

**T.C.
ISTANBUL AYDIN UNIVERSITY
INSTITUTE OF GRADUATE STUDIES**



**FACTORS AFFECTING CONSUMER PURCHASE INTENTION TO
ELECTRIC CARS IN TURKEY**

**MASTER'S THESIS
Nader TAGHIPOUR**

**Department of Business
Business Administration Program**

MARCH, 2024

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(Y2112.130043)

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Thesis Advisor: Asst. Prof. Dr. Murat Unanođlu

MARCH, 2024

ONAY SAYFASI

DECLARATION

I declare that the work in this master's thesis is completely original and has not been submitted, in whole or in part, for consideration for any other type of degree. All used or cited materials have been properly credited. "Factors Affecting Consumer Purchase Intention to Electric Cars in Turkey" is the primary topic of study in this thesis. I attest that all data was collected in compliance with professional and ethical standards and that it was thoroughly reviewed for this study. Any contributions made by other individuals or groups have been appropriately recognized throughout the dissertation. Furthermore, I acknowledge that this dissertation satisfies Istanbul Aydin University's requirements and guidelines for academic standing. (13/03/2024)

Nader TAGHIPOUR

FOREWORD

This thesis, "Factors Affecting Consumer Purchase Intention of Electric Cars in Turkey," was written after a thorough and insightful research process. Given the current fundamental change in the automobile industry towards sustainability, it is imperative to comprehend all aspects of consumer behavior concerning electric cars. This thesis is the result of thorough investigation, analytical analysis, and academic exploration of the variables impacting consumer choice in the ever-changing Turkish automotive market.

I am grateful to my thesis advisor, Assist. Prof. Dr. Murat Unanoğlu, for his unwavering support and advice during this journey. The direction and extent of this research have been greatly influenced by his knowledge, mentorship, and academic insight. Dr. Murat Unanoğlu's perceptive comments, helpful criticisms, and encouragement have never stopped pushing me ahead and giving me clarity and confidence in my academic endeavors.

Additionally, I would like to thank Istanbul Aydın University's faculty and staff for their assistance and resources, which have made it possible for me to conduct this research.

I would also like to sincerely thank my family and friends for their support and encouragement, which has been an endless source of inspiration and strength for me during this project. The completion of this thesis has been made possible by their everlasting support in me.

March, 2024

Nader TAGHIPOUR

FACTORS AFFECTING CONSUMER PURCHASE INTENTION TO ELECTRIC CARS IN TURKEY

ABSTRACT

This study focuses on electric car customers and their buying behavior in Turkey. As consumer behavior has become more vital in marketing, this research attempts to look at how functional value, social value, emotional value, conditional value and epistemic value impact consumers' intention to buy an electric car. This research utilized an online survey and a questionnaire to collect primary data. Consumption values including functional, social, emotional, conditional and epistemic are the five variables of this study. Each variable was assessed using a 5-point Likert scale. The data were analyzed by using Statistical Package for the Social Sciences (SPSS). The study's findings suggested that the most influence is exerted by functional value on consumer's intention to purchase electric car, closely followed by emotional value. Moreover, conditional and epistemic values showed comparatively significant effect on consumer purchase intention to electric car. In contrast, social values did not significantly correlate with consumers' intentions to buy electric cars. On the practical significance, the study identifies the importance of these variables which enable electric car manufacturers to find out expectations of customers and their products.

Keywords: consumption value, consumer purchase intention, consumer buying behavior, electric cars.

TÜRKİYE'DE TÜKETİCİNİN ELEKTRİKLİ ARAÇ SATIN ALMA NİYETİNİ ETKİLEYEN FAKTÖRLER

ÖZET

Bu çalışma Türkiye'deki elektrikli otomobil müşterileri ve onların satın alma davranışlarına odaklanmaktadır. Pazarlamada tüketici davranışı daha hayati hale geldikçe, bu araştırma işlevsel değer, sosyal değer, duygusal değer, koşullu değer ve epistemik değer tüketicilerin elektrikli araba satın alma niyetini nasıl etkilediğini incelemeye çalışıyor. Bu çalışmada birincil verileri toplamak için çevrimiçi bir anket ve anket kullanılmıştır. Fonksiyonel, sosyal, duygusal, koşullu ve epistemik olmak üzere tüketim değerleri bu çalışmanın beş değişkenini oluşturmaktadır. Her değişken 5'li Likert ölçeği kullanılarak değerlendirildi. Veriler Sosyal Bilimler İstatistik Paketi (SPSS) kullanılarak analiz edilmiştir. Araştırmanın bulguları, tüketicinin elektrikli otomobil satın alma niyeti üzerinde en fazla etkin işlevsel değerden kaynaklandığını ve bunu duygusal değer yakından takip ettiğini ortaya koydu. Ayrıca, koşullu ve epistemik değerler tüketicinin elektrikli otomobil satın alma niyeti üzerinde nispeten anlamlı bir etki göstermiştir. Bunun aksine, sosyal değerler tüketicilerin elektrikli araba satın alma niyetleriyle anlamlı bir korelasyon göstermedi. Pratik açıdan bakıldığında çalışma, elektrikli otomobil üreticilerinin müşterilerin ve ürünlerinin beklentilerini öğrenmesini sağlayan bu değişkenlerin önemini tespit etmektedir.

Anahtar Kelimeler: tüketim değeri, tüketici satın alma niyeti, tüketici satın alma davranışı, elektrikli arabalar

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LIST OF ABBREVIATIONS

ANOVA	: Analysis of Variance
CPV	: Customer-Perceived Value
CV	: Conditional Value
EMV	: Emotional Value
EPV	: Epistemic Value
EV	: Electric Vehicle
EVCS	: Electric Vehicle Charging Station
FV	: Functional Value
HEV	: Hybrid Electric Vehicle
ICEV	: Internal Combustion Engine Vehicle
IEV	: International Energy Agency
IPEC	: Intention to Purchase Electric Car
KMO	: Kaiser-Meyer-Olkin
MVT	: Motor Vehicle Tax
PV	: Photovoltaic
SCT	: Special Consumption Tax
SPSS	: Statistical Package for The Social Sciences
SV	: Social Value
VAT	: Value-added Tax

I. INTRODUCTION

A. Statement of the Case

Intention to purchase is a crucial component of marketing, since it allows you to forecast consumer behavior. The quality of life and the future of the world are more important concerns for modern consumers than previous generations, and They are more inclined to select products that are good for the environment. This change in consumer preferences is seen not only in wealthy nations, but also in developing nations such as Turkey. Furthermore, developing countries such as Turkey are beginning to appreciate the importance of environmentally friendly products, which can prevent environmental damage while also increasing the economy by creating new economic opportunities.

Electric cars are among the most environmentally friendly items in the car industry. One of the most significant industries in Turkey is the automobile sector. This is due to the fact that the automobile sector has the ability to boost the nation's economy through both direct and indirect taxes, technical advancement, the opening up of new business opportunities, and the development of the workforce through the provision of employment and training opportunities.

Aside from the low use of electric vehicles, a variety of variables influencing consumers' environmentally conscious purchasing intentions have emerged. Value elements, particularly consumption values, have received less attention in previous studies than environmental factors (such as knowledge about the environment, beliefs, and concern) and marketing factors (such as price, product quality, views, and demographic data). Value was discovered to be an essential indicator of consumers' inclination to buy (Bui, 2005). While intention can be a useful indicator of future behavior, it does not fully capture the state of mind of the consumer while making a purchase decision if values are not taken into consideration (Schiffman & Kanuk , 1983). In order to predict consumers' intention to buy electric cars in this study, consumption values were employed.

This study examines the major factors influencing customers' intentions, particularly with regard to buying electric cars, using the concept of consumption values established by (Sheth, Newman, & Gross, 1991). The theoretical foundation of the majority of the previous research on customers' intentions was the theory of planned behavior or the theory of reasoned action. Therefore, the purpose of this study's research questions is to investigate how consumers' intentions to buy electric cars are influenced by their consumption values—functional, symbolic, emotional, conditional, and epistemic values.

B. The Objectives of the Study

- To gain knowledge about factors influencing consumer purchase intention to electric cars.
- To explore the role of consumption value theory in electric car context.
- To examine the relationship among functional value, social value, emotional value, conditional value and epistemic value with consumer intention to purchase electric car.

II. LITERATURE REVIEW

A. Value

Values are the ideas and precepts that direct behavior toward a particular ideal condition (Schwartz & Bilsky, 1987). Values influence how we behave, how we think, and how we discriminate between distinct things, occasions, and situations (Long & Schiffman, 2000). When it comes to forming opinions, viewpoints and actions about environmental concerns, values are vital (Kilbourne & Pickett, 2008). Relationship marketing is thought to be centered on value, and the capacity of an organization to offer customers greater value is thought to be among the most effective competitive strategies of the 1990s (Christopher, Payne, & Ballantyne, 1991). This skill is now a differentiation and a solution to the challenge of locating a long-term competitive advantage. In business markets, value implies to the sum of money that a customer receives for the expense of an offered item, along with the technological, financial, service, and societal merits it acquires (James & James, 1998).

B. Customer-Perceived Value

The space between a potential customer's evaluation of an offering's expenses or benefits and their perception of the available options is known as customer-perceived value (Kotler & Keller, 2016). The total customer benefit is the estimated financial value of all the practical, psychological, and financial advantages that customers anticipate from a specific market offer because of its members, services, goods, and credibility (Kotler & Keller, 2016). The perceived package of expenses that consumers are expected to incur when assessing, acquiring, utilizing, and discarding the particular market offering is known as the total customer cost. This set of costs includes financial, time, energy, and psychological expenses (Kotler & Keller, 2016). Depending on how one views what is offered and received, consumers assess a product's total value, which is known as perceived value (Zeithaml, 1988). Based on customer reviews, perceived value is the whole measurement of the value that a customer felt they received from a good or service (Bolton, & Drew, 1991). (Howard

& Sheth, 1969) believed that satisfaction relies on value. The proportion of perceived advantages to perceived risk is known as perceived value. Therefore, if value determines customer pleasure, then overall expenses or sacrifice must also determine it. Remember that majority of the time, purchasers use reference pricing while making purchases (Monroe, 1991). The value concept has theoretical support from the utility theory, which forms the framework of contemporary microeconomic theory. This strategy emphasizes the fact that consumers frequently do not purchase goods or services for their own enjoyment. They purchase packages of characteristics, and the worth of the package is determined by the utility that the traits together bring, reduced by the disutility that results from their having to make sacrifices in order to receive the commodity. To put it another way, value is defined as the net trade-off that a customer believes they have obtained from all the expenses and rewards, or offerings, made in connection with the use of a good, service, or provider (Boris, Aleksandra, & Damijan, 2013). The perceived value, expressed in financial equivalents, of the collection of social, technical, economic, and technical advantages that customers of companies obtain in return for the cost of the product offering, while also accounting for the supplier's price and potential alternatives (Anderson & Sullivan, 1993). The customer's evaluation of the value that a provider has produced for them in considering the balances between every relevant advantages and disadvantages in a particular use (Woodruff, Schumann, & Gardial, 1993). In the end, Figure 1 shows how consumers make decisions. Within the limitations of search expenses and restricted knowledge, mobility, and wealth, they typically optimize value. For whatever reason, customers choose the offer they believe will provide the best value and take advantage of it. (Kotler & Keller, 2016).

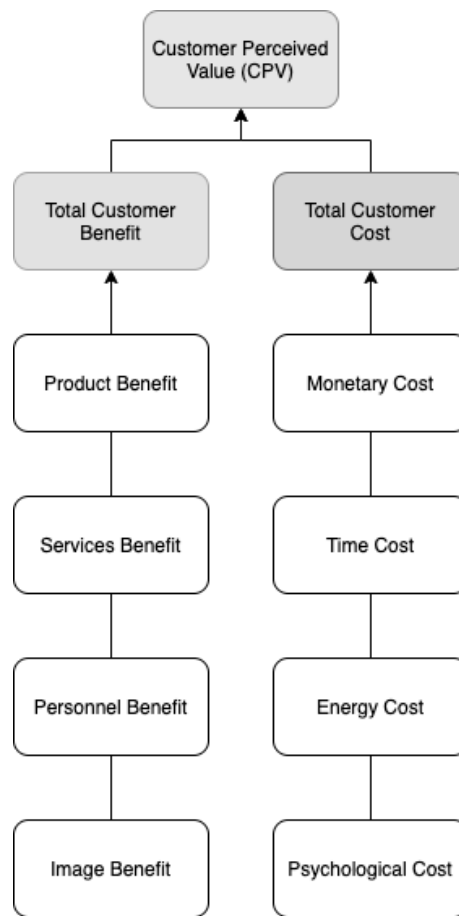


Figure 1: Consumer-Perceived Value

C. Perceived Quality

Perceived quality is explained as the distinction between expectations and actual performance (Parasuraman, Zeithaml, & Berry, 1988). Another method to consider quality is as an evaluation of the general greatness or quality of a product (Zeithaml, 1988). Quality serves as a somewhat universal value assessment (Holbrook & Corfman, 1981). It develops in collaborations where suppliers and customers are actively involved (Eriksson, Majkgard, & Sharma, 1999). Though it is not the same as satisfaction, perceived quality of service is a kind of mindset that emerges from comparing expectations and performance perceptions. As a result, the two ideas are connected since positive experiences eventually result in opinions of high quality (Rowley, 1998). A collection of characteristics in relation to the expectations of the

customer is used to measure the perceived degree of quality, which is how the benefits are determined (Boris, Aleksandra, & Damijan, 2013).

D. Perceived Price

Customers' usage of the advantages they receive from the product is considered to be the perceived price (Cakici, Akgunduz, & Yildirim, 2019). Customers place greater weight on the product's perceived value than its real cost (Zeithaml, 1988). Perceived price affects consumers' purchasing decisions or actions (Ali & Bhasin, 2019). Financial factors only need to be minimally changed from conventional quality models. After then, an analysis of what they got for their money would be the basis for a customer's evaluation of a certain item (Iacobucci, Grayson, & Ostrom, 1994).

E. Theory of Consumption Value

The theory is centered on consumption values and explains why customers decide to purchase a particular product over another, select a particular brand over another, and decide not to purchase a particular product at all (Sheth, Newman, & Gross, 1991). The theory identifies five consumption values that impact consumer buying behavior. They consist of functional, social, emotional, conditional, and epistemic values (Sheth, Newman, & Gross, 1991).

1. Functional Value

The perceived benefit derived from an alternative's ability to perform in a functional, practical, or physical capacity is known as its functional value and an option has functional value when it possesses unique physical, practical, or useful characteristics. (Sheth, Newman, & Gross, 1991). Price and quality are the two variables that comprise functional value (Sweeney & Soutar, 2001). Buyers carefully consider both quality and pricing before purchasing remade items (Bei & Simpson, 1995). The utility of environmentally friendly goods affects consumers' purchasing decisions (Finch, 2006). Some consumers are willing to pay more for products that are better for the environment and there is no apparent connection between functional value and customer choice behavior for green products (Lin & Huang, 2012). Nonetheless, it is discovered to have a favorable influence on India's sustainable usage

habits (Biswas, & Roy, 2015) and on green goods purchasing behavior in Portugal (Gonçalves, Lourenço, & Silva, 2016).

2. Social Value

The perceived benefit derived from an alternative's identification with one or more particular social groups is known as the social value. Through association with favorable or unfavorable stereotyped demographic, socioeconomic, and cultural-ethnic groups, an alternative gains social value. Social value is evaluated using a selection imagery profile (Sheth, Newman, & Gross, 1991). Whenever confronted with a social risk, consumers desire additional knowledge to prevent a bad outcome: Their sense of risk might be significantly lowered by what they consider to be professional advice (Aqueveque, 2006).

3. Emotional Value

Emotional value is a positive outcome that is thought to result from an alternative's capacity to arouse feelings or emotional states and when an alternative is connected to specific emotions, or when those emotions are triggered or maintained, it takes on emotional significance. The alternative's emotional value is determined using a profile of those feelings (Sheth, Newman, & Gross, 1991). An alternative's emotional profile is used to gauge its emotional value. A product or service's benefits have an effect on a customer's emotional responses (Sweeney & Soutar, 2001). Every purchase choice is impacted by an item or service's emotional and intellectual qualities (Mackay, 1999). Consumer decision behavior for green products has been proven to have a substantial positive correlation with emotional value (Gonçalves, Lourenço, & Silva, 2016).

4. Conditional Value

When a decision maker is presented with a particular situation or set of circumstances, the perceived utility obtained by an alternative is known as the option's conditional value. When prior social or physical circumstances enhance an alternative's usefulness or social standing, it acquires conditional value. To evaluate conditional value, a decision contingency profile is used (Sheth, Newman, & Gross, 1991).

5. Epistemic Value

The apparent value that a choice has based on its capacity to pique curiosity, provide novelty, or meet a need for knowledge is known as its epistemic value. Interest, originality, and knowledge-related questions offer a substitute with epistemic value (Sheth, Newman, & Gross, 1991). Consumers' propensity to purchase green goods may be influenced by their curiosity in a product's features (Tanner & Kast, 2003). Another reason people seek novelty is when they want to learn more, such when they need to solve an issue (Lin & Huang, 2012). Lack of awareness regarding green products may influence consumers' decisions to buy (Ginsberg & Bloom, 2004).

F. Consumer Purchase Intention

Consumers make extremely complicated purchasing decisions. In general, a customer's behavior, perception, and attitude influence their intention to purchase. Consumers' purchase behavior is a crucial factor to consider when assessing a certain product (Keller, 2008). Purchasing intention can be further described as the choice to take action or a physiological response indicating how someone acts in relation to goods or services (Wang, 2008). Purchasing intention is regarded as a necessary condition for motivating and compelling customers to make actual purchases of goods and services (Zhuang, Luo, & Riaz, 2021). Purchase intention, or the personal propensity of consumers toward a certain product, has been shown to be a significant predictor of the purchasing behavior of customers (Fishbein & Ajzen, 1975). Purchase intentions are a significant concept that is frequently employed in prediction, segmenting the market, novel product assessment, and advertising studies, among other aspects of marketing study and implementation (MacKenzie, Lutz, & Belch, 1986). The assessment of someone's intention to carry out that behavior will be the most accurate indicator of that person's behavior. Individuals' purchase intentions ought to be signs of their future behavior as they enable them to take into account the elements that are most important to them when making purchases (Fishbein & Ajzen, 1975). Purchase intention can be defined as what exactly we think we're going to purchase and a purchase also conveys one's thoughts or feelings about the potential of purchasing the things being given and how devoted a customer is to the brand. (Park, 2002). An efficient technique for forecasting the process of buying is purchase intention. When customers choose to buy a product from a certain retailer, their

decision is motivated by their intentions (Ghosh, 1990). While making a purchase, buyers will be distracted by both internal and external drives. The biological motive that triggers their response and leads them to the store to satisfy their demand will be the driving force behind their conduct (Kim & Jin, 2001). Price or the perception of quality and value can have an impact on a buyer's inclination to buy and buyers are affected by both inside and outside rewards during the buying procedure (Gogoi, 2013).

G. Consumer Behavior

The research area of buying habits concentrates on how individuals, groups, and institutions select, get, employ, and dispose goods, ideas, moments, or offerings in order to satisfy their requirements or goals (Kotler & Keller, 2016). Consumer behavior primarily illuminates how consumers choose what items to purchase with different resources—such as money and time—in order to satisfy their needs and requirements (Alamgir, Nasir, Shamsuddoha, & Nedelea, 2011). Customer behavior also provides insight into how customers assess products after making a purchase and how those assessments influence their subsequent purchases. (Schiffman & Kanuk , 1983). Consumer behavior is the expression of particular human behaviors, namely those related to the acquisition of goods and services from marketing companies (Walters, 1974). The exploration concerning the way individuals act as shoppers is the essence of consumer behavior (Blech & Blech, 1990). People are subjected to commercial and external factors, which, when merged with particular client traits, induce an array of mental functions that results in taking choices and purchase decisions. The procedure is based on the reaction to driver structures shown in Figure 2. (Kotler & Keller, 2016).

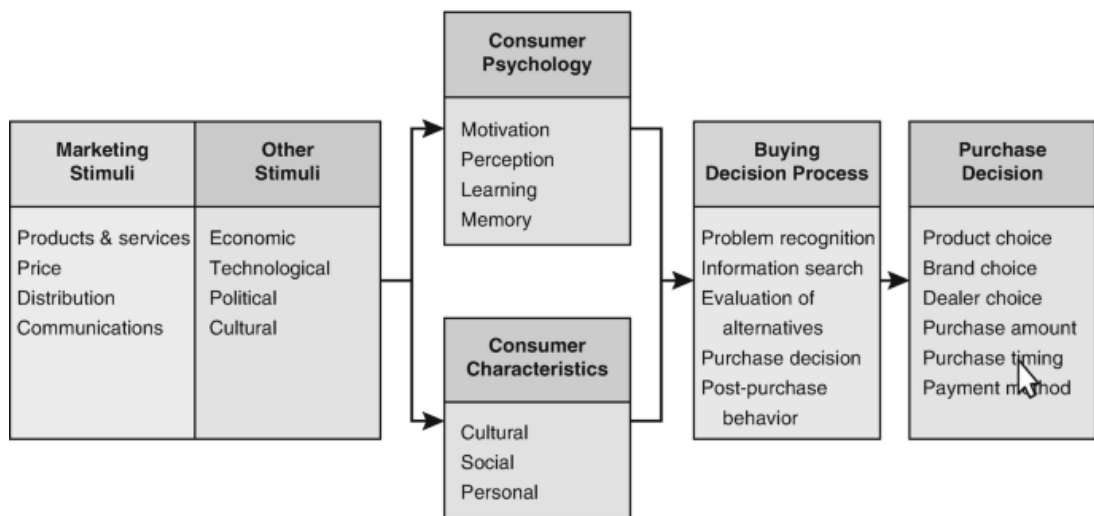


Figure 2: Model of Consumer Behavior

Consumer responses are primarily influenced by four main psychological processes: motivation, perception, learning, and memory (Kotler & Keller, 2016).

- **Motivation:** When a need develops to the point that it motivates us to take action, it becomes a motive. Both direction and intensity are components of motivation: we choose one objective over another and pursue it with varying degrees of power. Abraham Maslow tried to provide an explanation for why different needs drive people at different periods. Human needs are ranked from most to least important, according to his hierarchy (Figure 3). These needs vary from physiological to safety, social, esteem, and self-actualization needs. Prioritizing their most urgent requirements before addressing the others is how people tend to behave (Maslow, 1987).
- **Perception:** An inspired individual is willing to take steps, but their course choice will rely on their perspective on the situation (Kotler & Keller, 2016). Perception is a procedure through which we select, organize, and analyze the available information to create an accurate depiction of the surroundings (Kotler & Keller, 2016).
- **Learning:** We learn by practicing. Our behavior evolves as a result of learning from experience. Human behavior is mostly taught; however, most learning occurs accidentally. Researchers in learning contend that comprehension is the

result of interactions among efforts, triggers, signals, reactions, and rewards (Kotler & Keller, 2016).

- **Memory:** Psychologists who study cognition differentiate amongst memory that is long-lasting, which is a more persistent and almost limitless storage of information, and short-term memory, which is a temporary and restricted storage (Kotler & Keller, 2016). All of the knowledge and experiences we gain throughout life have the potential to remain in our long-term memory (Kotler & Keller, 2016).

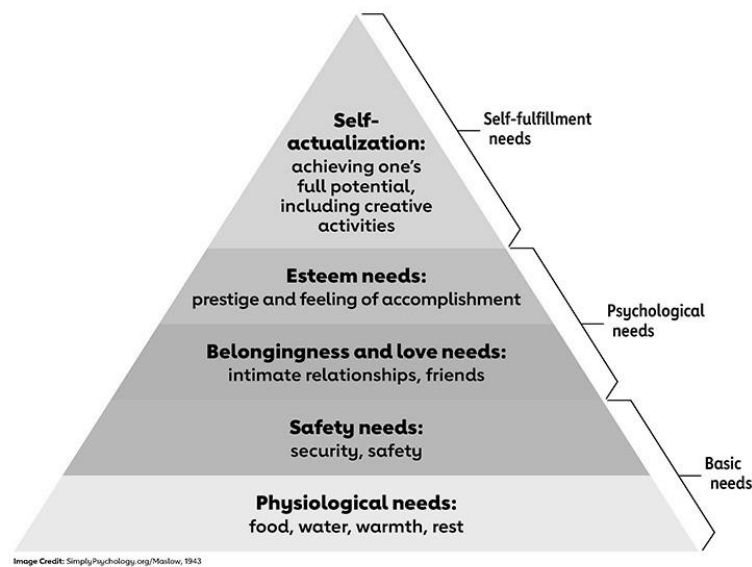


Figure 3: Maslow's Hierarchy of Needs

H. Consumer Buying Behavior

The way that people purchase a new automobile, an iPhone, financial services, and a tube of toothpaste varies significantly. Typically, more buyers participate in and deliberate over more difficult purchases. (Kotler & Armstrong, 2012). Consumer purchasing behavior is influenced by a pair of crucial factors, internal and external factors (Blackwell, Miniard, & Engel, 2006). Individual characteristics that impact consumer behavior fall into several key areas, including population density, understanding, education, drive, knowledge of customers, character, opinions, mindsets, and ways of life (Blackwell, Miniard, & Engel, 2006). The subsequent category of elements consists of exterior variables, which can be characterized as external variables that affect the way a customer decides (Blackwell, Miniard, & Engel, 2006). The variables at issue include civilization, social standing, friends,

relatives, and dwelling, and they are the main factors influencing customers' decisions to select a specific commodity or activity (Blackwell, Miniard, & Engel, 2006). The purchasing habits of customers pertains to the actions that consumers take before deciding to buy something or get something (Demand Jump Team, 2020). A buyer's purchasing decisions are impacted by social, cultural, and individual factors. Cultural influences are the most pervasive and profound of these (Kotler & Keller, 2016). Cultural background, subdividing, and social strata all have a big influence on the purchases consumers make and the main thing that shapes a person's goals and behavior is their culture (Kotler & Keller, 2016). Apart from cultural influences, our purchasing behavior is influenced by social elements including families, social positions, and statuses, as well as peer groups. A buyer's decision is affected by a variety of personal factors, like maturity and life stage, occupation and financial situation, personality and self-image, lifestyle, and values. Many of these directly affect consumer behavior, so it's critical for marketers to keep a careful eye on them (Kotler & Keller, 2016).

1. Types of Consumer Buying Behavior

Forms of consumer behavior are shaped through the type of goods that a customer requires, their degree of involvement in the purchasing process, and brand distinctions (Figure 4) (Openstax, 2023).

a. Complex buying behavior

When a consumer is deeply invested in something they buy and notices notable variations between brands, they engage in complicated buying behavior. When a product is pricey, potentially hazardous, bought seldom, and highly expressive, consumers may become very involved (Kotler & Armstrong, 2012). When you make an important or costly purchase, like a new car, you engage in complex buying behavior. You are probably very active in the purchasing process because you do not purchase a new car very often. One can check out numerous automobiles prior deciding on one, or you may speak with relatives or acquaintances (Openstax, 2023). Thereby, you're most likely convinced that cars are not all the same and have developed a customized set of criteria to help you make your decision. (Openstax, 2023).

b. Dissonance-reducing buying behavior

Users participate in this kind of purchasing actions when they feel intensely about a pricey, unusual, or serious item yet don't think there is much of disparity amongst firms (Kotler & Armstrong, 2012). When you are extremely involved in a purchase yet do not think there are many differences between brands, you are engaging in dissonance-reducing buying behavior. Let's take the example of renovating your home's flooring with laminate tile, which is another pricey, rare investment. You may look around to see what is available since you believe all of the brands of laminate tile in a given price category are relatively similar. However, you will probably buy pretty soon, maybe because of an affordable cost or availability (Openstax, 2023).

c. Habitual buying behavior

When there is not much or no brand distinctiveness and limited consumer involvement, habitual purchase behavior takes place (Kotler & Armstrong, 2012). Because a consumer who engages in regular shopping frequently performs successive purchases and cannot discern a substantial difference in brand, they are less involved in the decision to buy (Openstax, 2023). Perhaps you do not possess an obvious brand fidelity, but you usually buy a particular kind of naturally produced milk. If that particular manufacturer isn't available at the grocery store or even if a cheaper brand is available, you will probably buy something else (Openstax, 2023).

d. Variety-seeking buying behavior

In circumstances whenever the situation involves minimal customer interaction but a significant felt branding distinction, clients participate in behavior that seeks variety and regularly exchange brands (Kotler & Armstrong, 2012). The least customer-involved purchasing behavior is variety-seeking because switching brands is common. You just desire to give something different, even though you weren't dissatisfied with your previous buy of tortilla chips. Changing brands is something you should do for the purpose of variety rather than because you weren't happy with your last purchase (Openstax, 2023).

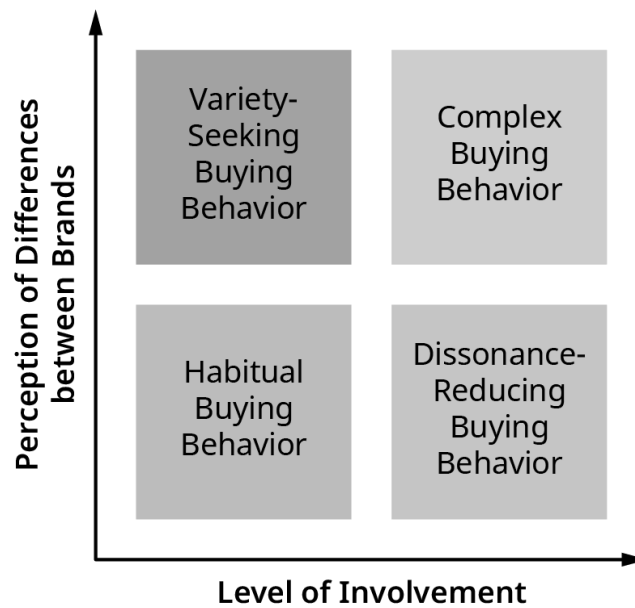


Figure 4: Types of Consumer Buying Behavior

I. Consumer Buying Decision Process

Intelligent businesses make an effort to comprehend every step of the purchasing procedure for their clients—from researching to selecting, utilizing, and even discarding a product. The consumer's journey typically goes through five processes (Figure 5): identification of issues, seeking information, assessment of other options, purchasing decision, and behavior after the purchase. (Kotler & Keller, 2016).

1. Problem Recognition

The purchase procedure starts when the buyer recognizes an urge or concern as a consequence of external or internal motivating factors (Kotler & Keller, 2016). Hunger, thirst, or sex are examples of typical demands that can reach a threshold and turn into drives in response to internal stimuli. An outside stimulus can also arouse a need. One could be inspired to consider buying something after seeing an advertisement on television for a Hawaiian trip or by admiring a friend's brand-new automobile (Kotler & Keller, 2016).

2. Information Search

Unexpectedly, customers frequently look for a narrow range of information. According to surveys, just 30% of consumers look at multiple appliance brands when purchasing durable goods, and fifty percent of all consumers only visit one retailer.

There are two search engagement levels that we can discern. We refer to this softer search condition as heightened attention. A person just gets more open to learning about a thing at this point. The following step could be an active information search, where the person looks for material to read, calls acquaintances, browses the internet, and visits stores to find out more about the goods (Kotler & Keller, 2016).

3. Evaluation of Alternatives

This phase has to do with how consumers research rival brands in order to choose which one is best for them. The latest theories presume that shoppers choose products principally through conscious and rational ideas, and that each consumer, or one customer in any given circumstance, adopts an exclusive strategy. Prior to viewing something as an assortment of attributes with varying possibilities to produce the intended outcomes, a client initially attempts to satisfy a need and next the customer desires distinct merits from the items response (Kotler & Keller, 2016).

4. Purchase Decision

The consumer establishes preferences amongst the products in the list they established throughout the evaluation stage and they could elect to buy an item that they assume the best (Kotler & Keller, 2016). A purchasing objective can be carried out by the customer by selecting from among as many as five different options including seller, company, amount, period, and how to pay (Kotler & Keller, 2016).

5. Post-Purchase Behavior

Following the purchase, the buyer may feel discomfort when they notice some unpleasant details or hear positive things about competing brands. Also, they are going to get informed with data supporting their decision. Consumers are supposed to feel pleased regarding a company and be given a point of view by advertisements that reinforce what they decide. Thus, the marketing professional's work doesn't stop at the sale (Kotler & Keller, 2016).

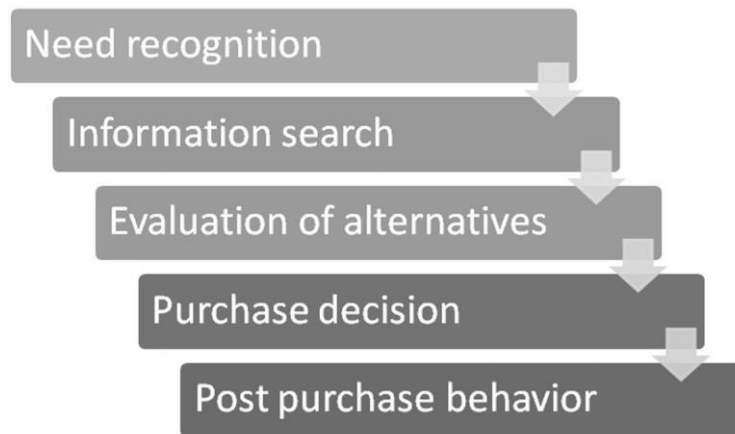


Figure 5: Five-Stage Model of the Consumer Buying Process

J. Customer Satisfaction

Companies attempt to increase consumer satisfaction by adding value to their main products, strengthening client relationships and ultimately achieving customer loyalty. Customer loyalty is believed to be mostly determined by factors such as their satisfaction (Heskett, Jones, Loveman, Sasser, & Schlesinger, 1994). total client fulfillment is a more trustworthy gauge of inclinations to buy once more over inferred or total excellent service (Liljander & Strandvik, 1994). It is assumed that delighted consumer would patronize a company more often than dissatisfied ones and will stay rather than going elsewhere for an extended period of life (Parasuraman, Zeithaml, & Berry, 1988). Classical quality paradigms state that quality must occur first, followed by customer pleasure (Parasuraman, Zeithaml, & Berry, 1988).

K. Hierarchy of Effects Model

The Hierarchy of Effects model makes the assumption that the buyer is an informed, analytical, problem-solving individual who gathers and assesses information to arrive at a well-informed conclusion. The buyer is also assumed to be actively engaged in the purchasing process (Picktin & Broderick, 2004). Various Hierarchy of Effects models exist that are in line with the cognitive model and the elements that impact the buying process. The problem definition stage, when the consumer gets affected by outside stimuli and determines his wants, is where most

cognitive models start. The process of gathering information, which leads to an assessment of the available options, constitutes the second stage. There is a great impact of influence during this stage of problem-solving. It comes down to a process of evaluation both during and after the purchase, during which the customer assesses whether or not his needs are met (Picktin & Broderick, 2004).

Lavidge and Steiner created the hierarchy of effects model that is most frequently cited. The first circumstance is that the customer has no idea that the good or service even exists. In order to determine whether the product can meet his demands, the consumer first acquires awareness of the product and product knowledge at the initial cognitive level. The consumer gains a favorable attitude toward the product at the subsequent phase of the affective process, which cause product preference. The consumer is persuaded to buy the product throughout the behavioral process, and then they make the purchase (Figure 6). Over time, the impacts are controlled in a sequential order, with each phase requiring completion before the customer may go on to the next (Lavidge & Steiner, 1961).

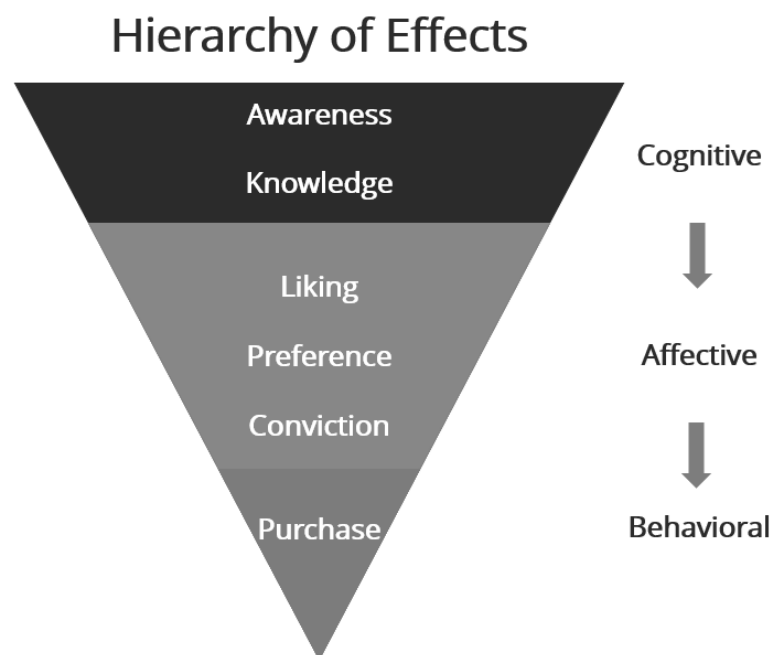


Figure 6: The Hierarchy of Effect Model.

L. Electric Vehicles

Utilizing petroleum and gasoline with the harm of the ecosystem has prompted the growth of study into topics concerning energy independence, electromobility, and sources of clean energy (Martins, Felgueiras, Smitkova, & Caetano, 2019). The primary issue with energy from natural supplies, including wind and solar energy, is that the quantity of electricity they provide to the system varies (Schlesinger & Robert, 2020). Energy storage is essential to overcoming the unpredictability of renewable energy sources. Electric vehicles (EV) are a novel source as a solution (Mwasilu, Justo, Kim, Do, & Jung, 2014). As battery capacity and range have increased and costs for batteries have decreased in the last few years, electric cars have emerged as one of the most desired research subjects (Yang, 2022).

M. Electric Cars and Infrastructure in Istanbul

Turkey connects the Mediterranean and Black Seas and is situated at the intersection of Europe and Asia. Turkey's strategic location and its workforce's affordability, talent, and competitiveness have made it one of Europe's top automotive production centers. Turkey produced about 1.5 million automobiles in 2019, ranking fourth in Europe trailing Germany, Spain, and France (Derneği, 2012). Moreover, Turkey is among the nations with a thriving automobile industry. Domestic cars account for more than 40% of retail sales. Nowadays, almost all cars offered across the Turkish nation-wide marketplace are ICEVs. In this sense, Turkey is behind of the universal tendency toward electric vehicles. One of the primary explanations why that electric vehicle usage does not pose widespread in Turkey is the insufficient deployment of EVCS equipment around the country (Gönül, Duman, & Güler, 2021). Value-added tax (VAT), special consumption tax (SCT), and motor vehicle tax (MVT) are the three principal sorts of taxes paid for automobiles in Turkey. The motor horsepower, kind of car, and exempt from taxes cost of a car are taken into consideration while calculating the SCT rate. Electric car users pay SCT at a rate of 3–15%, whereas ICEV and HEV consumers pay between 45 and 160%. While reduced taxes provide EVs a significant advantage, users do not benefit from the high cost of electric cars (Gujarati & Porter, 2009).

In accordance to the European Alternative Fuels Observatory report, there were 3457 charging stations for electric cars in Turkey at the end of 2021, a 48% increase from the year before (Euronews., 2022). Istanbul holds the top spot with 1265 units and is home to 37% of Turkey's total electric vehicle charging stations (Daily Sabah, 2022). Three primary factors are cited by researchers as to why Turkey prefers electric cars. Independence in energy security comes first, as electric cars ensure them (Chen, Li, Don, Hu, & Mi, 2021). The International Energy Agency (IEA) defines sustainability of supply as constant accessibility of power sources at a fair price and security of power has multiple dimensions including the primary aspect of lasting prosperity is allocating suitable resources to supply energy in compliance with financial and ecological laws (IEA, 2024). The second is a lower environmental effect because electric cars are anticipated to be powered by photovoltaic (PV) installations that are already in place and being utilized for other uses (Agbulut & Bakir, 2019). The third is the infrastructure for electric car charging that is being developed dynamically (Daramy-Williams, Anable, & Grant-Muller, 2019). Work on the modern legislation which ensure the growth and accessibility of infrastructure is currently ongoing. Efforts to market the first electric car in Turkey have being carried out. In Turkey, Togg electric cars are on sale for the first time since 2023.

III. HYPOTHESIS DEVELOPMENT

This study employed the theory of consumption value to investigate the variables influencing customers' intentions to purchase electric cars. Consumers evaluate items on a variety of value dimensions, such as functional, social, emotional, conditional, and epistemic values, according to this approach. Every component makes a distinct contribution to the overall assessment and purchasing intentions of consumers.

A claim is presented concerning functional value, which reflects the perceived quality and value, positively influences consumers' inclination to buy electric cars. Functional value is the perception of advantages that an option offers in terms of its potential to function in a practical, physical, or functional way. An option acquires functional value when it possesses unique utilitarian, physical, or functional qualities (Sheth, Newman, & Gross, 1991). As a result, the first hypothesis is formed:

- H1: Functional value positively affects intention to purchase electric car.

It is believed that social value—which includes a product's social standing, respect, and sense of belonging—will have a favorable consequence for consumers' intentions in buying electric cars. The term "social value" refers to the advantage that an option is thought to have from being associated featuring some sorts of social groupings. By being associated with either positive or adverse typical, societal, financial, and ethnic communities, a replacement gains social significance (Sheth, Newman, & Gross, 1991). As a result, the second hypothesis is formed:

- H2: Social value positively affects intention to purchase electric car.

It is thought that emotional value, which expresses happiness, satisfaction, and emotional connection to a product, should have beneficial impression on intention of customers to invest in electric cars. Emotional value is the perceived value of an option stemming from its magnitude to trigger impressions or psychological situations. An option obtains emotive importance once it is linked to specific feelings, or when those

emotions become apparent or preserved (Sheth, Newman, & Gross, 1991). So, the third hypothesis is formed as follows:

- H3: Emotional value positively affects intention to purchase electric car.

The visible benefit that an alternate choice offers due to the particular condition or set of circumstances that the consumer is presented with is known as the conditional value. When existing social or physical circumstances enhance an alternative's value or status in society, it acquires conditional value (Sheth, Newman, & Gross, 1991). As a result, the fourth hypothesis is developed:

- H4: Conditional value positively affects intention to purchase electric car.

Furthermore, the epistemic value concept highlights how knowledge and information works in consumer determinations. It is anticipated that epistemic value, which reflects the knowledge and information acquired from a product, will favorably affect the tendency of customers to buy electric cars. The apparent value that a choice has based on its ability to draw attention, offer uniqueness, or meet a need for facts and details is known as its epistemic value (Sheth, Newman, & Gross, 1991). Thus, the fifth hypothesis is developed as below:

- H5: Epistemic value positively affects intention to purchase electric car.

IV. RESEARCH METHODOLOGY

This section covers the research design, the research model, the questionnaire, the sampling strategy, and the data resources.

A. Research Model

Understanding how consumption values—functional, social, emotional, conditional, and epistemic—affect consumers' buying intentions is crucial. Consumer opinions are gathered for each consumption value in this study. This section of the study develops the following model by applying the consumption value theory.

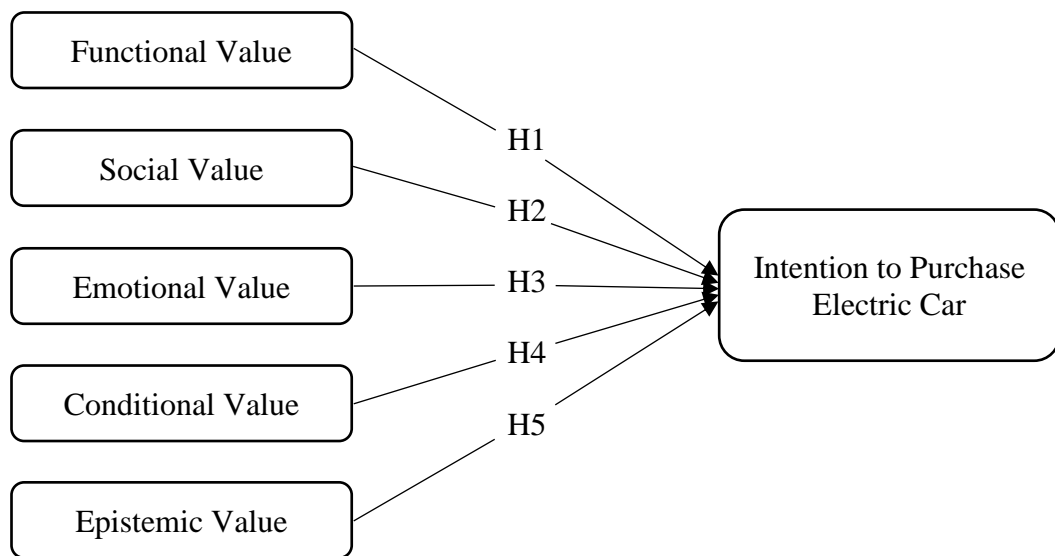


Figure 7: Research model (Teoh & Nor , 2015)

B. Research Design

In order to establish a set of quantitative or quantifiable data pertaining to more than one variable, this study used a cross-section design, which entails collecting information from several occasions at a specific moment in time and the collected information are then examined to seek for recurring trends in connection (Bryman & Bell, 2003). Anytime analysts aim to scrutinize outcomes at a given point time frame

spanning different market subsections or combinations to detect patterns of performance that differ or are similar, they use cross-sectional analysis (Hair, Money, Samouel, & Page, 2007). Surveys employ a cross-sectional methodology to collect an assortment of measurable or identifiable data in tandem to more than one variable (Bryman & Bell, 2003). Data are primarily collected by questionnaire or by structured interview upon multiple cases and at one point in time. These data are then analyzed to identify patterns of interaction (Bryman & Bell, 2003).

C. Questionnaire Design

For this study, an online questionnaire was employed. There are two sections to the questionnaire. The respondents were questioned about their gender, age, monthly income, level of education, and employment status in the first section, which is titled "Demographics." With 45 questions, the second section of the questionnaire is the most important one. It primarily asked respondents about their ideas and decisions with respect to the acquiring of electric cars as well as the variables that influence those decisions. There are 45 questions, all of which are closed-ended. Closed-ended questions are simple to respond to, require less time to complete, have fewer chances for error, and facilitate recording, analysis, and comparison (Reja, Manfreda, Hlebec, & Vehovar, 2003).

Participants to this investigation were tasked with assessing the components that will influence their future purchase of an electric car using a 5-point Likert scale. A variety of answers to a statement or set of assertions is offered by Likert scales (Croasmun & Ostrom, 2011). The scale employed in this research was 1 = Strongly Disagreed, 2 = Disagreed, 3 = Indifferent, 4 = Agreed, 5 = Strongly Agreed.

D. Data Resource

As this survey required the collection of empirical data and the testing of the link between data, a quantitative approach was used by the study. When the characteristics of an object are readily expressed by integers in a manner that is proper for mathematical computation, such as when its features are instantly noted with values, the evaluation is referred to as quantitative data (Hair, Money, Samouel, & Page, 2007).

E. Sampling method

Online convenience sampling was the method of collection adopted for this inquiry. This type of sampling strategy frequently allows a potential responder to self-select into the sample, giving researchers the freedom to pick who, where, and when to gather data (Bryman & Bell, 2003). This survey was conducted by sending Google Form link via WhatsApp to a targeted population who were university students. The target sample size was 300 for this research, however it reached 281 responses, accounted for approximately 93%.

V. DATA ANALYSIS

A. Data Analysis Method

Primary data for this study were analyzed using the Statistical Package for the Social Sciences (SPSS). In the realm of social sciences, encompassing observation and evaluation, statistical scrutiny is carried out by applying an instrument known as SPSS (Evalcommunity, 2024). Since the software is fairly straightforward to get started with and can be operated by any individual with no or minimum background in programming, it is an invaluable tool for scientists and analysts who requires performing statistical analysis on their own information (Evalcommunity, 2024). With regard to the most frequently used applications of SPSS, it deals with data, statistics for description, inductive statistical analysis, and displaying (Evalcommunity, 2024).

B. Profile of Respondents

The data presented in the Table 1 indicates that, of the 281 respondents, 164 were men which accounting for 58.4 percent of the total respondents and 117 were women, representing 41.6% of the total accepted responses. Regarding to age, 83.9% of the responders is under 34 years old. 52.3% of the total responses are between the ages of 18 and 25, which makes up the majority. With respect to monthly income, 84% of respondents make less than 24000 TL. Monthly income of less than 8000 TL and 16001-20000 TL has the greatest ratio at 43.8%. 84.6% of the respondents hold a university degree or a postgraduate degree, indicating that they are extremely well educated. And concerning employment status, 59.1% of respondents are employed, and 38.4% are student.

Table 1 Demographic Profile of Respondents

Characteristics	Measuring Group	Frequency	Percentage
Gender	Male	164	58.4
	Female	117	41.6
Age	18 – 21 years	84	29.9
	22 – 25 years	63	22.4
	26 – 29 years	47	16.7
	30 – 33 years	42	14.9
	34 – 50 years	38	13.5
	More than 50 years	7	2.50
Monthly Income	Less than 8000 TL	57	20.3
	8000 – 12000 TL	33	11.7
	12001 – 16000 TL	31	11.0
	16001 – 20000 TL	66	23.5
	20001 – 24000 TL	49	17.4
	More than 24000 TL	55	16.0
Education	Less than high school	4	1.4
	High School	39	13.9
	Bachelor's degree	135	48.0
	Master's degree	99	35.2
	PhD or higher	4	1.40
Employment Status	Full-time	93	33.1
	Part-time	54	19.2
	Student	108	38.4
	Unemployed	7	2.50
	Self-employed	19	6.8

C. Descriptive Analysis

In this study, descriptive analysis has been used. Complicated data can be simplified and organized into forms that are manageable and understandable through the use of descriptive analysis and it offers a brief overview of the key traits of the variables being studied for researchers (Babbie, 2016).

It is shown that the skewness values range from -1.116 to 0.654. The absolute value of skewness is the highest in emotional value and the lowest in epistemic value (Table 2). The kurtosis values range between -0.680 and 0.341, which in emotional value has the highest value with 0.341 and conditional value has the lowest which is accounted for -.680. For meeting all the requirements of univariate normality, both skewness and kurtosis should have the range within ± 3.5 (Hair , Black, Babin, & Anderson, 2019).

Table 2 Descriptive Analysis

	N	Min	Max	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
							Statistic	Std. Error	Statistic	Std. Error
Intention to Purchase Electric Car	281	1.00	5.00	3.3571	1.01957	1.040	-.765	.145	-.148	.290
Functional Value	281	1.00	5.00	3.7273	1.00722	1.014	-.992	.145	.265	.290
Social Value	281	1.00	5.00	2.3568	.92907	.863	.654	.145	-.128	.290
Emotional Value	281	1.00	5.00	3.7705	1.06193	1.128	-1.116	.145	.341	.290
Conditional Value	281	1.00	5.00	2.6335	1.08214	1.171	.427	.145	-.680	.290
Epistemic Value	281	1.00	5.00	3.3369	.96844	.938	-.376	.145	-.262	.290
Valid N (listwise)	281									

D. Reliability Analysis

Reliability and consistency of findings are linked, and attendees should virtually always give the same response on a survey meant to measure commitment (Heale & Twycross, 2015). Although it is impossible to figure out reliability precisely,

there are a variety of methods that are capable of calculating approximate reliability (Heale & Twycross, 2015).

Cronbach's Alpha was used to analyze the internal consistency of the variables used in this study, as it is vital that the researcher computes and provides the Cronbach's alpha coefficient for internal consistency reliability when employing Likert-type scales. The degree of consistency between items within a device and the instrument as a whole is known as internal consistency reliability. The inner dependability of a measure is determined by Cronbach's alpha through analyzing the relationships between each item and the instrument as a whole (Gay, Mills, & Airasian, 2012). A key element of reliability is internal consistency, which evaluates how consistent the outcomes produced by various items in an assessment method are. Cronbach's alpha is a commonly utilized metric for evaluating internal coherence (DeVellis, 2016). Recommended value of Alpha is at least 0.70 (Nunnally & Bernstein, 1994).

1. Reliability Analysis of Intention to Purchase Electric Car

Table 3 depicts that the internal consistency of Intention to Purchase Electric Car is strong, as its value is 0.927.

Table 3 Reliability Statistics of Intention to Purchase Electric Car

Cronbach's Alpha	N of Items
.927	6

2. Reliability Analysis of Functional Value

As it is shown in table 4, internal consistency of functional value is excellent, as its value is 0.951.

Table 4 Reliability Statistics of Functional Value

Cronbach's Alpha	N of Items
.951	8

3. Reliability Analysis of Social Value

Table 5 indicates that the internal consistency of social value is excellent, as its value is 0.948.

Table 5 Reliability Statistics of Social Value

Cronbach's Alpha	N of Items
.948	12

4. Reliability Analysis of Emotional Value

Table 6 depicts that the internal consistency of emotional value is excellent, as its value is 0.964.

Table 6 Reliability Statistics of Emotional Value

Cronbach's Alpha	N of Items
.964	8

5. Reliability Analysis of Conditional Value

Table 7 illustrates that the internal consistency of conditional value is excellent, as its value is 0.932.

Table 7 Reliability Statistics of Conditional Value

Cronbach's Alpha	N of Items
.932	5

6. Reliability Analysis of Epistemic Value

Table 8 shows that the internal consistency of epistemic value is excellent, as its value is 0.937.

Table 8 Reliability Statistics of Epistemic Value

Cronbach's Alpha	N of Items
.937	6

7. Reliability Analysis Summary

Table 9 indicates that in reliability analysis, the Cronbach's Alpha values had the range between 0.927 and 0.964. Alpha values more than 0.9 are accounted as strong and excellent for reliability (DeVellis, 2016). The most Cronbach's Alpha value is related to emotional value with (Alpha=0.964), which is followed by functional value (Alpha=0.951). In contrast, conditional value has the lowest Cronbach's Alpha, accounted for 0.937.

Table 9 Reliability Analysis Summary

Variables	Cronbach's Alpha	Items	Mean	Std.Deviation
Intention to Purchase Electric Car	0.927	6	3.357	1.01
Functional Value	0.951	8	3.727	1.00
Social Value	0.948	12	2.357	0.92
Emotional Value	0.964	8	3.770	1.06
Conditional Value	0.932	5	2.633	1.08
Epistemic Value	0.937	6	3.337	0.96

E. Factor Analysis

Factor analysis helps reduce the data set's complexity by locating a more manageable group of implicit factors that encompass the critical data found in the observed variables. This reduction in complexity makes complex data structures easier to handle and understand (Tabachnick & Fidell, 2019). By using factor analysis, researchers can find hidden constructs, or factors, that might not be readily apparent but have a significant impact on the variables that are measured. The fundamental characteristics that lead to the patterns in the data are represented by these hidden components (Costello & Osborne, 2005). Factor analysis facilitates the grouping of

associated variables by classifying them according to their common variance. This aids in the identification of connections and patterns among variables by researchers, resulting in a more sophisticated comprehension of the occurrences under study (Tabachnick & Fidell, 2019). Factor analysis is extensively utilized in order to verify if the variables that are observed really measure the desired implicit components, hence assessing the validity of measuring tools. This guarantees that studies are measuring the things they want to measure (Hair , Black, Babin, & Anderson, 2019).

1. Descriptive Statistics

The outcomes of the factor analysis with the univariate approach are displayed in Table 10. The mean, standard deviation, and analysis N are shown for every data point in the table.

Table 10 Descriptive Statistics

Item	Mean	Std. Deviation	Analysis N
IPEC 1	3.54	1.262	281
IPEC 2	3.22	1.142	281
IPEC 3	3.43	1.229	281
IPEC 4	3.49	1.216	281
IPEC 5	3.30	1.167	281
IPEC 6	3.16	1.121	281
FV 1	3.75	1.188	281
FV 2	3.76	1.145	281
FV 3	3.85	1.165	281
FV 4	3.69	1.140	281
FV 5	3.86	1.196	281
SV 1	2.00	1.054	281
SV 2	2.58	1.199	281
SV 3	2.64	1.196	281
SV 4	2.09	1.092	281
SV 5	2.38	1.160	281
SV 6	2.28	1.139	281
SV 7	2.37	1.158	281
SV 8	2.35	1.155	281
SV 9	1.93	1.060	281
SV 10	2.43	1.179	281
SV 11	2.52	1.213	281
SV 12	2.70	1.364	281
EMV 1	3.68	1.235	281
EMV 2	3.81	1.132	281

Table 10(continued): Descriptive Statistics

EMV 3	3.69	1.169	281
EMV 4	3.89	1.195	281
EMV 5	3.79	1.159	281
EMV 6	3.72	1.212	281
EMV 7	3.72	1.212	281
EMV 8	3.87	1.195	281
CV 1	2.40	1.173	281
CV 2	2.63	1.174	281
CV 3	2.77	1.242	281
CV 4	2.66	1.218	281
CV 5	2.71	1.292	281
EPV 1	3.40	1.139	281
EPV 2	3.30	1.084	281
EPV 3	3.23	1.062	281
EPV 4	3.26	1.050	281
EPV 5	3.43	1.151	281
EPV 6	3.40	1.167	281

2. KMO and Bartlett's Test

The two distinct kinds of metrics performed to figure out the factorization of the findings are the Bartlett's test of Sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling appropriateness (Shrestha, 2021). To put it another way, the KMO evaluation gauges whether the number of variables or sample size meets the criteria for factor evaluation or whether the data themselves are proper for this kind of analysis (Shrestha, 2021). If the KMO result is less than 0.6, it hints at the accuracy of the testing is unsatisfactory and that remedial action must be undertaken and the test reviews the adequacy of selection for every component in the model's structure alongside the model overall (Shrestha, 2021). If the resultant value is less than 0.5, the conclusions from the factor analysis may not probably be particularly helpful for the data analysis, and if the number of specimens is less than 300, it will be essential to determine the average communality of the kept objects (Shrestha, 2021). A mean of more than 0.6 is satisfactory for proportions of samples smaller than 100; averaging a value between 0.5 and 0.6 works well for audiences between 100 and 200 (Shrestha, 2021).

The extent to which the matrix of correlations that needs to be factored varies from an identity matrix is measured by Bartlett's test for Sphericity. It is obvious that there is little support for factoring a matrix if it could have been created from a population with unity in the diagonal and zeros in the off diagonal, as the results would

demonstrate a factor structure that could only have been generated by sampling mistake (Cooley & Lohnes, 1950). A factor analysis may be advantageous to a given data set if the probability of significance is below the value of 0.05 (Shrestha, 2021).

Table 11 demonstrates that the KMO is 0.944, greater than 0.5, indicating that the factor analysis results are proper for data analysis. Moreover, the correlation in the data is valuable for data analysis because Bartlett's test significance is 0.000, which is less than 0.05.

Table 11 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.944
Bartlett's Test of Sphericity	Approx. Chi-Square	10555.24
	df	666
	Sig.	0.000

3. Rotated Component Matrix

Rotating the factor magnitude found in the preliminary factor gathering is necessary in factor analysis to produce factors that are comprehensible and straightforward (Bryant & Yarnold, 1995). The process of rotation involves rotating the factors in an effort to create an uncomplicated structure (Yaremko, Harari, Harrison, & Lynn, 1986).

According to the table 12, component 5 is loaded with the intention of purchasing an electric car; component 2 is loaded with functional values; component 1 is loaded with social values; component 3 is loaded with emotional values; component 1 is loaded with conditional values; and component 4 is loaded with epistemic values

Table 12 Rotated Component Matrix^a

	Component				
	1	2	3	4	5
IPEC 1					.762
IPEC 2					.761
IPEC 3					.744
IPEC 4					.706
IPEC 5					.707
IPEC 6					.623
FV 1		.793			
FV 2		.782			
FV 3		.791			
FV 4		.822			
FV 5		.802			
FV 6		.818			
FV 7		.784			
FV 8		.744			
SV 1	.776				
SV 2	.743				
SV 3	.856				
SV 4	.878				
SV 5	.881				
SV 6	.885				
SV 7	.822				
SV 8	.855				
SV 9	.777				
EMV 1			.707		
EMV 2			.633		
EMV 3			.656		
EMV 4			.674		
EMV 5			.679		
EMV 6			.719		
EMV 7			.762		
EMV 8			.706		
CV 1	.625				
CV 2	.624				
CV 3	.646				

Table 12(continued) Rotated Component Matrixa

CV 4	.679	
EPV 1		.705
EPV 2		.722
EPV 3		.665
EPV 4		.622
EPV 5		.718
EPV 6		.706

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 8 iterations.

4. Communalities

The proportion of variance in each variable that could be taken into account by the factors is known as its communality (Statistical Consulting Group, 2024). The longitudinal portion of the anti-image link value supplies details concerning the sampling appropriateness of each item, which should continue to be at least 0.5 (Shrestha, 2021). Upon extraction, communal features represent the similar variance of the data set and exhibit the portion of each variable's turbulence that can be explained by the preserved factor (Shrestha, 2021). Table 13 shows that all extraction value are more than 0.5.

Table 13 Communalities

Item	Initial	Extraction
IPEC 1	1.000	.793
IPEC 2	1.000	.756
IPEC 3	1.000	.767
IPEC 4	1.000	.787
IPEC 5	1.000	.760
IPEC 6	1.000	.606
FV 1	1.000	.784
FV 2	1.000	.698
FV 3	1.000	.753
FV 4	1.000	.777
FV 5	1.000	.784
FV 6	1.000	.777
FV 7	1.000	.745
FV 8	1.000	.689
SV 1	1.000	.695
SV 2	1.000	.647

Table 13(continued) Communalities

SV 3	1.000	.736
SV 4	1.000	.785
SV 5	1.000	.803
SV 6	1.000	.787
SV 7	1.000	.739
SV 8	1.000	.789
SV 9	1.000	.784
EMV 1	1.000	.835
EMV 2	1.000	.747
EMV 3	1.000	.743
EMV 4	1.000	.791
EMV 5	1.000	.784
EMV 6	1.000	.820
EMV 7	1.000	.821
EMV 8	1.000	.824
CV 1	1.000	.670
CV 2	1.000	.666
CV 3	1.000	.669
CV 4	1.000	.731
EPV 1	1.000	.691
EPV 2	1.000	.776
EPV 3	1.000	.754
EPV 4	1.000	.677
EPV 5	1.000	.790
EPV 6	1.000	.753

Extraction Method: Principal Component Analysis.

5. Total Variance Explained

Total variance explained is the percentage of the original variables' total variance that can be explained by the components that were extracted (Cheplyaka, 2017). The total variance explained measures how much of the complete disparity in the original variables can be expounded by the factors that were extracted (Cheplyaka, 2017). The total variance of all the components that were collected is used to compute it. Stated differently, it denotes the percentage of the overall variability in the variables that were observed that can be attributed to the fundamental factors that were discovered by factor analysis (Cheplyaka, 2017).

Table 14 Total Variance Explained

Component	Initial Eigenvalues			Extraction Sum of Squared Loadings			Rotation Sum of Squared Loading		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	16.773	40.909	40.909	16.773	40.909	40.909	8.847	21.579	21.579
2	9.263	22.592	63.501	9.263	22.592	63.501	7.725	18.841	40.420
3	1.773	4.325	67.826	1.773	4.325	67.826	5.139	12.533	52.954
4	1.720	4.195	72.021	1.720	4.195	72.021	4.813	11.738	64.692
5	1.257	3.065	75.087	1.257	3.065	75.087	4.262	10.395	75.087
6	.887	2.158	77.244						
7	.664	1.620	78.864						
8	.619	1.510	80.374						
9	.572	1.394	81.768						
10	.521	1.270	83.038						
11	.475	1.157	84.196						
12	.451	1.101	85.296						
13	.401	.978	86.274						
14	.382	.933	87.207						
15	.362	.882	88.089						
16	.346	.844	88.934						
17	.330	.804	89.738						
18	.307	.748	90.485						
19	.285	.664	91.179						
20	.274	.669	91.848						
21	.264	.644	92.492						
22	.241	.588	93.080						
23	.232	.567	93.647						
24	.224	.546	94.193						
25	.212	.516	94.709						
26	.201	.491	95.200						
27	.191	.465	95.665						
28	.178	.433	96.098						
29	.173	.422	96.520						
30	.158	.385	96.905						
31	.152	.370	97.276						
32	.144	.352	97.627						
33	.140	.342	97.969						
34	.131	.320	98.289						
35	.125	.304	98.593						
36	.113	.275	98.869						
37	.108	.264	99.133						
38	.102	.248	99.381						
39	.093	.226	99.607						
40	.084	.205	99.812						
41	.077	.188	100.000						

F. Discriminant Validity Analysis

In this study discriminant validity has been conducted to analyze the variables' originality and distinctiveness. Table 15 depicts that all variables are unique. Since the diagonal distributions or square of every single pair of relationship are supposed to be in excess of the value that remains or square of the variability revealed, all the variables must be distinct and unique (Hair , Black, Babin, & Anderson, 2019).

Table 15 Correlation Matrix

	Intention to Purchase Electric Car	Functional Value	Social Value	Emotional Value	Conditional Value	Epistemic Value
Intention to Purchase Electric Car	0.718					
Functional Value	0.576	0.792				
Social Value	0.338	- 0.049	0.831			
Emotional Value	0.627	0.791	0.059	0.693		
Conditional Value	0.437	0.038	0.763	0.152	0.643	
Epistemic Value	0.617	0.436	0.498	0.577	0.618	0.690

G. Regression Analysis

By measuring the degree and trend of correlations, regression analysis allows researchers to investigate the relationships among variables. This facilitates the comprehension of the potential correlation between alterations to one variable and shifts in another (Gujarati & Porter, 2009).

1. Multiple Linear Regression

By expanding the study to include several predictor variables, multiple linear regression enables researchers to take into consideration the impact of many factors on the dependent variable. This approach is especially helpful in complicated research situations. (Hair , Black, Babin, & Anderson, 2019).

2. Multiple Linear Regression Coefficients

P-values reflect the probability of attaining the results that have been observed assuming the validity of the neutral hypothesis; an inferior p-value indicates the more

substantial statistically important nature of the difference that was noted (Beers, 2023). When conducting examinations of hypotheses, the P-value is capable of being adopted in place of specific level of trust, and statistical significance is usually interpreted as a P-value of 0.05 or less (Beers, 2023).

The beta (β) coefficient, also referred to as standardized regression coefficients, expresses the variation in the dependent variable as a standard deviation for a one-standard-deviation change in the associated standardized independent variable (Chirag, 2024).

It is evident from the table 16 that functional and emotional values have a substantial impact on the intention to purchase an electric car, as their P-values are less than 0.05 (<0.001). Conversely, because the social value's P-value is greater than 0.05, it has no effect on consumer buying intention to electric car.

Table 16 Multiple Regression

Model	Unstandardized Coefficients		Standardized Coefficients			Correlation			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
(Constant)	-.045	.194		-.231	.817					
Functional Value	.298	.067	.295	4.431	< .001	.576	.258	.177	.362	2.761
Social Value	.103	.069	.094	1.485	.139	.338	.089	.059	.404	2.476
Emotional Value	.257	.070	.268	3.683	< .001	.627	.217	.147	.303	3.302
Conditional Value	.208	.065	.221	3.186	.002	.437	.189	.128	.334	2.990
Epistemic Value	.159	.069	.151	2.297	.022	.617	.137	.092	.370	2.701

a. Dependent Variable: Intention to Purchase Electric Car

3. ANOVA

A statistical method called analysis of variance (ANOVA) is implemented to examine how group means in a collection of data diverge from one another. It evaluates if there is a statistically significant difference between the means of several groups. In order for an ANOVA to function, the overall variance shown in the data must be divided into distinct reports, such as variability across and among groups. An ANOVA compares the variance between and among categories to see if there is

sufficient data to disprove the null assumption that the group averages are all the same. There may be notable disparities between the groups if the disparity between them is greater than the variety within them. ANOVA is a frequently utilized statistical method for contemporaneous comparison of means across several groups in a variety of domains, including biological processes, economics, psychological science, and technology (Kent State University, n.d.).

As the table 17 shows, significance or P-value ($<.001$) is less than ≤ 0.05 , which means the difference among variables are statistically significant.

Table 17 ANOVA^a

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	162.792	5	32.558	69.802	.000 ^b
	Residual	128.272	275	.466		
	Total	291.064	280			

a. Dependent Variable: Intention to Purchase Electric Car

b. Predictors: (Constant), Epistemic Value, Functional Value, Social Value, Conditional Value, Emotional Value

4. R-Squared

R-squared measures how well the data fits the regression model and sometimes referred to as the index of commitment which is a statistical measure used in regression calculations that weighs the extent to which the independent variable can account for the range in the dependent factor (Taylor, 2024). R square more than 0.5 is considered relatively strong. As the table 18 shows, R square is 0.559 which means that 55.9% of the variance in the dependent variable.

Table 18 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.748 ^a	.559	.551	.68297

a. Predictors: (Constant), Epistemic Value, Functional Value, Social Value, Conditional Value, Emotional Value

5. Simple Linear Regression

Using one variable as the indicator and the other as the response, simple linear regression evaluates the association between two variables. The formula of a straight line is used in this manner to quantify the linear relationship (Field, 2018).

6. Simple Linear Regression of Functional Value

The first simple regression hypothesis states that functional value has a positive impact on consumer purchase intentions. The hypothesis explaining how functional value influences consumers' buying intentions to buy is supported (Table 19). 33% of the variance in consumer purchase intentions is defined by the functional value (Adjusted R Square=0.330, F=138.804, P<0.001). The functional value variable ($\beta=0.576$, P<0.001) has significant effect on the purchase intentions of consumers.

Table 19 Simple Regression of Functional Value

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlation			Collinearity Statistics	
	B	Std. Error	Beta				Zero-order	Partial	Part	Tolerance	VIF
(Constant)	1.182	.191			6.184	<.001					
Functional Value	.583	.050	.576		11.782	<.001	.576	.576	.576	1.000	1.000

a. Dependent Variable: Intention to Purchase Electric Car

7. Simple Linear Regression of Social Value

According to the second simple regression hypothesis, customer purchase intentions are positively impacted by social value. Table 20 provides support for the hypothesis that describes how social value influences customers' buying intentions. The social value accounts for 11% of the variance in consumer purchase intentions (Adjusted R Square=0.111, F=36.088, P<0.001). The purchasing intentions of customers are significantly impacted by the social value variable ($\beta = 0.338$, P<0.001).

Table 20 Simple Regression of Social Value

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlation			Collinearity Statistics	
	B	Std. Error	Beta				Zero-order	Partial	Part	Tolerance	VIF
(Constant)	2.482	.157			15.850	<.001					
Social Value	.371	.062	.338		6.007	<.001	.338	.338	.338	1.000	1.000

a. Dependent Variable: Intention to Purchase Electric Car

8. Simple Linear Regression of Emotional Value

The third simple regression hypothesis contends that emotional value has a favorable influence on customers' purchasing intentions. The hypothesis outlining the impact of emotional value on customers' buying intentions is supported (Table 21). 39.2% of the variance in customer purchase intentions can be explained by the emotional value (Adjusted R Square=0.392, F=181.165, P<0.001). The emotional value variable has a substantial effect on customers' purchasing intentions ($\beta = 0.627$, P<0.001).

Table 21 Simple Regression of Emotional Value

Model	Unstandardized Coefficients		Standardized Coefficients			Correlation			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
(Constant)	1.086	.175		6.193	<.001					
Emotional Value	.602	.045	.627	13.460	<.001	.627	.627	.627	1.000	1.000

a. Dependent Variable: Intention to Purchase Electric Car

9. Simple Linear Regression of Conditional Value

According to the fourth simple regression hypothesis, consumer purchasing intentions are positively impacted by conditional value. Table 22 provides evidence in favor of the hypothesis describing how conditional value affects consumers' purchasing intentions. The conditional value represents 18.8% of the variance in consumer purchase intentions (Adjusted R Square=0.188, F=65.908, P<0.001). Customers' purchasing intentions are significantly impacted by the conditional value variable ($\beta = 0.437$, P<0.001).

Table 22 Simple Regression of Conditional Value

Model	Unstandardized Coefficients		Standardized Coefficients			Correlation			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
(Constant)	2.272	.144		15.737	<.001					
Conditional Value	.412	.051	.437	8.118	<.001	.437	.437	.437	1.000	1.000

a. Dependent Variable: Intention to Purchase Electric Car

10. Simple Linear Regression of Epistemic Value

The fifth simple regression hypothesis asserts that epistemic value has a positive impact on customer purchasing intentions. By the data in Table 23, the hypothesis that illustrates how customers' purchasing intentions are influenced by epistemic value is supported. 37.9% of the variance in customer purchase intentions is represented by the epistemic value (Adjusted R Square=0.379, F=171.609, P<0.001). The epistemic value variable has a substantial effect on customers' purchasing intentions ($\beta = 0.617$, P<0.001).

Table 23 Simple Regression of Epistemic Value

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Correlation			Collinearity Statistics	
	B	Std. Error	Beta				Zero-order	Partial	Part	Tolerance	VIF
(Constant)	1.189	.172			6.901	<.001					
Epistemic Value	.650	.050	.617		13.100	<.001	.617	.617	.617	1.000	1.000

a. Dependent Variable: Intention to Purchase Electric Car

H. Questions Impact Analysis

Gaining knowledge of how survey questions affect significant factors is essential to understanding the root causes of the research area. This analysis explores the complex interactions between the questionnaire items and the corresponding components in order to clarify the importance of each question in forming our knowledge of factors influencing consumers' intentions to purchase electric cars. Through a close examination of the statistical metrics, such as standardized beta or t-values coefficients, connected to each question, we aim to determine the degree to which particular questions add to the general framework of our research. This study is essential for determining important questions that have a significant impact, directing future research projects and influencing the electric vehicle industry's decision-making procedures.

1. Functional Value Questions

The most influential question among all functional value questions ($\beta = 0.558$ and P-value <0.001) indicated that respondents thought the quality level of electric cars was acceptable (Table 24). Regarding the second most significant question,

participants claimed that driving an electric car is cost-effective ($\beta = 0.523$ and P-value = <0.001). The respondents' assertion that the electric cars are well-made ($\beta = 0.517$ and P-value = 0.001) resulted in the determination of the next important question.

Table 24 Questions Regression of Functional Value

Items	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	1.182	.191		6.184	<.001
FV 1	.422	.045	.492	9.441	<.001
FV 2	.327	.047	.384	6.941	<.001
FV 3	.419	.046	.478	9.086	<.001
FV 4	.460	.046	.517	10.084	<.001
FV 5	.489	.043	.558	11.231	<.001
FV 6	.452	.045	.513	9.983	<.001
FV 7	.459	.046	.513	9.993	<.001
FV 8	.446	.044	.523	10.257	<.001

2. Social Value Questions

Out of all the social value questions, the one with the greatest influence ($\beta = 0.395$ and P-value <0.001) revealed that the respondents were proud to be environmentally conscious (Table 25). In response to the second most important question, participants stated ($\beta = 0.364$ and P-value = <0.001) that they would not be buying an electric automobile as advised by their family. The respondents claimed that most of the people who matter to them would not be grateful if they purchased an electric car ($\beta = 0.352$ and P-value = 0.001) contributed to the identification of the following crucial query.

Table 25 Question Regression of Social Value

Items	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	2.482	.157		15.850	<.001
SV 1	.132	.057	.136	2.296	.022
SV 2	.300	.048	.352	6.291	<.001
SV 3	.262	.049	.307	5.392	<.001
SV 4	.137	.055	.146	2.469	.014
SV 5	.241	.051	.274	4.763	<.001
SV 6	.287	.051	.321	5.655	<.001
SV 7	.321	.049	.364	6.530	<.001
SV 8	.226	.051	.256	4.427	<.001
SV 9	.020	.058	.020	.339	.735
SV 10	.258	.049	.298	5.214	<.001
SV 11	.255	.048	.303	5.317	<.001
SV 12	.295	.041	.395	7.174	<.001

3. Emotional Value Questions

Among all the emotional value questions, the most significant one ($\beta = 0.605$ and P-value <0.001) showed that respondents had a strong emotional attachment to the electric vehicle (Table 26). Participants indicated ($\beta = 0.584$ and P-value = <0.001) that purchasing an electric automobile will make them feel like they are personally contributing positively to something better according to the second most important question. The respondents' assertions that purchasing an electric car will increase their sense of happiness and ethical integrity ($\beta = 0.577$ and P-value = 0.001) helped identify the two important questions that followed.

Table 26 Questions Regression of Emotional Value

Items	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.086	.175		6.193	<.001
EMV 1	.435	.042	.527	10.347	<.001
EMV 2	.495	.045	.549	10.982	<.001
EMV 3	.453	.045	.519	10.136	<.001
EMV 4	.492	.042	.577	11.797	<.001
EMV 5	.514	.043	.584	12.017	<.001
EMV 6	.485	.041	.577	11.795	<.001
EMV 7	.461	.042	.548	10.941	<.001
EMV 8	.516	.041	.605	12.683	<.001

4. Conditional Value Questions

Of all the conditional value questions, the most impactful one ($\beta = 0.405$ and P-value <0.001) revealed that respondents would purchase an electric automobile even in the absence of a government incentive (Table 27). In response to the second most important question, participants stated that they would still buy an electric car even if there was no discount. ($\beta = 0.397$ and P-value = <0.001). The next crucial question was determined by the respondents' claim ($\beta = 0.385$ and P-value = 0.001) that they will purchase an electric car even if they are not readily available.

Table 27 Questions Regression of Conditional Value

Items	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.272	.144		15.737	<.001
CV 1	.329	.048	.379	6.842	<.001
CV 2	.352	.048	.405	7.406	<.001
CV 3	.326	.045	.397	7.221	<.001
CV 4	.313	.047	.373	6.722	<.001
CV 5	.303	.044	.385	6.961	<.001

5. Epistemic Value Questions

The most influential epistemic value question ($\beta = 0.604$ and P-value <0.001) of all showed that respondents will purchase electric cars since they are aware that they could reduce pollution levels (Table 28). Regarding the second crucial inquiry, the respondents expressed their intention to purchase an electric car due to their awareness of its potential for minimizing environmental damage ($\beta = 0.574$ and P-value = <0.001).

Table 28 Questions Regression of Epistemic Value

Items	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.189	.172		6.901	<.001
EPV 1	.471	.046	.527	10.346	<.001
EPV 2	.481	.048	.512	9.954	<.001
EPV 3	.505	.049	.526	10.325	<.001
EPV 4	.470	.051	.484	9.228	<.001
EPV 5	.535	.042	.604	12.660	<.001
EPV 6	.501	.043	.574	11.703	<.001

VI. FINDINGS AND DISCUSSION

The study's results show that functional value has the greatest impact among the significant values. The results confirm that the intention to purchase an electric car is significantly influenced by functional, emotional, conditional, and epistemic values (Table 29). The functional features of electric cars, such as their price, quality, and maintenance costs, as well as the ability to satisfy consumers' emotional demands, could influence their decision to buy electric cars.

Additionally, the significance of conditional value is notable as it influences customers' intention to purchase electric cars through manufacturer discounts, promotions, and government subsidies.

Regarding the intention to buy an electric car, epistemic value has also been shown to be significant. The more respondents learn about the benefits of electric cars, even if the majority of them are well educated and have limited experience with such environmentally friendly products, the more interested or eager they get to buy them.

In contrast, the findings indicate that social value does not significantly influence the intention to buy an electric car. Respondents did not believe that owning an electric automobile would improve their social standing, praise, or impression. It demonstrates how consumers' individual opinions are their primary concern and how they will make decisions based on those beliefs rather than the recommendations of social groups. Consequently, social value has no significance.

Table 29 Hypotheses Testing

Hypothesis	Relationship	Beta	t-value	Decision
H1	Functional value → Intention to purchase electric car	0.295	4.431	Accepted
H2	Social value → Intention to purchase electric car	0.094	1.485	Not Accepted
H3	Emotional value → Intention to purchase electric car	0.268	3.683	Accepted
H4	Conditional value → Intention to purchase electric car	0.221	3.186	Accepted
H5	Epistemic value → Intention to purchase electric car	0.151	2.297	Accepted

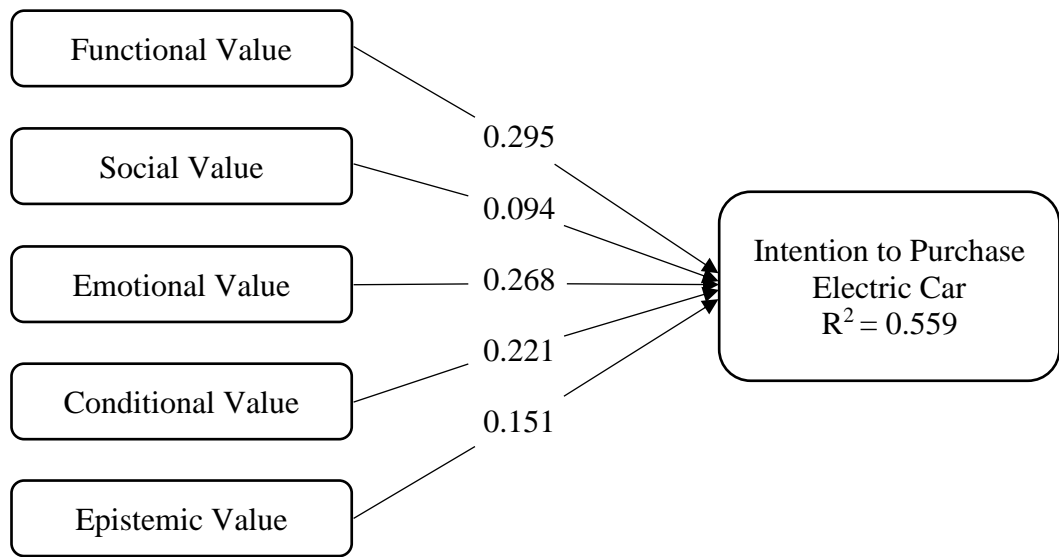


Figure 8: Result of The Structural Model Analysis

According to the study's findings, the five consumption values account for 55.9% of consumer behavior, which is a better explanation than theories like the theory of planned behavior. Regarding the importance of functional, emotional, and conditional value, the results of this study are consistent with those of earlier study, such as Teoh Chai Wen & Nor Azila Mohd Noor (2015); however, they differ from this research in one area, specifically epistemic value.

VII. CONCLUSION

The current study explored the comprehensive factors influencing consumers' intentions to buy electric cars and found important information on the relative importance of consumption value factors. The results highlight how important functional and emotional factors are in influencing consumers' intentions in the electric car market.

Functional value appeared as the main driver, having a significant impact on buyers' intentions to purchase electric cars. Consumers were motivated to choose electric vehicles due to their perceived quality and economic advantages over conventional cars. This highlights the need of emphasizing the practical features and affordability of electric cars in marketing campaigns, as well as addressing consumer concerns about performance and price.

Following functional value, emotional value came about as another significant factor of customer purchase intentions to electric cars. The respondents had a deep emotional connection to electric cars and saw them as a way to improve society and the environment as well as a source of happiness. Because of this emotional impact, marketers could create stories that speak to consumers' beliefs and desires and satisfy their need for emotional fulfillment and significant contributions.

Conditional value turns out to be more influential than epistemic value in the case of the electric car market. The distinction could be explained by customers depending more on environmental impact and financial incentives than on complex concepts requiring extensive knowledge and learning. As a result, conditional value becomes more significant in influencing consumer behavior, indicating the desire of consumers to make decisions rely on environmental and financial outcomes even in the absence of comprehensive information about green technologies.

Moreover, it seems that in the market for electric cars, consumers' purchasing intentions are less affected by epistemic value, given the respondents' educational backgrounds and potential for increased understanding of environmental concerns and green technologies.

Remarkably, social value turned out to have little or no impact on consumer intentions to buy electric cars. Compared to other product categories where image and social status play crucial roles, respondents did not think that owning an electric automobile would improve their public image or social praise. This research highlights the necessity for marketers to promote electric cars by focusing other value dimensions, such as emotional and functional advantages, as opposed to focusing on social attractiveness.

A. Managerial Implication

The present study's results provide significant understanding of the deep relationship between consumption values and purchasing intentions in the electric car industry. In order to develop successful marketing strategies and encourage the use of electric vehicles, lawmakers and marketers must have a thorough understanding of these aspects. The following are some significant managerial implications from the study's conclusions:

1. Emphasizing Functional and Emotional Values in Marketing Initiatives

The study underlines how crucial functional and emotional values are in influencing people to buy electric cars. It is critical to take care of consumers' worries over performance and cost by focusing on the useful features and financial benefits of electric cars. Campaigns for marketing electric vehicles should spotlight their high quality, durability, and cost-effectiveness, presenting them as practical and reasonably priced alternatives for conventional cars. In addition, by creating enticing stories that address to consumers' needs and beliefs, marketers may take advantage of the emotional connection that people have with electric cars. Storytellers that highlight the good effects electric cars have on society, the environment, and consumers' emotions can be very powerful in drawing in readers and promoting favorable opinions of the electric cars.

2. Utilizing Conditional Value in Marketing Methods

In the electric car market, conditional value is as a substantial driver of consumer behavior. It emphasizes the significance of modifying marketing strategies to highlight the financial and environmental advantages of electric cars rather than

focusing only on technical details or complicated technological specifics. This suggests that efforts to emphasize the environmental benefits and possible savings in costs through incentives such as tax reductions or discount rate could result in greater customer acceptance and growth in the electric car market.

3. Reevaluating Social Value in Marketing Techniques

In contrast to predictions, social value doesn't seem to have much of an effect on consumers' intents to buy electric cars. This illustrates how marketers need to reconsider how much social appeal when it comes to advertising electric cars. Marketers should give other value aspects, such emotional and functional values, a higher priority in their strategies rather than social status or image. Marketers can more effectively match their messaging with the intentions and preferences of their target audience by directing their emphasis from social appeal to more actual values. Customers are expected to respond positively to messages that highlight the individual advantages and significant contributions that come with driving electric cars, which will lead to a rise in their use.

VIII. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Many factors that could have influenced how the results were interpreted and how broadly they could be applied are included in this study's limitations.

A. Cross-Sectional Data Limitation

Cross-sectional data are limited since they are obtained from a sample of people at a specific point in time. While this approach provides beneficial insights into the connections between variables at the time, it has own drawbacks when it comes to identifying long-term changes or trends. In the field of consumer behavior research, focusing completely on cross-sectional data limits researchers to capturing a picture of customers' intentions, preferences, and behaviors across a certain time period. Consumer intentions, on the other hand, are not static; they can be affected by a wide range of variables that might alter over time. Market dynamics, like supply and demand adjustments, competition changes, and the introduction of new items, can all have a substantial impact on customer preferences. Personal conditions, such as income, lifestyle, or occurrences in life, can all have an impact on consumer behavior. Furthermore, external variables such as societal trends, cultural crises, and financial conditions have a significant impact on consumer decisions.

To overcome the limitations of cross-sectional data in recording dynamic changes in consumer behavior, researchers frequently turn to longitudinal studies. Longitudinal studies collect data from an identical group of participants throughout time, enabling researchers to monitor shifts in consumer preferences, views, and behaviors. Researchers can acquire a better understanding of the fundamental elements that drive long-term goals by examining how these variables change over time.

B. Geographical Scope Limitation

The geographical scope limitation refers to the restriction of focusing primarily on a certain geographic area—in this case, Istanbul—rather than taking into account the wider scope of consumer behavior in other regions or cultures. Istanbul, as a large city has diverse populations with distinctive cultural, economic, and social attributes, particularly on the European and Asian sides. By focusing just on people in Istanbul, the study risks overlooking the complexities and variances in consumer behavior that present throughout Turkey. The European and Asian sides of Istanbul, in particular, differ significantly in terms of lifestyle, culture, financial condition, and level of development. These differences can have a significant impact on consumer preferences, purchasing decisions, and attitudes toward products and services. For example, customers on the European side of Istanbul could have different buying habits, brand choices, and attitudes toward sustainability than those on the Asian side. Furthermore, income levels, levels of education, as well as access to resources can differ between these two locations, impacting consumer behavior in unique ways.

To solve this challenge, future research should take a broader approach, undertaking cross-cultural studies that compare consumer behavior and preferences on the European and Asian sides of Istanbul. Such research consists of gathering information on representative samples of customers from both locations and examining variations and similarities in their perceptions, motives, and purchasing behaviors.

C. Theory Selection Limitation

The constraint in theory selection indicates the study's dependence on the theory of consumption values to interpret consumer intentions, whereas overlooking other recognized theories such as the theory of planned behavior or the theory of reasoned action. While the consumption values theory was helpful in describing a considerable percentage of the variance in the consumer's purchase intentions (55.9% in this study), it might not offer a thorough understanding of all the psychological processes that influence consumer behavior. The theory of consumption values is founded on the concept that consumers value goods and services according to their perceived value in many areas such as functional, social, emotional, conditional and

epistemic. While this theory is useful in determining why consumers make particular decisions, it might fail to fully represent the cognitive and logical parts of decision-making that are fundamental to theories such as planned behavior and reasoned action. The theory of planned behavior states that three elements determine behavioral intentions: views regarding behavior, personal standards, and the impression of behavioral control. In a similar way the theory of reasoned action points out how opinions and personal standards shape behavioral intentions. Both of these theories offer a systematic framework for comprehending how people decide in accordance with their views, perspectives, and perceptions of norms in society.

Linking several theoretical frameworks allows academics to get a more detailed knowledge of consumer purchasing processes. For example, by combining the theory of consumption values with the theory of planned behavior, researchers could explore not only the values consumers place on goods, but also the cognitive processes that influence their intentions. Likewise, using the idea of reasoned action allows researchers to find out the way personal norms and social factors relate to consumption values to determine behavior.

D. Methodological Considerations

Future studies could benefit from considering other methodological approaches to improve the reliability and validity of findings. For example, mixed-methods research designs that combine quantitative surveys with qualitative interviews or focus groups can provide more detailed insights into consumers' intentions, choices, and decision-making processes. Furthermore, performing studies or quasi-experimental studies enables researchers to discover causal correlations among variables, providing more insight into how certain interventions or marketing techniques affect customer behavior. Researchers can overcome any biases associated with any single method by employing a variety of methodological approaches, resulting in a more comprehensive knowledge of consumer behavior in the field of electric cars.

IX. REFERENCES

BOOKS

- BABBIE, E. (2016). *The Basics of Social Research*. Cengage Learning.
- BLACKWELL, R. D., Miniard, P. W., & Engel, J. F. (2006). *Consumer behavior*. Boston: Thomson South-Western.
- BLECH, M. A., & BLECH, G. E. (1990). *Introduction to advertising and promotion management*. San Diego: Irwin Homewood.
- COOLEY, W. W., & LOHNES, P. (1950). *Multivariate Procedures in the Behavioral Science*. New York: Wiley, In press.
- DEVELLIS, R. F. (2016). *Scale Development: Theory and Applications*. Sage Publications.
- FIELD, A. (2018). *Discovering Statistics Using IBM SPSS Statistics*. Sage Publications.
- FISHBEIN, M., & AJZEN, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Addison-Wesley Publishing Company.
- GAY, L. R., MILLS, G. E., & AIRASIAN, P. W. (2012). *Educational research: Competencies for analysis and applications*. Pearson.
- GHOSH, A. (1990). *Retail management*. Chicago: Drydden press.
- GUJARATI, D. N., & PORTER, D. C. (2009). *Basic Econometrics*. McGraw-Hill Education.
- HOWARD, J. A., & SHETH, J. N. (1969). *The Theory of Buyer Behavior*. New York: John Wiley and Sons.
- KELLER, K. L. (2008). *Strategic Brand Management*. Pearson Prentice Hall.
- MASLOW, A. H. (1987). *Motivation and Personality*. NJ: Prentice Hall.

MONROE, K. B. (1991). *Pricing – Making Profitable Decisions*. New York: McGraw-Hill.

KOTLER, P., & ARMSTRONG, G. (2012). *Principles of marketing*. Pearson.

KOTLER, P., & KELLER, K. L. (2016). *Marketing Management*. New York: Pearson.

NUNNALLY, J., & BERNSTEIN, I. (1994). *Psychometric*. McGraw-Hill.

PICKTIN, D., & BRODERICK, A. (2004). *Integrated Marketing Communications*. Pearson Education.

SCHIFFMAN, L., & KANUK, L. L. (1983). *Consumer behavior*. Pearson Education.

TABACHNICK, B. G., & FIDELL, L. S. (2019). *Using Multivariate Statistics*. Pearson.

WALTERS, C. G. (1974). *Consumer Behavior: Theory and Practice*. Richard D. Irwin.

ARTICLES

AGBULUT, U., & BAKIR, H. (2019). **İçten Yanmalı Motorlar Yerine Elektrikli Araçlara Yönelmenin Ekonomik ve Ekolojik Etkilerinin Araştırılması.** *Düzce Üniversitesi Bilim Teknol.*

ALAMGIR, M., NASIR, T., SHAMSUDDOHA, M., & NEDELEA, A. (2011). **Influence of brand name on consumer decision making process-an empirical study on car buyers.** *The USV Annals of Economics and Public Administration*.

ALI, A., & BHASIN, J. (2019). **Understanding customer repurchase intention in e-commerce: role of per-ceived price, delivery quality, and perceived value.** *Journal of Business Research*.

ANDERSON, E. W., & SULLIVAN, M. (1993). **The antecedents and consequences of customer satisfaction for firms.** *Marketing Science*.

AQUEVEQUE, C. (2006). **Extrinsic cues and perceived risk: The influence of consumption situation.** *Journal of Consumer Marketing*.

- BEI, L. T., & SIMPSON, E. M. (1995). **The determinants of consumers' purchase decisions for recycled products: An application of acquisition-transaction utility theory.** *Advances in consumer research.*
- BISWAS,, A., & ROY, M. (2015). **Green products: An exploratory study on the consumer behavior in emerging economies of the East.** *Journal of Cleaner Production.*
- BOLTON,, R. N., & DREW, J. H. (1991). **A multistage model of consumers' assessment of service quality and value.** *Journal of Consumer Research.*
- BORIS, S., ALEKSANDRA, P. K., & DAMIJAN, M. (2013). **The relationships among perceived quality, perceived risk and perceived product value.** *Journal of Product & Brand Management.*
- BRYANT, F. B., & YARNOLD, P. R. (1995). **Principal-components analysis and confirmatory factor analysis.** In L. G. Grimm & P. R. Yarnold (Eds.). *Reading and understanding multivariate statistics.*
- BRYMAN, A., & BELL, E. (2003). **Business Research Methods.** *Oxford University Press.*
- BUI, M. H. (2005). **Environmental marketing: A model of consumer behavior.** *Proceedings of the Annual Meeting of the Association of Collegiate Marketing Educators.*
- CAKICI, A. C., AKGUNDUZ, Y., & YILDIRIM, O. (2019). **The impact of perceived price justice and satisfaction on loyalty: the mediating effect of revisit intention.** *Tourism Review.*
- CHEN, X., LI, Z., DON, H., HU, Z., & MI, C. C. (2021). **Enabling Extreme Fast Charging Technology for Electric Vehicles.** *IEEE Trans. Intell. Transp. Syst.*
- CHRISTOPHER, M., PAYNE, A., & BALLANTYNE, D. (1991). **Relationship Marketing: Bringing Quality Customer Service and Marketing Together.** *Butterworth-Heinemann, Oxford.*
- COSTELLO, A. B., & OSBORNE, J. W. (2005). **Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most From Your Analysis.** *Practical Assessment, Research & Evaluation.*

- CROASMUN, J. T., & OSTROM, L. (2011). **Using likert-type scales in the social sciences.** *Journal of adult education.*
- DARAMY-WILLIAMS, E., ANABLE, J., & GRANT-MULLER, S. (2019). **A systematic review of the evidence on plug-in electric vehicle user experience.** *Transp. Res. Part D Transp. Environ.*
- DERNEĞİ, O. S. (2012). **Otomotiv Sanayii Genel ve İstatistik Bülteni.**
- ERIKSSON, K., MAJKGARD, A., & Sharma, D. D. (1999). **Service quality by relationships in the international market.** *The Journal of Services Marketing.*
- FINCH, J. E. (2006). **The impact of personal consumption values and beliefs on organic food purchase behavior.** *Journal of Food Products Marketing.*
- GINSBERG, J. M., & BLOOM, P. N. (2004). **Choosing the right green-marketing strategy.** *MIT Sloan.*
- GOGOI, B. (2013). **Study of antecedents of purchase intention and its effect on brand loyalty of private label brand of apparel.** *International Journal of Sales & Marketing.*
- GONÇALVES, H. M., LOURENÇO, T. F., & Silva, G. M. (2016). **Green buying behavior and the theory of consumption values: A fuzzy-set approach.** *Journal of Business Research.*
- GÖNÜL, O., DUMAN, A. C., & GÜLER, O. (2021). **Electric vehicles and charging infrastructure in Turkey: An overview.** *Renewable and Sustainable Energy Reviews.*
- HAIR, J. F., BLACK, W. C., BABIN, B. J., & Anderson, R. E. (2019). **Multivariate Data Analysis.** *Cengage Learning.*
- HAIR, J. F., MONEY, A. H., SAMOUEL, P., & Page, M. (2007). **Research methods for business.** *Education+Training.*
- HEALE, R., & TWYXCROSS, A. (2015). **Validity and reliability in quantitative studies.** *Evidence-based nursing.*

- HESKETT, J. L., JONES, T. O., LOVEMAN, G. W., Sasser, W. E., & Schlesinger, L. A. (1994). **Putting the service-profit chain to work.** *Harvard Business Review*.
- HOLBROOK, M. B., & CORFMAN, K. P. (1981). **Quality and value in the consumption experience.** Phaldrus rides again. *Perceived Quality*.
- IACOBUCCI, D., GRAYSON, K. A., & OSTROM, A. L. (1994). **The calculus of service quality and customer satisfaction: theoretical and empirical differentiation and integration.** *Advances in Services Marketing and Management*.
- KILBOURNE, W., & PICKETT, G. (2008). **How materialism affects environmental beliefs, concern, and.** *Journal of Business Research*.
- KIM, J. O., & JIN, B. H. (2001). **Korean consumers' patronage of discount stores: Domestic vs. multinational discount stored shoppers' profile.** *Journal of Consumer Marketing*.
- LAVIDGE, R., & STEINER, G. (1961). **A model for predictive measurements of advertising.** *Journal of Marketing*.
- LILJANDER, V., & STRANDVIK, T. (1994). **A comparison of episode performance and relationship performance for a discrete service.** *Dienstleistungsmarketing – Konzeptionen und Anwendungen*.
- LIN, P. C., & HUANG, Y. H. (2012). **The influence factors on choice behavior regarding green products based on the theory of consumption values.** *Journal of Cleaner Production*.
- LONG, M. M., & SCHIFFMAN, L. G. (2000). **Consumption values and relationships: Segmenting the market for frequency programs.** *Journal of Consumer Marketing*.
- MACKAY, H. (1999). **Turning point: Australians choosing their future.** *Pan Macmillan*.
- MACKENZIE, S. B., LUTZ, R. J., & BELCH, G. (1986). **The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations.** *Journal of Marketing Research*.

- MARTINS, F., FELGUEIRAS, C., SMITKOVA, M., & CAETANO, N. (2019). **Analysis of Fossil Fuel Energy Consumption and Environmental Impacts in European Countries.** *Energies*.
- MWASILU, F., JUSTO, J. J., KIM, E. K., DO, T. D., & JUNG, J. W. (2014). **Electric vehicles and smart grid interaction: A review on vehicle to grid and renewable energy sources integration.** *Renew. Sustain. Energy Rev.*
- PARASURAMAN, A., ZEITHAML, V. A., & BERRY, L. L. (1988). **Servqual: a multiple item scale for measuring consumers' perceptions of service quality.** *Journal of Retailing*.
- PARK, J. (2002). **he effect of product presentation on mood, perceived risk, and apparel purchase intention in Internet apparel shopping.** *The Ohio State University*.
- REJA, U., MANFREDA, K. L., HLEBEC, V., & VEHOVAR, V. (2003). **Open-ended vs. close-ended questions in web questionnaires.** *Developments in applied statistics*.
- ROWLEY, J. (1998). **Quality measurement in the public sector: some perspectives from the service quality literature.** *Total Quality Management*.
- SCHLESINGER, J., & ROBERT, L. H. (2020). **Getting Real on Wind and Solar.** *Washington Post*.
- SCHWARTZ, S. H., & BILSKY, W. (1987). **Toward a universal psychological structure of human values.** *Journal of Personality and Social Psychology*.
- SHETH, J. N., NEWMAN, B. I., & Gross, B. L. (1991). **"Why we buy what we buy: A theory of consumption values."** *Journal of business research*, 159-170.
- SHRESTHA, N. (2021). **Factor analysis as a tool for survey analysis.** *American Journal of Applied Mathematics and Statistics*.
- SWEENEY, J. C., & SOUTAR, G. N. (2001). **Consumer perceived value: The development of a multiple item scale.** *Journal of Retailing*.
- TANNER, C., & KAST, S. W. (2003). **Promoting sustainable consumption: Determinants of green purchases by Swiss consumers.** *Psychology and Marketing*.

- TEOH, C. W., & NOR , A. M. (2015). **What affects Malaysian consumers' intention to purchase hybrid car?** *Asian Social Science*, 12.
- WANG, X. (2008). **Does country-of-origin matter in the relationship between brand personality and purchase intention in emerging economies?** Evidence from China's auto industry. *International marketing review*.
- WOODRUFF, R. B., SCHUMANN, D. W., & Gardial, S. F. (1993). **Understanding value and satisfaction from the customer's.** *Survey of Business*.
- YANG, C. (2022). **Running battery electric vehicles with extended range: Coupling cost and energy analysis.** *Appl. Energy*.
- YAREMKO, R. M., HARARI, H., HARRISON, R. C., & Lynn, E. (1986). **Handbook of research and quantitative methods in psychology: For students and professionals.** *Lawrence Erlbaum Associates*.
- ZEITHAML, V. A. (1988). **Consumer perceptions of price, quality, and value: A means-end model and.** *Journal of Marketing*.

ELECTRONIC SOURCES

- Beers, B. (2023, 3 28). *P-Value: What It Is, How to Calculate It, and Why It Matters*. Retrieved from Investopedia: <https://www.investopedia.com/terms/p/p-value.asp>
- Cheplyaka, R. (2017). *Explained variance in PCA*. Retrieved from Roman Ceheplyaka: <https://ro-che.info/articles/2017-12-11-pca-explained-variance>
- Chirag, G. (2024, 1 11). *Understanding regression coefficients: standardized vs unstandardized*. Retrieved from Analytics Vidhya: <https://www.analyticsvidhya.com/blog/2021/03/standardized-vs-unstandardized-regression-coefficient/>
- Daily Sabah. (2022). *New Regulation in Turkey Revs up Support for EV Charging Stations*. Retrieved from Daily Sabah: <https://www.dailysabah.com/business/automotive/new-regulation-in-turkey-revs-up-support-for-ev-charging-stations>

- Demand Jump Team. (2020). *What Is Consumer Buying Behavior?* Retrieved from DemandJump: <https://www.demandjump.com/blog/what-is-consumer-buying-behavior>
- Euronews. (2022). *Türkiye’de Elektrikli ,Sarj İstasyonu Sayısı ne Kadar, Diğ er Ülkelerde Durum ne?* Retrieved from Euronews.: [https://tr.euronews.com/2022/03/19/elektrikli-arac-say-s-art-yor-turkiye-ve-avrupa-da-sarj-istasyonlar-yeterli-mi#:~{}:text=Elektrikliara%C3%A7say\T1\is\T1\i\(2019\)EAFO\T1\textquote rightyag%C3%B6reT%C3%BCrkiye\T1\textquoterightde,say\T1\is\T1\i3bin457idi](https://tr.euronews.com/2022/03/19/elektrikli-arac-say-s-art-yor-turkiye-ve-avrupa-da-sarj-istasyonlar-yeterli-mi#:~{}:text=Elektrikliara%C3%A7say\T1\is\T1\i(2019)EAFO\T1\textquote rightyag%C3%B6reT%C3%BCrkiye\T1\textquoterightde,say\T1\is\T1\i3bin457idi)
- Evalcommunity. (2024). *Utilizing SPSS (Statistical Package for the Social Sciences) for Effective Data Analysis in Monitoring and Evaluation.* Retrieved from evalcommunity: <https://www.evalcommunity.com/career-center/using-spss-in-monitoring-and-evaluation/>
- IEA. (2024). *Energy Security.* Retrieved from IEA: <https://www.iea.org/topics/energy-security>
- James, C. A., & James, A. N. (1998). *Business Marketing: Understand What Customers Value .* Retrieved from Harvard Business Review: <https://hbr.org/1998/11/business-marketing-understand-what-customers-value>
- Kent State University. (n.d.). *SPSS Tutorials: One-Way ANOVA.* Retrieved from Kent State University: <https://libguides.library.kent.edu/spss/onewayanova>
- Openstax. (2023). *Understanding Consumer Markets and Buying Behavior.* Retrieved from Openstax: <https://openstax.org/books/principles-marketing/pages/3-1-understanding-consumer-markets-and-buying-behavior>
- Statistical Consulting Group. (2024). *Factor Analysis | SPSS Annotated Output.* Retrieved from UCLA: <https://stats.oarc.ucla.edu/spss/output/factor-analysis/>
- Taylor, S. (2024). *R-Squeared.* Retrieved from CFI: <https://corporatefinanceinstitute.com/resources/data-science/r-squared/>
- Zhuang, W., Luo, X., & Riaz, M. U. (2021). *On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach.* Retrieved from Frontiers: <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.644020/full>

APPENDICES

Appendix-1: Questionnaire

Dear Sir/Madam.

This questionnaire has been designed in order to get my Master degree in Business Administration from Istanbul Aydin University. I can assure you that the data will be handled with discretion and will not be forwarded to any organization.

Thanks in advance for your participation.

Personal Information:

- Gender: Male Female
- Age: 18-21 years 22-25 years
 26-29 years 30-33 years
 34-50 years More than 50 years
- Monthly income: Less than 8000 TL 8001-12000 TL
 12001-16000 TL 16001-20000 < TL
 20001-24000 TL More than 24000 TL
- Educational level: Less than high school High school
 Bachelor's degree Master's degree
 PhD or higher
- Employment Status: Full-time Part-time
 Student Unemployed
 Self-employment

Please read the following questions carefully and put a mark in the box that you consider as your answer:

Intention to purchase electric car	Strongly disagreed	Disagreed	Indifferent	Agreed	Strongly agreed
I intend to purchase an electric car because it is environmentally-friendly.					
I intend to purchase an electric car even though it is more expensive than a conventional car.					
I intend to purchase an electric car over a conventional car when their product qualities are similar.					
I feel that I will play a great part in helping the environment if I drive an electric car.					
I feel more comfortable if I drive an electric car rather than a conventional car.					
I intend to buy an electric car in the near future.					
Functional value	Strongly disagreed	Disagreed	Indifferent	Agreed	Strongly agreed
The electric car offers value for money.					
The electric car is reasonably priced.					
The electric car performs better.					
The electric car is well made.					
The electric car has an acceptable standard of quality.					
The electric car performs consistently.					
The electric car lowers my maintenance cost.					
The electric car is economical driving.					

Social Value	Strongly disagreed	Disagreed	Indifferent	Agreed	Strongly agreed
If I buy an electric car, most people who are important to me will disapprove it.					
If I buy an electric car, most people who are important to me will appreciate it.					
If I buy an electric car, most people who are important to me will find it desirable.					
If I buy an electric car, most people who are important to me will not support it.					
I learned so much about the electric car from my friends and family.					
Most members of my family and friends will expect me to buy an electric an electric car.					
I will follow the advice of my family that I should buy an electric car.					
My friends recommend e that I should buy an electric car.					
Buying an electric car would have a negative effect on my self-image.					
Buying an electric car would say something positive about who I am.					
Buying an electric car would say something positive about what I stand for.					
I feel proud of being a green person.					
Emotional value	Strongly disagreed	Disagreed	Indifferent	Agreed	Strongly agreed
Buying an electric car will give me feelings of well-being.					
Buying an electric car is exciting.					
Buying an electric car will make me elated.					

Buying an electric car will make me feel happy.					
Buying an electric car will give me feelings of making a good personal contribution to something better.					
Buying an electric car will give me feelings of doing the morally right thing.					
Buying an electric car will give me feelings of being a better person.					
I emotionally support the electric car.					
Conditional value	Strongly disagreed	Disa-greed	Indif-ferent	Agreed	Strongly agreed
I will buy an electric car under worsening environmental conditions.					
I will buy an electric car when there is a subsidy by the government for the hybrid car.					
I will buy an electric car when there is a discount rate for the hybrid car.					
I will buy an electric car when there is a promotional activity for the hybrid car.					
I will buy an electric car when electric cars are available.					
Epistemic value	Strongly disagreed	Disa-greed	Indif-ferent	Agreed	Strongly agreed
Before buying an electric car, I will obtain substantial information about the different makes and models of products.					
I will acquire a great deal of information about the different makes and models before buying an electric car.					
I am willing to seek out novel information about the electric cars.					
I like to search for new and different knowledge about the electric cars.					

I know that electric cars can reduce the pollution level.					
I know that electric cars can reduce environmental harm.					

RESUME

Name Surname: Nader Taghipour

EDUCATION:

Master of Business Administration: 2024, Istanbul Aydin University, Department of Business, Business Administration

Bachelor of Civil Technology Engineering: 2013, Islamic Azad University, Faculty of Engineering, Department of Civil Engineering

Associate of General Affairs of Construction: 2010, Enghelabe Eslami Technical College, Faculty of Engineering

EXPERIENCE:

Construction Manager, Tehran, Iran

2017 – 2020

- Led a team of engineers and construction professionals in overseeing multiple construction projects from initiation to completion, ensuring adherence to timelines, budgets, and quality standards.
- Coordinated with architects, contractors, and subcontractors to develop project plans, schedules, and budgets, and ensured compliance with building codes and regulations.
- Conducted regular site inspections, monitored construction progress, and provided technical guidance and support to ensure the successful execution of projects.

Renovation Project Engineer, Tehran, Iran

2014 – 2016

- Led renovation projects for residential and commercial properties, including structural upgrades, interior remodeling, and building envelope improvements.

- Collaborated with clients to understand their requirements, develop design concepts, and create detailed renovation plans that met their needs and budget constraints.
- Managed projects budgets, procurement, and scheduling, tracked project progress, and addressed any issues or delays to ensure timely completion and client satisfaction.

HONORS:

Ranked among top students in master's degree in Istanbul Aydin University (GPA 3.5), 2023

Ranked among the top 1 percent in the university national entrance exam of Iran, 2008