

The Effect of Price Perception on Customer Loyalty in Airline Cargo Transportation

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Abstract

Airline cargo transportation is the preferred transportation system as the fastest transportation way today. However high costs also lead to high prices. Therefore, pricing is one of the issues that businesses should pay the most attention to when planning. Although competition over price is a competitive factor that businesses do not want to enter, this situation has become inevitable due to the intensity of the competition. To cope with this situation, it is beneficial for businesses to constantly measure and evaluate the price perception of customers.

In addition, it is of great importance for every customer for airline cargo companies that want to stay afloat in a dynamic market. Providing unconditional customer satisfaction and turning these customers into loyal customers is the key to sustainable success for companies engaged in airline cargo transportation.

Based on what has been described so far, it is possible to express the main purpose of this study in the form of investigating the effect of price perception on customer loyalty. The businesses using airline cargo transportation were included in the research and in this direction, research was carried out with 33 businesses operating in the Marmara Region and using airports in Istanbul.

In the study, it was concluded that airline cargo service price perception does not have a statistically significant effect on airline cargo service customer loyalty. Finally, suggestions have been made to those interested in the subject.

This study was derived from the master thesis of Erkut Artık and conducted under the supervision of Assoc. Prof. Dr. Adnan Duygun

1. Introduction

Nowadays, commerce has begun to take place in a virtual world by the widespread use of computers and mobile phones in the 21st century. Thanks to the virtual world, people have started to buy the product they want from anywhere in the world. Those who want to quickly obtain the products they buy have started to prefer the airline. This has caused airline cargo to gain importance.

The ability of people to transport from one place to another as soon as possible has increased the volume of trade of countries to high levels and ensured the unofficial disappearance of borders. Since it is difficult to establish an airline business primarily due to high costs and the politic of the countries, the airline cargo sector is controlled by very few businesses. Air transport has been the most expensive mode of transport for many reasons, such as a small number of businesses and high costs.

This research, it is aimed to determine the effect of price perception on customer loyalty of businesses using airline cargo transportation.

2. Price and Price Perception

The concept of price is generally defined as the amount of money that a seller demands from the customer to give up a product or service that he has (Ertuğrul, 2008). According to the Turkish Language Society, the concept of price means "the value for money of something in buying or selling, worth, pricey" (Sözlük, 2021).

Monroe (1990) specified the concept of price as the value arising from the monetary amount received by the seller or the products/services divided by the amount of products/services received by the buyer.

As for the concept of perception, it is defined as the whole process of defining, arranging, and interpreting anything that a person feels with his sense organs to create a phenomenon in his mind (Schacter et al., 2010). In its simplest form, price perception can be defined as a customer's view of the price they will pay for a product or service they want to buy (Bei and Chiao, 2001).

The most important factor that gives customers a clue about a product or service they want to buy is the price, and the price is perceived as a feature of the product or service. 40% of customers make comparisons as a result of their research

before making a purchase (Helgeson and Beatty, 1985). To ensure customer satisfaction and become loyal customers, businesses should evaluate how their customers perceive prices along with their attitudes and behaviors and make the right pricing. How the price of a product or service offered by the business to its customers will be perceived by the customer determines the profitability of the business and its existence in the long term. The customer's perception of price has a very important place in deciding which business to choose for shopping (Ene and Özkaya, 2013).

Price represents the amount of economic expenditure that must be sacrificed for customers, based on the fact that it is present in all purchasing situations, while the perceived price represents the amount of money that must be given up. Therefore, although high prices negatively affect the purchasing possibilities, they can be perceived as a signal for product quality for many customers (Lichtenstein et al., 1993). Price perception is one of the factors affecting the positive or negative image formed in the customer's mind about a product or service they want to buy (Küçükergin and Dedeoğlu, 2014). The fact that the price is expensive or cheap can be perceived differently by different customers. While some customers may perceive the high price they will pay for the product or service they will buy as a waste of their money, some customers may think that they have a high price because of its quality and buy it (Yaraş, 2008).

3. Customer and Customer Loyalty

The concept of the customer, according to the Turkish Language Society, is "Service, goods, etc. It is defined as the person who receives and pays a fee in return" (Sözlük, 2021). A customer is a person and organization inside and outside the business that requests a product or service that the business produces as the final output. These individuals and organizations are the final consumers who buy and consume the product (Huge and Anderson, 1988).

The buyer or end-user of a service or product output is the customer. The result that the modern marketing approach wants to achieve is that customers make regular purchases from a business or are loyal to a brand and prefer it. According to Statt (1997), to be a customer, there must be an ongoing relationship between a particular business, brand, or store.

Customer loyalty is defined as the fact that customers constantly buy the product or service they buy from a certain business or brand, and do not look for another brand or business when they think about purchasing again (Aktepe et al., 2009). According to Koç (2002), the concept of loyalty means 'sincere and solid friendship, sincere loyalty, solidity in feelings and emotions, not betraying, conformity to the truth'.

The fact that customers continue to exchange with the business, spend time on it or intend to say positive things about the business is a sign of loyalty. Shankar et al. (2003) defined loyalty as the commitment a customer makes to a particular brand, website, or online service provider when alternative options are available. Customer loyalty is a psychological relationship that customers establish with the business, not just buying products or services again. When the customer is loyal, it integrates with the business and completely belongs to the business (Smith, 1996).

In the early 1980s, the importance of customer loyalty began to be understood thanks to regular flight schedules. Until these years, businesses have prepared customer loyalty creation forms for customers, tested them, and applied them to customers. The purpose of this whole process is based on

keeping customers connected to the business for a longer period, and as a result, increasing sales and profits (Duffy, 2005).

Nowadays, customers are more knowledgeable, more investigative, and more protective of their rights. The fact that customers began to display a more selective or more willing image when choosing a product or service allowed them to become price-conscious. In such an environment, the trust and loyalty of the customer to the brand are extremely important. In an increasingly competitive environment, businesses have to be customer-oriented (Gronstedt, 2002).

For a business to have a long life and to make a profit, it must have a loyal customer portfolio (Dekimpe et al., 1997). The fact that the customer regularly makes frequent purchases from the same business is stated as the first stage of customer loyalty. Customers who have real loyalty to the business, on the other hand, do not give up making their purchases from the business to which they are connected, even if their conditions are not favorable or if competing businesses have better offers (Altıntaş, 2000).

According to Rundle-Thiele and Mackay (2001), loyal customers show more intense interest in businesses and, as a result, they become attached to the business. Loyal customers of the business do not accept the offers of other businesses, even if they are more suitable, and they are willing to pay more fees to their businesses.

In markets where competition is very intense, businesses want almost all of their customers to be fan customers as much as possible. The main reason for this is that there are businesses that can substitute the same product or service in the market. The dynamic nature of market conditions has encouraged businesses to take care of their customers rather than to gain customers. Lifelong customer relationships and valuing their customers have become mandatory for businesses. They have to spend 5 times more energy, time, and money than normal to regain a lost customer. Despite all these costs, businesses cannot regain 68% of their lost customers (Uyar, 2018). It seems to be possible for businesses to increase their revenues by 85% by increasing their existing customer loyalty by 5%. It is an 85% probability that the customers who are not satisfied and about to give up on the business can be regained at the right time and with the right intervention (Taşpınar, 2005).

When businesses try to acquire new customers instead of focusing on the current customer, they have to incur more costs. Realizing this, businesses have begun to value their existing customers more and develop new strategies to make them loyal customers. Desiring the best for the customer and satisfying them is the basis of creating loyal customers. Loyal customers will not accept the attractive offers of competitor companies, they will defend their business under all circumstances and will contribute the economic value for the business (Hackl and Westlund, 2000).

3.1. Customer Loyalty Approaches

Customer loyalty approaches; examined in three categories as behavioral, attitudinal, and combined. Firstly, behavioral loyalty; can be explained with sub-headings such as the customer's intention to repeat the purchase from the same business for shopping, then to express his satisfaction to other people and to pay more to the business for shopping (Ha and Jang, 2010). Behavioral loyalty; is related to the consistency of the customer and includes the behavior of repurchasing a product or service from the same business, how often he buys

it, and the repetition of his behavior (Giray and Girişken, 2015).

This loyalty approach is not limited to business transactions only and beyond that, it covers customer behavior revealed by motivational factors (Doorn et al., 2010). The missing aspect of this dimension is the misconception that every purchase will provide loyalty to the brand. A customer whose expectations are not met may tend to shift to another business at the point where the business finds an alternative to its products (Batmaz, 2008).

In the behavioral loyalty approach, loyalty is determined by behavioral movements. Therefore, what is important in this approach is that the customer repeats the purchase and maintains his intention to purchase in the future (Altıntaş, 2000).

Secondly, attitudinal loyalty approach reveals the true feelings of customers and focuses on exactly how they see the business rather than why they buy a product or service (Gounaris and Stathapoulos, 2004) This approach can be defined as the customer's psychological commitment to the business. The reason for this is that he is willing to recommend the business to someone else even if he does not make any purchases (Bowen and Chen, 2001). Businesses with more customers with attitudinal loyalty can sell at higher prices and gain larger market shares (Ayas, 2012).

In contrast to the behavioral loyalty approach, the attitudinal loyalty approach goes further than the behavioral loyalty approach and expresses the strength of the customer's emotional closeness to the business (Mechinda et al., 2009). While behavioral loyalty is determined in part by situational factors (such as the availability of a brand), attitudinal loyalty is more persistent (Cáceres and Paparoidamis, 2007).

Finally, the unified loyalty approach emerges by combining the behavioral and attitudinal loyalty approaches; is explained depending on the frequency and rate of shopping according to the customer's product, service, or brand preference (Bowen and Chen, 2001).

The combined loyalty approach is also referred to as the mixed loyalty approach in many sources. The most important point in the unified loyalty approach; is to eliminate this confusion by determining whether the repetition of the purchasing behavior specified in the behavioral approach is due to loyalty or any obstacle or habit-based behavior (Baykal and Ayyıldız, 2020).

According to, the mixed definition put forward by Jacoby and Kyrner (1973) through combining attitudinal and behavioral approaches, loyalty "is a behavioral result developed by a decision-making unit against one or more brands among the existing brands, as a function of psychological processes and revealed consciously, without relying on chance, for a certain period".

4. Methodology

In this section; the aim of the research, the importance of the research, the data collection method, the variables of the research, the model of the research, the hypotheses of the research, the universe, and the sample of the research were emphasized. SPSS program was used for the analysis of the data collected in the research and it was studied with a 90% confidence level.

4.1. Purpose of the Research

The main purpose of this thesis is to measure the effect of the price perception of the companies using airline cargo

transportation on customer loyalty. In addition, determining the airline cargo usage habits and operating characteristics of the businesses included in the research and benefiting from airline cargo transportation were determined as sub-objectives.

4.2. Importance of the Research

The airline cargo transportation industry takes into account the wishes of the customers to respond well to customer demands and needs, however, due to its high costs such as operating costs, it offers high transportation fees to its customers, causing the customer to sell their products at higher prices. Due to the price policy of airline cargo companies, businesses can choose slower but more profitable transportation routes in order not to lose their customers and gain profits. From this point of view, the research is important in terms of increasing the loyalty levels of customers using airline cargo and shaping price perceptions depending on loyalty. It is thought that the results of the research will help and guide researchers, academics, and experts interested in the subject in determining marketing strategies, and also contribute to the literature, especially in terms of the industrial market, given that there are not enough studies.

4.3. Data Collection Method and Research Variables

In this study, a questionnaire was used as data collection management. When the questionnaire form is sent to the businesses by e-mail, the question "Have you used airline cargo transportation at least once a year?" a filter question was asked and the survey was continued with businesses that answered yes to this question.

The questionnaire used consists of four parts. In the first part; airline cargo usage habits, in the second part; business information, in the third section; airline cargo service price perception, and finally, in the fourth section, questions about airline cargo service customer loyalty are included.

Table 1. Research Variables

	Number of Variables	References
Airline Cargo Usage Habit	3 Variables	
Business Information	4 Variables	
Airline Cargo Service Price Perception	25 Variables	Lichtenstein, Ridgway and Netemeyer (1993)
Airline Cargo Service Customer Loyalty	9 Variables	Madak and Salepçioğlu (2020), Kazançoğlu (2011), Mermertaş (2018), Narunart and Panjakajornsak (2019), Pi and Huang (2011)

Table 1 includes the variables used in the research and the sources used to determine the variables. Variables other than airline cargo usage habits and business information were asked in the questionnaire form with the help of a 5-point Likert scale.

The habit of using airline cargo is listed as "How many times have you worked with an airline cargo business in the last year", "Which airline cargo business is your most preferred" and "The main reason for using airline cargo".

Business information is in the form of "Business type", "Establishment year of the business", "Activity field of the business", and "Annual revenue of the business".

The airline cargo service price perception scale consists of 25 variables. The scale developed by Lichtenstein, Ridgway

and Netemeyer in 1993 was used for the scale (Lichtenstein et al., 1993).

The variables of airline cargo service price perception used in the research are listed as follows:

- APP1- If the price of the cargo service is low, I am also concerned about the quality of the service provided.
- APP2- I also compare the prices of other airline cargo businesses to make sure I get my money's worth.
- APP3- When purchasing airline cargo service, I always try to maximize the quality I get for the money I spend.
- APP4- When I purchase airline cargo service, I like to make sure I get my money's worth.
- APP5- Although I usually get airline cargo service at lower prices, I give importance to certain service quality.
- APP6- When I purchase airline cargo service, I usually compare unit prices.
- APP7- I check the list price to make sure I'm getting the best airline cargo service for the money I spend.
- APP8- I wouldn't want to spend extra effort to find a lower-priced airline cargo service.
- APP9- Although I usually get airline cargo service at lower prices, I give importance to certain service quality.
- APP10- The time and effort it took to find a lower-priced air freight service are not worth the money I save.
- APP11- I would never work with more than one airline cargo company to find a lower-priced airline cargo service.
- APP12- Often the time it takes to find a lower-priced airfreight service isn't worth the effort.
- APP13- In general, high-quality airline cargo service implies a high price.
- APP14- In general, you get what you pay for in airline cargo service.
- APP15- The price of airline cargo service is a good indicator of the quality of the service.
- APP16- I always pay a little more for the best air freight service.
- APP17- Others notice when you buy the most expensive airfreight service.
- APP18- Receiving a high-priced airline cargo service makes us feel better as a business.
- APP19- Buying the most expensive airfreight service makes the business feel great.
- APP20- When the business purchases a high-priced airline cargo service, it enjoys its prestige.
- APP21- When you buy the higher-priced airline cargo service, you are implying something to others.
- APP22- If you consistently buy the lowest-priced version of an air freight service, others will think you're stingy.
- APP23- I buy the most expensive of an air freight service because I know others will notice.
- APP24- I think that others have judged the business based on the airline cargo service I purchased.
- APP25- I find it impressive to buy an expensive airfreight service even for a relatively inexpensive item.

APP8 (I wouldn't want to spend extra effort to find a lower-priced airline cargo service), APP10 (The time and effort it took to find a lower-priced air freight service are not worth the

money I save), APP11 (I would never work with more than one airline cargo company to find a lower-priced airline cargo service) and APP12 (Often the time it takes to find a lower-priced airfreight service isn't worth the effort) were asked as negative judgments in the questionnaire. After the survey was completed, the necessary transformations were made about these variables, they were made positive and then included in the analysis.

The variables of airline cargo service customer loyalty used in the research are listed as follows:

- ACL1- I like to work with the airline cargo company I work with.
- ACL2- I believe that the airline cargo company I work with is a good airline cargo company.
- ACL3- I will continue to receive service from the airline cargo company I work with.
- ACL4- I will continue to recommend the airline cargo company I work with.
- ACL5- I would like to work with this airline cargo company in the coming years.
- ACL6- I would like to work more often with the airline cargo company I work with.
- ACL7- When I want to work with an airline cargo business, my first choice would be this airline cargo business.
- ACL8- I am happy to work with this airline cargo business.
- ACL9- Even if this airline cargo business increases its prices, I still prefer the same business.

4.4. Basic Hypothesis of the Research

According to the survey study conducted in this research, it is possible to express the main hypothesis to be tested in the research as follows:

H₀: Price perceptions of the businesses using airline cargo do not have a statistically significant effect on customer loyalty.

H₁: Price perceptions of businesses using airline cargo have a statistically significant effect on customer loyalty.

4.5. The Universe and Sample of the Research

The universe of the research; consists of businesses operating in the Marmara Region and benefiting from airline cargo transportation through airports in Istanbul. Since it is not possible to reach all businesses in terms of time and cost, the snowball sampling method, which is one of the non-random sampling methods, was used. A survey was conducted with 33 businesses using airline cargo transportation between 15 July 2021 and 30 August 2021.

5. Findings

In this section; the reliability analysis of the scales used in the research, the normality analysis of the scale scores, the frequency distributions of the airline cargo usage habits, the frequency distributions of the business information, and finally the effect of the airline cargo service price perception on the airline cargo service customer loyalty are included.

5.1. Reliability Analysis of the Scales

Likert-type scales are generally used to measure Cronbach's alpha coefficient consistency between variables. It is a method used to test the reliability of the variables in the research. It is possible to interpret the Cronbach alpha values as follows (Yıldız and Uzunsakal, 2018).

- If $0.00 < \alpha < 0.40$, the scale is unreliable.
- If $0.40 < \alpha < 0.60$, the scale has low reliability.
- If $0.60 < \alpha < 0.80$, the scale is quite reliable.
- If $0.80 < \alpha < 1.00$, the scale is highly reliable.

5.1.1. Reliability Analysis of the Airline Cargo Service Price Perception Scale

Variables that significantly impair reliability in the airline cargo price perception scale were identified and removed from the scale. Reliability analysis was then performed again. The reliability analysis was repeated until there were no variables that impair reliability. Accordingly, APP1 (If the price of the cargo service is low, I am also concerned about the quality of the service provided), APP15 (The price of airline cargo service is a good indicator of the quality of the service), APP20 (When the business purchases high-priced airline cargo service, it enjoys its prestige), APP21 (When you buy the higher-priced airline cargo service, you are implying something to others), APP22 (If you consistently buy the lowest-priced version of an air freight service, others will think you're stingy) are excluded from the scale. The final result is outlined in Table 2.

Table 2. Airline Cargo Service Price Perception Scale Reliability Statistics

Cronbach's Alpha	N of Items
0.689	20

As can be seen in Table 2, there are 20 variables in the airline cargo price perception scale. The Cronbach's Alpha value for the scale was determined as 0.689. This shows that the scale is quite reliable.

5.1.2. Reliability Analysis of Airline Cargo Service Customer Loyalty Scale

Similar to the airline cargo price perception scale, a variable that significantly impairs reliability in the airline cargo customer loyalty scale was excluded from the scale. ACL9 (Even if this airline cargo business increases its prices, I still prefer the same business), a reliability analysis was performed again. The final result is shown in Table 3.

Table 3. Airline Cargo Service Customer Loyalty Scale Reliability Statistics

Cronbach's Alpha	N of Items
0.964	8

As seen in Table 3, there are 8 variables in the airline cargo customer loyalty scale. The Cronbach's Alpha value for the scale was determined as 0.964. In this case, it is possible to state that the scale has high reliability.

5.2. Normality Analysis of Scale Scores

The Kolmogorov-Smirnov test was used to determine whether the scale scores were normally distributed. Table 4 and Table 5 show the results. According to the results, it was concluded that the distribution of scale scores was not normal ($\text{sig.} < 0.10$).

Table 4. Airline Cargo Service Price Perception Scale Score Normality Analysis

Kolmogorov-Smirnov ^a			
Airline Cargo Service Price Perception	Statistic	df	Sig.
	0.160	33	0.032

a. Lilliefors Significance Correction

Table 5. Airline Cargo Service Customer Loyalty Scale Score Normality Analysis

Kolmogorov-Smirnov ^a			
Airline Cargo Service Customer Loyalty	Statistic	df	Sig.
	0.210	33	0.001

a. Lilliefors Significance Correction

5.3. Frequency Distributions of Businesses

In this section, the frequency distributions of the airline cargo usage habits of the businesses and the business information are included. Variables related to airline cargo usage habits; The number of times working with the airline cargo business in the last year is listed as the most preferred airline cargo business and the main reason for using airline cargo. Business information is business type, establishment year of the business, activity field of the business, and annual revenue of the business.

Table 6. Using Airline Cargo Business in the Last Year

	Frequency	%	Valid %	Cumulative %
4 times and less	8	24.2	24.2	24.2
5-8	6	18.2	18.2	42.4
9-12	6	18.2	18.2	60.6
13 times or more	13	39.4	39.4	100.0
Total	33	100.0	100.0	

According to the results obtained in Table 6, from 33 businesses participating in the survey; 8 of them 4 times or less (24.2%), 6 of them 5-8 times (18.2%), 6 of them 9-12 times (18.2%) and 13 of them 13 times or more (39.4%) has used airline cargo transportation in the last year.

Table 7. Most Preferred Airline Cargo Business

	Frequency	%	Valid %	Cumulative %
Turkish Cargo	20	60.6	60.6	60.6
Pegasus Cargo	3	9.1	9.1	69.7
MNG Cargo	7	21.2	21.2	90.9
ULS Cargo	3	9.1	9.1	100.0
Total	33	100.0	100.0	

Depending on Table 7, 33 businesses participated in the survey; 20 of them preferred Turkish Cargo (60.6%), 3 of them Pegasus Cargo (9.1%), 7 of them MNG Cargo (21.2%), and 3 of them ULS Cargo (9.1%).

Table 8. The Main Reason for Using Airline Cargo

	Frequency	%	Valid %	Cumulative %
Imports	6	18.2	18.2	18.2
Export	23	69.7	69.7	87.9
Domestic sales	3	9.1	9.1	97.0
Domestic Purchase	1	3.0	3.0	100.0
Total	33	100.0	100.0	

The results are shown in Table 8, 33 businesses participating in the survey; 6 of them preferred airline cargo transportation due to import (18.2%), 23 for export (69.7%), 3 for domestic sales (9.1%), and 1 for domestic purchase (3%).

Table 9. Business Type

	Frequency	%	Valid %	Cumulative %
Private Business	27	81.8	81.8	81.8
Foreign Capital Business	6	18.2	18.2	100.0
Total	33	100.0	100.0	

As can be seen in Table 9, the 33 businesses participating in the survey; 27 of them were registered as private businesses (81.8%) and 6 of them as foreign capital businesses (18.2%).

Table 10. Establishment Year of the Business

	Frequency	%	Valid %	Cumulative %
1950 and before	3	9.1	9.1	9.1
1951-1970	5	15.2	15.2	24.2
1971-1990	9	27.3	27.3	51.5
1991-2005	7	21.2	21.2	72.7
2006-2015	7	21.2	21.2	93.9
2016 and after	2	6.1	6.1	100.0
Total	33	100.0	100.0	

According to the results shown in Table 10, from 33 businesses participating in the survey; 3 of the 1950 and before (9.1%), 5 of them 1951-1970 (15.2), 9 of them 1971-1990 (27.3%), 7 of them 1991-2005 (21.2%), 7 of them 2006-2015 (21.2%) and the last 2 were established in 2016 and later (6.1%).

Table 11. Activity Field of the Business

	Frequency	%	Valid %	Cumulative %
Manufacturing Business	14	42.4	42.4	42.4
Trade Business	19	57.6	57.6	100.0
Total	33	100.0	100.0	

As can be seen in Table 11, 33 businesses participated in the survey; 14 of them (42.4%) continue their activities as manufacturing businesses, and 19 of them (57.6%) as trade operations.

Table 12. Annual Revenue of the Business

	Frequency	%	Valid %	Cumulative %
250.001 – 500.000 TL	3	9.1	9.1	9.1
500.001 – 1.000.000 TL	3	9.1	9.1	18.2
1.000.001 – 2.000.000 TL	8	24.2	24.2	42.4
2.000.001 – 4.000.000 TL	5	15.2	15.2	57.6
4.000.001 TL or more	14	42.4	42.4	100.0
Total	33	100.0	100.0	

Table 12 shows the annual revenue of 33 businesses participating in the survey for 2020. Accordingly, businesses; 3 of them are 250.0001-500.000 TL (9.1%), 3 of them are 500.001-1.000.000 TL (9.1%), 8 of them are 1.000.001-2.000.000 TL (24.2%), 5 of them are 2.000.001 – 4.000.000 TL (15.2%) and lastly, 14 of them have 4.000.001 TL and above (42.2%) annual revenue.

5.4. The Effect of Airline Cargo Service Price Perception on Airline Cargo Service Customer Loyalty

In this section, the effect of airline cargo service price perception on airline cargo service customer loyalty is examined. For this reason, the regression analysis presented in Table 13. Since the data did not show a normal distribution, first of all, the data were adapted to the normal distribution. Then, regression analysis was performed.

Table 13. The Effect of Airline Cargo Service Price Perception (ACSPP) on Airline Cargo Service Customer Loyalty (ACSCL)

	Unstandardized Coefficients		Standardized Coefficients
	B	Std. Error	Beta
Static ACSPP	4.715	15.576	0.135
	23.003	30.210	
	t	Sig.	R ²
Static ACSPP	0.303	0.764	0.018
	0.761	0.452	

Table 13 shows that airline cargo service price perception (ACSPP) does not have a statistically significant effect on airline cargo service customer loyalty (ACSCL). Therefore, the H₀ hypothesis is accepted.

6. Conclusion

Businesses to get ahead of their competitors in the global market and to make their existence sustainable by keeping their market share high have started to actively use the fastest means of transportation, thus airline cargo.

Airline cargo transportation; is a transportation system that has very important advantages such as high speed, establishing a wide transportation network under certain conditions, and security. It is considered an effective system for the long-distance transportation of especially urgent cargo. However, in geographically large countries, dispersed in terms of the settlement, and not conducive to transportation networks due to natural conditions, actively used airline cargo transportation causes very high costs. Airline cargo transportation requires huge investments especially in infrastructure, fuel and operation costs, etc. compared to passenger transportation in addition to high overhead fixed costs such as; it has had suitable aircraft for cargo flights, state-of-the-art cargo handling operation equipment, areas where logistics operations are required for intermodal transportation can be carried out, warehouses and warehouses suitable for all kinds of cargo, and bear these costs.

It is possible to state that the price perceptions and customer loyalty of customers using airline cargo services are among the issues that businesses that provide airline cargo transportation services should focus on when evaluating their customers. Therefore, this study; it is aimed to examine the effect of the price perceptions of the businesses that receive airline cargo transportation services on their loyalty to the airline cargo businesses.

Research was carried out by using a questionnaire as a data collection method with 33 businesses operating in the Marmara Region and using the airports in the province of Istanbul. Of the 33 businesses participating in the research, in the last year, 8 of them have used airline cargo transportation 4 times or less (24.2%), 6 of them 5-8 times (18.2%), 6 of them 9-12 times (18.2%) and 13 of them used it 13 times or more

(39.4%). During this period, 20 businesses were operated by Turkish Cargo (60.6%), 3 businesses by Pegasus Cargo (9.1%), 7 businesses by MNG Cargo (21.2%), and 3 businesses by ULS Cargo (9.1%) preferred. 6 businesses prefer these airline businesses for import (18.2%), 23 businesses for export (69.7%), 3 businesses for domestic sales (9.1%), and 1 business for domestic purchase reasons (3%) benefited from cargo transportation. 27 businesses receiving airline cargo service were registered as private businesses (81.8), and 6 businesses were registered as businesses with foreign capital (18.2%). 3 of these businesses were between 1950 and before (9.1%), 5 of them between 1951-1970 (15.2%), 9 of them between 1971-1990 (27.3%), 7 of them between 1991-2005 (21.2%), 7 of them were established between 2006-2015 (21.2%) and 2 of them were established in 2016 and after (6.1%). While 14 businesses participating in the survey are manufacturing businesses (42.4%), 19 businesses operate as commercial operations (57.6%). Businesses according to their revenue in 2020; 3 businesses 250,000-500,000 TL (9.1%), 3 businesses 500,001-1,000,000 TL (9.1%), 8 businesses 1,000,001-2,000,000 TL (24.2%), 5 businesses 2,000,001 – 4,000,000 TL (15.2%) and lastly 14 businesses are listed as 4,000,001 TL and above (42.2%).

The main hypothesis tested in the study is expressed as follows:

H₀: Price perceptions of the businesses using airline cargo do not have a statistically significant effect on customer loyalty.

H₁: Price perceptions of businesses using airline cargo have a statistically significant effect on customer loyalty.

In the research has been concluded that airline cargo service price perception does not have a statistically significant effect on airline cargo service customer loyalty. In this case, the H₀ hypothesis was accepted.

It would be useful to make comparisons with other studies conducted to better evaluate the result obtained in the research. One of the hypotheses included in the article titled “The Analysis of Customer Loyalty and Its Antecedents in Turkish Internet Service Provider Sector with Structural Equation Modelling” published by Karakaş Geyik and Gökçen in 2014 is “Price perception has a positive effect on customer loyalty” (Karakaş Geyik and Gökçen, 2014). As a result of structural equation modeling, it was revealed that the hypothesis in question was not confirmed (Karakaş Geyik and Gökçen, 2014). For this result obtained; they stated that loyal customers are customers with low price sensitivity, and customers with high loyalty act independently of price (Karakaş Geyik and Gökçen, 2014). This result is similar to the result obtained in the study.

Narunart and Panjakajornsak (2019) supported the result obtained in the research with their statements in the article they published. They expressed price insensitivity as the customer's commitment not to switch to other products, whether there is an increase in the price of the product or not. Therefore, it has been stated that loyal customers act independently of price.

The research conducted by Anuwichanont (2011) with passengers; examined the effect of price perception on customer loyalty in the context of airlines, and discussed the moderating effect of consumers' price perception in explaining service loyalty. The moderating effect of price perception is significantly evident, only due to the relationship between brand effect and loyalty structures. According to this result, price perception does not directly affect brand loyalty and is similar to the result of the research.

O'Cass and Frost (2002) listed the factors that affect the

customer's purchase of a product or service in the form of brand and quantity. It has been understood that customers with brand loyalty are less affected by price increases than customers with lower loyalty levels, but price sensitivity gains more importance when it comes to quantity. Apart from the effect of the quantitative variable, it is possible to state that the result of this research partially overlaps with the result obtained in the research.

Johnson et al. (2001) examined the evolution and future of national customer satisfaction index models based on five different industries, including airlines. They revealed the low positive effect of price on loyalty for airlines.

The results obtained in more recent studies are similar to the results obtained in the research. It is possible to interpret that customers' understanding of loyalty changes over time. As customers' loyalty levels increase, they act independently of price perceptions.

Considering both the results obtained in the research and the results of similar studies in the literature, it is seen that the effect of price perception on customer loyalty is either not or is very limited. Whether this situation is similar or different for the industrial market (B2B - Business to Business) has been revealed by research. It has been concluded that the result is similar and supportive of the literature.

In addition to what has been said so far; it is also possible to make suggestions to researchers and academicians who want to work on this subject. The research was carried out with a small number of samples It will be useful to study it with a larger number of samples and compare the results obtained.

It is important not only for airline cargo but also for repeating the research in different fields or sectors, comparing the results, and determining the differences or similarities in the field or sector.

It may be recommended to repeat the study in different regions or countries. Thus, it will be possible to detect differences or similarities in terms of regions or countries.

Considering that this research was carried out during the Covid-19 pandemic period, there is a possibility that the pandemic may affect the results. To understand and demonstrate whether this effect exists, it would be useful to repeat the research and compare the results obtained after the pandemic period.

Finally, repeating the research with different variable or variables that may be related to the price perceptions and customer loyalty of airline cargo customers, or even with variable or variables that are thought to have a regulatory effect on the price perceptions and customer loyalty of airline cargo customers can be suggested.

Ethical approval

Istanbul Gelisim University, Ethics Committee Chairman, Meeting Date: 03 June 2021, Decision No: 2021-20-19.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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