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The Case of Afyonkarahisar**

Otomobil Kullanıcılarının Tatminin Etkileyen Faktörlerin  
Belirlenmesi, Afyonkarahisar Örneği

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## Otomobil Kullanıcılarının Tatminin Etkileyen Faktörlerin Belirlenmesi, Afyonkarahisar Örneği<sup>1</sup>

### Öz

Otomotiv sektörü, Dünya’da olduğu gibi ülkemizde de, gün geçtikçe gelişerek hem yurtiçi hem de yurtdışında yaratmış olduğu değerlere bağlı olarak ülke ekonomileri için önemli bir yere sahip olmaktadır. Otomotiv sektörünün üretim içindeki payı ve ekonomik katkı oranı değerlendirildiğinde, imalat sanayi içinde önde gelen sektörler arasında yer almaktadır. Sektörün imalat sanayi toplam üretimi içindeki payı sektör ortalamasının üstünde yer almaktadır. Otomotiv sanayi sahip olduğu yapı nedeni ile demir-çelik, hafif metaller, petro-kimya, lastik, plastik gibi temel sanayi dallarının başlıca ürünüdür. Ayrıca turizm, alt yapı ve inşaat ile ulaştırma ve tarım sektörlerinin gerek duyduğu her çeşit motorlu araçlar otomotiv sektörü ürünleri ile sağlanmaktadır. Sektörün diğer sektörlerle bağlantısını gösteren bu durum; otomotiv sektörünün, bulunmuş olduğu ülkenin ekonomisi üzerinde büyük bir etkiye sahip olmasına neden olmaktadır.

Otomotiv endüstrisi, toplum ve çevre üzerinde derin bir etkiye sahiptir ve günümüz küresel dünyasında birçok sektörde olduğu gibi otomotiv sektöründe de önemli bir rekabet ortamı bulunmaktadır. Firmalar arasında yaşanan bu rekabet müşteri tatmini ve sadakati konusunu daha önemli bir hale getirmiştir. Müşteri tatminini sağlamak için yapılması gerekenlerin belirlenmesi, firmalara yol gösterici olmakta, müşteri odaklılığın da önemli bir kısmını oluşturmaktadır. Bu nedenle çalışmada otomotiv sektörü özelinde müşteri tatminini sağlayan faktörler belirlenmiş ve bunlar üzerine bir çalışma gerçekleştirilmiştir. Makalenin amacı; otomobil kullanıcılarının tatmini etkileyen unsurların ortaya konularak bunları nasıl geliştirilebileceğini belirlemektir. Bu amaçla 412 otomobil kullanıcısı üzerine bir anket yapılmıştır. Anket çalışması ile toplanan verilerin analizinde korelasyon katsayıları, t-testleri ve varyans analiz yöntemleri kullanılmıştır. Çalışma sonucuna göre otomobil kullanıcılarının tatmin düzeylerini belirleyen unsurlar olan yapısal kalite, dayanıklılık, maliyetler, sürüş kalitesi ve konfor ile tatmin düzeyi arasında anlamlı ve pozitif yönlü bir ilişki bulunmuştur.

**Anahtar Kelimeler:** Müşteri İlişkileri Yönetimi, Müşteriyi Elde Tutma, Müşteri Tatmini, Müşteri Sadakati, Otomotiv Endüstrisi

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## Determination of the factors affecting the car users' satisfaction, The Case of Afyonkarahisar

### Abstract

The automotive sector has an important place in our country as in the world, depending on the values it has created both domestic and foreign, for the country's economies. When the automotive sector is evaluated with its share in production and its economic contribution rate, it is seen that it is among the leading sectors in the manufacturing industry. The share of the sector in the total production of the manufacturing industry is above the sector average. The automotive industry is the main product buyer of basic industry branches such as iron and steel, light metals, petro-chemistry, rubber and plastics due to its structure. In addition, all kinds of motor vehicles required by the tourism, infrastructure and construction, transportation and agriculture sectors are provided with automotive industry products. This situation, which shows the sector's connection with other sectors, causes the automotive sector to have a great impact on the economy of the country where it is located.

The automotive industry has a deep impact on society and the environment and also there is an important competitive environment in the automotive industry as in many other sectors in today's global world. This competition among companies has become more important issue of customer satisfaction and loyalty. Determining what needs to be done to ensure customer satisfaction is a guide for companies and also an important part of customer-oriented. Therefore, the factors that ensure customer satisfaction in the automotive industry were determined and a study was carried out on these factors. The purpose of the article is to identify the factors that affect the satisfaction of car users and to determine how they can be developed. For this purpose, a survey was conducted on 412 car users. Correlation coefficients, t-tests and variance analysis methods were used in the analysis of the data collected through the survey. According to the results of the study, a significant and positive relationship was found between structural quality, durability, costs, driving quality, and comfort with satisfaction level.

**Keywords:** Customer Relationship Management, Customer Retention, Customer Satisfaction, Customer Loyalty, Automotive Industry

### 1. Introduction

Customers' expectations and demands are increasing day by day. Correspondingly, businesses have abandoned their traditional marketing and adopted the customer-oriented marketing approach which is the most



important element of modern marketing, in order to sustain their existence and gain competitive advantage. Businesses aimed to achieve customer satisfaction by offering product and service in a customer-oriented manner with a modern marketing approach. Customer orientation is the most important factor in ensuring and increasing customer satisfaction (Soysal, 2015, p.11).

Global automotive industry with intense competition is in the middle of both quality development and transformation of management. The industry's attention has moved from focusing on internal quality to customer satisfaction and then to customer retention and profitability in the quality development. The way of working and management are the changes in the transformation in management. While the automotive industry is being managed with a product-oriented approach, then it becomes a customer-oriented industry. Understanding the relationship between product quality with customer satisfaction and retention become a vital factor for financial and organizational success in the automotive industry (Johnson et al., 1997). In particular, product quality analysis is based on data obtained during the advanced marketing efforts of customer satisfaction. Following the data obtained, especially reliability and car prices and design features, comfort, functionality, etc. elements are followed. Automobile producers' marketers receive data based on consumers' subjective perception of products, based on an individual's needs for automotive products (Amineh & Kosach, 2016, p. 8727).

The automotive industry is among the leading sectors that enable the steady growth of developed and developing countries, accelerate technological developments and help many other sectors to grow in the world. The automotive sector, which constitutes for about 5% of the world economy with a total size of approximately 4 trillion dollars, corresponds to the world's 4th largest economy. In addition, the automotive sector provides employment to 80 million people in the world directly and indirectly. The automotive sector has a high multiplier effect and added value on economic growth with its strong forward and backward links with other sectors. It is in the position of purchaser of products produced by industries such as iron-steel, petro-chemistry, plastic, glass, textile and electronics, and supplies motor vehicles needed by sectors such as agriculture, tourism, construction, infrastructure, transportation and defense. The automotive sector is also closely connected with the marketing, dealer, after-sales service, fuel, finance and insurance sectors, which enable raw materials and sub-industry and final products to reach the consumer (Türkiye Sınai Kalkınma Bankası, 2017, p. 13; Sanayi ve Verimlilik Genel Müdürlüğü, 2019, p. 5).

When the state of the automotive industry is analyzed in Turkey, it is seen that the sector continues to grow. Businesses launch many brands, models and prices every year so that customers can easily switch from one brand to another in this industry. Retaining and maintaining the customers are important elements for companies in order not to lose customers.



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Automotive industry is in the industrial products group within industries. In table 1, export figures are shown for 2020 on a monthly basis. It can be seen that the automotive industry contributed the most in export figures within industrial products. In addition, , although there was a decrease due to the Covid-19 process, the sector seems to be recovering rapidly in 2020. This shows that the automotive industry is the driver of the economy although in adverse conditions.

**Table 1.** Monthly Export Registration Figures on a Sectoral Basis (2020) (1.000.000 \$)

| INDUSTRY                               | Jan.                | Feb.                | March               | Apr.              | May                 | June                | July                | Aug.                | Sep.                | Total                | %                  |
|--|---------------------|---------------------|---------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|--------------------|
| <b>C. Industrial Products</b>          | <b>8.396</b>        | <b>8.624</b>        | <b>7.538</b>        | <b>4.523</b>      | <b>5.383</b>        | <b>7.947</b>        | <b>8.864</b>        | <b>7.166</b>        | <b>9.555</b>        | <b>67.996</b>        | <b>100</b>         |
| <b><u>Automotive Industry</u></b>      | <b><u>2.398</u></b> | <b><u>2.519</u></b> | <b><u>2.061</u></b> | <b><u>596</u></b> | <b><u>1.202</u></b> | <b><u>2.014</u></b> | <b><u>2.200</u></b> | <b><u>1.544</u></b> | <b><u>2.605</u></b> | <b><u>17.141</u></b> | <b><u>25,2</u></b> |
| Ready-made garment and apparel         | 1.489               | 1.517               | 1.210               | 573               | 835                 | 1.350               | 1.808               | 1.543               | 1.798               | 12.123               | 17,8               |
| Steel                                  | 1.137               | 1.003               | 983                 | 901               | 817                 | 1.128               | 1.046               | 875                 | 1.102               | 8.992                | 13,2               |
| Electric Electronic                    | 823                 | 863                 | 829                 | 619               | 669                 | 901                 | 985                 | 851                 | 1.064               | 7.604                | 11,2               |
| Ferrous and Non-Ferrous Metals         | 702                 | 689                 | 671                 | 518               | 498                 | 676                 | 754                 | 615                 | 749                 | 5.873                | 8,6                |
| Machinery and Mechanical parts         | 624                 | 634                 | 626                 | 456               | 431                 | 585                 | 666                 | 571                 | 689                 | 5.281                | 7,8                |
| Air conditioning Industry              | 361                 | 388                 | 396                 | 287               | 278                 | 360                 | 416                 | 356                 | 437                 | 3.278                | 4,8                |
| Cement Glass Ceramic and Soil Products | 288                 | 309                 | 316                 | 231               | 250                 | 323                 | 351                 | 319                 | 345                 | 2.732                | 4                  |
| Jexelry                                | 292                 | 372                 | 229                 | 146               | 225                 | 345                 | 346                 | 187                 | 315                 | 2.457                | 3,6                |
| Defense and Aviation Industry          | 167                 | 174                 | 142                 | 161               | 112                 | 167                 | 140                 | 177                 | 282                 | 1.521                | 2,2                |
| Ship and Yacht                         | 109                 | 148                 | 69                  | 29                | 58                  | 88                  | 141                 | 120                 | 160                 | 922                  | 1,4                |
| Other Industrial Products              | 7                   | 9                   | 7                   | 6                 | 6                   | 8                   | 10                  | 8                   | 11                  | 71                   | 0,1                |

**Source:** Turkish Exporters Assembly (<https://tim.org.tr/tr/ihracat-rakamlari>)



Table 2 shows the amount of cars and commercial vehicles produced on the basis of countries between 2016 and 2019. It is seen that Turkey's total vehicle production (TVP) is 1,461,244 (982,642 of them are automobiles and 478,602 are commercial vehicles). It ranks 14th in the total world vehicle production ranking. In addition, it is seen that there was a serious decrease in vehicle production worldwide in 2019. Beside that, China, America and Japan produced 50.4% of the total vehicle production in 2019.

**Table 2.** Total vehicles production in the World (2016-2019)

| No                          | Country/<br>Region | 2016                           |            | 2017              |            | 2018              |            | 2019              |            |
|-----------------------------|--------------------|--------------------------------|------------|-------------------|------------|-------------------|------------|-------------------|------------|
|                             |                    | Total<br>Vehicle<br>Production | %<br>TVP   | TVP               | %<br>TVP   | TVP               | %<br>TVP   | TVP               | %<br>TVP   |
| 1                           | China              | 28.118.794                     | 29,4       | 29.015.434        | 29,6       | 27.809.196        | 28,9       | 25.720.665        | 28,0       |
| 2                           | USA                | 12.198.137                     | 12,8       | 11.189.985        | 11,4       | 11.314.705        | 11,8       | 10.880.019        | 11,9       |
| 3                           | Japan              | 9.204.590                      | 9,6        | 9.693.746         | 9,9        | 9.728.528         | 10,1       | 9.684.298         | 10,6       |
| 4                           | Germany            | 6.062.562                      | 6,3        | 5.645.581         | 5,8        | 5.120.409         | 5,3        | 4.661.328         | 5,1        |
| 5                           | India              | 4.488.965                      | 4,7        | 4.782.896         | 4,9        | 5.174.645         | 5,4        | 4.516.017         | 4,9        |
| 6                           | Mexico             | 3.597.462                      | 3,8        | 4.068.415         | 4,2        | 4.100.525         | 4,3        | 3.986.794         | 4,3        |
| 7                           | South<br>Korea     | 4.228.509                      | 4,4        | 4.114.913         | 4,2        | 4.028.834         | 4,2        | 3.950.617         | 4,3        |
| 8                           | Brazil             | 2.156.356                      | 2,3        | 2.699.672         | 2,8        | 2.879.809         | 3,0        | 2.944.988         | 3,2        |
| 9                           | Spain              | 2.885.922                      | 3,0        | 2.848.335         | 2,9        | 2.819.565         | 2,9        | 2.822.355         | 3,1        |
| 10                          | France             | 2.082.000                      | 2,2        | 2.227.000         | 2,3        | 2.270.000         | 2,4        | 2.202.460         | 2,4        |
| 11                          | Thailand           | 1.944.417                      | 2,0        | 1.988.823         | 2,0        | 2.167.694         | 2,3        | 2.013.710         | 2,2        |
| 12                          | Canada             | 2.370.271                      | 2,5        | 2.199.789         | 2,2        | 2.020.840         | 2,1        | 1.916.585         | 2,1        |
| 13                          | Russia             | 1.303.989                      | 1,4        | 1.551.293         | 1,6        | 1.767.674         | 1,8        | 1.719.784         | 1,9        |
| 14                          | <b>Turkey</b>      | <b>1.485.927</b>               | <b>1,6</b> | <b>1.695.731</b>  | <b>1,7</b> | <b>1.550.150</b>  | <b>1,6</b> | <b>1.461.244</b>  | <b>1,6</b> |
| 15                          | Czech<br>Rep.      | 1.349.896                      | 1,4        | 1.419.993         | 1,4        | 1.345.041         | 1,4        | 1.433.963         | 1,6        |
| <b>Total<br/>Production</b> |                    | <b>95.568.664</b>              | <b>100</b> | <b>97.954.688</b> | <b>100</b> | <b>96.167.447</b> | <b>100</b> | <b>91.787.521</b> | <b>100</b> |

**Source:** OICA (International Organization of Motor Vehicle Manufacturers) and data were compiled by the authors.

The automobile industry is considered as one of the driving forces of economic growth (Dua & Gautam, 2013). The automotive industry is not only a driving force behind the 1990s efficiency boom, but also a competitive and global industry facing numerous business challenges. The major of these challenges are product and service development, product and service quality, supplier relations, process improvement, internal and external customer satisfaction, retailing, distribution option, pricing, placing, promotion, franchising and the management and improvement of the technology (Womack et al. 1991).

The purpose of this study is to reveal the factors affecting the satisfaction of automobile users. Thus, it is aimed to give information to the sector stakeholders about customer satisfaction and to make recommendations that will increase customer satisfaction. It is thought that the study will contribute to the literature since it has applied a scale that has not been



applied in our country before, and investigated the community by considering different factors on customer satisfaction.

## 2. Customer Satisfaction

Customers are the focal point of all activities carried out by businesses. The main reason is that every product, service or idea must ultimately appeal to the needs of the customer. As a concept, customer service has many dimensions of its own. Customers create some perceptions against the business in relation to various aspects of customer service such as competence, quick response, reliability, and honesty. Customers reveal their degree of satisfaction by evaluating the services of companies through these perceptions (Deran vd.,2014).

Customer service enables to the business enterprise who are engaged in economic activities for profit and the buyer to add more value through various activities. This is the core element of the service or product offered to the customer. Existing customers are satisfied with a good level of customer service, then new customers are attracted through word of mouth communication. Customer service is not only an activity or function, but also an attitude and a philosophy. Customer service ensures customer satisfaction, which is a function of customer expectations with the high level of importance they place on the customer, and consequently, it increases the service level of the enterprise (Marangoz, 2007; Reilly, 2010, p. 9).

Marketing activities become less transaction-oriented and more relationship-oriented, putting increasing weight on customer retention. Customer retention can be defined either from a buyer's point of view as an attitude towards the provider of a good or service resulting in a willingness to incur follow up-transaction, or from a seller's point of view as a bundle of activities resulting in a close buyer-seller relationship (Johnson et al., 1997, p. 318). In other words "*Customer retention*" is the number of customers doing business with a firm at the end of a financial year expressed as percentage of those who were active customers at the beginning of the year (Buttle & Maklan, 2015, p.85).

*Customer lifetime value* is the present-day value of all net margins earned from a relationship with a customer, customer segment or cohort. A customer's lifetime value (CLV) is an estimate of the present value of the future cash flows associated with a particular customer or group of customers. CLV is a forward-looking concept that takes a long-term perspective on a supplier's relationship with a customer and is the same unit of measurement that creates customer equity (Buttle & Maklan, 2015, p.33; Dawkins & Reichheld, 1990; Buttle & Groeger, 2015, p. 1).

*Market orientation* is defined as "the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide



responsiveness to it" (Kohli and Jaworski 1990, p. 6; Herhausen, 2011, p. 14-15). *Customer orientation* is "the sufficient understanding of one's target buyers to be able to create superior value for them continuously" (Narver and Slater 1990, p. 21).

The concept of customer satisfaction became the focus of the marketing concept that was widely accepted and adopted today in the 1950s (Czepiel & Rosenberg, 1977, p.403). One of the first scientists was Cardozo (1965) who suggest the idea of customer satisfaction (Chiu et al., 2011, p. 9781). As the level of customer satisfaction increases, it reveals that the customer is more likely to buy again and purchase other products which indicates customer loyalty.

Marketing is defined as "*customer satisfaction engineering*" (Kotler and Levy, 1969, p.10). The concept of customer satisfaction has been a part of marketing and practical area for nearly a century; It became a separate subject for research and investigation in the 1970s (Churchill and Carol, 1982, p. 491-492).

Fornell (1992, p.6) believes that customer satisfaction can directly predict overall perception and this is the existence of a company that can bring repetitive consumer behavior, hence "*customer satisfaction*" can be used as an economic benefit index. On the other hand, Anderson et al. (1994, p.54), thinks that customer satisfaction reflects a consumer's total experience in purchasing a product or service, and this is an overall assessment over time.

Ostrom and Iacobucci (1995) stated that customer satisfaction is a way to evaluate the difference between customer expectations and the real perception of a particular product. Their indices are service attitude, service efficiency, product price, overall company performance and optimal level of company familiarity.

Customer satisfaction is the measure of how the goods and services offered by the companies meet or exceed their customer expectations. Satisfaction is very important for both customers and organizations. Satisfaction is difficult to determine because it is a subjective concept. It depends on many factors and varies from person to person and from product to product. Customer satisfaction is a measure of customers' post-purchase behavior. The importance of customer satisfaction in developing a customer and market oriented strategy cannot be determined exactly. Today, increasing the level of customer satisfaction has become a very important factor for every customer (Dua and Gautam, 2013, p.69). In other words, customer satisfaction is the customer evaluating the purchasing and consumption experiences with a product, service, brand or company (Johnson, 2015).

The analysis of customer satisfaction brings significant advantages to the business, the main of which are as follows (Amineh & Kosach, 2016, p.8728-8729):



- Determining the most important product features for the buyer and allowing them to be used for advertisements, avoiding unimportant benefit costs for the consumer,
- Assist in the correct evaluation of market positions;
- First of all, it reveals opportunities for improvement by determining the quality of products and processes, improvement priorities.

Therefore, the current customer satisfaction assessment is considered as a mechanism that allows automobile producers to compete in the market.

Customer satisfaction has gained importance in the business world and has become a fundamental subject of marketing. This satisfaction is usually used as the ultimate goal as a common marketing measure of an organization's performance. Bennett and Sharyn (2004) stated that customer satisfaction is the key to success and a satisfied customer is a repetitive customer. In order to survive in businesses, organizations must always provide good services that provide highly satisfied and loyal customers in highly competitive markets. When customers are satisfied, they are more likely to return to those who help them, while dissatisfied customers are shifting elsewhere (Vukmir, 2006; O'Sullivan & McCallig, 2012).

Customer satisfaction shows the level of the person's (buyer) emotions after comparing his perceived performance and buyer expectations. If the expectations do not match, they will not be confirmed. There are two parts about approve or disagreement. The first is the positive that the products and services can match the expectations of the customers, and the second part is that the products and services are negative if they cannot match the expectations of the customers (Furaida et al., 2018).

In actual fact, many companies are aware of the importance of customer satisfaction, but they lack an effective evaluation index or system so that they can understand the customer's expectations and needs and improve and measure the quality of their products and services. Rephrase in simple words, customer satisfaction is about understanding how well customers meet their needs. Thus, you can constantly improve how to deal with them by keeping the satisfied customers coming back and telling their friends about their good experiences. Unsatisfied customers will not come back and they will adversely talk about the company and tell their friends to avoid from it (Chiu et al., 2011, p. 9781).

Customer loyalty is the key part of the success of a business and it provides organizational survival. In addition, it increases the company's reputation in the market. On the other hand, product and customer service quality are main points in meeting customer satisfaction. For this reason, organizations are working on creating demand for their products and services with exceptional customer support (Mullan & Gilmore, 2008; Hoots, 2005; Altejar & Dizon, 2019).



In general, loyalty is about consumers' behavior towards the brand, services, shops, activities and product categories. Therefore, the term customer loyalty instead of brand loyalty and loyalty is a basic feature of people (Rowley, 2005). Also, customer loyalty is crucial for the organization to fulfill customer behavior from the organization's perspective. Building customer loyalty is a business strategy, not just a marketing program (Perez & Bosque, 2015). This is because all businesses should try to increase loyalty and maximize customers' share (Moussa & Touzani, 2013). Customer loyalty is more of a journey than a destination, and there is nothing clearly defined to easily implement loyalty marketing approaches across the industry (Kim et al., 2007). In addition, by understanding the background of loyalty marketing, it can operate a little easier and can reduce the time required to develop the loyalty strategy, and also help to prevent some classic mistakes (Bowen & Chen, 2001).

Mehra and Ranganathan (2008) stated that customer satisfaction leads to customer loyalty, and it is to achieve customer satisfaction as in various industrial and cultural environments in order to achieve higher customer focus and increase customer satisfaction. In addition, the organization's focus on customers also increases the outcome of improving business performance. Therefore, when customers have expectations from an organization, if the expectations are not met, the customer will not be satisfied and stop bossing the organization. It is very important for the industry to satisfy the customer and "*customer loyalty*" is effective quality management (Oberg, 2014).

Marketers often admit that it is cheaper to retain an existing customer than to attract a new one. Customer loyalty is the key to a brand's longevity and can be linked to the company's growth. Loyalty, also known as customer retention and loyalty, first emerged as a marketing concept in the 1940s. These two concepts of commitment have evolved over time: "*brand choice*" or "*attitudinal loyalty*"; and "*market share*" or "*behavioral loyalty*" emerged. Later, these two concepts were combined by Day (1969) and Jacoby & Chesnut (1978) to include "*composite loyalty*" which believes loyalty should always include positive attitudes, intentions, and repeat purchases (Day, 1969; 33; Jacoby & Chesnut, 1978, 26; Rundle-Thiele, 2005, p. 499).

It is difficult to understand and define loyalty. There are different types of loyalty for each product, service or brand. These range from shallow to deep brand loyalty. For this reason, the process applied is important when trying to build customer loyalty (Hawkins & Vel, 2013, p.126).

Attitudinal loyalty is a deep desire to maintain a relationship with a particular supplier, product, service or brand. (Czepiel & Gimore, 1987 as cited in Hawkins & Vel, 2013, p.126). Attitudinal loyalty also affects the consumer's disposition towards the brand, for example, as a function of psychological processes. This includes attitudinal preference and loyalty towards the brand (Jacoby & Chestnut, 1978). Attitudinal loyalty can arise from a desire to maintain an ongoing relationship. The customer's



psychological predisposition to repeat purchases from the same firm / vendor and to recommend the same firm / vendor (Dick & Basu, 1994; Musa, 2005, p. 48).

Behavioral loyalty is defined as repeat purchasing, being a repeatitavie customer for the company (Czepiel & Gimore, 1987). A customer can also emotionally buy from the same firm again because of convenience, better service, same service, or higher switching costs. However, this does not necessarily mean an emotional bond with the brand or service provider, as it would do with attitudinal loyalty (Hawkins & Vel, 2013, p.126).

In addition, Brown (1952) divides loyalty into four categories as undivided loyalty, divided loyalty, unstable loyalty, and no loyalty (as cited in Hawkins & Vel, 2013, p. 127). Undivided loyalty is a customer who only purchases with one service provider for a particular product. With divided loyalty, the customer uses multiple suppliers or products. Unstable lyalty is where shifts arise from defection. Loyalty means that a customer does not show loyal behavior towards any brand or product. These definitions extend the aforementioned definitions; Here, they look at the level of attitude and behavior actions that lead to the level of loyalty (Hawkins & Vel, 2013, p. 127; East et all, 1998).

In Table 3 Relative Attitude-Behavior Relationship developed by Dick and Kasu (1994) was included. Cross-classifying previously developed concept of relative attitude with repeat patronage leads to the four specific conditions (high and low of each at two levels) related to loyalty below. Each of these conditions is briefly discussed (Rowley, 2005, p. 575; Dick Kasu, 1994, p.101, Ay, 2014, p. 79).

**Table 3.** The concept of relative attitude with repeat patronage

|                   |      | Repeat Patronage |                |
|-------------------|------|------------------|----------------|
|                   |      | High             | Low            |
| Relative Attitude | High | True Loyalty     | Latent Loyalty |
|                   | Low  | Spurious Loyalty | No Loyalty     |

Kaynak: Dick ve Basu (1994), p. 101

*Loyalty or True Loyalty* signifies a favorable correspondence between relative attitude and repeat patronage. It is the level of loyalty of customers in a positive attitude towards the goods and services of a business and in being a permanent customer of the same business. It is not enough for an enterprise to endeavour unilaterally to create true loyalty. The attitudes of this level of customers towards the business can be investigated, and the factors affect them revealed about goods or service. Then customers with other loyalty types can be turned into a true loyal customers.



*Latent Loyalty* is associated with high relative attitude, but low repeat patronage (a low repeat purchase rate). However, there is an extremely strong emotional bond between the customer and the company (Değermen, 2004: 84). For example, although a person feels a high level of emotional attachment to a particular restaurant, he may not be able to show a high level of repurchase behavior just because the person he is with has different food preferences (Dick and Basu, 1994: 102). For this level of customers, they must first identify why their purchase frequency is low and develop new strategies based on the result.

*Spurious Loyalty* represents a low relative attitude, with high repeat patronage which is characterized by nonattitudinal influences on behavior (e.g., subjective norms or situational effects). (Dick & Kunal, 1994). It is a situation where consumers buy too often despite not being emotionally attached to a brand or business. Consumers with this loyalties may not like the business/ brand, even if they continue to make purchases. The probability of customers at this level to become customers again; In addition to the personal situation of the consumer, it is influenced by factors such as habitual purchasing, financial incentives, lack of trust or alternatives (Baloğlu, 2002: 48).

*No Loyalty* is associated with a low relative attitude, combined with low repeat patronage. A low relative attitude combined with low repeat patronage signifies an absence of loyalty. This could occur under a variety of market scenarios. Lack of loyalty consists of a combination of low relative attitude and repeat buying behavior. In this level of commitment, consumers exhibit a low level of attitudinal commitment and repeat customer behavior, and therefore consumers in this group are open to competitive presentations ((Dick and Basu, 1994, p. 102; Baloğlu, 2002,p. 49). Businesses should determine the loyalty levels of their customers by conducting research on the attitudes and purchasing behavior of their customers and segment them according to these levels. As a result of the emerging levels, necessary marketing strategies should be developed for the customers. (Ay, 2014, p. 83).

Customer satisfaction will increase the number of loyal customer and profits, which will reduce the chances of customers to move away due to poor quality of products or services. Customer satisfaction is the main focus of strategic planning by businesses. It becomes one of the important decision-making factor in national quality awards. Satisfying customers will play an important role in the future of every company's growth. Moreover, customer satisfaction has emerged as a key variable in many companies and has been shown to affect many other performance-related variables. Customer satisfaction and loyalty have a significant impact on future purchasing intentions in the automobile industry (Söderlund & Rosengren, 2008; Ou et al., 2011; Donio et al., 2006).

However, due to its comprehensiveness and diversity, it is difficult to fully predict the quality of automotive products. In this context, we tried to



develop a methodology for the research and evaluation of customer satisfaction from automotive products, taking into account as many factors as possible, enabling maximum evaluation of quality.

Studies examining the relationship between product and service quality with customer satisfaction and customer loyalty in the automotive industry are as follows.

Deveraj et al. (2001) examined the effects of product quality and service quality on consumers' purchasing intent in the automotive industry. Data collected through the seller's archive data, customer surveys and consumer reports. Then they were analyzed through the LISREL structural equation model (SEM). According to the results, they stated that consumers with high quality automobiles are more satisfied with their purchases and are more likely to buy similar products in the future. Beside that, there is a strong positive relationship between customers' level of satisfaction with their automobiles was found.

Akay (2003) examined the factors affecting consumer behaviors in his thesis in the automotive industry in Ankara. The data collected by the survey method and were analyzed by SPSS. According to the results obtained, the features that consumers pay attention to when purchasing their cars are as follows; the brand, economical, quality, durability, technical superiority, comfort, ease of payment, availability of spare parts, spare part price, campaign opportunity, credit facility and service.

Stan and Saporta (2005) investigated the factors affecting customer satisfaction using the structural equation model (PLS (Partial Least Square) and LISREL (Linear Structural Relationship) in the PSA Company (Peugeot Citroën). In the study, data on customer satisfaction was used. According to the results obtained from the study, they found that construction quality, durability, costs, interior comfort and driving quality have an effect on the level of general satisfaction.

Mahapatra et al. (2010) examined the customer satisfaction and impact of their future purchase decision and to investigate the performance of different features of a car in India. The data collected by the survey method were analyzed by the regression analysis. According to the results of the study, it is seen that the cost of maintenance, fuel efficiency, comfort, brake safety, vibration, pollution/ emission, engine noise, ignition, battery performance, horn, wiper performance and light performance affect the future purchasing decisions of the consumer.

Jahanshahi et al. (2011) investigated the relationship between product quality and customer service with customer satisfaction and customer loyalty in the context of the automotive industry in India. The data collected by the survey method were analyzed through the regression and One-Way ANOVA. The result of the study shows that there is a positive correlation



between customer service structures with customer satisfaction, customer loyalty, and product quality.

Chiu et al. (2011) tried to model the customer satisfaction in the automobile industry in Taiwan. Structural Equation Model (SEM) was used to analyze the data collected by the survey method. They concluded that perceived quality and perceived value have the biggest impact on the customer satisfaction. Furthermore, image and customer satisfaction are the most affecting factors on customer loyalty. And it was determined that product quality is also a determining factor in the customer's loyalty to the company.

Dua and Gautam (2013) tried to reveal the factors that affect customer satisfaction in the automotive industry in India. Survey method was used in the study. The data were analyzed by percentage table, frequency table and multi-dimensional scaling method. As a result of the study, it was obtained that the customer was mostly satisfied with the price, safety, design, interior, mileage, comfort level, status brand name, after-sales service, and spare parts.

Kaushal (2014) examined the automobile purchase behavior in his study in India. He collected the data with the survey method and reduced the 39 sub-factors to five factors with factor analysis, then tested and verified the five factors through the SEM. According to the result of the study, five factors that affect the car buying behavior are safety, quality, performance, value and technology.

Shende (2014) examined the factors that affect the segment preferences of consumers while purchasing cars in India. As a result of the study, disposable income is the factor which influences each segment. In addition, it has been determined that the values of money, safety and driving comfort are also effective, and the quality perceived by the customers is essentially dependent on the brand image.

Amineh and Kosach (2016) evaluated consumer satisfaction on automotive product quality in Ukraine and tried to develop a methodology that would enable quality to be evaluated. The data collected by the survey method were evaluated by the Gap analysis model and the scale of R. Kolman (2009). As a result of the study, they found that vehicle quality indicators consist of functional, technical, economic, safety, aesthetic and ecological criteria.

Annamalah and Ying (2016) investigated the effects of customer satisfaction and customer loyalty on technical services in the automotive industry in Klang, Malaysia. Correlation analysis was performed on the data collected by the survey method. According the results of the study, they found that five factors (quality, speed, cost, process, knowledge and technical personnel skills) affect customer satisfaction and lead to customer loyalty.

Ruhlusaraç and Nakip (2016) examined the factors affecting academicians' preferences for autotmobile purchasing in their study in Turkey. The data collected through the survey method were analyzed with SPSS. According



to the results obtained from the study, it has been determined that there is a difference between the academics' gender and monthly income, and the difference between their monthly income and the frequency of purchase of cars by age. Another result is monthly income, which is the most effective demographic factors affecting purchasing preferences, and age and gender are among other influential factors.

Köylüoğlu et al. (2018) tried to determine the factors affecting academicians' car buying behavior in their study in Turkey. The data collected by the survey method were analyzed by SPSS. According to the result obtained, monetary value, brand, and driving comfort were found statistically significant to explain the customer satisfaction level. It was seen that the brand variable made the biggest contribution to this explanation.

Tanomsin and Chen (2018) investigated the effect of service quality and price on customer satisfaction and customer loyalty in a low cost airline (LCA) in Thailand. Survey method was used to collect the data and multiple regression was used to analyze them. According to the results of the study, they have revealed that customer satisfaction greatly affects customer loyalty, followed by the quality of service. The lowest effect was between price with customer satisfaction and loyalty.

Furaida et al. (2018) measured customer satisfaction for automobile repair service in Indonesia. They used the SERVQUAL method to measure the difference between perceived quality and expected quality. Survey method was used and 5 experts and 434 participants' opinions were taken in the research. According to the result of the study, the general dimension of service quality in automobile repair was found below expectations.

Altejar and Dizon (2019) examined the effects of customer service quality and product quality on customer satisfaction and customer loyalty on the food industry. Data obtained by the survey method then Regression and ANOVA method were used in the analysis of them. As a result of the study, they revealed that product and customer service quality have only a small effect on customer satisfaction and customer satisfaction does not guarantee the customer loyalty.

As a result of the literature review, it is seen that many researchers investigated the interaction between product quality and service quality with customer satisfaction and customer loyalty in the automotive industry. There are many different approaches, models, levels, methods and variations of variables were used for measuring customer satisfaction or customer loyalty.

### **Hypotheses of the study**

There are many factors that determine the satisfaction level of consumers with their vehicles. When the literature on the subject is examined, it is seen that there is a relationship between satisfaction level and different factors.



For example, according to Arslan (2003); features such as ease of use, comfort and economical are factors that affect people's satisfaction and satisfaction levels after purchasing a vehicle. According to Okşit (2014), the tendency of consumers about automobiles has started to change. Today, automobile users have started to prefer fuel-saving, safe and comfortable vehicles, and they have started to buy cars that combine all of these features. Analytical Hierarchy Method has been used in some studies and it has been understood that the factors that determine the satisfaction level of the consumers and shape their purchasing preferences are the equipment, design and fuel type respectively about their vehicles (Yavaş et al., 2014, p.119).

Considering the previous studies, the effect of structural quality, durability, cost, driving quality and comfort factors on consumer satisfaction was investigated and the following hypotheses were formed in table 4.

**Table 4.** The Hypotheses of the study

|  |
|--|
| H1: There is a significant relationship between structural quality and satisfaction level. |
| H2: There is a significant relationship between durability and satisfaction level.         |
| H3: There is a significant relationship between costs and satisfaction level.              |
| H4: There is a significant relationship between driving quality and satisfaction level.    |
| H5: There is a significant relationship between comfort and satisfaction level.            |

### 3. Methodology

#### 3.1. The Constraints of Research, data set, and method

In the study, data were collected by the survey method. Survey adapted from Stan and Sporta (2005)'s research named "*Customer Satisfaction and PLS Structural Equation Modeling. An Application to Automobile Market*". The research was prepared using the 5 point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). 450 questionnaires were distributed between 28 September 2019 and 20 November 2019 within the scope of the research, 38 forms were excluded from the study because they were filled incorrectly and incompletely so 412 questionnaires were used in the research. The sample of the study is 412 consumers who were reached from Afyonkarahisar province in accordance with the convenience sampling method. According to TURKSTAT data, the number of vehicles registered to traffic in Afyonkarahisar in July 2020 is 227,447 (www.Haberler.com). 412 participants are numerically capable of representing the main mass in the survey. While calculating the sample size, Yazıcıoğlu and



Erdoğan's (2004) Sample Size Table was used. Some of the surveys were collected online, some of them were face to face. There are two main categories in the survey, the attitudes of car users section and demographic factors section. There are 23 questions in the survey that the contents are as follows; 3 questions about general satisfaction level, 5 questions about structural quality, 3 questions about durability, 3 questions about vehicle costs, 3 questions about driving quality, 2 questions about vehicle comfort. All of these data are collected on a 5-point Likert scale. In the last part of the survey, there are 4 questions to determine the demographic features of the participants. On 20 September 2019, before the questionnaire was distributed, it was given to a study group of 30 to investigate whether the questions had an incorrect or incomplete statement. The questionnaire was corrected and finalized.

## **4.2. Data Analysis and Research Findings**

In the study, the frequency and percentage distributions of the data collected with the help of the survey were made, the arithmetic averages were calculated, One Sample T-Test and variance analysis were performed for the comparative tables. Correlation analysis was performed to measure the relationship between variables.

### **4.2.1. Validity and Reliability Analysis**

Cronbach Alpha analysis was performed to determine the reliability and consistency of the study. This analysis shows the standard change that occurs with the variance ratio of the variances of the expressions in the questionnaire. According to the results obtained from the analysis (Cronbach Alfa = 0,926), the survey is quite reliable. KMO (Kaiser Meyer Olkin) test was also conducted to measure whether the sample group determined was sufficient in the factor analysis. As a result of this test, KMO was determined as .877 and the sample was found to be sufficient (Sipahi, Yurtkoru, & Çinko, 2006).

The data on the sample size, lowest and highest attitude score, arithmetic mean, standard deviation, skewness and kurtosis values of the current scale are given in Table 5. The fact that the average value of the scale, which shows the satisfaction levels of automobile users, is higher than 2.5, shows that the participants generally have a positive satisfaction level towards their cars.

In the study, it was investigated whether the factors showed normal



distribution or not. Skewness and Kurtosis values were checked for normality test. It is accepted that there is a normal distribution when Kurtosis and Skewness values are between -2 and +2 (George and Mallery, 2010). Since all values in the study were in this range, it was understood that a normal distribution was achieved and parametric tests were used.

**Table 5.** Attitude Levels Regarding the Satisfaction Levels of Automobile Users.

| Factors                     | N   | Min | Max | M | Ss   | Kurtosis | Skewness |
|-----------------------------|-----|-----|-----|---|------|----------|----------|
| <b>General Satisfaction</b> | 412 | 1   | 5   | 4 | 0,91 | 0,154    | -0,669   |
| <b>Structural Quality</b>   | 412 | 1   | 5   | 4 | 0,82 | 2,036    | -1,17    |
| <b>Durability</b>           | 412 | 1   | 5   | 4 | 0,95 | 1,193    | -1,106   |
| <b>Costs</b>                | 412 | 1   | 5   | 3 | 0,95 | -0,009   | -0,395   |
| <b>Driving Quality</b>      | 412 | 1   | 5   | 4 | 0,92 | 1,881    | -1,225   |
| <b>Comfort</b>              | 412 | 1   | 5   | 4 | 1,01 | 1,392    | -1,143   |

Table 6 shows the results of the factor analysis regarding the satisfaction statements of the participants. As a result of factor analysis, it is seen that the variables are gathered under 6 factors explaining 75.622% of the total variance. In addition, the consistency and reliability of each factor is high.

**Table 6.** Factor Analysis for Opinions of Automobile Users Regarding Satisfaction Level

| Expressions/ Factors                               | 1    | 2    | 3 | 4 | 5 | 6 |
|--|------|------|---|---|---|---|
| <b>General Satisfaction Level</b>                  |      |      |   |   |   |   |
| My general satisfaction from my car is high.       | 0,72 |      |   |   |   |   |
| The overall quality of my car is high.             | 0,84 |      |   |   |   |   |
| The price-quality ratio of my car is high.         | 0,72 |      |   |   |   |   |
| <b>Structural Quality</b>                          |      |      |   |   |   |   |
| My car doesn't even have minor disturbing defects. |      | 0,80 |   |   |   |   |
| My car has no sound pickup problem.                |      | 0,85 |   |   |   |   |
| My car has no concussion.                          |      | 0,65 |   |   |   |   |
| The general paint condition of my car is good.     |      | 0,35 |   |   |   |   |



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|   |       |      |      |      |      |      |
|---|-------|------|------|------|------|------|
| The mechanical safety of my car is good.  |       | 0,50 |      |      |      |      |
| <b>Durability</b>   |       |      |      |      |      |      |
| The robustness of my car is high.   |       |      | 0,46 |      |      |      |
| The door, window and lock mechanism of my car is good.                              |       |      | 0,77 |      |      |      |
| The robustness of the command buttons of my car is sufficient.                      |       |      | 0,89 |      |      |      |
| <b>Costs</b>  |       |      |      |      |      |      |
| My car fuel consumption is low.   |       |      |      | 0,56 |      |      |
| My car is economical in eliminating mechanical problems.                            |       |      |      | 0,86 |      |      |
| My car's maintenance and repair costs are low.                                      |       |      |      | 0,92 |      |      |
| <b>Driving Quality</b>  |       |      |      |      |      |      |
| The suspension quality of my car is high.   |       |      |      |      | 0,55 |      |
| My car's driving silence is good.   |       |      |      |      | 0,72 |      |
| My car's maneuverability and steering are good.                                     |       |      |      |      | 0,77 |      |
| <b>Comfort</b>  |       |      |      |      |      |      |
| The comfort of the interior of my car and the width of the interior space are good. |       |      |      |      |      | 0,82 |
| My car dashboard is good.   |       |      |      |      |      | 0,75 |
| <b>Cronbach's Alpha (For each dimension)</b>  | 0,84  | 0,82 | 0,83 | 0,89 | 0,83 | 0,84 |
| <b>Cronbach's Alpha (For all scale)</b>   | 0,93  |      |      |      |      |      |
| Arithmetic Mean Values for Factors  | 3,40  | 3,50 | 3,80 | 3,30 | 3,70 | 3,80 |
| Standard Deviation Values for Factors   | 0,89  | 0,84 | 0,90 | 0,93 | 0,88 | 0,93 |
| Total Variance Explanation Rate   | 75,62 |      |      |      |      |      |

#### 4.2.2. Descriptive statistics of demographic variables

Table 7 contains demographic data of the participants. 57.3% of the respondents are male and 42.7% are female. 34% of the participants are between the ages of 31-40. In terms of education, the rate of university graduates is 50.3%. 40% of the respondents have an income of 4,000 TL and above. Since most of the studies measuring the satisfaction levels of automobile users did not include variables such as marital status and occupation, these variables were not included in the study and were not included in the survey.

Table 7. Demographic Features of the Participants

| Variable      | N   | Percent | Variable      | N   | Percent |
|---------------|-----|---------|---------------|-----|---------|
| <b>Gender</b> |     |         | <b>Income</b> |     |         |
| Female        | 176 | 42,7    | 0-3000        | 141 | 34      |



|              |     |      |                           |     |      |
|--------------|-----|------|---------------------------|-----|------|
| Male         | 236 | 57,3 | 3001-4000                 | 103 | 25   |
| <b>Total</b> | 412 | 100  | 4001 and above            | 168 | 40,7 |
| <b>Age</b>   |     |      | <b>Total</b>              | 412 | 100  |
| 0-20         | 48  | 11,7 | <b>Education</b>          |     |      |
| 21-30        | 105 | 25,4 | Primary/ Secondary School | 84  | 20,3 |
| 31-40        | 140 | 33,9 | High school               | 121 | 29,4 |
| 41-50        | 101 | 24,5 | University and above      | 207 | 50,3 |
| 51 and above | 18  | 4,4  | <b>Total</b>              |     | 100  |
| <b>Total</b> | 412 | 100  | University and above      | 207 | 50,3 |
|              |     |      | <b>Total</b>              |     | 100  |

#### 4.2.3. Participants' Perceptions of General Satisfaction Levels

In this section, the average and standard deviation values of the opinions of the car users about the satisfaction level are shown.

Table 8 shows the opinions of the participants regarding the level of satisfaction. According to the table, the general satisfaction levels of the participants regarding their cars are high. In addition, according to the table, car users seem to be more satisfied with the maneuverability, instrument panel, paint condition and mechanical safety of their vehicles than other features. Participants' least agreed view is "My car doesn't even have minor disturbing flaws". This situation shows that automobile users face flaws in their vehicles, albeit small.

**Table 8** Participants' Perceptions of General Satisfaction Levels

| <b>General Satisfaction Levels of Participants About the Automobile</b> | <b>Mean (x)</b> | <b>Standard Deviation</b> |
|---|-----------------|---------------------------|
| My general satisfaction from my car is high.                            | 3,64            | 0,998                     |
| The overall quality of my car is high.                                  | 3,49            | 1,032                     |
| The price-quality ratio of my car is high.                              | 3,34            | 1,105                     |
| <b>The opinions of Participants About the structural quality</b>        | <b>Mean (x)</b> | <b>Standard Deviation</b> |
| My car doesn't even have minor disturbing defects.                      | 3,01            | 1,161                     |
| My car has no sound pickup problem.                                     | 3,38            | 1,067                     |
| My car has no concussion.   | 3,42            | 1,126                     |
| The general paint condition of my car is good.                          | 3,91            | 1,055                     |
| The mechanical safety of my car is good.                                | 3,88            | 0,965                     |



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| <b>The opinions of Participants About the automobile durability</b>                                  | <b>Mean (x)</b> | <b>Standard Deviation</b> |
|--|-----------------|---------------------------|
| The robustness of my car is high.  | 3,78            | 0,996                     |
| The door, window and lock mechanism of my car is good.   | 3,87            | 1,073                     |
| The robustness of the command buttons of my car is sufficient.                                       | 3,76            | 1,014                     |
| <b>The opinions of Participants About the costs of automobile</b>                                    | <b>Mean (x)</b> | <b>Standard Deviation</b> |
| My car fuel consumption is low.  | 3,33            | 1,124                     |
| My car is economical in eliminating mechanical problems.   | 3,31            | 1,075                     |
| My car's maintenance and repair costs are low.<br>(Otomobilimin bakım ve onarım giderleri düşüktür.) | 3,3             | 1,136                     |
| <b>The opinions of Participants About the driving quality of automobile</b>                          | <b>Mean (x)</b> | <b>Standard Deviation</b> |
| The suspension quality of my car is high.  | 3,67            | 1,004                     |
| My car's driving silence is good.  | 3,51            | 1,094                     |
| My car's maneuverability and steering are good.  | 3,95            | 1                         |
| <b>The opinions of Participants About the comfort of automobile</b>                                  | <b>Mean (x)</b> | <b>Standard Deviation</b> |
| The comfort of the interior of my car and the width of the interior space are good.                  | 3,79            | 1,06                      |
| My car dashboard is good.  | 3,93            | 0,99                      |

#### 4.2.4. Correlation Relations Between Customer Satisfaction Factors

Correlation table for customer satisfaction is shown in Table 9. According to the table, there is a significant relationship between all the factors that make up customer satisfaction. And there is a moderate significant relationship between the general satisfaction level of customers and durability. Likewise, there is a moderately positive significant relationship between the general satisfaction level of the customers with the car and the driving quality, structural quality, comfort and costs. The amount of variance explained by the variables is equal to the square of the correlation coefficient and this is called the "determination coefficient" (<https://acikders.ankara.edu.tr>).



Accordingly, 38% of the overall satisfaction level is due to structural quality and 42% to the durability. Also, according to Table 9, the highest level of relationship was found between comfort and driving quality factors, while the lowest relation was found between price and comfort variables.

**Table 9.** Correlation Between Factors

| Factors              |   | General Satisfaction | Structural Quality | Durability | Costs | Driving Quality | Comfort |
|----------------------|---|----------------------|--------------------|------------|-------|-----------------|---------|
| General Satisfaction | r | 1                    |                    |            |       |                 |         |
|                      | P |                      |                    |            |       |                 |         |
| Structural Quality   | r | *,619                | 1                  |            |       |                 |         |
|                      | p | 0                    |                    |            |       |                 |         |
| Durability           | R | *,650                | *,649              | 1          |       |                 |         |
|                      | p | 0                    | 0                  |            |       |                 |         |
| Costs                | r | *,309                | *,363              | *,338      | 1     |                 |         |
|                      | p | 0                    | 0                  | 0          |       |                 |         |
| Driving Quality      | r | *,561                | *,707              | *,588      | *,304 | 1               |         |
|                      | p | 0                    | 0                  | 0          | 0     |                 |         |
| Comfort              | r | *,558                | *,617              | *,549      | *,297 | *,712           | 1       |
|                      | p | 0                    | 0                  | 0          | 0     | 0               |         |

\*0,01 Level of Significance

As a result of the correlation analysis, all hypotheses created in Table 10 were accepted. Accordingly, the overall satisfaction level of car users is related to all of the features such as structural quality, durability, costs, driving quality and comfort.

**Table 10** The Hypotheses of the study

| Hypothesis  | Result   |
|---|----------|
| H1: There is a significant relationship between structural quality and satisfaction level | Accepted |
| H2: There is a significant relationship between durability and satisfaction level         | Accepted |
| H3: There is a significant relationship between costs and satisfaction level              | Accepted |
| H4: There is a significant relationship between driving quality and satisfaction level    | Accepted |
| H5: There is a significant relationship between comfort and satisfaction level.           | Accepted |



#### 4.2.5. Comparing the Perceptions of Automotive Users by Gender

The thoughts of the participants about endurance by gender were compared in Table 11. According to the results, it is understood that female see their cars safer than male.

**Table 11.** Independent Sample T-Test for Comparing Participants' Opinions on Automobile Durability

| Gender | N   | Mean | Standart Deviation | Standart Error | F      | Significance Level |
|--------|-----|------|--------------------|----------------|--------|--------------------|
| Male   | 230 | 3,64 | 1,0017             | 0,06605        | 12.996 | 0                  |
| Female | 171 | 3,95 | 0,70961            | 0,05427        |        |                    |

The opinions of the participants about vehicle comfort according to their gender were compared in Table 12. According to the results, it is understood that female see their cars more comfortably than male.

**Table 12** Independent Sample T-Test for Comparing Participants' Opinions on Automobile Comfort

| Gender | N   | Mean | Standart Deviation | Standart Error | F     | Significance Level |
|--------|-----|------|--------------------|----------------|-------|--------------------|
| Male   | 230 | 3,73 | 1,02868            | 0,06783        | 8,752 | 0,001              |
| Female | 171 | 4,04 | 0,7743             | 0,05921        |       |                    |

### 5. Conclusions and Recommendations

The automotive industry is one of the world's leading industries. Customer relations increase day by day in this field where intense competition is experienced and customer loyalty is important. In addition, issues such as efficiency competition, efficient use of resources and management skills come to the fore among companies. The importance of R&D and innovation investments and interstate competition has made automotive a strategic sector. Also, automotive industry is growing and new investments are made in Turkey who tries to take place in the global market with new brand.

The aim of these efforts is to prevent foreign dependency by making the country more competitive in the sector. It is also to facilitate the transition of the customers to the new domestic car, which has been used for years by leaving the brands in the market. Therefore, it is necessary to better understand the factors affecting customer satisfaction such as durability, driving quality, cost, comfort, after-sales service, structural quality. The main purpose of this article is; to reveal the factors affecting the satisfaction of automobile users. The sub goals of the study are; to provide useful



information to sector stakeholders on factors that will increase customer satisfaction by making suggestions on the subject.

In light of the findings obtained from the study, the following recommendations can be made:

- The main factors affecting customers satisfaction in automobile as follows; structural quality, durability, driving quality, comfort and costs.
- All of these factors affect the overall level of satisfaction at a close rate. Therefore, new vehicles to be launched to the market must meet all of these features and be liked by the customer.
- Ensuring customer satisfaction requires combining many different features together. Therefore, companies that want to ensure customer loyalty need to create a more comprehensive product component.
- Today's consumer is not easily satisfied due to the high competition. The high level of demand is at the forefront in the automotive sector as well as in different sectors.
- According to the study, consumers think that the car they use have minor distributing flaws/ defects and generally like their existing vehicles. For this reason, new automobile brands must make a difference in these small areas of dissatisfaction in order to surpass their competitors and change customer preferences.
- According to the study, the satisfaction level of female consumers in some subjects is higher than male. The reasons for this should be investigated and the brand positioning of vehicles in different segments should be made by taking demographic features into consideration.
- In order to have high customer loyalty, new cars must be innovative. In addition, the costs should be low. It does not seem easy for brands that cannot launch an efficient product to be successful in the market.

The research has reached parallel results with previous studies. Especially from the studies conducted in our country; Ruhlusaraç and Nakip (2016) Köylüoğlu et al. (2018) and Akay's (2003) studies have reached similar results and it has been understood that structural quality, durability, driving quality, comfort and costs are important factors in both consumer satisfaction and automobile choice. In addition, it is understood from studies conducted in different countries that there are many factors affecting the satisfaction levels of automobile users such as Dua and Gautam (2013), Amineh and Kosach (2016), Annamalah and Ying (2016), Tanomsin and Chen (2018), Furaida et al. (2018). The fact that the automobile industry is a global market and the existence of the same model and brand of cars in different parts of the world has brought consumer satisfaction levels closer to each other. In addition, increasing competition drives customers to be more demanding. For this reason, the preferences of consumers in different parts of the world have become similar.



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In the study, the scale used in a different country was adapted in our country. As a result of the detailed analysis of the factors that ensure customer satisfaction in the automobile industry and the evaluation of demographic factors, some important results were obtained in the study. It is especially important that the factors that ensure customer satisfaction affect the overall satisfaction level equally. This situation also shows that the new automobiles to be launched on the market must compete in a strong and loyal market, and shows the need for innovative and efficient solutions. Companies that meet these conditions will be able to hold on to the market in the long term, establishing a long-term customer relationship system and gain brand loyalty.

The study has some limitations. The limitations of the study are to limit the sample of the study to a single province, to use only quantitative analysis methods, and not to include other research techniques and methods. In future studies, it can be investigated how factors such as consumer ethnocentrism, advertising and public relations affect customer satisfaction. Techniques such as interviews and observations can be included, and the study can be repeated in different cities or different countries by using a larger sample. It can be focused on specific brands and car segments.

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