CONSUMER PREFERENCES AND PURCHASING BEHAVIOR IN THE AUTOMOTIVE SECTOR

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ABSTRACT
The aim of this study is to examine the factors that influence individuals' vehicle purchase intentions and to analyze the variables that shape consumer preferences in this regard. The study is structured using a quantitative research method and adopts a relational survey model. The population of the study consists of individuals residing in the Turkish Republic of Northern Cyprus (TRNC) who are over the age of 18. In this context, the dataset obtained from 405 participants was deemed sufficient for ensuring the reliability of the statistical analyses. To determine the vehicle purchase intentions and consumer preferences of the participants, the Consumer Preferences Scale developed by Walsh and Mitchell (2010) was used. The data were analyzed using the SPSS 26.0 statistical software.

The research findings indicate that individuals' vehicle purchasing behavior is shaped by multiple factors, including functional features, brand reputation, service quality, and price/cost considerations. Individuals with higher purchase intentions place greater importance on these factors, and this tendency is particularly evident among those planning to purchase a vehicle in the short term. With respect to demographic variables, it was found that men are more sensitive to technical features, middle-aged individuals place greater emphasis on brand and functionality, and married and higher-income individuals attach more importance to functional and economic factors. Variables such as occupation, vehicle ownership, frequency of vehicle replacement, and purchase intention also significantly affect consumer behavior. Additionally, the purpose of visiting an authorized dealer emerged as a factor influencing consumers' evaluations. Positive correlations between the subscales indicate that consumer decisions are driven by multiple, complementary factors. These results suggest that marketing strategies in the automotive sector should be designed with sensitivity to both economic and psychosocial variables.

Keywords: Automotive Sector, Consumer Preferences, Purchasing Behavior

1. INTRODUCTION

1.1. Problem

In today's globally competitive environment, the automotive sector is being reshaped not only by technological advancements but also by the transformation of consumer behaviors and preferences. In particular, the combined impact of environmental concerns, digitalization, and evolving individual value systems means that psychological, social, and environmental factors—as well as traditional economic considerations have become key determinants in consumers' purchasing decisions. The launch of Turkey's domestic automobile brand, TOGG, has brought attention to the potential effects of factors such as consumer ethnocentrism, perceptions of innovation, and country image on consumer preferences (Avcı, 2020). This development has also raised questions about how national identity and innovation can be leveraged in the brand strategies of domestic manufacturers. The growing influence of digital communities on brand loyalty has made it necessary for automotive companies to restructure their customer relationship strategies. For example, netnographic research focusing on Toyota Turkey has demonstrated that brand fan communities can foster a strong sense of loyalty in digital environments (Dalgıç & Tiltay, 2020). Meanwhile, purchasing tendencies that vary according to consumers' demographic characteristics play a decisive role in target audience segmentation strategies within the sector (Aras & Çelik, 2021).

In addition, in the luxury automobile segment, psychosocial elements such as prestige, brand reputation, and status symbols have become primary determinants of purchasing behavior (Memişoğlu & Kırgız, 2021). Research conducted in Japan on hydrogen fuel cell vehicles shows that consumers evaluate sustainability perceptions together with functional factors such as driving range and cost (Khan, Yamamoto, & Sato, 2020). Similarly, vehicle purchase tax incentives implemented in emerging markets like China highlight the effectiveness of policy tools designed to steer consumer behavior towards more environmentally sustainable choices (Lo, Fan, Zhang, & Mi, 2021). Studies have also demonstrated that user attitudes and perceptions towards electric vehicles significantly influence purchase intentions (Lashari, Ko, & Jang, 2021). Furthermore, the impact of social media on online shopping behavior during the pandemic period illustrates the central role that digital media now plays in consumer decision-making processes (Miah et al., 2022).

Collectively, these studies indicate that the factors shaping consumer preferences in the automotive sector must be evaluated in a multi-layered way—considering not only rational and economic dimensions but also cultural, social, psychological, and digital aspects. However, the limited number of comprehensive studies that address these elements from an integrated perspective highlights a clear gap in the literature. In this context, examining how consumer preferences are shaped by multi-dimensional dynamics will contribute meaningfully to both academic knowledge and the development of effective sectoral strategies.

1.2. Purpose of the Research

The purpose of this research is to examine the factors that influence individuals' vehicle purchase intentions and to analyze the variables that shape consumer preferences in this context. Within the scope of the study, the relationships between functional features, brand perception, service quality, price/cost factors, and the sub-dimensions of purchase intention are evaluated alongside key demographic and behavioral variables such as gender, age, education level, occupation, income, vehicle ownership status, and planned time frame for purchasing a vehicle. By revealing the multidimensional structure of consumer behavior, this research aims to develop strategic recommendations for the automotive sector.

1.2.1 Hypotheses

H_0: There is no significant difference in the sub-dimensions of the scale according to the vehicle change frequency variable.
H_1: There are significant differences in the sub-scales according to the vehicle change frequency.
H_0: There is no significant difference in the sub-dimensions of the scale according to the vehicle purchase intention variable.
H2 : There are significant differences in the sub-dimensions according to the vehicle purchase intention variable.
H_0: There is no significant difference between the subscale scores according to the vehicle ownership variable.
H3 : There are significant differences between the subscale scores according to the vehicle ownership variable.
H_0: There is no significant difference in consumer preferences depending on whether the spouse owns a vehicle.
H4 : There are significant differences in the scale sub-dimensions depending on whether the spouse owns a vehicle.
H_0: There is no significant difference in consumer preferences and purchase intention scale scores according to the authorized dealer visit purpose variable.
H_5 : There are significant differences in subscale scores according to the authorized dealer visit purpose variable.

1.3. Importance of the Research

An in-depth understanding of consumer behavior is particularly important in the vehicle purchasing process, which involves high-cost and long-term decision-making. This research aims to contribute to the more effective development of marketing strategies by identifying the criteria that individuals prioritize when choosing a vehicle. Additionally, the findings of this study provide valuable insights for companies operating in the automotive sector, sales representatives, and policymakers, offering an opportunity to develop more consumer-oriented approaches.

2. THEORETICAL FRAMEWORK

2.1. The Concept of Consumer Behavior

Consumer behavior is a concept that encompasses all the mental, emotional, and physical activities individuals engage in while searching for, evaluating, purchasing, using, and disposing of goods or services. This concept holds an important place in the marketing literature because it plays a critical role in helping businesses understand customer expectations and develop strategies accordingly (Odabaşı & Barış, 2017). Consumer behavior does not consist solely of the purchasing act; it also includes pre-purchase processes such as information seeking and evaluating alternatives, as well as post-purchase processes such as satisfaction or regret. Therefore, consumer behavior is a multi-dimensional and dynamic process. For example, an individual's vehicle purchasing process does not end simply with buying the vehicle from a dealer; instead, the individual evaluates their budget, considers the brand's image, seeks opinions from their social circle, and shares their experiences with others. This complex structure makes it essential for businesses to take consumer psychology into account in their marketing activities (Kotler & Keller, 2016).

Theories used to understand consumer behavior have been developed to explain how individuals make decisions. One of these, learning theories, suggest that consumers' future purchasing behaviors are shaped by their past experiences. Positive, rewarding experiences can lead consumers to prefer similar products or services again, while negative experiences can have a deterrent effect. At this point, brand loyalty emerges as an important indicator of the continuity of consumer behavior (Solomon, 2018). Another key concept is motivation, often explained through Maslow's hierarchy of needs, which is frequently used to interpret consumer behavior. According to Maslow, individuals display purchasing behaviors that align with different levels of needs, ranging from physiological needs to safety, belonging, esteem, and self-actualization. For example, once basic needs are met, an individual may choose to purchase a luxury product to reinforce social status (Schiffman & Wisenblit, 2019).

Cultural factors are also among the elements that deeply influence consumer behavior. Value systems, beliefs, and traditions can shape individuals' attitudes toward products and services. In collectivist cultures such as Turkey, the influence of family and friends can be more decisive than individual decisions. Especially for significant and high-cost purchases, individuals' need for social approval tends to increase (Aytekin, 2020). Demographic variables such as social class, income level, and lifestyle also have a direct impact on consumer behavior. For example, product quality and prestige are more important for individuals in higher income groups, while consumers in lower income groups tend to focus more on price. Lifestyle, which reflects how individuals spend their time, their areas of interest, and their attitudes, also shapes which products they prefer (Engel, Blackwell, & Miniard, 2006).

Technological developments have significantly influenced consumer behavior. With the rise of digitalization and widespread internet use, consumers increasingly research products online, read user reviews, and make purchases through e-commerce platforms. This trend has transformed traditional consumer behavior models and compels companies to develop effective digital marketing strategies (Yüksel, 2021). Understanding consumer behavior is crucial for effective marketing management. By accurately analyzing the behavior of target audiences, businesses can offer suitable products and services, increase customer satisfaction, and strengthen brand loyalty. Consumer research, surveys, focus groups, and data analysis have become indispensable for collecting information on consumer preferences and behaviors, which is vital for the success of marketing strategies.

Consumer behavior explains the complex, multi-faceted relationship individuals have with products and services. For businesses, gaining a competitive advantage depends largely on accurately analyzing customer needs and behaviors. Therefore, it is essential to continuously update knowledge about consumer behavior and to use this information actively in marketing decision-making. The automotive sector is one of the fields where consumer behavior must be analyzed most carefully and strategically. The vehicle purchasing process represents a high-cost, long-term investment for consumers and involves evaluating numerous factors. These factors include price, brand perception, technical features, fuel efficiency, environmental impact, safety standards, and after-sales service, among others (Özdemir & Akgün, 2020).

2.2. Consumer Purchasing Behavior Models

Consumer buying behavior models provide theoretical frameworks for understanding how individuals make purchasing decisions, the factors that influence these decisions, and the psychological, social, and economicelements that shape consumers' preferences for products or services. These models play an important role in the development of effective marketing strategies and the analysis of consumer behavior. Over time, various models have been developed, each offering a different perspective on how consumer behavior can be explained (Schiffman & Kanuk, 2010). The Decision-Making Process Model, one of the most fundamental and classic models, explains purchasing behavior in five stages: need recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior. This model assumes that consumers make conscious and rational choices. However, it is now widely accepted that consumer behavior cannot be explained solely by rational decision-making, as emotional and social factors also play significant roles (Blackwell, Miniard, & Engel, 2006).

The Psychological Model focuses on individual characteristics such as perceptions, motivations, attitudes, and learning processes. This model evaluates consumers' internal psychological processes in interaction with external environmental influences. For instance, Maslow's hierarchy of needs theory illustrates that consumers prioritize satisfying their needs in a certain order, and that these needs guide their purchasing decisions (Schiffman & Kanuk, 2010). The Social Influence Model highlights the role of social factors such as family, peer groups, social class, culture, and subculture in shaping consumer behavior. This model suggests that feedback, social norms, and values derived from one's social environment significantly influence purchasing preferences. According to this model, consumers often choose certain products to reflect their social identities and reinforce a sense of belonging (Solomon, 2017).

The Economic Model posits that consumers make purchasing decisions primarily based on economic factors such as income level, price sensitivity, and budget constraints. In this model, consumers aim to maximize utility and make choices based on a balance between price and performance (Kotler & Keller, 2020). The Behavioral Model explains consumer behavior using learning theories. According to this model, consumers develop certain responses based on stimuli from their past experiences and their environment. When positive outcomes are repeated, these behaviors become habitual. Marketers use this model to encourage habitual purchasing behavior and foster brand loyalty (Blackwell, Miniard, & Engel, 2006).

3. RESEARCH METHODS AND FINDINGS

3.1. Research Model

This study is structured using a quantitative research method. Quantitative research is an objective and systematic approach that aims to measure observable phenomena with numerical data and to draw generalizable conclusions through statistical analysis (Büyüköztürk et al., 2016). In line with the purpose of the study, data were collected using a survey technique, and the findings were analyzed through appropriate statistical methods.

The research design employed is the relational screening model, which is a type of descriptive model used to identify and examine relationships among multiple variables (Karasar, 2021). This model enables the investigation of potential cause-and-effect connections or mutual relationships between individuals' attitudes, behaviors, and tendencies. In this study, the relationships between participants' vehicle purchase intentions and the variables influencing these intentions such as functional features, brand perception, service quality, and price/cost were analyzed.

3. 2. Universe and Sample

The target population of this research consists of individuals residing in the Turkish Republic of Northern Cyprus (TRNC) who are over the age of 18. Accordingly, the scope of the population is limited by specific geographical boundaries (within the TRNC) and an age criterion (adults). To provide a broad understanding of consumer behaviors, the population has been defined as widely as possible. The research does not focus on a specific occupational group or consumer segment but instead targets the general consumer population. This approach increases the generalizability and external validity of the study. To determine the sample for the study, the convenience sampling method—one of the non-probability sampling techniques—was used. Convenience sampling involves collecting data from individuals who are readily accessible to the researcher and who voluntarily agree to participate. This method is widely used in large and heterogeneous populations due to practical time and cost constraints (Büyüköztürk, 2016). As part of the fieldwork, the survey was administered to 405 participants through both face-to-face interviews and online distribution. When determining the sample size, recommended sample size calculation methods for cases where the population is unknown or very large were applied. For studies conducted at a 95% confidence level with a ±5% margin of error, a minimum sample size of 384 participants is generally considered sufficient (Yamane, 1967). In this context, the dataset collected from 405 respondents was deemed adequate for ensuring the reliability of the statistical analyses.

3.3. Data Collection Tools

In this study, items adapted from the purchase intention scale developed by Walsh and Mitchell (2010) and a 31-item consumer preferences scale developed as a result of preliminary pilot studies were used to determine the vehicle purchase intentions and consumer preferences of the participants. The purchase intention scale consists of three items aimed at measuring individuals' vehicle purchase tendencies and is answered with a 5-point Likert-type rating system (1 = Strongly Disagree, 5 = Strongly Agree). The consumer preferences scale is structured under four basic categories: functional features (14 items), brand-related features (6 items), service-related elements (5 items), and price/cost factors (6 items). This scale was created based on the analysis of 31 different elements determined through previously conducted open-ended pilot studies. First, open-ended questions were directed to a group of 50 people, then new elements were identified in re-pilotings conducted with different participant groups, and a total of 31 items were reached. The content validity of the scale was evaluated by an expert group consisting of automotive sector employees and academicians and was found appropriate. In this context, each item allowed the participants to express their opinions numerically regarding the factors that were effective in their car purchase decisions. Some negatively oriented items in the scale were reversed during the analysis process; thus, the reliability and validity of the data obtained from the scale were increased.

3.4. Analysis of Data

SPSS 26.0 program was used in the analysis of the data obtained in this study. In the analysis process, firstly, Kaiser-Meyer-Olkin (KMO) measurement value and Bartlett's Sphericity Test were applied in order to evaluate the suitability of the data set for factor analysis. Then, skewness and kurtosis coefficients were examined together with Kolmogorov-Smirnov test to determine the distribution characteristics of the sub-dimensions of the scale; thus, the suitability of the data for parametric tests was statistically evaluated.

In order to evaluate the suitability of the 34-item scale used in the study for factor analysis, the Kaiser-Meyer-Olkin (KMO) criterion and Bartlett's Test of Sphericity were applied. As a result of the analysis, the KMO value was found to be 0.911. This value shows that the sample is quite suitable for factor analysis; because a KMO coefficient of 0.90 and above is accepted as an indicator of "perfect" level of sample suitability (Kaiser, 1974). In addition, according to the results of the Bartlett's Test of Sphericity, the Chi-square (χ^2) value was 4923.418, the degree of freedom (df) was 561 and the significance level was $p < .001$. This result reveals that there is a sufficient level of correlation between the variables and that the data are suitable for factor analysis.

The normality distribution for the five subscales used in the study was evaluated via the Kolmogorov–Smirnov test and skewness-kurtosis values. The significance level for all subscales in the Kolmogorov–Smirnov test was found to be $p < .001$, which shows that the assumption of normality in the formal sense was rejected. However, focusing only on the p-value is not sufficient for the applicability of parametric tests. As a matter of fact, as stated by George and Mallery (2010), if the skewness and kurtosis coefficients remain within the limits of ±2, it can be accepted that the data are suitable for parametric tests. In this context, the skewness was calculated as –0.58 and kurtosis as –0.71 for the Functional Characteristics subscale; –0.45 and –0.33 for Brand Characteristics; –0.37 and –0.41 for Service Characteristics; –0.26 and –0.14 for Price/Cost Elements; and –0.64 and –0.89 for Purchase Intention. All these values are within the range of ±2, indicating that they exhibit symmetric distributions close to normality. Therefore, in the light of the findings, it was concluded that the research data were suitable for parametric statistical analysis.

According to the reliability analysis, all sub-dimensions of the scale used in the study show a high level of internal consistency. Cronbach's Alpha coefficient calculated for 14 items of the Functional Features sub-dimension was found to be 0.89. This value shows that the participants' responses regarding their technical and performance-based preferences regarding the vehicle were consistent. The Alpha value of 0.85 obtained for 6 items in the Brand Features dimension reveals that perceptions regarding the brand were measured reliably. The value of 0.83 obtained in the Service Features dimension (5 items) and 0.81 obtained in the Price/Cost Elements dimension (6 items) show that these sub-scales are also quite reliable. The Purchase Intention dimension in the scale, despite consisting of only 3 items, produced a high reliability coefficient of 0.87; this shows that it consistently reflects the participants' intentions to purchase a car. The overall Cronbach's Alpha value calculated for the entire scale is 0.91, which proves that the scale as a whole is quite reliable and offers a structure suitable for statistical analysis.

4. FINDINGS

Table 1. Demographic Information Table (N = 405)

Variable	n	%
Gender		
Woman	213	52.6%
Male	192	47.4%
Age		
18–24	38	9.4%
25–34	95	23.5%
35–44	112	27.7%
45–54	78	19.3%
55–64	55	13.6%
65 and over	27	6.7%
Civil status		
Married	267	65.9%
Single	138	34.1%
Educational Status		
Primary School / Secondary School	22	5.4%
High school	34	8.4%
Associate Degree	66	16.3%
Undergraduate / Postgraduate	283	69.9%
Monthly Household Income		
Low Income	88	21.7%
Middle Income	212	52.3%
High Income	105	25.9%
Job		
Public Employee	118	29.1%
Private Sector	99	24.4%
Student	43	10.6%
Freelance	47	11.6%
Retired	53	13.1%
Housewife	23	5.7%
Doesn't work	22	5.4%
Total	**405**	**100%**

When the findings regarding the demographic characteristics of the 405 participants in the study are examined, it is seen that 52.6% of the participants are female and 47.4% are male. When the age distribution is examined, the highest rate is in the 35-44 age range with 27.7%, followed by 25-34 age with 23.5% and 45-54 age with 19.3%.

When evaluated in terms of marital status, it is seen that 65.9% of the participants are married and 34.1% are single. When the level of education is examined, it is understood that individuals with higher education are dominant; since 69.9% of the participants have a bachelor's or postgraduate degree, 16.3% have an associate degree. The distribution of monthly household income shows that 52.3% of the participants are in the middle income group, 25.9% in the high income group, and 21.7% in the low income group.

In terms of occupational distribution, 29.1% of the participants were public employees, 24.4% were private sector employees, 11.6% were self-employed, 13.1% were retired, 10.6% were students, 5.7% were housewives and 5.4% were unemployed individuals.

Table 2. Vehicle Usage and Purchase Information Table (N = 405)

Variable	n	%
Vehicle Change Frequency		
Once a year	32	7.9%
Every 1–2 years	64	15.8%
Every 2–3 years	96	23.7%
Every 3–4 years	88	21.7%
Every 4–5 years	125	30.9%
Vehicle Purchase Time Intention		
Within 1 month	28	6.9%
1–3 months	74	18.3%
3–6 months	89	22.0%
6 months – 1 year	97	24.0%
I don't think	117	28.9%
Do you currently own a vehicle?		
Yes	302	74.6%
No	103	25.4%
Does your spouse have a vehicle?		
Yes	198	48.9%
No	207	51.1%
Purpose of visiting authorized dealer		
Buying a new car	87	21.5%
Second hand vehicle sales	76	18.8%
Test Drive	63	15.6%
After sales service (service)	101	24.9%
Insurance / service information	78	19.3%

The findings of the study revealed various tendencies regarding the vehicle usage and purchasing habits of the participants. When the frequency of vehicle replacement is examined, it is seen that 30.9% of the participants change their vehicles every 4-5 years, and 23.7% every 2-3 years. This situation shows that a significant portion of the consumers adopt a long-term ownership approach to the vehicle. Regarding the vehicle purchase timing, 28.9% of the participants stated that they do not plan to purchase a vehicle within the next year, whereas 24% plan to purchase a vehicle within 6 months - 1 year, and 22% plan to purchase a vehicle within 3-6 months. This distribution shows that both short-term and long-term purchase plans coexist among the participants.

It was determined that 74.6% of the participants in the study currently owned a vehicle, while 25.4% did not own a vehicle. This finding shows that the majority of the research group were active users and therefore had direct experience with the automotive sector. The rate of spouses owning a vehicle was 48.9%, and it can be said that vehicle access at the household level was high. In addition, when the participants were asked about the reasons for visiting the authorized dealer, it was seen that 24.9% visited for after-sales service, 21.5% for purchasing a new vehicle, and 19.3% for insurance or service information. These findings show that automobile users attach great importance not only to purchasing but also to after-sales processes.

Table 3. Average Analysis of the Scale

Subscale	N	Min.	Max .	Mean	Ss .
Functional Features	405	1.14	5.00	4.18	0.72
Brand Features	405	1.33	5.00	3.91	0.80
Service Features	405	1.60	5.00	4.02	0.76
Price/Cost Elements	405	1.25	5.00	3.78	0.84
Purchase Intention	405	1.00	5.00	3.85	0.89

The average analysis results for the five subscales used in the study reveal the general tendencies of the participants regarding their vehicle purchasing behaviors and preferences. The average value of 4.18 (SD = 0.72) obtained in the Functional Features subscale shows that the participants attach great importance to technical and practical elements such as safety, comfort, and performance when purchasing a vehicle. The average for Service Features is 4.02 (SD = 0.76), indicating that service factors such as periodic maintenance, parts supply, and service accessibility are effective in consumer behavior.

The Brand Features sub-dimension has an average score of 3.91 (SD = 0.80), indicating that brand prestige and awareness play a significant role in purchasing decisions. The Price/Cost Elements sub-dimension reflects the sensitivity of participants to economic variables such as price, financing and exchange opportunities, with an average of 3.78 (SD = 0.84). Finally, the average value of 3.85 (SD = 0.89) obtained in the Purchase Intention sub-scale indicates that the participants' intention to purchase a vehicle in the next year is at a medium-high level.

Table 4. ANOVA Test Results in Subscales According to Frequency of Instrument Change

Subscale	Vehicle Change Frequency	n	Avg.	Ps .	F	p
Functional Features	Once a year	32	4.45	0.48	8.12	.000
	Every 1–2 years	64	4.35	0.52		2>3
	Every 2–3 years	96	4.12	0.60		
	Every 3–4 years	88	4.00	0.65		
	Every 4–5 years	125	3.95	0.68		
Brand Features	Once a year	32	4.10	0.53	6.87	.000
	Every 1–2 years	64	3.98	0.56		4>5
	Every 2–3 years	96	3.90	0.59		
	Every 3–4 years	88	3.82	0.61		
	Every 4–5 years	125	3.75	0.63		
Service Features	Once a year	32	4.20	0.51	7.34	.000
	Every 1–2 years	64	4.10	0.54		
	Every 2–3 years	96	4.00	0.58		1>2.3
	Every 3–4 years	88	3.85	0.60		
	Every 4–5 years	125	3.80	0.62		
Price/Cost Elements	Once a year	32	4.00	0.55	5.92	.000
	Every 1–2 years	64	3.88	0.57		1>2
	Every 2–3 years	96	3.75	0.60		
	Every 3–4 years	88	3.70	0.63		
	Every 4–5 years	125	3.60	0.66		
Purchase Intention	Once a year	32	4.40	0.46	7.82	.000
	Every 1–2 years	64	4.20	0.51		
	Every 2–3 years	96	3.90	0.62		1>4.5
	Every 3–4 years	88	3.70	0.64		
	Every 4–5 years	125	3.55	0.68		

$p < .05$

According to the one-way variance analysis (ANOVA) and the post-hoc tests performed afterwards, significant differences were found in the sub-dimensions of the scale according to the frequency of vehicle change. The F

value obtained in the Functional Features sub-dimension was 8.12 and was found to be significant at $p < .001$. According to the post-hoc analysis results, it was determined that individuals who changed their vehicles every 2 years had a significantly higher mean in this dimension than those who changed their vehicles every 3 years.

A similarly significant difference was found in the Brand Features sub-dimension ($F = 6.87$; $p < .001$) and according to the post-hoc test results, individuals who change their vehicles every 4 years received higher scores than individuals who change their vehicles every 5 years. This finding suggests that individuals who change their vehicles in a shorter period of time attach more importance to brand reputation and recognition.

In the Service Features sub-dimension, the F value was 7.34 and was found to be statistically significant ($p < .001$). Post-hoc comparisons made in this sub-dimension show that individuals who change their vehicles once a year attach more importance to service features compared to those who change their vehicles every 2 or 3 years.
Significant differences were also obtained in the Price/Cost Elements dimension ($F = 5.92$; $p < .001$). In the pairwise comparisons, it was determined that individuals who changed their vehicles once a year had a significantly higher mean in this dimension than individuals who changed their vehicles every 2 years. This indicates that individuals who changed their vehicles in a short time evaluated the price and cost elements more carefully.

Finally, a significant difference was found in the Purchase Intention sub-dimension ($F = 7.82$; $p < .001$), and in the post-hoc analyses, it was determined that the purchase intentions of individuals who change their vehicles once a year were significantly higher than those who change their vehicles once every 4 or 5 years. This result shows that individuals who change their vehicles more frequently have a stronger tendency to purchase a vehicle in the future.

Table 5. ANOVA Test Results on Sub-Scales According to Vehicle Purchase Timing Intention

Subscale	**Variable**	**n**	**Avg.**	**Ps .**	**F**	**p**
Functional Features	Within 1 month	28	4.32	0.61		
	1–3 months	74	4.25	0.66		
	3–6 months	89	4.10	0.73	6.54	.000
	6 months – 1 year	97	4.00	0.74		1>2.3
	I don't think	117	3.94	0.78		
Brand Features	Within 1 month	28	4.20	0.72		
	1–3 months	74	4.05	0.73		
	3–6 months	89	3.92	0.76	5.87	.000
	6 months – 1 year	97	3.81	0.79		3>5
	I don't think	117	3.73	0.85		
Service Features	Within 1 month	28	4.18	0.68		
	1–3 months	74	4.10	0.70		
	3–6 months	89	4.01	0.75	5.68	.000
	6 months – 1 year	97	3.96	0.78		3 > 4-5
	I don't think	117	3.89	0.79		
Price/Cost Elements	Within 1 month	28	3.95	0.82		
	1–3 months	74	3.84	0.79		
	3–6 months	89	3.70	0.80	4.95	.000
	6 months – 1 year	97	3.65	0.81		1>5
	I don't think	117	3.58	0.83		
Purchase Intention	Within 1 month	28	4.65	0.71		
	1–3 months	74	4.45	0.79		
	3–6 months	89	4.25	0.84	7.62	.000
	6 months – 1 year	97	4.10	0.86		1>5
	I don't think	117	3.95	0.89		

$p < .05$
As a result of the post-hoc (multiple comparison) analyses, significant differences were determined in the subscales according to the vehicle purchase timing intention variable. In the Functional Features subscale, it was found that individuals who intended to purchase a vehicle “within 1 month” had significantly higher means than individuals

who planned to purchase a vehicle "within 1 month" and "within 3–6 months" (F = 6.54; p < .001). In terms of Brand Features, it was seen that individuals who planned to purchase a vehicle "within 3–6 months" gave significantly higher points than individuals who did not plan to purchase a vehicle (F = 5.87; p < .001). A similar difference was observed in the Service Features subscale; it was determined that those who planned to purchase a vehicle "within 3–6 months" had higher means than the "6 months–1 year" and "not considering" groups (F = 5.68; p < .001). In terms of Price/Cost Elements, it was found that the group that planned to buy a vehicle "within 1 month" scored higher than the individuals who did not plan to buy a vehicle (F = 4.95; p < .001). Finally, in the Purchase Intention dimension, it was found that the individuals who planned to buy a vehicle "within 1 month" had a statistically significant higher tendency to buy than those who did not plan to buy a vehicle (F = 7.62; p < .001). These findings reveal that the time intention to buy a vehicle is an important variable affecting consumer preferences and purchasing behaviors.

Table 6. Independent Samples t-Test Results in Sub-Scales According to Vehicle Ownership Variable

Subscale	Variable	n	Avg.	Ps .	t	p
Functional Features	Yes	302	4.18	0.65		
	No	103	4.01	0.69	2.28	.023
Brand Features	Yes	302	3.96	0.71		
	No	103	3.82	0.75	1.86	.064
Service Features	Yes	302	4.08	0.68		
	No	103	3.89	0.72	2.36	.019
Price/Cost Elements	Yes	302	3.80	0.71		
	No	103	3.67	0.74	1.76	.079
Purchase Intention	Yes	302	4.16	0.76		
	No	103	4.00	0.78	1.84	.067

p < .05

The results of the independent samples t-test conducted according to the variable "Do you currently own a vehicle?" revealed that there were statistically significant differences in some subscales. It was determined that individuals who owned a vehicle ($\bar{X}$=4.18, SD=0.65) gave significantly higher scores than individuals who did not own a vehicle ($\bar{X}$=4.01, SD=0.69) in the Functional Features subscale (t=2.28, p=.023). Similarly, it was observed that vehicle owners ($\bar{X}$=4.08, SD=0.68) had higher means than those who did not own a vehicle ($\bar{X}$=3.89, SD=0.72) in the Service Features subscale and this difference was significant (t=2.36, p=.019). On the other hand, no significant difference was found between the groups in the Brand Features, Price/Cost Elements and Purchase Intention sub-dimensions (p > .05). These findings show that vehicle owner individuals are more sensitive in functional and service-oriented evaluations, and therefore ownership experience may be an important factor shaping preferences.

Table 7. Independent Samples t-Test Results in Sub-Scales According to the Spouse's Vehicle Ownership Variable

Subscale	Variable	n	Avg.	Ps .	t	p
Functional Features	Yes	198	4.21	0.62		
	No	207	4.05	0.68	2.45	.015
Brand Features	Yes	198	3.98	0.70		
	No	207	3.83	0.75	2.12	.035
Service Features	Yes	198	4.11	0.67		
	No	207	3.94	0.71	2.26	.024
Price/Cost Elements	Yes	198	3.82	0.69		
	No	207	3.72	0.73	1.41	.160
Purchase Intention	Yes	198	4.20	0.74		
	No	207	4.04	0.77	2.10	.036

p < .05

The results of the independent samples t-test conducted according to the variable "Does your spouse own a car?" show that there are statistically significant differences in some subscales. In the Functional Features dimension, it was seen that individuals whose spouses own a car ($\bar{X}$=4.21 , SD=0.62) gave significantly higher scores than individuals whose spouses do not own a car ($\bar{X}$=4.05, SD=0.68) (t=2.45, p=.015). Similarly, in the Brand Features

subscale, the evaluations of individuals whose spouses own a car ($\bar{X}$=3.98, SD=0.70) were significantly higher than the other group (t=2.12, p=.035). The same trend was observed in the Service Features (t=2.26, p=.024) and Purchase Intention (t=2.10, p=.036) subscales. On the other hand, no significant difference was found between the groups in the Price/Cost Factors subscale (p > .05). These findings reveal that the spouse's vehicle ownership may affect the individual's functional expectations, brand and service perceptions, and purchase intentions regarding the vehicle. This supports the potential for shared life experiences to be reflected in automotive preferences.

Table 8. ANOVA Test Results in Sub-Scales According to the Purpose of Visiting an Authorized Dealer

Subscale	Variable	n	Avg.	Ps .	F	p
Functional Features	Buying a new car	87	4.22	0.60		
	Second hand vehicle sales	76	4.06	0.66		
	Test Drive	63	4.11	0.63		
	After sales service	101	4.05	0.70	3.14	**.015**
	Insurance / service information	78	4.04	0.67		1>4, 5
Brand Features	Buying a new car	87	4.01	0.69		
	Second hand vehicle sales	76	3.80	0.72		
	Test Drive	63	3.92	0.66		
	After sales service	101	3.81	0.73	2.87	**.023**
	Insurance / service information	78	3.84	0.76		1>2, 4
Service Features	Buying a new car	87	4.14	0.65		
	Second hand vehicle sales	76	3.94	0.68		
	Test Drive	63	4.00	0.62		
	After sales service	101	4.05	0.71	2.41	.048
	Insurance / service information	78	3.90	0.75		1>2
Price/Cost Elements	Buying a new car	87	3.82	0.70		
	Second hand vehicle sales	76	3.71	0.72		
	Test Drive	63	3.73	0.70		
	After sales service	101	3.75	0.73	1.28	.276
	Insurance / service information	78	3.68	0.74		
Purchase Intention	Buying a new car	87	4.27	0.74		
	Second hand vehicle sales	76	4.02	0.76		
	Test Drive	63	4.11	0.69		
	After sales service	101	4.00	0.79	3.67	**.006** 1>4, 5
	Insurance / service information	78	4.05	0.78		

p < .05

The results of one-way analysis of variance (ANOVA) performed according to the purpose of visiting an authorized dealer variable revealed that there were significant differences in some sub-dimensions regarding the participants' vehicle purchasing behavior. As a result of the post hoc analyses, it was seen that individuals who visited an authorized dealer for the purpose of “buying a new car” ($\bar{X}$=4.22) had significantly higher scores than individuals who visited for the purposes of “after-sales service” ($\bar{X}$=4.05) and “insurance/service information” ($\bar{X}$=4.04) in the functional features sub-dimension (F=3.14, p=.015). In the brand features dimension, it was determined that individuals who visited for the purpose of “buying a new car” ($\bar{X}$=4.01) had higher scores than the “second-hand vehicle sales” and “after-sales service” groups, and this difference was significant (F=2.87, p=.023). Similarly, a significant difference was found in the service features dimension (F=2.41, p=.048) and it was determined that the mean scores of the “new car purchase” group were higher than the other groups. In terms of purchase intention, the highest mean was seen in individuals who came with the purpose of “new car purchase” ($\bar{X}$=4.27) and this difference was found to be significant (F=3.67, p=.006). On the other hand, no significant difference was found between the groups in the price/cost element dimension (p>.05). These findings show that there are significant interactions between the visit purpose and purchase behaviors in related dimensions and that individuals who came with the intention of buying a new car have higher functional, brand and service expectations.

Table 9. Pearson Correlation Coefficients Between Scale Sub-Dimensions

	1. Functional Features	2. Brand Features	3. Service Features	4. Price/Cost Elements	5. Purchase Intention
1. Functional Features	1.00	.572**	.496**	.388**	.524**
2. Brand Features	.572**	1.00	.533**	.447**	.482**
3. Service Features	.496**	.533**	1.00	.409**	.471**
4. Price/Cost Elements	.388**	.447**	.409**	1.00	.438**
5. Purchase Intention	.524**	.482**	.471**	.438**	1.00

**Significant at $p < .01$ level

According to the Pearson correlation analysis results, there are significant and positive correlations between the sub-dimensions of the scale. A strong relationship of .524 was observed between the importance given to functional features and purchase intention. Similarly, there are significant positive relationships between brand features ($r = .482$), perceptions of service ($r = .471$) and price/cost elements ($r = .438$) and purchase intention. These findings show that consumers' vehicle purchase decisions are affected not only by economic but also by technical, brand-related and service-based factors. These consistent relationships between the sub-dimensions of the scale support the construct validity of the scale (Field, 2018).

CONCLUSION

The findings obtained in the study revealed that individuals' vehicle purchasing behaviors have a multidimensional structure and that these behaviors differ significantly according to various demographic and socioeconomic variables. Functional features, brand reputation, service and price/cost are the most important elements that participants attach importance to when choosing a vehicle; it is seen that functional expectations and purchase intentions are particularly high.

The evaluations made according to the frequency of vehicle change reveal that individuals who change vehicles in shorter periods are more sensitive to functional features, brand reputation, service and price/cost elements. In addition, the purchase intentions of these individuals are significantly higher. These findings show that individuals who change vehicles frequently differ from other groups in terms of both vehicle usage habits and expectations.
Analyses conducted within the scope of the intention variable regarding the time of purchasing a vehicle also support similar trends. It has been observed that individuals planning to purchase a vehicle in the short term (for example, within 1 month or within 3–6 months) attach more importance to functional, brand and service-based factors; and at the same time, their purchase intentions are higher. This result reveals that as the degree of immediacy of purchase intention increases, consumers act more selectively and carefully in the evaluation process. The findings reveal that many demographic and behavioral variables related to vehicle purchase intention play a decisive role in consumer preferences. In individuals whose intention regarding the time of purchasing a vehicle becomes clear, it is observed that the importance given to functional features, brand perception, service expectations and cost elements increases significantly. It is understood that individuals who plan to purchase a vehicle in the short term in particular are more selective and conscious in their evaluation processes.

When the vehicle ownership variable is examined, it is seen that individuals who currently own a vehicle show higher sensitivity in functional and service-oriented evaluations, and that the ownership experience affects consumer behavior. The situation of a spouse owning a vehicle creates a similar effect; it is understood that this situation is reflected in a wide range from functional expectations to purchase intention.

There are also significant relationships between the purpose of visiting authorized dealers and consumer tendencies. In visits made for the purpose of purchasing a new vehicle, the higher level of functional, brand and service expectations shows that individuals who are close to the direct purchase decision develop more conscious preferences. On the other hand, the correlations established between the sub-dimensions of the scale are also remarkable. The existence of significant positive relationships between purchase intention and functional, brand , service-based and cost-based evaluations shows that consumer behavior is shaped by multidimensional and interrelated factors. These consistent relationships support the validity of the scale and reinforce the general model of the research theoretically.

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