 470 thoroughly answered questionnaires were handed back to the researchers by the respondents at the end of this process.

Measures and Measurements

The questionnaire that was used while collecting the data consisted of three parts. The first part included questions to identify the demographic characteristics of the respondents. The second part consisted of questions regarding respondents' travel habits and the travel they had just done or would soon do. Respondents were asked to identify the name of the airlines they had just traveled on/ would soon travel on, and in order to understand the airline business model a search was made via the ICAO (2020). The second part of the questionnaire also included a scale to measure passenger loyalty. Three statements, adopted from Koklic et al. (2017), measured passenger loyalty: planning to keep traveling with the same airline, general satisfaction, and recommending the airline to others. Respondents were asked separately to identify their level of agreement with each statement (1: completely disagree ... 5: completely agree).

The third part of the questionnaire included a scale to measure FIPAPs. This scale was formed based on the works of Çelikkol et al. (2012), Kurtulmuşoğlu et al. (2016), Jiang and Zhang (2016), and Park (2007). After compiling factors influencing passengers' airline preferences from the research in question, structured interviews were carried out with more than ten people who work in different sectors and regularly travel in order to ensure content and face validity. During the interviews, respondents were asked to read the factors/statements and explain what they understood from each separately. Then comparisons were made between the intended and actual meaning (what respondents understood) to assure congruence.

They were also asked if each statement had a clear meaning and the extent to which they differed. In line with the results of those interviews, some statements were modified. The scale presented in Appendix 1 includes 26 statements to measure FIPAPs. Respondents were asked to identify how effective each statement was on their airline ticket purchase decision for the travel they had just undertaken or were about to undertake using options from 1 to 5. (1: Not effective at all; 2: Slightly effective; 3: Moderately effective; 4: Quite effective; 5: very effective).

Data Analysis

Before analyzing the data, some questionnaires were eliminated based on the general coherence of the answers and their coherency to the control questions related to ticket prices. In the process, 52 questionnaires were eliminated, and data from 418 respondents were analyzed. Factor and Cronbach's Alpha analysis at SPSS and confirmatory factor analysis at AMOS were used to ensure the data's structural validity and internal consistency. The effect of the airline business model on FIPAPs and passenger loyalty was tested by path analysis at AMOS. Furthermore, the comparisons between full-service and low-cost airlines regarding passenger loyalty and FIPAPs were tested by the Independent Sample t-Test at SPSS.

Results

Demographic Characteristics of the Respondents

The demographic characteristics of the respondents were listed under the categories of sex, age, education, income, and occupation. More than half of the respondents (59%) were male, and 41% were female. The gender split of the respondents was close to even. FIPAPs and passenger loyalty were compared between males and females. The results of the Independent Sample t-Test indicated no significant differences between the two groups regarding FIPAPs ($p=0.265>0.05$) and passenger loyalty ($p=0.926>0.05$). Additionally, 40% of respondents were between the ages of 18-25, 35% were between the ages of 26-35, and 18% were between 36 and 45. In summary, the majority of respondents consisted of young and middle-aged people. The results of One Way ANOVA indicated that there were no significant differences between different age groups in terms of FIPAPs ($p=0.434>0.05$) and passenger loyalty ($p=0.057>0.05$).

The results of One Way ANOVA also indicated that there were no significant differences between different education levels regarding FIPAPs ($p=0.077>0.05$) and passenger loyalty ($p=0.568>0.05$). In terms of education level, 20% of the respondents had a postgraduate degree, 62% had a bachelor's degree from a higher education institution, 12% had a degree from a vocational school, and 7% had a degree from a high school. In terms of occupation,

40% of the respondents worked in the private sector, and 20% worked in public institutions. Furthermore, 28% of the respondents were students. Regarding monthly income levels, 75% of the respondents earned around \$680 or less. Only 14% of the respondents' monthly incomes were \$1,096 or more. These low-income levels in USD (\$) can be explained by the low value of the Turkish Lira against the USD. The results of One Way ANOVA indicated that there were no significant differences between different income levels regarding FIPAPs ($p=0.272>0.05$) and passenger loyalty ($p=0.540>0.05$).

Travel Habits of Respondents

The respondents had just traveled / would soon travel by 14 different full-service airlines: THY, Azal, Etihad, Air China, Qatar, United, Korean, Austrian, American, Emirates, Royal Jordanian Air, Jet, Middle East, and Aeroflot. The rest of the respondents had just traveled / would soon travel by ten different low-cost airlines: Pegasus, Onur Air, Anadolu Jet, AtlasGlobal, SunExpress, Ryanair WizzAir, Lion, Scat, and Mahan Air (ICAO, 2020). 62% of the respondents had chosen one of the full-service airlines, and 38% had chosen one of the low-cost airlines.

All the respondents had economy-class tickets. Regarding purpose of travel, 95% of the respondents were traveling for a holiday, family/relative visit, business, or education. The respondents were asked about their travel frequency within the previous year and airline preferences for those journeys. On average, respondents had flown 13 times in the previous year, with the vast majority of them having undertaken 5 to 21 flights in the same year. In order to fill out the questionnaire it was crucial to understand how well the respondents knew the airlines. This is why respondents were asked how many flights they had had with the same airline in the previous year and the percentage of flights with the same airline from the total number of flights undertaken that year. On average, respondents had traveled eight times with the same airline within the previous year. Respondents, on average, had undertaken 66% of their flights with the same company within the previous year. These results indicate that respondents were mainly regular passengers of the airlines for which they had filled in the questionnaire.

Factors Influencing Passengers' Airline Preferences

Both exploratory and confirmatory factor analyses were conducted to summarize numerous variables into fewer and easy-to-interpret factors and ensure construct validity. KMO value (0.90) and Chi-Square value (5285.831) of Barlett's test being statistically significant ($p=0.00 < 0.05$) indicated that the data set was suitable for exploratory factor analysis. Statements related to FIPAPs were categorized into six groups via factor analysis. Based on the results of the analysis, three statements, namely the attitude of cabin crew (mean value: 3.70), aircraft hygiene (mean value: 3.96), and free baggage allowance (mean: 3.30), were excluded from

the scale because they had high factor loads in two different factors. Consequently, 23 statements related to FIPAPs were categorized into six factors through exploratory factor analysis.

The extracted factors were in-flight experience, assurance, schedule convenience, booking experience, punctuality, and affordability. In-flight experience represents the richness and quality of service provided to the passenger inside the cabin, and this factor is named in line with An and Noh (2009) and Akpur and Zengin (2019a). Assurance consists of indicators that give the passenger confidence that there will be no accidents during the flight. This dimension is named in line with Calisir et al. (2016). Schedule convenience is related to the airline's ability to offer a direct flight to the desired destination at a convenient time for the passenger. Schedule convenience is named in line with Park (2007). Booking experience is related to whether the airline has a suitable system for easy online check-in, seat selection procedures, and error-free information about the flight. This dimension is named in line with Kurtuluşoğlu et al. (2016) and Jiang and Zhang (2016). Punctuality represents the flight being operated on time without having a period of delay during take-off and landing. This factor is in line with Kurtuluşoğlu et al. (2016) and Vlachos and Lin (2014). Affordability is related to low ticket prices, discounts, and installments in the payment. Affordability is named in line with Calisir et al. (2016).

Confirmatory Factor Analysis was applied to validate the measurement model consisting of six latent and 23 directly observed variables. Factor loads and mean values of each latent variable in the theoretical model, presented in Table 1, indicated that the measurement model had a good model fit (CMIN: 642.83; P: 0.00<0.05; CMIN/DF: 642.83/212= 3.03; NFI: 0.902; IFI: 0.932; CFI: 0.932; RMSEA: 0.070). Furthermore, the general reliability of each construct, Composite Reliability (CR), and the internal consistency of each construct, Cronbach's Alfa (CA), indicated high reliability of the constructs. Convergent and discriminant validities were also evaluated. The results in Table 1 indicated that both convergent and discriminant validities were achieved (Hair et al., 2014). Finally, the results provide evidence that the structures in the model meet standards of reliability and construct validity.

Table 1
Validity and Reliability scores FIPAPs

Latent Variables	Mean	Factor Loads	CA	CR	AVE	MSV	1	2	3	4	5	6
1 Punctuality	3.76	0.85-0.86	0.84	0.84	0.73	0.37	0.85					
2 In-flight Experience	3.47	0.65-0.81	0.90	0.90	0.56	0.54	0.61	0.75				
3 Assurance	3.78	0.75-0.93	0.88	0.89	0.73	0.54	0.56	0.73	0.85			
4 Schedule Convenience	3.86	0.74-0.86	0.86	0.86	0.61	0.46	0.54	0.68	0.60	0.78		
5 Booking experience	3.66	0.79-0.95	0.89	0.90	0.76	0.34	0.59	0.58	0.49	0.50	0.87	
6 Affordability	3.41	0.62-0.89	0.86	0.85	0.60	0.13	0.31	0.25	0.29	0.30	0.36	0.77

The mean values of the FIPAPs show that Schedule Convenience is the factor influencing economy-class passenger preferences the most, and Assurance and Punctuality follow it. This result indicates that, while making a ticket purchase decision, economy-class passengers pay attention mainly to the convenience of flight time, assurance of the airline regarding safety, and punctuality. Contrary to the expectation, factors that have a minor influence on economy-class passenger preferences are in-flight experience and affordability, regardless of the airline business model. However, affordability and in-flight experience moderately affect economy-class passenger preferences.

The Differences between Full-service and Low-cost Airlines in terms of FIPAPs and Passenger Loyalty

The differences between full-service and low-cost airlines in terms of FIPAPs and passenger loyalty were tested by the Independent Sample t-Test. The results prove that in-flight experience, schedule convenience, assurance, and punctuality influence passengers' preferences for full-service airlines more than for low-cost airlines. On the other hand, affordability influences passengers' preferences for low-cost airlines more than for full-service airlines. Furthermore, there are no significant differences between full-service and low-cost airlines regarding the booking experience. These results indicate that the H₁ hypothesis is partly supported.

Table 2
Results of Independent Sample t-Tests

FIPAPs	Levene Test		t-test for Equality of Means						
	F	Sig.	t	Sig.2	Business Model	N	Mean	Mean Diff.	
In-flight experience	1	45.04	0.00	5.90	0.00	Full-service	254	3.70	0.61
	2			5.42	0.00	Low-Cost	159	3.09	
Schedule convenience	1	8.67	0.00	3.06	0.00	Full-service	254	3.97	0.28
	2			2.92	0.00	Low-Cost	159	3.69	
Assurance	1	24.24	0.00	3.66	0.00	Full-service	254	3.93	0.38
	2			3.43	0.00	Low-Cost	159	3.55	
Punctuality	1	30.33	0.00	2.73	0.01	Full-service	254	3.88	0.33
	2			2.57	0.01	Low-Cost	159	3.56	
Booking experience	1	12.96	0.00	1.68	0.09	Full-service	254	3.73	0.20
	2			1.60	0.11	Low-Cost	159	3.54	
Affordability	1	2.01	0.16	-4.32	0.00	Full-service	254	3.35	-0.25
	2			-4.41	0.00	Low-Cost	159	3.60	
Passenger loyalty	1	18.41	0.00	-4.32	0.00	Full-service	254	4.36	0.87
	2			-4.41	0.00	Low-Cost	159	3.49	

1: Equal variances assumed; 2: Equal variances not assumed.

Passenger loyalty to full-service airlines is significantly greater than that to low-cost airlines. This result means the data supports the H₃ hypothesis. Full-service airlines focus on enhancing service quality to attract prospective customers and retain current customers thro-

ugh loyalty programs. On the other hand, low-cost airlines focus on providing relatively low-priced tickets with no-frills services and restrictions on baggage allowances to attract and retain customers (Akpur & Zengin, 2019b). Since the price targets cognitive loyalty, the weakest loyalty level, this result aligns with the literature (Oliver, 2014).

The Relationship between FIPAPs and Passenger Loyalty and the Moderating Role of Airline Business Model

FIPAPs were categorized into six groups: in-flight experience, schedule convenience, assurance, punctuality, booking experience, and affordability. The influence of these dimensions on passenger loyalty was tested in AMOS. Mean values for FIPAPs were first calculated based on their measured variables to represent respective constructs in the structural model. The model also included the airline business model as an interacting variable to answer the question of what role the airline business model played in the relationship between dimensions of FIPAPs and the loyalty of economy-class passengers. The standardized values for all dimensions of FIPAPs were calculated. Then the values of interacting variables for respondents were computed by multiplying the standardized values of dimensions of FIPAPs with the airline business model. The model in AMOS included six independent variables, six interacting variables, an airline business model, and passenger loyalty as dependent variables.

Since passenger loyalty was not included in the confirmatory factor analysis, its factor loads were evaluated here. Factor loads of three statements of passenger loyalty were between 0.83 and 0.93, and they were statistically significant (Sig.< 0.000 and C.R.< 23.378). The model fit indices showed how well the data supported the theoretical model. The model fit indices CMIN(χ^2): 15.935; p: 1.137>0.05; CMIN/SD: 15,935/10 = 1.593; NFI: 0.991; IFI: 0.997; CFI: 0.997; RMSEA: 0.038; GFI: 0.990; AGFI: 0.965) indicated excellent fit (Meydan & Şeşen, 2015). In other words, the theoretical model was supported by the dataset quite well.

Table 3
Standardized Regression Coefficients

Dependent Variable	Independent Variable	Standardized Coefficients	S.E.	C.R.	P
Passenger Loyalty	<--- In-flight experience	0.185	0.054	3.154	0.002
Passenger Loyalty	<--- Schedule convenience	0.167	0.054	2.830	0.005
Passenger Loyalty	<--- Punctuality	0.119	0.052	2.086	0.037
Passenger Loyalty	<--- Affordability	-0.019	0.045	-0.393	0.694
Passenger Loyalty	<--- Affordability*ABM ¹	0.170	0.031	3.522	***
Passenger Loyalty	<--- ABM	0.216	0.054	3.377	***

¹: Interacting variable; ABM: Airline Business Model; ***: Sig.<0,001

Although the data support the model, the influences of all dimensions of FIPAPs are not significant. The results show that only three of the FIPAPs, in-flight experience, schedule convenience, and punctuality, significantly influence passenger loyalty (p<0.05 and C.R.<1.96).

Assurance, booking experience, and affordability do not significantly affect passenger loyalty. This indicates that H₂ is partly supported. The results indicate that when the in-flight experience in aircraft, schedule convenience, and punctuality go up by one standard deviation, passenger loyalty increases by 0.185, 0.167, and 0.119 standard deviations, respectively. However, the regression weights for assurance, booking experience, and affordability in predicting passenger loyalty are not significantly different from zero at the 0.05 level (two-tailed). Those results indicate that in-flight experience, schedule convenience, and punctuality significantly influence the loyalty of economy-class passengers, whereas assurance, booking experience, and affordability do not influence it.

The results indicate that the airline business model moderates ($\beta = 0.17, t = 3.522, p < 0.001$) only the influence of affordability among dimensions of FIPAPs on passenger loyalty. Affordability significantly influences passenger loyalty when an airline is a full-service one, but it does not when it is a low-cost carrier. This result indicates that H₄ is partly supported. To conclude, low ticket prices and payment facilities foster the loyalty of economy-class passengers for full-service airlines but not for low-cost airlines. Additionally, regardless of airline business models, in-flight experience, schedule convenience, and punctuality influence the loyalty of economy-class passengers.

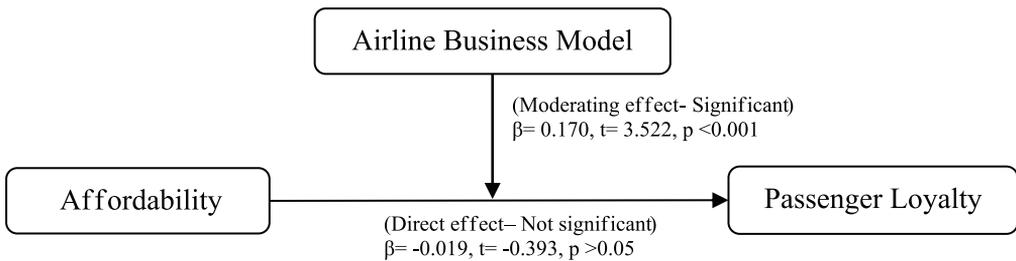


Figure 2. Moderating role of airline business model on the relationship.

Discussion and Conclusion

This paper identifies the influence of FIPAPs on passenger loyalty and tests the moderating role of airline business models on this influence for economy class. This paper also compares full-service and low-cost airlines regarding FIPAPs and passenger loyalty. The results indicate that schedule convenience influences airline preferences the most, regardless of airline business models. In other words, airline preferences of economy-class passengers are affected the most by the convenience of flight times and the availability of direct flights. This result supports the works by Çetin et al. (2016) and Banerji et al. (2022). Çetin et al. (2016) argued that the option of a direct flight significantly influences tourist preferences. Banerji et

al. (2022) concluded that on-time arrival is the most critical factor that passengers consider while purchasing. The second most crucial factor influencing passenger airline preferences is the assurance of airlines in terms of safety. Passengers consider assurance the most crucial factor regarding alternatives (Lee et al., 2018). Punctuality, which stands for operating on time by having no or low latency time during take-off and landing, is the third factor influencing airline preferences. This result is consistent with the literature (Kurtulmuşoğlu et al., 2016).

An interesting result of this research is that affordability and in-flight experience, which are the two most prominent factors distinguishing the target market of both full-service and low-cost airlines (Boubker & Naoui, 2022; Caber, 2018; Lee et al., 2018), influence passenger preferences the least among other factors. This result can be explained by the fact that the research population consists of quality seekers and price-sensitive passengers. Also, this result necessitates making comparisons between full-service and low-cost airlines. The results indicate that the in-flight experience provided to passengers influences passenger preferences for full-service airlines more than for low-cost airlines. However, affordability has more influence on passenger preferences of low-cost airlines than passenger preferences of full-service airlines. These results confirm that low-cost airlines are more associated with cheaper ticket prices, whereas full-service airlines are more associated with superior service quality (Caber, 2018).

Furthermore, assurance, schedule convenience, and punctuality are the FIPAPs of full-service airlines more than the passenger preferences of low-cost airlines. These results partially contradict the results of Mehta et al. (2019) who argue that assurance is not a significant predictor of passengers' preference between full-service and low-cost carriers. However, they are consistent with the results of Chiou and Chen (2010), who argue that service quality perception is a latent variable with the most significant influence on passenger preferences on full-service airlines. Consequently, passengers prefer the economy classes of full-service airlines for the experience they have on the flight, the assurance, the convenient flight schedule, and the punctuality rather than economy classes of low-cost airlines. However, economy classes of low-cost airlines are preferred over economy classes of full-service airlines for only their affordability.

Furthermore, the results indicate no significant difference between full-service and low-cost airlines in booking experience. This result can be explained by comparing passengers' expectations of both full-service and low-cost airlines regarding booking experience. Regardless of airline business models, passengers evaluate the availability of online check-in, online seat selection, and full notification about flights as a necessity, not as a distinguishing factor. These results further support Fourie and Lubbe's (2006) idea, highlighting that domestic full-service and low-cost airlines have been competing strongly on many attributes, including price, in recent years.

In-flight experience, schedule convenience, and punctuality significantly influence passenger loyalty. This result supports the literature which states that service quality influences passenger loyalty in low-cost airlines and full-service airlines (Calisir et al., 2016; C. Chen & Liu, 2017; Boubker & Naoui, 2022; Chonsalasin et al., 2021; Koklic et al., 2017; Lee et al., 2018; Loureiro & Fialho, 2017). However, affordability, assurance, and booking experience do not significantly influence passenger loyalty. This result can be explained by the fact that assurance and booking experience are factors that passengers evaluate as liabilities for airlines, not as factors that create privilege and distinguish the airline from its competitors.

Furthermore, the airline business model moderates the influence of affordability on passenger loyalty and makes it significant if the airline is a full-service one. The airline business model's moderating role provides evidence that having a full-service airline increases the influence of affordability on passenger loyalty. This result partially supports the work of Shen and Yahya (2021). Affordability is an attribute related to functional features of the service, and thereby, it may be exceeded by the rivals at any time. Therefore, affordability is one of the functional features targeting passengers' cognitive side (Oliver, 2014). However, affordable ticket prices from full-service airlines foster the loyalty of economy-class passengers. This result is in line with the fact that full-service airlines have been competing intensely on the price of economy-class in recent years, with their price often the same or even lower than that of low-cost airlines (Fourie & Lubbe, 2006). Consequently, affordability may not be an attribute that leads to loyalty for economy-class passengers of low-cost airlines, but it is for economy-class passengers of full-service airlines.

Another interesting result of this research is that the influence of in-flight experience on passenger airline preferences -the factor which affects passenger loyalty the most- is the lowest one, together with affordability, among the other factors. The significant difference between full-service and low-cost airlines in terms of in-flight experience can explain this result. Additionally, assurance, one of the most influential factors on passenger airline preferences, does not affect passenger loyalty. This result indicates that passengers think of airlines' accident history and the possibility of having an accident before choosing one. However, it does not have a significant influence when it comes to repetitive purchases and attitudes toward the airline brand.

The passenger loyalty level of full-service airlines is significantly higher than the passenger loyalty of low-cost airlines. This result is also consistent with the work of Koklic et al. (2017), arguing that passengers of full-service airlines are more loyal than passengers of low-cost airlines. Lee et al. (2018) concluded that customer satisfaction influences attitudinal loyalty in full-service airlines more than in low-cost airlines. This result also supports the notion that low-ticket price targets cognitive loyalty, whereas superior service targets affective and conative loyalties with stronger loyalty (Oliver, 2014). Finally, this result is consistent

with the fact that full-service airlines usually deliver loyalty programs to their passengers to maintain and strengthen their good relationships with their passengers.

Managerial Implications

The paper's results indicate that FIPAPs for economy classes are not always parallel to their influence on passenger loyalty. Therefore, airlines are firstly recommended to make clear if they aim to influence passenger airline preferences or enhance passenger loyalty by their service or in their marketing communication campaigns. This recommendation applies to targeting both current passengers and prospective passengers. To create passenger loyalty as a primary purpose, it is suggested that they focus on in-flight experience, schedule convenience, and punctuality in their marketing campaigns regardless of their airline business models. However, being a full-service airline does not increase the influence of FIPAPs on passenger loyalty except for affordability. Therefore, full-service airlines are recommended to keep and develop their leadership on schedule convenience, punctuality, and in-flight experience factors to attract prospective passengers and ensure passenger loyalty. They are also recommended to provide special discounts to existing passengers to enhance passenger loyalty.

In contrast, it is suggested that low-cost carriers focus on factors influencing passenger preferences for their economy classes instead of creating loyalty. Furthermore, they are recommended to pay significant attention to punctuality in order to reduce latency periods and delays at airports by reoptimizing the time between two flights. If necessary, they should make these periods longer, as full-service airlines do. They are also recommended to focus on schedule convenience and put their flights on peak demand hours even if this creates extra costs instead of focusing on the ticket price. In line with this, they are recommended to focus on factors influencing passenger airline preferences, such as assurance, booking experience, and affordability in their marketing campaigns instead of creating passenger loyalty.

Limitations and Suggestions for Further Research

Some limitations need to be considered while evaluating the results of this paper. First, the distance between departure and arrival destinations was ignored while choosing respondents. However, FIPAPs may differ according to flight distance. For example, the influence of in-flight experience on passenger preferences may be more significant on long flights. In contrast, the influence of affordability on passenger preferences may be stronger on shorter flights. Another limitation of the paper is related to sampling and population. Data were collected only from passengers flying from/to the two airports in Istanbul, Turkey. Future research including flight distance as a moderating variable in a similar research model and testing the model by collecting data from passengers flying from/to different airports in different geographical areas might generate more interesting results. Another limitation is that the data were collected from those who had just traveled or would soon travel, but no check

was made regarding differences in behavioral profiles. There could be significant differences between those two groups of passengers. However, the paper did not test possible differences since the researchers had not thought about this in time. Researchers planning to conduct similar research are recommended to add this as a control variable to their research. Finally, the effect of FIPAPs on loyalty may be mediated by some variables, such as perceived value and satisfaction. Future research would do well to include those mediating variables in their research models.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The authors have no conflict of interest to declare.

Grant Support: The authors declared that this study has received no financial support.

Author Contributions: Conception/Design of study: Ö.K., M.A.Ö.; Data Acquisition: E. D; Data Analysis/Interpretation: Ö.K.; Drafting Manuscript: ÇKÇ, E.D.; Critical Revision of Manuscript:Ö.K.; Final Approval and Accountability: Ö.K.

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Appendix 1: Statements in the questionnaire

Passenger Loyalty	I am planning to keep traveling with this airline
	Overall, I am satisfied with traveling with this airline
	I recommend this airline to others
In-flight Experience	Quality of in-flight food and drinks
	Helpfulness of flight attendants
	Variety of in-flight food and drinks
	In-flight entertainment facilities (video, journal etc.)
	Comfort of aircraft
	Benefits of the loyalty program
Assurance	Well-qualified cabin crew
	A clear history regarding accidents
	Flight Safety and Security
Schedule Convenience	A new and well-maintained fleet
	Always having a flight
	Always having direct flights
	The convenience of flight hours
Booking Experience	Possessing a large fleet
	The convenience of online seat selection.
	The convenience of online check-in
Punctuality	A perfect service giving information about the flights
	Flight punctuality
Affordability	Short Latency Period During Take-off & Landing
	Early-booking discounts
	Installment opportunities in payment
	Price advantage with campaigns
Excluded Statements	Low ticket prices
	The attitude of cabin-crew
	Aircraft hygiene
	Free baggage allowance

