Abstract

In recent years, significant developments have taken place in the airline industry. It is thought that the interest in the sector will increase continuously in the coming years. So the competition in the sector will be more intense as it is now. In this intense competitive environment, concepts such as customer satisfaction and customer loyalty, which are important determinants of sales and profitability of firms, will become as important as they are now. It is necessary for customers to have positive perception of the product or service offered by the firm in order to be satisfied. In addition, customer satisfaction may result in referrals to other people about the firm. Therefore, in this study, the mediating effect of customer satisfaction was investigated through online questionnaire. Factor analysis and regression analysis were performed in the study. As a result, the customer satisfaction has a full mediator effect between the perceived value and the word-of-mouth.

Keywords: Customer Satisfaction, Perceived Value, Word-of-Mouth, Airline Industry, Mediating Effect.

Introduction

The airline industry is a global service industry that is experiencing intense competition and growing with the developing technology, providing economically important contributions (Rothkopf and Wald, 2008). This industry plays an important role in the development of tourism and international trade as well as economy. According to estimates by the International Air Transport Association (IATA), people who prefer air transport spend about $ 650 billion in 2016. In addition, the value of commercial commodities transported by air is around 5.5 trillion dollars. The most important reasons for this significant increase in passenger and freight traffic are; the reduction of air transport costs and the further development of links (IATA, 2017). At the same time, this industry is one of the fastest growing industries in the global economy. In the last two decades that we have left behind, this industry has grown at an annual average rate of 5%. This industry, which is a significant contributor to the Gross
Domestic Product, creates significant employment in all countries (Vespermann and Wald, 2011). The impact of the industry on the Gross Domestic Product is about $ 665 billion, and this industry employs a total of 62.7 million people worldwide (ATAG, 2016). Despite the current stagnation in the market and the crises experienced in the sector, it is estimated that this industry will continue to remain a global industry with an annual average growth rate of 4.2% -5.1% (Vespermann and Wald, 2011).

Turkey is one of the fastest growing countries in the airline industry. In recent years, the number of passengers has increased significantly in both local and international flights (Karaca, 2015). Particularly in 2003, with the adoption of the regional air transport policy, private airline companies were allowed to travel anywhere in the country. With this development, there has been a significant increase in the number of airlines operating in the sector and the number of flight points (İşık, 2010). In the last thirteen years, the number of aircraft in our airline companies increased by 233%, seat capacity by 264%, cargo capacity by 502%. In addition, the number of destinations flying out of Turkey has been 341. As of the end of 2016, there are 540 aircraft in the civil aviation companies operating in Turkey. There has been a progress in the sector over expectations of international organizations in estimates of the sector. However, the predictions of international organizations and big aircraft makers are that the growth in the sector will continue until the 2030s (DGCA, 2016). Air Transport Action Group (ATAG) estimates that by 2034 the number of people who prefer air transportation worldwide will be 6.9 billion per year, while the number of people employed in the sector will be 99.1 million (ATAG, 2016). In the light of foresight competition in the sector will become even more intense, and customer satisfaction, which is prioritized by all service-oriented industries including the airline industry (Arif et al., 2013), will become an even more important criterion. Because customer satisfaction is an important guide for monitoring and improving the current and potential performance of companies. At the same time, customer satisfaction has a significant impact on customers’ loyalty, the intention of word-of-mouth and re-purchasing behavior (Meesala and Paul, 2016). This demonstrates how important it is for companies that want to survive in intense competition and sustainable competitive advantage to offer products or services that will meet customer expectations and ensure they are satisfied with the value they perceive.

The relationship between perceived value, word-of-mouth, and customer satisfaction variables in the literature has mostly been studied in binary terms. However, regarding these concepts, the number of studies that measure the effect of a third variable on the relationship between one variable and the other is very small. Therefore, in this study, the mediating effect of customer satisfaction on the linear relationship between perceived value and word-of-mouth was analyzed. Thus, a significant relationship between perceived value and word-of-mouth was introduced to explain whether a significant relationship could be maintained if the customer satisfaction variable was included, and it was aimed to include literary value and managerial inferences.

Literature Review

Perceived Value-Customer Satisfaction Relationship

The most extensive accepted definition of perceived value was made by Zeithaml (1988) (Yang et al., 2016). According to Zeithaml, consumers define the value in 4
terms. These are; “low price”, “what I want in a product”, “the quality I get for the price I paid” and “what benefit will I get for the money I give”. When we deal with these four terms as a whole; the perceived value is a general benefit assessment based on the perceived price of the consumer paying for the product received (Zeithaml, 1988). At the same time, the perceived value represents the balance between perceived benefits and perceived costs (Lai and Chen, 2011). The perceived value affects customer satisfaction as it can affect customers’ attractiveness or pushing, and as a result, it is seen as a component of customer satisfaction (Qin et al., 2010). There are studies in the literature that show that the perceived value may be a more important factor that determines consumers' intent to purchase again in comparison to satisfaction or quality (Cronin et al., 2000; Petrick, 2004; Petrick and Backman, 2002; Woodruff, 1997). In some studies, perceived value is defined as the predecessor of intentions of satisfaction and behavior (Chen, 2008; Cronin et al., 2000; Petrick, 2004; Petrick and Backman, 2002). In addition, Jen and Hu set up a perceived value model in 2003 to determine the factors that affect consumers' intent to purchase again for public transport services. The results of the model show that the behavioral intentions of the consumers are significantly affected by the perceived value (Jen and Hu, 2003). These studies show how important the perceived value is. However, it is also known that the perception of the product or service received by consumers for their price is positively related to their level of satisfaction (Chen and Tsai, 2008). There are several studies in the literature that perceived value affects consumers' satisfaction positively (Cronin et al., 2000; Gallarza and Saura, 2006; Mohd-Any et al., 2015; Al-Sababhy et al., 2003; Williams and Soutar, 2009; Eggert and Ulaga, 2002; Hsu, 2006; Yang and Peterson, 2004; Lai, 2004; Turel and Serenko, 2006; Deng et al., 2010; Murray and Howat, 2002; Qin et al., 2010). The first hypothesis of the research that is inspired by these studies is as follows:

**H1:** Perceived value has a significant and positive influence on customer satisfaction.

**Perceived Value-Word-of-Mouth Relationship**

Word-of-Mouth involves communicating the consumer's informal view of products and brands to other people. This view is derived from consumption experiences or advertisements (Wien and Olsen, 2017). Word-of-Mouth is at the center of the buying process. Consumers need the views of people who have previously purchased these products or services, especially with regard to products or services that are of high financial value (Lu et al., 2016). This view can be traditionally verbally transmitted or transmitted electronically (Pollack, 2017). At the same time, word-of-mouth can be realized in two ways, positive and negative. Positive word-of-mouth involves positive feedback from customers who are satisfied with the experience they have had with a product or service. Negative word-of-mouth includes negative opinions that emphasize customers' dissatisfaction with the product or service (Mishra et al., 2016). Nevertheless, some consumers' views on products or services may emerge as a result of observations of global measures such as perceived value and quality, as well as observations of specific measures such as employee performance (Hartline and Jones, 1996).

There are only a few studies in the literature that examined the relationship between perceived value and word-of-mouth. Regarding these concepts, the mediating effect of oral communication concept on the perceived value of travel made for health purposes was investigated by Lu et al 2014. In the study, it was detected that word-of-
mouth showed a full mediator effect on the perceived value (Lu et al., 2014). In the study conducted by Hsu et al. In 2017, the relationship between electronic word-of-mouth and perceived value was investigated. As a result of the study, it has been found that the perceived value is positively influenced by the electronic word-of-mouth (Hsu et al., 2017). Hartline and Jones conducted a study in 1996 to examine whether customers' perceptions of employee performance and quality translate into word-of-mouth. As a result of the study, it has been determined that both the perceived value and the quality are converted into word-of-mouth actions and that the perceived value’s effect on word-of-mouth is higher than quality’s effect on word-of-mouth (Hartline and Jones, 1996). The second hypothesis of the research that is inspired by these studies is as follows:

\( H_2: \) Perceived value has a significant and positive influence on Word-of-Mouth.

**Customer Satisfaction-Word-of-Mouth Relationship**

Customer satisfaction is achieved when consumers' expectations are met with the benefits that the product or service offers (Tütüncü and Doğan, 2003). The customer has an expectation when buying a product or service. Satisfaction occurs when the benefit from the product or service overlaps or exceeds this expectation (Naktiyok and Kucuk, 2003). Satisfaction is not a universal phenomenon and it is not possible for everyone to be equally satisfied with the same experience. Customers have different needs, objectives, and experiences that affect their expectations (Pizam et al., 2016).

Customer satisfaction is of great importance to companies as it intensively affects the intent to purchase again and the word-of-mouth action. Satisfaction strengthens positive attitudes towards the brand and increases the likelihood of re-purchasing from the same brand (Pizam and Ellis, 1999). At the same time, talks and advice from satisfied customers about the company or company's products or services initiate the process of acquiring new customers (Cat and Koco, 2008). There are several studies in the literature that emphasize that the satisfied customer have advice about the company's products or services (Jiewanto et al., 2012; San-Martin et al., 2015; Hui et al., 2007; Webber, 2011; Jung and Seock, 2017; Kim et al., 2009; Maxham III and Netemeyer, 2002; Ranaweera and Prabhu, 2003). The third hypothesis of the research that is inspired by these studies is as follows:

\( H_3: \) Customer satisfaction has a significant and positive influence on Word-of-Mouth.

**Mediator Variable: Customer Satisfaction**

In this study, it was aimed to examine the mediating effect of customer satisfaction on the relationship between perceived value and word-of-mouth. There are several studies in the literature that examine the mediating effect of customer satisfaction (Pereira et al., 2016; Wahab et al., 2016; Usta and Memis, 2009; Agus and Abdullah, 2000; Osman and Sentosa, 2013; Chumpitaz and Swaen, 2002; Srivastava and Rai, 2013; Al-Hawari and Ward, 2006). However, the number of studies regarding whether the mediating effect of customer satisfaction on the relationship between perceived value and word-of-mouth is very limited. Therefore, it is considered that if the customer satisfaction is a mediator variable, an important contribution will be made to the literature. So the last hypothesis of the research is designed as follows:

\( H_4: \) There is a mediation effect of customer satisfaction on the relationship between perceived value and word-of-mouth.
Research Design and Methodology

An online questionnaire was conducted to examine the cause-effect relationships of perceived value, word-of-mouth, and customer satisfaction. In order to measure the perceived value, the expressions (3 questions) used in 2009 by Kuo et al. In order to measure the effect of word-of-mouth, we used the expressions used in 2007 by Marangoz (3 questions) and the expressions used by Calvo-Porral and Levy-Mangin in 2015 (4 questions) to measure customer satisfaction.

Customers who prefer air transportation in the study were selected as the target audience and were asked to complete the questionnaire if they used air transportation before the questionnaire. It has been stated that the target group must indicate the degree of participation for each expression in the questionnaire. The questionnaire form has been prepared via Google Forms. Convenience sampling method has been adopted in the study. In this direction, the questionnaire was sent between 10 March - 03 April 2017. Within the scope of the study, 192 valid questionnaires were obtained.

55.7% of the respondents in the questionnaire are women and 44.3% are men. The age range of participants varies from 19 to 49, and participants aged 30 and 31 make up approximately 20% of all participants. When the educational status of the participants is examined; 77.1% of them are postgraduates, 20.3% are graduates, 2.6% are associate degree and previous graduates. The proportion of consumers with income 4000 Turkish Liras and over is 62.5%; the rate of those with income between 3001-4000 Turkish Liras is% 17.7; the rate of income between 2001-3000 Turkish Liras is 12%; the rate of those with income between 1001-2000 Turkish Liras is 5.7% and the rate of those with income less than 1000 Turkish Liras is 2.1%. The proportion of respondents who stated that air transport is the primary preference for other modes of transport is the 81.2%; the proportion of respondents who stated that air transport is not the preferred preference is 18.8%.

Results and Discussion

Prior to testing the mediating effects of customer satisfaction variables, Reliability Analysis and Principal Component Analysis, one of the methods used in factor analysis, were used to determine the reliability and validity of the measurement means used in the research. According to Büyükoçtürk (2002), when the factors are strong and the number of variables is low, the sample size between 100 and 200 is sufficient for factor analysis. However, as a universal rule, it is assumed that a sample with at least fivefold the number of variables is sufficient (Büyükoçtürk, 2002). The number of data used in the study is 192, which is sufficient for analysis.

Reliability refers to the consistency between the ratings of participation that people have expressed about the expressions on the questionnaire. Cronbach's Alpha value resulting from the analysis is used to interpret to what extent the individual differences are incorrect and to what extent they are incorrectly calculated with respect to the expressions in the questionnaire (Büyükoçtürk, 2007). If this coefficient is 0.70 or above, the scale used is considered to be reliable (Bektaş and Akman, 2013). According to Büyükoçtürk (2002), factor analysis is an analysis that provides meaningful proposals with fewer and identifiable characteristics from a large number of proposals under the same dimension (Büyükoçtürk, 2002). Principal Component Analysis, one of the methods used in factor analysis, is a widely used method. This method creates
independent and fewer basic components that can be characterized as components of variables (Ersungur et al., 2007).

The statistical tests used in the analysis of the principal components are the Kaiser-Meyer-Olkin (KMO) test and the Bartlett test. The Bartlett test implies that there is a significant and sufficient correlation (p <0.05) between at least some of the variables in the correlation matrix (Hair et al., 2014). The KMO test is a test that checks the adequacy and suitability of the sample size for the data set (Gürbüz and Yüksel, 2008). The value resulting from this test ranges from 0 to 1, and a value closer to 1 indicates that the sample size is sufficient and appropriate for the data set (Sanguansat, 2012). In addition, this value should be at least 0.50 and above. However, it is stated that factor loadings of at least 0.30-0.40 are considered adequate, but in practice, it is assumed that factor loads above 0.50 are considered significant (Hair et al., 2014).

### Table 1: Results of Principal Component Analysis

<table>
<thead>
<tr>
<th>Expressions Regarding Scales</th>
<th>Factor Loads</th>
<th>Eigenvalue</th>
<th>% Variance</th>
<th>Cronbach α</th>
<th>KMO Test</th>
<th>Bartlett Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV1</td>
<td>0.903</td>
<td>2.150</td>
<td>71.65</td>
<td>0.792</td>
<td>0.658</td>
<td>$\chi^2=196.970$</td>
</tr>
<tr>
<td>PV2</td>
<td>0.826</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PV3</td>
<td>0.808</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>CS1</td>
<td>0.896</td>
<td>2.952</td>
<td>73.80</td>
<td>0.881</td>
<td>0.784</td>
<td>$\chi^2=443.317$</td>
</tr>
<tr>
<td>CS2</td>
<td>0.887</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS3</td>
<td>0.869</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS4</td>
<td>0.779</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word of Mouth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOM1</td>
<td>0.941</td>
<td>2.125</td>
<td>70.84</td>
<td>0.790</td>
<td>0.573</td>
<td>$\chi^2=329.693$</td>
</tr>
<tr>
<td>WOM2</td>
<td>0.936</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WOM3</td>
<td>0.604</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*PV1. I think I am traveling at a reasonable price with this company. PV2. I think it is worth the time and effort to travel with this company. PV3. Traveling with this company is a more sensible choice when compared to other companies. CS1. I think it's logical to travel with this company. CS2. I'm very satisfied with this company. CS3. This company offers me everything I expect from an airline company. CS4. This company has met all my anticipations until today. WOM1. I say positive things about the airline company I use the most to the people around me. WOM2. I suggest that my friends and acquaintances prefer the airline company I use the most. WOM3. I also tell my complaints about the airline company that I use the most to other customers and the people around me.

When Table 1 is examined, it is seen that Cronbach α value is over 0.70 for all variables. This indicates that participants' stated participation levels for the proposals in the questionnaire are consistent. In addition, the factor loadings for all expressions exceeded the value of 0.50, which is assumed to be significant in practice. At the same time, the KMO test result for all dimensions is above the value of 0.50. This indicates that the sample size is adequate and proper. In addition, the Bartlett Tests (p = 0.000) were also significant, indicating that the correlations for the items collected under the scales were significant. It is, therefore, possible to mention the existence of a significant and sufficient correlation between at least some of the variables. The correlation between the factors is shown in Table 2.

### Table 2: Results of Correlation Analysis

<table>
<thead>
<tr>
<th>Factors</th>
<th>Perceived Value</th>
<th>Customer Satisfaction</th>
<th>Word of Mouth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Value</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>0.736**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Word of Mouth</td>
<td>0.434**</td>
<td>0.673**</td>
<td>1</td>
</tr>
</tbody>
</table>

** significant at 99% confidence level
Table 2 shows that there is a significant \( p<0.05 \) and positive correlation (Pear. Corr. = 0.736) between perceived value and customer satisfaction, a significant \( p<0.05 \) and positive correlation (Pear. Corr. = 0.434) between perceived value and word-of-mouth, and a significant \( p<0.05 \) and positive correlation (Pear. Corr. = 0.673) between customer satisfaction and word-of-mouth. However, it is understood that the highest correlation is between perceived value and customer satisfaction.

Baron and Kenny's mediator effect approach was used to examine whether the customer satisfaction factor is a mediator effect between perceived value and word-of-mouth. Three-step regression analysis was performed in this direction. This analysis has been used in several studies investigating mediating effects (Bitmiş et al., 2013; Kanbur and Kanbur, 2015; Polat and Meyda, 2011; Kahya, 2013).

**Baron and Kenny's Approach to Mediator Effect Analysis**

Baron and Kenny (1986) studied the differences between moderator and mediator effects in social psychological research and suggested Figure 1 to explain the mediator effect variable.

![Figure 1: Model for Mediation Effect](image)

According to Baron and Kenny (1986), there is a model as shown in Figure 1 in order to verify the mediation effect. There are three variables in the model, and there are two causal variables (Perceived Value and Customer Satisfaction) that explain the dependent variable (Word-of-Mouth). There are two direct effects: the first one is between perceived value and word-of-mouth (c) and the second one is between perceived value and customer satisfaction (a). Also, there is a mediator effect between customer satisfaction and word-of-mouth (b). If the direct relationship between the perceived value and word-of-mouth is significant while this relationship loses its meaning because of the mediator effect of customer satisfaction we can say that customer satisfaction is a dominant variable. In this case, a full mediation effect is mentioned. The coefficient c may decrease, although the direct relationship between the perceived value and the word-of-mouth is preserved after adding the customer satisfaction into the model. In this case, a partial mediation effect is mentioned (Baron and Kenny, 1986).

According to Baron and Kenny (1986), three different regression equality assumptions have to be fulfilled in order to understand whether the mediator variable is indeed mediator. These:

1- A significant linear relationship between the perceived value and the word-of-mouth,
2- A significant linear relationship between the perceived value and the customer satisfaction,
3- A significant linear relationship between the customer satisfaction which is a mediator variable and the word-of-mouth which is a dependent variable. Once these three assumptions have been made, it is possible to talk about the presence of the mediator effect if the effect of the perceived value on word-of-mouth decreases. In addition, the Sobel Test is used to test whether the effect of the detected mediator effect actually exists (Baron and Kenny, 1986).

In order to test the hypotheses H1, H2, H3, and H4 developed using the literature and the model is given in Figure 1, regression analysis was done through statistical package program.

**Table 3: Mediating Effect of Customer Satisfaction on the Relationship Between Perceived Value and Word-of-Mouth**

<table>
<thead>
<tr>
<th>Dependent Variable: Word-of-Mouth</th>
<th>F</th>
<th>P</th>
<th>Beta Coefficient</th>
<th>S.E.</th>
<th>T</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>156,867</td>
<td>0,000***</td>
<td>0,696</td>
<td>0,056</td>
<td>12,525</td>
<td>0,000***</td>
<td>0,586</td>
<td>0,806</td>
<td>1,00</td>
</tr>
<tr>
<td>R² = 0,452</td>
<td></td>
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</tbody>
</table>

Adjusted $R^2 = 0,449$
Durbin-Watson coefficient = 1,852

<table>
<thead>
<tr>
<th>Dependent Variable: Word-of-Mouth</th>
<th>F</th>
<th>P</th>
<th>Beta Coefficient</th>
<th>S.E.</th>
<th>T</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Value</td>
<td>44,094</td>
<td>0,000***</td>
<td>0,451</td>
<td>0,068</td>
<td>6,640</td>
<td>0,000***</td>
<td>0,317</td>
<td>0,585</td>
<td>1,00</td>
</tr>
<tr>
<td>R² = 0,188</td>
<td></td>
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</tbody>
</table>

Adjusted $R^2 = 0,184$
Durbin-Watson coefficient = 2,075

<table>
<thead>
<tr>
<th>Dependent Variable: Customer Satisfaction</th>
<th>F</th>
<th>P</th>
<th>Beta Coefficient</th>
<th>S.E.</th>
<th>T</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Value</td>
<td>224,816</td>
<td>0,000***</td>
<td>0,709</td>
<td>0,047</td>
<td>14,994</td>
<td>0,000***</td>
<td>0,615</td>
<td>0,802</td>
<td>1,00</td>
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<tr>
<td>R² = 0,542</td>
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</tbody>
</table>

Adjusted $R^2 = 0,540$
Durbin-Watson coefficient = 2,194

<table>
<thead>
<tr>
<th>Dependent Variable for Mediation Effect: Word-of-Mouth</th>
<th>F</th>
<th>P</th>
<th>Beta Coefficient</th>
<th>S.E.</th>
<th>T</th>
<th>P</th>
<th>LLCI</th>
<th>ULCI</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Value</td>
<td>81,054</td>
<td>0,000***</td>
<td>-0,140</td>
<td>0,082</td>
<td>-1,708</td>
<td>-0,302</td>
<td>0,022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>8,343</td>
<td>0,085</td>
<td>9,797</td>
<td>0,000***</td>
<td>0,666</td>
<td>1,002</td>
<td>2,183</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2 = 0,462$</td>
<td></td>
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</tbody>
</table>

$\Delta R^2 = 0,274***$
Adjusted $R^2 = 0,456$
Durbin-Watson coefficient = 1,837

Normal theory test for indirect effect (Sobel test) $= 0,5912$, S.E.$= 0,072$, $z = 8,1885$ ve p$= 0,000***$

**significant at 99% confidence level**

The fact that the assumptions of the regression analysis are fulfilled is very important in terms of the accuracy of the analysis. From these assumptions, multicollinearity occurs when there is a very high correlation between the independent variables and represents an undesirable condition in regression analysis. The variance inflation factor (VIF) value is taken into account to detect multicollinearity. This value is 10 or more, indicating that there is a problem of multicollinearity (Albayrak, 2005). In addition, the autocorrelation required for the analysis is measured by the Durbin-Watson coefficient, which should range from 1.5 to 2.5 (Büyükşalvarç and Abdioğlu, 2010).
As a result of the regression analysis, it was found that there was a significant linear relationship between perceived value and customer satisfaction and a significant linear relationship between perceived value and word-of-mouth, as well as a significant linear relationship between customer satisfaction and word-of-mouth. After fulfilling these assumptions, it is seen that Beta coefficient of perceived value which explains word-of-mouth is decreased from 0.451 to -0.140, and the relation explanatory ratio increases from $R^2 = 0.188$ to $R^2 = 0.462$. After entering the customer satisfaction into the model, the model had an increase of $(\Delta R^2)$ 0.274 in terms of the disclosure with two variables. Moreover, in the normal theory test (Sobel Test) which tests whether the indirect effect is real, it is significant with $p = 0.000$ value. Since the coefficient of the perceived value variable is insignificant ($p = 0.089$), it can be said that the customer satisfaction has a full mediator effect function between the perceived value and the word-of-mouth. In other words, there are other multiple-effect variables between perceived value and word-of-mouth. However, it was found that there were no multicollinearity problems among the variables (VIF <10) and that the Durbin Watson coefficient for all analyzes varied from 1.5 to 2.5. The results obtained for the hypotheses as a result of the analyzes made to test the hypotheses of the study are shown in Table 4.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_1$</td>
<td>Perceived Value $\rightarrow$ Customer Satisfaction</td>
</tr>
<tr>
<td>$H_2$</td>
<td>Perceived Value $\rightarrow$ Word-of-Mouth</td>
</tr>
<tr>
<td>$H_3$</td>
<td>Customer Satisfaction $\rightarrow$ Word-of-Mouth</td>
</tr>
<tr>
<td>$H_4$</td>
<td>Perceived Value $\rightarrow$ Customer Satisfaction $\rightarrow$ Word-of-Mouth</td>
</tr>
</tbody>
</table>

Table 4 shows that all the hypotheses of the study are supported. This implies that a significant and linear relationship between perceived value and customer satisfaction, a significant and linear relationship between perceived value and word-of-mouth, and a significant and linear relationship between customer satisfaction and word-of-mouth was determined. Furthermore, it has been determined that customer satisfaction has a full mediator effect on the significant and linear relationship between the perceived value and the word-of-mouth.

Conclusion, Recommendations, And Limitations

Before analyzing the meaningful relationship between perceived value, customer satisfaction, and word-of-mouth, and the mediating effect of the customer satisfaction on this relationship, reliability analysis of variables was performed. As a result of this analysis, questions about variables were found to be reliable. As a result of correlation analysis, it was found that there were significant and positive relations between all variables. Then the mediation effect was tested by regression method.

When the linear relationship between perceived value and word-of-mouth is examined, it is seen that perceived value discloses 18% of word-of-mouth and the effect ratio is 0.451. This indicates that perceived value is not enough to explain word-of-mouth, and other variables must be included in the model. It has been determined that the customer satisfaction has an effect on both perceived value and word-of-mouth. In this case, it is thought that airline companies, which will provide their customers with a reasonable price, time and effort to travel and making a sensible choice as a substitute, will be one step ahead of their competitors.
The Sobel test, which examined whether the mediation effect is meaningful, was significant (p = 0.000). In addition, the significant relationship between perceived value and word-of-mouth lost meaningfulness (p=0.089) after the customer satisfaction variable was included in the model. According to these findings, the customer satisfaction variable is a full mediator effect. Therefore it is recommended that airline companies operating in the sector should provide services that can increase the satisfaction level of the customers. Because at the end of the study; it has been determined that the value that the customers perceived is not enough to talk about positively about the company. Customers need to be satisfied as well as the positive value they perceive in order to have positive referrals to the firm.

The mediating effect of customer satisfaction has been investigated in several studies and it has been found that it plays a mediator role in the relationship between different variables. For example; Osman and Sentosa (2003) studied the tourism industry in Malaysia, in their research they found that the customer satisfaction has a mediator effect on the relationship between service quality and customer loyalty. Al-Hawari and Ward (2006) studied the banking industry in Australia, in their research they found that the customer satisfaction has a mediator effect on the relationship between automated service quality and financial performance. Usta and Memiş (2009) studied the mobile communication industry in Turkey, in their research they found that the customer satisfaction has a mediator effect on the relationship between service quality and brand loyalty. Chumpitaz and Swaen (2002) studied in the airline industry, in their research they found that the customer satisfaction has a mediator effect on the relationship between service quality and brand loyalty. Mosahab et al. (2010) studied the banking industry in Iran, in their research they found that the customer satisfaction has a mediator effect on the relationship between service quality and service loyalty. These findings are similar to the findings in this study, although the variables that the customer satisfaction has a mediator effect on are different.

The first limitation of this study is about the size of the sample. The number of the universe is unknown. According to Yazıcıoğlu and Erdoğan (2011), the sample size to be determined for the universes in the size of 100 million should be at least 384. However, due to the time constraints of the researchers, 192 valid questionnaires were obtained. The other limitation of this study is to consider the present feelings of participants. Research results reflect the opinions of individuals at a specific time interval or after a certain number of experiences. Hence, positive or negative experiences that individuals may experience in later days may lead to different outcomes.
References


Ranaweera, C., Prabhu, J. (2003). “On the relative importance of customer satisfaction and trust as determinants of customer retention and positive word of


