



**THE INFLUENCING FACTORS OF NEW ENERGY VEHICLE
CONSUMERS'PURCHASE INTENTIONS-A CASE STUDY OF
IDEAL BRAND**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION
GRADUATE SCHOOL OF BUSINESS
SIAM UNIVERSITY**

2023



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ABSTRACT

Sustainable energy vehicles are being developed in China, aiming to promote a low-carbon society and environmentally friendly transportation. This paper aimed to study the influencing factors of consumer purchase intention of Ideal Brand New Energy Vehicles.

The objectives of the study were 1) to explore the influencing factors that affect the purchase intention of consumers of Ideal Brand New Energy Vehicles and 2) to determine whether functional value, emotional value, social value, green value, and economic value have any influence on the purchase intention of consumers of Ideal Brand New Energy Vehicles.

This study adopted the quantitative research method. A total of 410 questionnaires were distributed, and 403 valid questionnaires were recovered, with a recovery rate of 98.3%. Based on the purchasing decision theory and the sustainable development theory, this paper found that: 1) Functional value, emotional value, social value, green value, and economic value are the factors influencing consumer purchase intention for new energy vehicles; 2) The factors influencing consumer purchase intention of new energy vehicles, which are functional value, emotional value, social value, green value, and economic value, all have a significant positive effect on consumer purchase intention. For recommendations, Ideal Brand should focus on the following aspects: 1) Enhancing functional value; 2) Strengthening emotional value; 3) Enhancing green value; 4) Rationalizing economic value; 5) Improving social value.

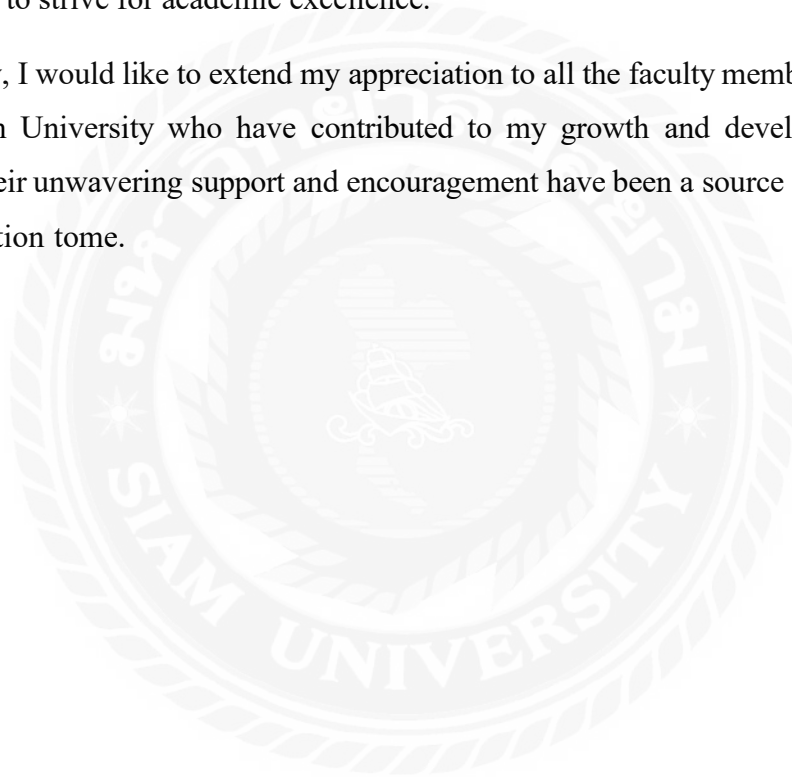
Keywords: new energy vehicle, consumer purchase intentions, Ideal Brand

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to my advisor, for his invaluable guidance, support, and encouragement throughout my master's thesis research. His insightful comments and constructive criticism have significantly improved the quality of my work.

Additionally, I am grateful to Associate Professor Dr. Jomphong Mongkhonvanit, the Dean of the Graduate School, for his support and encouragement throughout my studies. His dedication to the graduate program and commitment to excellence have inspired me to strive for academic excellence.

Finally, I would like to extend my appreciation to all the faculty members and staff of the Siam University who have contributed to my growth and development as a scholar. Their unwavering support and encouragement have been a source of inspiration and motivation to me.



DECLARATION

I, Lyu He, hereby certify that the work embodied in this independent study entitled “The Influencing Factors of New Energy Vehicle Consumers' Purchase Intentions-A Case Study of Ideal Brand” is result of original research and has not been submitted for a higher degree to any other university or institution.

Lyu He
Jan, 15 2024



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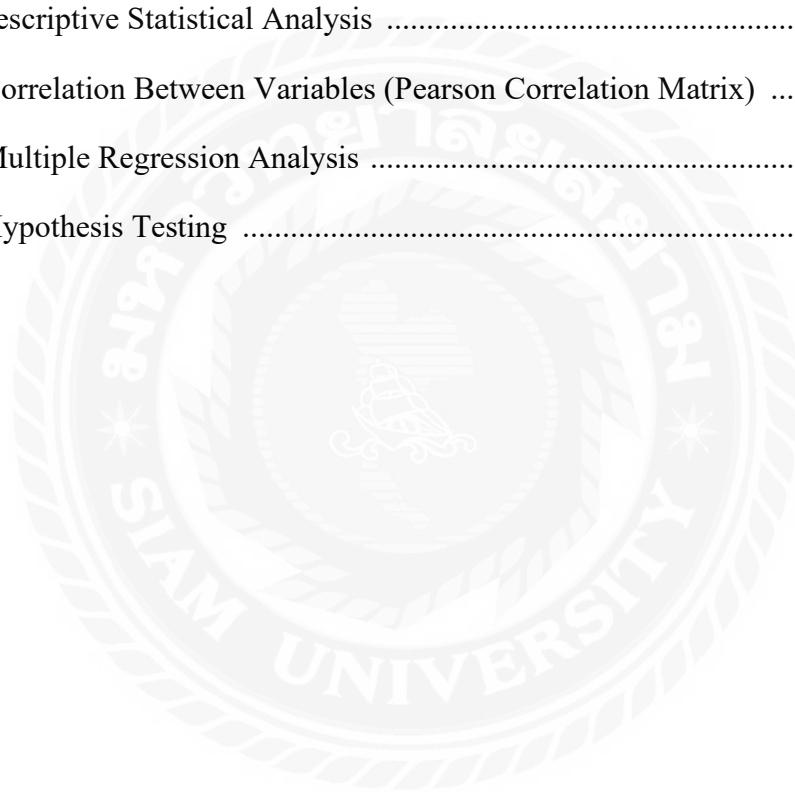


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Chapter 1 Introduction

1.1 Background of the Study

With the rapid development of social and economic development, people's production and living standards have made qualitative progress and have new consumption concepts and lifestyles (Anderson et al., 2020). Consumption is more and more concerned about the changes in the ecological environment, in addition to focusing on the economic benefits of the product, but also on the social benefits of the product. In China's efforts to develop a green economy, consumers pursue a green lifestyle, and the manufacturing industry and other heavy industrial enterprises have also begun to improve the concept of technological upgrading and green production while reforming the management structure, resulting in the overall realization of the transformation and upgrading of intelligent, low-carbon systems (Tiebout, 2020). Enterprises want to seize the opportunity and open up new development spaces; the key is to focus on the green economy and sustainable development (Verhoef et al., 2021). The automobile industry is an important pillar industry for the national economy. The development of traditional automobiles is accompanied by various environmental problems, such as exhaust pollution and an imbalance between energy supply and demand. New energy vehicles are characterized by low energy consumption, cleanliness, and light pollution. To realize the transformation and upgrading of China's automobile industry structure, it is necessary to develop new energy vehicles (Xu et al., 2014). New energy vehicles are a breakthrough in solving environmental problems. At present, low-carbon intelligentization has become the general trend of global automobile technology, and new energy vehicles are gradually replacing traditional fuel vehicles (Gong et al., 2012).

The development of new energy vehicles in China has stabilized due to the improvement of China's automotive product power (Ma et al., 2017), the improvement of basic charging facilities, policy promotion, and other strong improvement measures. The proportion of annual deliveries of new energy vehicles in the Chinese market in the overall market will rapidly increase from 4.35% in 2018 to 26.25% in 2022 (Chu & Majumdar, 2022). It will fulfill the 2025 development target proposed in the New Energy Vehicle Industry Development Plan (2021-2035). However, Chinese consumers do not have an understanding of new energy vehicles. Chinese consumers do not have enough incentive to buy new energy vehicles. To better promote the development of new energy vehicles, expand the market for new energy vehicles, and enhance customer motivation and incentives to purchase (Liu et al., 2018).

The Chinese government strongly encourages the development of new energy resources to replace gasoline. The development of new energy vehicles is the breakthrough point that can practically solve the problem of imbalance between

energy supply and demand, as well as provide a kind of guarantee for the country's economic security and energy security (Dong & Liu, 2020). Carbon monoxide in the exhaust gases emitted by traditional cars is fuel combustion, while hydrocarbons are gasoline combustion, and nitrogen oxides are emitted. These exhaust gases account for 70% to 80% of urban air pollution sources (Chu & Majumdar, 2022). New energy vehicles, powered by electricity, emit zero pollutants, which is favorable to the ecological environment and adds to the physical and mental health. New energy vehicles have unique advantages and long-term development value (Wang et al., 2019).

Therefore, replacing conventional vehicles with new energy vehicles is not only for the eventual establishment of an environmentally friendly and low-carbon society but also an inevitable choice for the sustainable development of the automobile industry in the future. The development of new energy vehicles in China for more than ten years has been carried out and has made progress (Dong & Liu, 2020). Whether in terms of technology or application, as well as market expansion, the Chinese government has vigorously subsidized new energy vehicles. Along with the gradual implementation of the subsequent subsidy regression policy, it will make users less motivated to buy cars. The lack of internal drive for sustainable development of new energy vehicles will be more evident (Chu & Majumdar, 2022). Then, what should be done to continue to promote consumer consumption and how to occupy a larger market share in the automobile industry? New energy automobile enterprises can better define their production strategies. It provides targeted marketing advice for companies' product development and helps Chinese government departments make rational decisions.

1.2 Questions of the Study

In comparison to the conventional automobile industry, new energy vehicles present numerous advantages. They decrease energy consumption and reliance by utilizing eco-friendly energy sources like solar power, leading to reduced pollution. Additionally, new energy vehicles emit lower emissions, aiding in excessive carbon dioxide emissions. Lastly, new energy vehicles can optimize China's industrial structure, signifying an industry upgrade that will propel the entire sector forward. China ranks first in the world in terms of new energy vehicle sales. However, the support for new energy vehicle sales comes from government behavior. Encouraged policies such as preferential and unrestricted purchases of new energy vehicles in China, consumers have started to try to use new energy vehicles. The Chinese government has introduced a series of policies to support the development of new energy vehicles in the hope of promoting the further development of the automotive industry. However, the role of the Chinese government in guiding the industry does not determine the direction of the industry. There are still difficulties in shifting the

new energy vehicle industry from policy-oriented to market-oriented. Therefore, how to realize the healthy development of the new energy automobile industry has become important.

1. What are the factors influencing the consumer purchase intention of Ideal Brand New Energy Vehicles?

2. Do functional value, emotional value, social value, green value, and economic value affect consumer purchase intention to buy Ideal Brand New Energy Vehicles?

1.3 Objectives of the Study

Starting from the consumer purchase intention of new energy vehicles, this study explores the influence of different factors on the consumer purchase intention of new energy vehicles through theoretical research and empirical analysis of the purchase decision theory and the sustainable development theory, to provide corresponding suggestions for the new energy vehicle industry and related departments. Under the premise of the purchase decision theory and the sustainable development theory, the state can make full use of the consumers' purchase intention to develop a suitable marketing strategy for the company, realize the smooth transition of the sales of new energy vehicles from policy-oriented to market-oriented, and then promote the balanced development of China's automobile industry.

1. To explore the influencing factors that affect the purchase intention of consumers of Ideal Brand New Energy Vehicles.

2. To determine whether functional value, emotional value, social value, green value, and economic value affect the purchase intention of consumers of Ideal Brand New Energy Vehicles.

1.4 Scope of the Study

In the study of new energy vehicle consumer purchasing intention, the scope of the study usually includes multiple aspects to comprehensively understand

consumers' attitudes and intentions toward new energy vehicles of Ideal Brand. In the study of consumer purchase intention of new energy vehicles, the research object is mainly the purchaser who bought new energy vehicles. The research subjects need to have purchased Ideal Brand new energy vehicles and use new energy vehicles. Consumers are not included in the study, who have not purchased new energy vehicles. The age, gender, income level, and education level of the research subjects are included in the research survey process. Age and gender mainly investigate whether there is a difference in the purchase intention of consumers of different ages and genders towards new energy vehicles. Income level mainly investigates the purchase intention of people with different income levels towards new energy vehicles, to find out whether there is any difference related to economic status. Education level mainly studies the education level of the respondents to find out whether a high education level is related to the degree of understanding of new energy vehicle technology and the intention to purchase vehicles.

Meanwhile, the questionnaire also investigates and analyzes the functional value, emotional value, social value, green value, and economic value. By gaining a deeper understanding of the characteristics and attitudes of these research subjects, researchers can more comprehensively grasp the current status and trends of the new energy vehicle market, and provide valuable information for formulating relevant policies, improving products, and conducting marketing.

1.5 Significance of the Study

The research supplements and completes the missing research on green perceived value in the past. In the past, scholars have defined perceived value from various perspectives, and new research orientations have been developed in different fields (Huang et al., 2020). However, for the research on the green perceived value of consumers' environmental goods, many of them put forward the conceptual definition, the division, and research on its sub dimensions, and even appear to be studied simply as a single-dimensional variable in the research, this study will include the green value as a variable in the research model. Green value is added to the research model and introduced into the decision-making process of new energy vehicles (Won Jun Jang et al., 2019), comparing the degree of influence of different dimensions of green perception on the purchase intention of new energy vehicles, to further improve the study of green perceived value variables. Second, under the framework of purchase decision theory, customer functional value, emotional value, and social value are taken as research variables. It aims to reveal the role of consumer innovativeness in consumer perception influencing purchase intention and draw theoretically relevant conclusions through empirical research.

Since people in modern society are wary of risk avoidance, this is the reason consumers tend to adopt a conservative consumption style for new products. As an emerging market that urgently needs to be developed, the research in this paper will help enterprises and the government to better cater to consumers' deep-seated, and help enterprises maximize consumers' interests so that they can have a good shopping experience (Huang et al., 2020), while also achieving high returns and building a brand of word-of-mouth, to reach a balance between the interests of both enterprises and consumers. Moreover, based on the theory of diffusion of innovation, focusing on and giving full play to the innovativeness of customers has an important practical value for promoting the development of new energy vehicles. Through the exploration of consumer innovation, enterprises, and governments can indirectly enhance consumers' intention to purchase new energy vehicles. New energy vehicles are not only a mode of transportation, but also a technological innovation and progress (Sajjadi et al., 2021). Around the world, the new energy vehicle industry has embarked on the track of networked, intelligent, electrified research and development and market-wide promotion and application, representing the common strategic direction of the development of the world's automotive industry. As China's automobile industry started relatively late, there is still a big gap between China and advanced foreign companies in areas such as engines and engines. Therefore, if this wave of development trend can be grasped, China's automobile industry will be very likely to go to the forefront of the development of the world's automobile industry (Wang et al., 2019).

Chapter 2 Literature Review

2.1 Introduction

This research literature review is based on the purchase decision theory and the sustainable development theory to analyze the factors influencing the purchase intention of new energy vehicles. The literature review clarifies the current status of research related to the development of new energy vehicles, and the factors influencing the intention to purchase new energy vehicles. Based on the analysis and related research conclusions, the conceptual model of this study is to determine the relationship between functional value, emotional value, social value, green value, and economic value on the intention to buy consumers new energy vehicles.

2.2 Literature Review

2.2.1 New Energy Vehicles

(1) Concept of New Energy Vehicles

New Energy Vehicles (NEV) refers to automobiles with new technologies and structures that use non-conventional automotive fuels as their power source and are formed by adopting advanced technologies in comprehensive vehicle power control and drive (Peng, 2017). In this paper, we select the definition of new energy vehicles and their categories that are generally agreed upon for discussion, i.e., in a broad sense, those that use all energy sources other than internal combustion engines such as gasoline and diesel engines, e.g., hydrogen-powered, gas-powered, hybrid, etc., are new energy vehicles. A common feature of new energy vehicles is that exhaust is low, and the emissions are all oxygen and water. The concept of the narrow sense is more from the technical level. This paper explores the general scope of consumer consumption of new energy vehicles, so the use of the broad definition is more universal (Kimble & Hua, 2013).

New energy vehicles have the advantages of energy saving, low pollution, etc., the number of pure electric vehicles and hybrid vehicles on the market is relatively large, the new energy vehicles studied in this paper include these two categories, as well as fuel cell vehicles, natural gas vehicles, and alcohol ether-

powered vehicles, although the scope of input production is small (Tu & Yang, 2019), but still belongs to the new energy vehicles within the scope of the larger classification. Through market research, it can be concluded that Chinese consumers' understanding of new energy vehicles is between pure electric vehicles and hybrid vehicles. The term "new energy vehicles" in this study refers to vehicles powered by new energy (Du et al., 2018).

(2) Influencing Factors of Purchase Intention of New Energy Vehicles

Customers' purchasing intention refers to the customer's view of a certain commodity, coupled with the role of the external environment, which makes it possible for customers to purchase a commodity. The purchase intention of new energy vehicles directly affects their purchase actions, and enhancing the purchase intention of new energy vehicles will have an impact on the market promotion of new energy vehicles (Du et al., 2018). The three factors of consumer purchasing intention of new energy vehicles include the basic characteristics of new energy vehicles, the influence of the external environment, and the individual attribute characteristics of consumers. The product quality and safety performance of new energy vehicles are more important to users. The improvement of vehicle performance and the R&D of core technologies are the fundamental guarantees for the new energy vehicle industry and the basis for improving competitiveness. The market potential of new energy vehicles is great, but automotive enterprises should not be blindly confident, to seize the opportunity to break through the technical bottlenecks under favorable market conditions, in terms of product quality and the manufacturing process should be carried out gradually, to grasp the priorities. The development of new energy vehicles and government policy support are inseparable, and the government's policy orientation plays a leading role (Khorasanizadeh et al., 2016).

Under the environment of the new energy vehicle industry shifting from state support to market-oriented, an in-depth understanding of the intrinsic connection between consumer behavior and government subsidies in the new energy vehicle industry is a scientific problem that needs to be solved urgently at present. The capital investment in the new energy vehicle industry is extremely important. New energy vehicles still rely heavily on policy promotion, and their share of the market is still not ideal, but the national policy to promote China's new energy vehicles (Lancaster, 2019) is a general trend. In this trend, the ability to seize the opportunity to develop new products that meet customer needs will be the biggest winner. At the same time, new energy vehicle enterprises should also consciously cooperate with the national policy, so that policy research and utilization become an important part of the enterprise's strategy, and the two complement each other to play a greater role in promoting the rapid development of China's new energy vehicles (Rosen, 2022). Consumers' recognition of the low energy consumption and high

quality of products will have a positive impact on their purchasing behavior of new energy vehicles, and in addition, environmental protection awareness and policies will also have a positive impact. Purchasing energy-saving products is a kind of environmental protection behavior, but consumers' consumption outlook will still be influenced by their previous purchasing experience. Different consumers have different personality traits, and these traits will have a consistent impact on consumers' behavior, which will have an impact on consumers' outward behavior and cognition, and then change consumers' purchase intention and purchase behavior (Jiang et al., 2018).

2.2.2 Purchase Decision Theory

(1) Concept of Purchase Decision Theory

Consumer decision-making is a psychological process. Consumers in the final purchase decision before the perception and evaluation of goods or services, the individual needs to stimulate the internal or external environment, such as the joint role of the publicity and encouragement factors, the desire to buy into a complete process of practical action, and at the end of the whole process of the goods to feedback on the views. This is a relatively complete set of systematic decision-making processes, including consumer information perception, consumer interest, need motivation, purchase decision, complete purchase (Sari, 2021), and the experience. Consumers make decisions by selecting relevant goals and refining the overall plan, then making choices that lead to purchase intent. The buying experience then influences the consumption, thus constituting a kind of complete cycle of consumer decision-making. Consumer behavior is influenced by various factors, including consumer interests and income levels. Individual factors include age, gender, income, occupation, etc. These individual factors will not only affect the consumer's behavior but also the consumer's behavior. These individual factors not only affect individual consumer behavior but also have an impact on the group involved in household decision-making. Therefore, the factors that determine consumer behavior are constantly changing, even for the same consumers, their consumer behavior is constantly changing with the changes in the environment they live in (Van Steenburg & Naderi, 2019).

(2) Functional Value

Functional value in purchase decision theory refers to the functions and performance that consumers believe a product or service provides in actual use. When purchasing new energy vehicles, functional value maybe one of the important factors influencing purchase intention. According to the literature review, consumers'

purchase intention to buy new energy vehicles is influenced by fuel economy in functional value. New energy vehicles usually run with lower energy consumption, which means lower fuel costs (Morgan & Hunt, 2020). Consumers prefer to buy new energy vehicles because they are more economical in use. The performance and driving experience of new energy vehicles are also important influences on consumer choice in the study. Consumers are more willing to buy new energy vehicles when their performance and driving experience are comparable or even superior to that of traditional fuel vehicles. New energy vehicles are environmentally friendly. An important aspect of functional value is the environmental friendliness of new energy vehicles (Grant, 2021). For consumers who are concerned about the environment, purchasing a new energy vehicle maybe motivated by a sense of responsibility for the environment and support for sustainable development. Consumers will be attracted by advanced technologies and innovations in new energy vehicles, such as smart driving features and smart connectivity technologies in electric vehicles. National and regional incentives and subsidies for purchasing new energy vehicles also influence consumers' intention to buy. Owning a new energy vehicle brings social recognition and enhances a consumer's image, which may also be a consideration for purchase. New energy vehicles have lower maintenance costs compared to traditional fuel vehicles, which is for some consumers (Amit & Schoemaker, 2021). Purchase decision theory suggests that consumers consider several factors in their purchase decisions, including perceived product or service value, brand reputation, personal needs, and budget (Grant, 2021). Therefore, it is necessary to consider the above factors comprehensively in the study and to gain a deeper understanding of the impact of functional value on purchase intention through market research, consumer feedback, and data analysis.

(3) Emotional Value

Emotional value in purchase decision theory refers to the emotional experience and feelings that a product or service evokes in the minds of consumers. Different from functional value, emotional value emphasizes the emotional connection and pleasure associated with the product or service. The influence of emotional value on consumers' intention to buy new energy vehicles includes brand emotion, appearance design, and emotional connection. Consumers buy new energy vehicles because of the emotional connection to a specific brand. That is related to the image and reputation of the brand and the values conveyed by the brand. The influencing factors of consumers' purchase intention are related to the appearance and style of new energy vehicles. Emotional value can also be affected by factors such as the design and body style of new energy vehicles (Zhang et al., 2020).

Consumers will generate purchase intention because of their favorable impression of the appearance of the car. The emotional value of consumers' purchase

intention is related to the driving experience and fun of the car. Factors such as driving characteristics and acceleration performance of new energy vehicles may affect consumers' emotional experience. Emotional value contains environmental awareness. Environmental protection is a kind of emotional awareness. Purchasing a new energy vehicle makes consumers feel positive emotions towards the environmental cause because new energy vehicles are usually perceived to be friendlier to the environment. Emotional association is also a content of emotional value for consumers (Reinoso-Carvalho et al., 2019). Consumers decide their purchase intention through emotional associations related to new energy vehicles, such as a sense of the future and a sense of advancement. Emotional and functional values are intertwined in the purchase decision. For example, consumers may feel emotionally pleasurable (emotional value) because of the car's environmental characteristics (functional value) (Reinoso-Carvalho et al., 2019). Therefore, these two value aspects can provide a more comprehensive understanding of the factors influencing purchase intention in research.

(4) Social Value

Social value in purchase decision theory refers to the relevance of a product or service to a consumer's sense of social responsibility, ethical standards, and impact on society. Compared with functional value and emotional value, social value emphasizes the impact of individual purchasing behavior on society and the environment. The influence of social value on consumers' intention to purchase new energy vehicles includes environmental responsibility and awareness, sustainable development value, and social identity. Social value is the influencing factor of the intention to buy new energy vehicles. The environmental awareness and environmental responsibility of new energy vehicles. Social value is related to the individual's concern and sense of responsibility for environmental issues. The purchase of new energy vehicles is regarded as environmentally friendly behavior, reflecting consumers' recognition of social responsibility.

Social value is related to the concept of sustainable development, and the purchase of new energy vehicles is seen as a kind of support for the goal of sustainable development. At the same time, social identity and demonstration effects have an impact on consumers' intention to purchase new energy vehicles. Consumers purchase new energy vehicles because they pursue social recognition, hoping that their behavior will have a positive demonstration effect on others and promote the development of society in a more environmentally friendly direction. Social value is related to compliance with government policies and regulations. If the government promotes the development of new energy vehicles and provides appropriate

incentives, consumers are more willing to purchase them because of their sense of social responsibility. Social value relates to consumers' perception of the impact of their purchasing behavior on society, and purchasing a new energy vehicle is a positive social contribution. Compared with functional and emotional values, social value focuses more on the impact of purchasing behavior on society, the environment, and social responsibility, and emphasizes the social significance of an individual's shopping decision. In practical research, questionnaires and in-depth interviews can gain insight into consumers' perceptions and considerations of social value when purchasing new energy vehicles.

2.2.3 Sustainable Development Theory

(1) Concept of Sustainable Development Theory

The theory of sustainable development seeks to find a way of development that can simultaneously meet present needs without compromising the fulfillment of future needs. The theory is concerned with striking a balance between the three dimensions - economic, social, and environmental - to ensure long-term sustainability. The theory of sustainable development argues that economic development should not come at the expense of the needs of future generations. The theory emphasizes the protection and preservation of natural resources while meeting current needs to ensure that they remain available in the future. The theory of sustainable development emphasizes the consideration of economic, social, and environmental factors. This is referred to as the "triple bottom line", where the economic dimension focuses on the sustainability of the economic system, the social dimension emphasizes social justice and inclusiveness, (Shi et al., 2019) and the environmental dimension focuses on the health of ecosystems and the sustainable use of natural resources. The theory of sustainable development is an interdisciplinary field that encompasses several disciplines, including economics, environmental science, sociology, and political science. It requires the integration of various factors to develop comprehensive policies and practices. Responsibilities of business and government towards society and the environment are usually included in the theory of sustainable development. Corporate Social Responsibility (CSR) is one of the key concepts, emphasizing that businesses should have a positive impact on society and the environment in their economic activities. The theory of sustainable development advocates long-term planning and decision-making to ensure the sustainable use of resources and the long-term stability of society (Suárez-Eiroa et al., 2019).

Overall, the theory of sustainable development pursues an integrated approach to development that can meet current needs while protecting and enhancing the

quality of life for future generations. This involves economic sustainability, social justice and inclusiveness, and environmental protection and regeneration.

(2) Green Value

In the theory of sustainable development, green value emphasizes the importance of environmental protection and sustainable resource use. In the decision-making of consumers to purchase new energy vehicles, green value positively affects the intention to purchase. Green perceived value then attracts a great deal of attention from the academic community. As consumers' demand for environmentally friendly products has become stronger and stronger, green perceived value has gradually become a hot issue in marketing circles in recent years.

Green perceived value is the expectation of product safety, sustainability, quality assurance, and the degree of fulfillment of consumer needs. Green perceived value is not only a psychological feeling (Fuerst & McAllister, 2011) that consumers have when choosing a product, but also an environmentally friendly value of the product, which can promote positive word-of-mouth among consumers and lead them to make green purchases. Green perceived value refers to the overall evaluation of the net benefits that potential buyers of goods or services receive from green products or environmentally friendly services. A customer's decision to buy is the result of a combination of multiple dimensions, and the impact of these factors on intention to buy varies in different situations. The emotional value perceived by consumers in the actual purchasing experience, and the green value of green products and services themselves, largely enhance consumers' intention to repurchase, verifying the moderating effect of advertising appeal (Jiang & Kim, 2015). The intention to buy green products is largely influenced by the perceived green value, and the size of its influence varies among different types of products. In addition, the awareness of environmental protection and the government's intervention will also have a certain impact on the green perceived value. The academic research on the theory of green perceived value is a gradual deepening process, in which more and more scholars propose that companies should stand in the position of consumers to feel the value of goods and services, and as far as possible to let customers feel the value created by the enterprise, to incentivize consumers to buy the company's goods and services (Dumont et al., 2016).

(3) Economic Value

Economic value, which is the assessment made by consumers of green products or services from an economic point of view, will significantly increase its utility when the cost or pricing of the product is lowered or the price/performance ratio is improved compared with similar products. It is also the customer's perception when consuming a new energy vehicle, which mainly includes whether the price is reasonable, the subsequent repair and maintenance expenditures, and whether the service is in place. An increase in the functional and economic value of a product will result in a significantly higher propensity for repeat purchases; a product with higher green and economic value is more likely to prompt positive word-of-mouth publicity from customers (Jiang & Kim, 2015).

Economic value emphasizes the cost-effectiveness of a product or service. For new energy vehicles, the economic value may be related to factors such as fuel cost, maintenance cost, and usage cost. Consumers consider whether purchasing a new energy vehicle will provide a return on investment in the long term, for example through lower operating costs and possible government incentives. Consumers are more likely to purchase a new energy vehicle if they perceive that such an investment will provide economic benefits in the long term, such as lower operating and maintenance costs (Chen, 2016).

2.3 Conceptual Framework

This study analyzes the influence of functional value, emotional value, social value, green value, and economic value on consumers' intention to buy new energy vehicles by analyzing and summarizing the theory of purchasing decisions and the theory of sustainable development. The model is constructed, and hypotheses are set through a literature review. Functional value refers to the physical characteristics of green products or services that can satisfy customers' functional needs, and it is the basis for consumers to evaluate them when purchasing them. Emotional value refers to the pleasure consumers feel when purchasing goods and services because of the added value they receive. Social value refers to a brand's ability to connect consumers with other social groups by providing them with tools. Green value refers to the value of products that can meet people's green needs, which can not only effectively improve the environment and energy consumption but also create a green environmental protection culture in society and enhance the group's awareness of environmental protection. Economic value is the consumer's assessment of green products or services from an economic point of view. If the product's cost or pricing is reduced or compared with similar products, its utility will be significantly increased. As shown in Fig2.1.

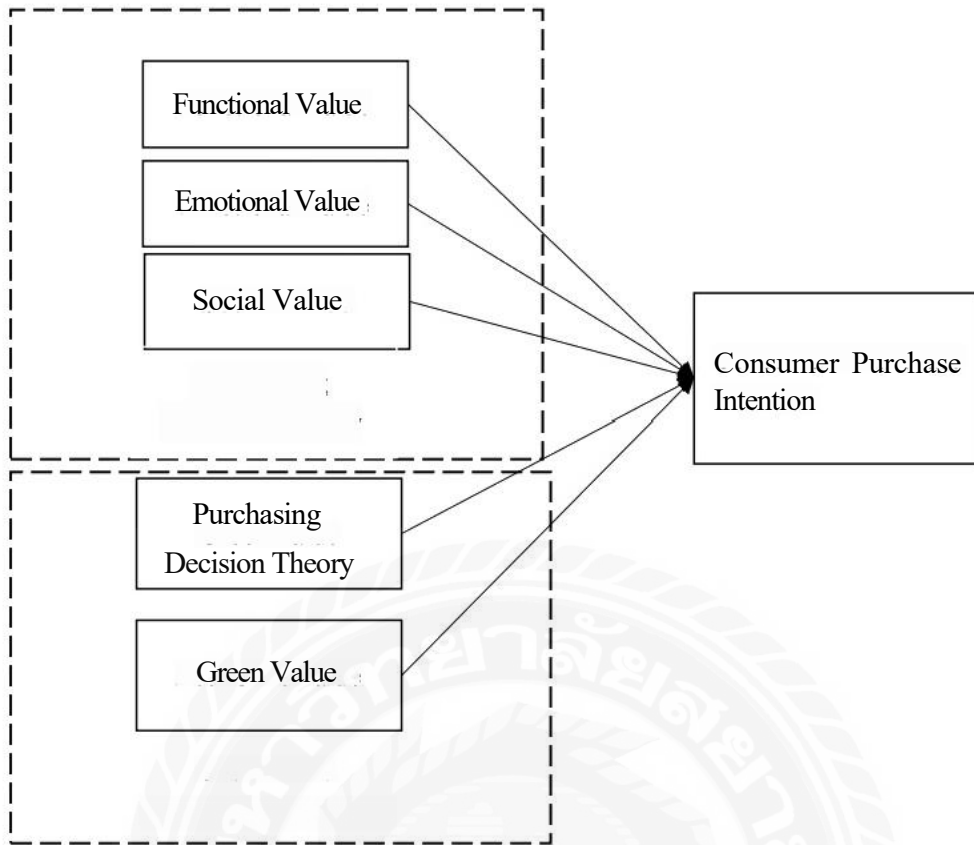


Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Introduction

The main content of this study is the factors influencing the purchase intention of new energy automobile consumers. This study takes the consumer purchase intention of new energy vehicles of the Ideal Brand as a research case. In the model, the independent variables include functional value, emotional value, social value, green value, and economic value, and the dependent variable is consumer purchase intention. This study used questionnaire to collect data, and the quantitative method was used.

3.2 Research Design

A quantitative research method was used in this study. Simple random sampling was used for the research survey. The questionnaire was based on a five-point Likert scale. The first part of the questionnaire is to collect the basic characteristics of the survey sample. The second part focuses on the data related to the functional value, emotional value, social value, green value, and economic value. There are 5 items for each variable, totaling 25 items.

The value is measured in five aspects: functional value, emotional value, social value, green value, and economic value. Combined with the characteristics of new energy vehicles studied in this paper, the questions in the questionnaire were optimized accordingly on the basis of previous mature questionnaires, and the content of the scale is as shown in Table 3.1. There are 5 items for functional value measurement, 5 items for emotional value measurement, 5 items for social value measurement, 5 items for green value measurement, 5 items for economic value and 5 items for consumer purchase intention. A five-point Likert scale was used, with scores ranging from 1 to 5, representing strongly disagree, disagree, generally agree, agree, and strongly agree, with higher scores representing greater agreement with the item. The corresponding question items were designed for each variable, and the items were coded as shown in Table 3.1.

Table 3.1 The Consumer Purchase Intention Measurement Item

Measurement Item	NO.
Functional Value	
I think the performance of new energy vehicles on the market is more stable at present	Q1
I think the quality of the current new energy vehicles is very reliable	Q2
I think the current quality standard of new energy vehicles is acceptable.	Q3
I think the quick start of new energy vehicles is attractive	Q4
I think the low-noise driving of new energy vehicles is attractive	Q5
Emotional Value	
I like to use new energy vehicles	Q6
I recognize the advantages of new-energy vehicles over fuel vehicles.	Q7
I feel relaxed when driving a new energy vehicle	Q8
I feel comfortable and happy driving a new energy vehicle.	Q9
Driving a new energy vehicle makes me look different	Q10
Social Value	
Using a new energy vehicle helps me make a good impression on others	Q11
Using a new energy vehicle can help me win more compliments.	Q12
Using a new energy vehicle can help me build a positive and healthy image of myself.	Q13
Using a new energy vehicle can improve people's perception of me.	Q14
Using new energy vehicles makes others feel that I have a sense of social responsibility	Q15
Green Value	
Using new energy vehicles can help improve the ecological environment	Q16
Using new energy vehicles will benefit the development of society	Q17
Using new energy vehicles can help improve environmental awareness	Q18
Use of new energy vehicles helps improve sustainable development	Q19
Use of new energy vehicles helps save energy	Q20
Economic Value	

I think the current price of new energy vehicles is reasonable.	Q21
I think it is a good choice to buy a new energy vehicle at the current market price.	Q22
The price subsidy policy makes me feel that new energy vehicles are very attractive.	Q23
The tax incentives make me feel that new energy vehicles are very attractive.	Q24
I think buying a new energy vehicle is a good choice with good cost performance.	Q25
Consumer Purchase Intention	
I am willing to collect and learn more information about new energy vehicles.	Q26
I look forward to more types of new energy vehicles coming onto the market.	Q27
I will prioritize the purchase of new energy vehicles over traditional vehicles.	Q28
I will actively advise people around me to buy new energy vehicles	Q29
I will experience more products of new energy vehicles	Q30

3.3 Hypothesis

An important antecedent of consumers' intention to buy is their perception of the value of the product, which is the cost that consumers pay after deducting the benefits they receive when choosing a product to understand its value, as well as the perception of product quality, appearance, functionality, and other aspects in the consumption process. This perception is also an important factor for consumers to consider when purchasing a product, which will affect their final purchase intention. Functional value refers to the perception of practicality in green products or services after comparing the actual quality and psychological expectations. In new energy vehicles, the functional value is the most basic and core value, which comes from the physical attributes and instrumental features. Emotional value refers to the material feelings and emotional transformations experienced by customers in experiencing and evaluating the desired product. And the emotional value can be negative or positive. Because new energy vehicles have the characteristics of energy savings and environmental protection, they can not only reduce the fuel costs of consumers but also improve the environment and ecology. Social value is a kind of cognition produced by people's improvement of their concepts in consumption. People's behavior will be affected by the social environment in which they live, and most consumers feel that the social image and identity of the goods represent their characteristics, which is the main reason people's perceived value at the social level can influence them.

Green value is a value of social significance based on environmental protection, emphasizing the internal satisfaction of consumers, which does not come from the recognition of consumers' image and identity by the outside society but from the fact that consumers can satisfy their pursuit of environmental protection after purchasing green products. Economic value is a kind of direct benefit gained in a short period of time or indirect benefit brought in a long period of time, which mainly refers to the consumers' assessment of green products from the aspects of both cost and price. Therefore, the following hypotheses are proposed in this study:

H1: Functional value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.

H2: Emotional value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.

H3: Social value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.

H4: Green value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.

H5: Economic value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.

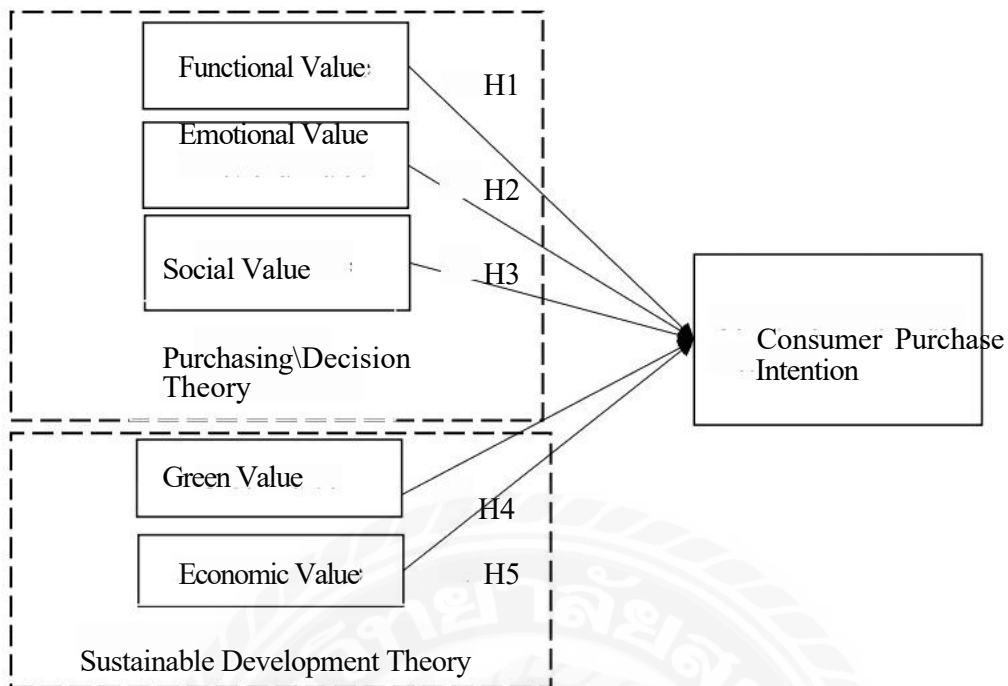


Figure 3.1 Hypotheses

3.4 Population and Sampling

This research focuses on the study of consumer purchase intention-influencing factors of Ideal Brand new energy vehicles. The scope of the study is Ideal Brand New Energy Vehicle purchasers, and the main target is consumers who have purchased and used Ideal Brand New Energy Vehicles. Other new energy vehicle consumers are not included in the study. The survey content includes consumers' age, gender, income, and education; functional value; emotional value; social value; green value; economic value; consumer purchase intention; and so on. The sampling method of this study is the random sampling method. The sample formula was used to collect data values for the quantile of the standard normal distribution; for the confidence level, generally take the value of 95%. P is the sample standard deviation; the sample standard deviation of the estimated value of the sample standard deviation is generally 0.5; to determine the error tolerance E (i.e., the maximum permissible value of the difference between the sample mean and the overall mean), $E=0.05$. The result of the calculation was 398 samples. For the random sampling method, an online survey was conducted using Questionnaire Star for questionnaire distribution, and the sample was drawn randomly from the overall population.

3.5 Data Collection

This study takes Chinese Ideal Brand New Energy of Vehicles as the research object for data collection. The process of questionnaire design unfolded in this paper is to first collect and study the mature scale, then make targeted modifications to improve and optimize the design, and first form a preliminary questionnaire. The questionnaire of this study includes two aspects: first, the basic demographic characteristics of the respondents were analyzed, and the basic data such as gender, age, literacy, and so on were derived; second, functional value, emotional value, social value, green value, economic value, consumer purchase intention, and other variables were measured. Except for the basic personal information, all the other questions are based on Likert's "five-point scale," in which the questions consist of numerical choices from 1 to 5, with 1 being "strongly disagree," 2 being "disagree," 3 being "disagree," and 4 being "strongly disagree." The questions are made up of numerical options from 1 to 5, with 1 being "strongly disagree," 2 being "disagree," 3 being "not sure," 4 being "agree," and 5 being "strongly agree." The questions and answers of the five-level scoring method are fixed, and its language is concise and clear, which allows respondents to have a correct judgment of their own situation, reduces the difficulty of respondents answering and the researcher recovering the data, and at the same time ensures the accuracy of the data and facilitates the coding and analysis of the data.

The questionnaire survey was conducted from November 1, 2023, to January 20, 2024. Considering the fast collection speed of online distribution, the study mainly used the online distribution of questionnaires for the research, where respondents could ask and answer questions if they did not understand. A total of 410 questionnaires were distributed during the survey; 410 questionnaires were recovered, and 403 questionnaires were valid, with a validity rate of 98.3%.

3.6 Data Analysis

3.6.1 Reliability

Reliability analysis refers to the statistical process of reflecting the true degree of the characteristics being tested based on the consistency or stability of the results of the test scale. The more uniform the results of the test, the more representative the data are of the overall situation, and the higher the reliability of the scale. Through the reliability analysis, we can understand whether the design of the questionnaire is reasonable and make corrections so as not to produce a misjudgment of the problem.

Cronbach's alpha is most often used to evaluate the degree of internal consistency of the test items. The larger the value of Cronbach's alpha, the higher the degree of consistency among the items. The survey data showed that the reliability of the questionnaire was good. The questionnaire had a total of 30 items. When the reliability coefficient of the subscale is above 0.7, the scale or questionnaire is good; when the coefficient of the subscale is between 0.6 and 0.7, it is also acceptable; and when the reliability coefficient of the total scale needs to reach 0.8 or higher, it proves

that the overall reliability is very good. The Cronbach's alpha for functional value is 0.901. The Cronbach's alpha for emotional value is 0.875, social value is 0.870, green value is 0.878, and economic value is 0.881. The Cronbach's alpha of consumer purchase intention is 0.868, and the Cronbach's alpha of each variable is greater than 0.8, which indicates that the scale has high stability and consistency. This indicates that the reliability of the survey research questionnaire is very good, as shown in Table 3.2.

Table 3.2 Variable Reliability Test

Variable	Cronbach's Alpha	N of Items
Functional Value	0.901	5
Emotional Value	0.875	5
Social Value	0.870	5
Green Value	0.878	5
Economic Value	0.881	5
Consumer Purchase Intention	0.868	5

3.6.2 Validity

Validity refers to the degree of validity of a measurement, that is, the accuracy and usefulness of what can be measured, and is generally combined with reliability analysis to jointly test the scale. The validity of the questionnaire was determined by factor analysis. The KMO test as well as Bartlett's sphericity test of the questionnaire need to be tested before principal component factor analysis. Factor analysis can only be performed if the KMO value is greater than 0.7. The survey data shows that the overall KMO value is 0.928 and the significance is 0.000, which is less than 0.05 and reaches the significant level, indicating that factor analysis can be conducted. Confirmatory factor analysis (CFA) was conducted in this study. The result of factor analysis for each variable was that the cumulative explanatory rate of functional value,

emotional value, social value, green value, and economic value was 68.624%, respectively, which is greater than 0.5. See Tables 3.3 and 3.4. This indicates that it is suitable for factor analysis.

Table 3.3 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.928
Bartlett's Test of Sphericity	Approx. Chi-Square	5943.745
	df	300
	Sig.	0.000

Table 3.4 Confirmatory Factor Analysis (CFA)

Total Variance Explained								
Component	Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	37.437	37.437	9.359	37.437	37.437	3.554	14.218	14.218
2	13.674	51.112	3.419	13.674	51.112	3.546	14.182	28.400
3	6.530	57.641	1.632	6.530	57.641	3.384	13.536	41.936
4	5.949	63.590	1.487	5.949	63.590	3.351	13.402	55.338
5	5.034	68.624	1.258	5.034	68.624	3.321	13.286	68.624

All the question items were divided into five dimensions by Confirmatory factor analysis, and from the results of the independent variable factor analysis, a total of five items with eigenvalues greater than 1 were extracted, which was consistent with the original topic division. And the factor loadings of the questionnaire measurement items are all greater than 0.5, and the differentiated validity between each dimension is better, indicating that each dimension is better independent. It indicates that the overall validity of the questionnaire is good, see Table 3.5.

Table 3.5 Rotated Component Matrix

	Component
--	-----------

Items	1	2	3	4	5
Q1	0.816	0.086	0.220	0.140	0.223
Q2	0.759	0.075	0.212	0.146	0.207
Q3	0.796	0.050	0.174	0.182	0.211
Q4	0.763	0.106	0.224	0.147	0.146
Q5	0.743	0.164	0.261	0.035	0.218
Q6	0.186	0.110	0.760	0.195	0.186
Q7	0.213	0.051	0.729	0.106	0.255
Q8	0.222	0.062	0.741	0.100	0.213
Q9	0.219	0.076	0.774	0.063	0.183
Q10	0.208	0.143	0.726	0.149	0.191
Q11	0.129	0.104	0.206	0.179	0.831
Q12	0.242	0.091	0.245	0.039	0.717
Q13	0.170	0.076	0.275	0.097	0.690
Q14	0.209	0.165	0.128	0.118	0.730
Q15	0.214	0.097	0.179	0.096	0.753
Q16	0.096	0.782	0.094	0.245	0.079
Q17	0.126	0.757	0.126	0.295	0.099
Q18	0.040	0.750	0.075	0.283	0.117
Q19	0.129	0.758	0.049	0.256	0.139
Q20	0.055	0.824	0.077	0.161	0.082
Q21	0.112	0.283	0.202	0.730	0.103
Q22	0.168	0.243	0.040	0.770	0.086
Q23	0.097	0.336	0.132	0.716	0.120
Q24	0.133	0.190	0.150	0.791	0.090
Q25	0.131	0.315	0.106	0.720	0.151

Chapter 4 Findings

4.1 Introduction

The factors influencing consumer purchase intention for new energy vehicles of Ideal Brand were sorted out through a literature review. Using the quantitative research method, the reliability and validity of the collected questionnaires were analyzed to determine the validity of the collected data. In order to further understand the relationship between the variables, the data were analyzed by descriptive statistics, correlation analysis, and regression analysis. Through the analysis, the hypotheses were verified, and the interactions among the variables in the consumer purchase intention influencing factor model were clarified.

4.2 Description of Statistical Variables

In this study, a total of 410 questionnaires were distributed and 410 questionnaires were collected in the process of analyzing the study. At the same time, the questionnaire that took not more than 40 seconds was excluded. Finally, 403 valid questionnaires were obtained through the data analysis of the survey collection, which meets the requirements of the sample size.

In this study, there are 209 men, accounting for 51.9%, and 194 women, accounting for 48.1%, which meets the gender requirements of sample random sampling. In the process of the survey about the age of the sample, there were 65 respondents aged 18 to 25 years old, which accounted for 6.1%; 121 respondents aged 26 to 35 years old, which accounted for 30%; 124 respondents aged 36 to 45 years old, which accounted for 30.8%; 91 respondents aged 46 to 55 years old, which accounted for 22.6%; and 2 respondents aged over 55 years old, which accounted for 0.5%. In the course of the survey about income, the number of people whose income is less than 3,000 yuan is 53, accounting for 13.2%; the number of people whose income is between 3,001 and 6,000 yuan is 129, accounting for 32.0%; the number of people whose income is between 6,001 and 10,000 yuan is 161, accounting for 40.0%; the number of people whose income is between 10,001 and 20,000 yuan is 13, accounting for 3.2%; and the number of people whose income is above 20,000 yuan was 47, accounting for 11.7%. The survey data showed that in terms of the education level of the respondents, there were 241 respondents in high school and below, accounting for 59.8%; 137 respondents in undergraduate, accounting for 34.0%; 14 respondents in master's degree, accounting for 3.5%; and 11 respondents in others, accounting for 2.7%. See Table 4.1. The sample as a whole meets the statistical requirements.

Table4.1 Descriptive Statistical Analysis

Item	Options	Frequency	Percent%
Gender	Male	209	51.9
	Female	194	48.1
Age	18-25	65	16.1
	26-35	121	30.0
	36-45	124	30.8
	46-55	91	22.6
	above 55	2	0.5
Income	below 3000	53	13.2
	3001-6000	129	32.0
	6001-10000	161	40.0
	10001-20000	13	3.2
	Above20000	47	11.7
Education	High school and below	241	59.8
	Undergraduate	137	34.0
	Master's degree	14	3.5
	Others	11	2.7
Condition	Purchased a new energy vehicle in the past	403	100.0
Total		403	100.0

4.3 Results of the Study

4.3.1 Correlation Analysis

The main role of correlation analysis is to define the relationship between individual variables. When the coefficients of two variables are correlated and the correlation is significant, it means that there is a correlation

between the two variables. When the correlation between two variables is not significant, it means that there is no correlation between the two variables. This study analyzes the relationship between the variables of functional value, emotional value, social value, green value, economic value, and consumer purchase intention. The correlation coefficients illustrate the factors influencing consumer purchase intentions for new energy vehicles of Ideal Brand. According to the analysis results in Table 4.2, the relationship between each variable was obtained.

Table 4.2 Correlation Between Variables (Pearson Correlation Matrix)

Variable	Functional Value	Emotional Value	Social Value	Green Value	Economic Value	Consumer Purchase Intention
Functional Value	1					
Emotional Value	.564**	1				
Social Value	.534**	.556**	1			
Green Value	.300**	.296**	.324**	1		
Economic Value	.391**	.383**	.361**	.624**	1	
Consumer Purchase Intention	.487**	.444**	.470**	.455**	.501**	1

NOTE: *P<0.05, **P<0.01, ***P<0.001

According to the table, that the Pearson correlation coefficients of functional value, emotional value, social value, green value, economic value, and consumer purchase intention are between 0.296 and 0.624, which is smaller than 0.9 and $p < 0.01$, indicating that there is a correlation between the variables and it is positive.

The Pearson correlation coefficient between functional value and emotional value is 0.564, and $P < 0.01$, indicating that there is a correlation between functional value and emotional value, and it is a general correlation.

The Pearson correlation coefficient between functional value and social value is 0.534, and $P < 0.01$, indicating that there is a correlation between functional value and social value, and it is a general correlation.

The Pearson correlation coefficient between functional value and green value is 0.300, and $P < 0.01$, indicating that there is a correlation between functional value and green value, and it is a general correlation.

The Pearson correlation coefficient between functional value and economic value is 0.391, and $P < 0.01$, indicating that there is a correlation between functional value and economic value, and it is a general correlation.

The Pearson correlation coefficient between functional value and consumer purchase intention is 0.487, and $P < 0.01$, indicating that there is a correlation between functional value and consumer purchase intention, and it is a general correlation.

The Pearson correlation coefficient between emotional value and social value is 0.556, and $P < 0.01$, indicating that there is a correlation between emotional value and social value, and it is a general correlation.

The Pearson correlation coefficient between emotional value and green value is 0.296, and $P < 0.01$, indicating that there is a correlation between emotional value and green value, and it is a general correlation.

The Pearson correlation coefficient between emotional value and economic value is 0.383, and $P < 0.01$, indicating that there is a correlation between emotional value and economic value, and it is a general correlation.

The Pearson correlation coefficient between emotional value and consumer purchase intention is 0.444, and $P < 0.01$, indicating that there is a correlation between emotional value and consumer purchase intention, and it is a general correlation.

The Pearson correlation coefficient between social value and green value is 0.324, and $P < 0.01$, indicating that there is a correlation between social value and green value, and it is a general correlation.

The Pearson correlation coefficient between social value and economic value is 0.361, and $P < 0.01$, indicating that there is a correlation between social value and economic value, and it is a general correlation.

The Pearson correlation coefficient between social value and consumer purchase intention is 0.470, and $P < 0.01$, indicating that there is a correlation between social value and consumer purchase intention, and it is a general correlation.

The Pearson correlation coefficient between green value and economic value is 0.624, and $P < 0.01$, indicating that there is a correlation between green value and economic value, and it is a general correlation.

The Pearson correlation coefficient between green value and consumer purchase intention is 0.455, and $P < 0.01$, indicating that there is a correlation between green value and consumer purchase intention, and it is a general correlation.

The Pearson correlation coefficient between economic value and consumer purchase intention is 0.501, and $P < 0.01$, indicating that there is a correlation between economic value and consumer purchase intention, and it is a general correlation.

Through the above analysis, the factors influencing consumer purchase intention of Ideal Brand New Energy Vehicles include functional value, emotional value, social value, green value, and economic value; therefore, to improve the consumer purchase intention, it is necessary to start from five aspects and adopt reasonable and scientific management methods. The correlation between the variables shows that each variable plays a certain role in the model, reflecting the rationality of the model construction.

4.3.2 Multiple Regression Analysis

Multiple regression analysis was applied to the data to determine the relationship between the dependent variable consumer purchase intention and the independent variables functional value, emotional value, social value, green value, and economic value. The regression equation was significant, $F = 55.298$, $p < 0.001$. The Durbin-Watson test value was 1.919, which is between 1.8 and 2.2. The data were independent and met the linear regression requirements. In the diagnostic result of covariance, the VIF values of functional value, emotional value, social value, green value, and economic value are 1.108, 1.001, 1.085, 1.073, 1.051. The VIFs are all close to 1, which follows the requirements, indicating no covariance in the data. Functional value ($\beta = 0.391$,

$p < 0.05$), emotional value ($\beta = 0.498$, $p < 0.05$), social value ($\beta = 0.363$, $p < 0.05$), green value ($\beta = 0.482$, $p < 0.05$), economic value ($\beta = 0.699$, $p < 0.05$) significantly and positively affect consumer purchase intention. The variables together explain the weight of consumer purchase intention as 64.1%, which meets the requirement.

Table 4.3 Multiple Regression Analysis

Item	Unstd. B	Std. Beta	t	Sig.	VIF	F	Durbin-Watson
C	0.747		3.981	0.000			
Functional Value	0.391	0.203	4.045	0.000	1.108	55.298***	1.919
Emotional Value	0.498	0.321	1.996	0.047	1.001		
Social Value	0.363	0.201	3.454	0.001	1.085		
Green Value	0.482	0.277	3.560	0.000	1.073		
Economic Value	0.699	0.411	4.059	0.000	1.051		
R Square	0.641						
Adjusted R Square	0.629						

NOTE: * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$

According to the multiple regression analysis, the influential relationship between each variable is obtained:

$$\text{Consumer Purchase Intention} = 0.747 + 0.391 \text{Functional Value} + 0.498 \text{Emotional Value} + 0.363 \text{Social Value} + 0.482 \text{Green Value} + 0.699 \text{Economic Value}$$

Therefore, according to the results of the data analysis, functional value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, which supports hypothesis H1. Emotional value has a positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, which supports hypothesis H2. Social value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, which supports hypothesis H3. Green value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, which supports hypothesis H4. Economic value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, which supports hypothesis H5.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study focuses on the influencing factors of consumer purchase intention for Ideal Brand New Energy Vehicles. In this study, the Ideal Brand of new energy vehicles that has been widely used is selected as the specific research subject. After combing the literature of the purchasing decision theory and the sustainable development theory, the impacts of functional value, emotional value, social value, green value, and economic value were analyzed. The data processing software SPSS was used. The 403 valid questionnaire collected were tested for reliability, including exploratory factor analysis, correlation analysis, and regression analysis to test the hypotheses, and based on the results obtained from the research test, suggestions for promoting the sales of new energy vehicles were put forward.

5.1.1 The Influencing Factors that Affect the Purchase Intention for Ideal Brand New Energy Vehicles

By analyzing the theories of purchasing decision theory and sustainable development theory, this paper finds that functional value, emotional value, social value, green value, and economic value are the factors of consumer purchase intention of new energy vehicles. Through correlation analysis and regression analysis, Pearson's correlation coefficients of functional value, emotional value, social value, green value, economic value, and consumer purchase intention were 0.487, 0.444, 0.470, 0.455, 0.5010, which are less than 0.9 and $P < 0.01$. The correlation analysis shows that there is a correlation between consumer purchase intention of Ideal Brand New Energy Vehicle and the independent variables functional value, emotional value, social value, green value, economic value, and consumer purchase intention of an Ideal Brand new energy vehicle. Therefore, these factors affect consumer purchase intention of Ideal Brand New Energy Vehicles. At the same time, correlation analysis can also be concluded to show that there is a correlation between the variables.

5.1.2 Functional Value, Emotional Value, Social Value, Green Value, And Economic Value Have a Positive Effect on Consumer Purchase Intention

According to the data analysis, through correlation analysis and regression analysis. The regression analysis model was constructed in the regression analysis, which concluded that functional value ($\beta=0.391$, $p < 0.05$), emotional value ($\beta=0.498$,

$p < 0.05$), social value ($\beta = 0.363$, $p < 0.05$), green value ($\beta = 0.482$, $p < 0.05$), economic value ($\beta = 0.699$, $p < 0.05$) significantly and positively affect consumer purchase intention. This indicates that each variable is positively correlated with consumer purchase intention for Ideal Brand New Energy Vehicles. Among the factors influencing consumer purchase intention for Ideal Brand New Energy Vehicles, functional value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, supporting hypothesis H1. Emotional value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, supporting hypothesis H2. Social value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, supporting hypothesis H3. Green value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, supporting hypothesis H4. Economic value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles, which supports hypothesis H5. Therefore, it shows that each independent variable for functional value, emotional value, social value, green value, and economic value, has a positive effect on the dependent variable of consumer purchase intention. See Table 5.1.

Table 5.1 Hypothesis Testing

NO.	Hypothesis	Result
H1	Functional value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.	Supported
H2	Emotional value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.	Supported
H3	Social value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicle.	Supported
H4	Green value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.	Supported
H5	Economic value has a significant positive effect on consumer purchase intention for Ideal Brand New Energy Vehicles.	Supported

5.2 Recommendation

(1) Functional Value Perspective

It is necessary to accelerate the technological change within the enterprise, improve the core product technology of new energy vehicles, and

improve the quality and performance of the products to enhance consumers' confidence in purchasing. Since the emergence and development of new energy vehicles, the core issue that consumers are most concerned about has been the range of their batteries. According to the survey results, the most important issues for new energy vehicle companies to overcome include battery life, charging, and range time. Therefore, it is essential to prioritize research and development in the field of car battery and charging technology. By addressing consumer concerns about the technical aspects of new energy vehicles, we can significantly increase their intention to purchase these vehicles. Moreover, as a new industry with investment and risk, new energy vehicles require the joint participation of government, enterprises, and research institutes in technical research and development.

To enhance the functional value of the product, but also from professional after-sales service guarantee system to start, to allow customers to generate trust and perfect experience. Currently, the development of infrastructure such as charging facilities for new energy vehicles is not balanced in different regions, and consumers often suggest improvements to automotive service providers with fewer outlets, less efficient service management, and routine maintenance of vehicles that cannot be carried out promptly. Therefore, it is necessary to further improve the after-sales work of new energy vehicle companies, establish and enhance the relevant after-sales service network, and train high-quality maintenance personnel so that consumers can enjoy worry-free services. In addition, the grass-roots staff of new energy vehicles should be specially trained so that they can deeply realize the technology and environmental protection value of new energy vehicles. In this way, they can convey the company's product concepts to consumers in the process of communicating with them, and enhance consumers' awareness of and confidence in new energy vehicles.

To strengthen brand building and enhance the influence of brand value. In modern society, consumers attach increasing importance to product brands, and many consumers take it as a primary consideration. With high perceived brand value, customers' purchase intention will also be enhanced. Now it is the early stage of new energy development and promotion, there are not many new energy automobile brands with strong influence in China, and most consumers do not have a high brand recognition of new energy automobiles and lack purchase motivation. Therefore, in the process of product innovation, the enterprise concerned should also create a brand with clear positioning, enhance brand awareness through advertising and promotion and other means, and improve the quality of the whole brand, to increase the degree of customer trust and reputation of the company, and improve the company's brand value as a whole.

(2) Emotional Value Perspective

Consumers know a lot about new energy vehicles from online media and advertising marketing but lack personal experience and experience. Companies can invite users and the media to go for a test drive through offline experience activities, so that they can personally experience the driving pleasure brought by new energy vehicles, and the media can actively publicize them based on their test drive experience. In the field test drive, the field staff should not only use their professional skills to actively promote the new energy vehicles but also to build a good image for the enterprise with a positive and enthusiastic service attitude to enhance the consumers' emotional awareness of the new energy vehicles and to further enhance the purchase intention of the new energy vehicles based on this. In addition, to better improve the customer's sense of experience, each company can also jointly organize new energy electric vehicle expositions, etc., and customers in the real environment to carry out more emotional communication and interaction, to enhance the emotional value of the new energy vehicles and promote to the final purchase decision.

The charging range of new energy vehicles needs to be built on the premise that charging stations and other auxiliary infrastructure are perfect, that is to say, the consumer's intention to buy a car is closely related to the coverage of charging pile facilities and the convenience of their application. It is essential to eliminate users' concerns about charging, reduce the time and effort they need to spend on new energy vehicles and bring consumers a comfortable and convenient experience so that more users will be willing to try new energy vehicles. Therefore, China should take the initiative to integrate and manage the charging stations of new energy vehicles in China, improve the utilization rate of charging piles, and gradually promote them nationwide. In addition, it is necessary to safeguard and protect the legitimate interests of consumers from the perspectives of laws, and to regulate the basic construction of charging facilities. That promotes the positive relationship between consumers' perceived value and intention, and directly and powerfully influences consumers' enthusiasm for purchasing.

(3) Green Value Perspective

Consumers' green perceptions have an impact on the purchase behavior of new energy vehicles, so it is necessary to strengthen the publicity and popularization of environmental protection knowledge, improve consumers' environmental awareness and understanding of the energy-saving and low-carbon attributes of new energy vehicles, to prompt them to make environmentally friendly consumption decisions. At the same time, enterprises should research more advanced green production technology, and by Chinese laws and regulations and industry standards for production operations, to effectively improve the value

of new energy vehicles. Increase publicity on the types of exhaust and air pollution emitted by fuel vehicles, so that the public can realize the current plight of China's lack of resources and the extent of environmental pollution, and stimulate the public's enthusiasm and determination to implement environmental protection. At the same time, by comparing the performance indicators and costs of new energy vehicles and fuel vehicles, consumers will realize the low cost and high environmental protection characteristics of new energy vehicles, thus stimulating the motivation of consumers to buy new energy vehicles. When human beings realize the seriousness of environmental problems and the harm they cause to their bodies, consumers will pursue a "green" lifestyle. The popularization of environmental protection knowledge can also enhance consumers' attention to new energy vehicles and their trust in new energy vehicles, which can effectively promote consumers' green purchases.

Consumers' green perception have a certain impact on the purchase intention of new energy vehicle consumers, so it is necessary to strengthen the publicity and popularization of environmental protection knowledge, improve consumers' environmental awareness and understanding of the energy-saving and low-carbon attributes of new energy vehicles, to prompt them to make environmentally friendly consumption decisions. At the same time, enterprises should research more advanced green production technology, and by Chinese laws and regulations and industry standards for production operations, to effectively improve the value of new energy vehicles. Increase publicity on the types of exhaust and air pollution emitted by fuel vehicles, so that the public can realize the current plight of China's lack of resources and the extent of environmental pollution, and stimulate the public's enthusiasm and determination to implement environmental protection. At the same time, by comparing the performance indicators and costs of new energy vehicles and fuel vehicles, consumers will realize the low cost and high environmental protection characteristics of new energy vehicles, thus stimulating the motivation of consumers to buy new energy vehicles. When human beings realize the seriousness of environmental problems and the harm they cause to their bodies, consumers will pursue a "green" lifestyle. The popularization of environmental protection knowledge can also enhance consumers' concern and trust in new energy vehicles, which promotes consumers' green purchasing.

Enterprises should carry out marketing campaigns for new energy vehicles. Today's society pursues a sustainable way of development, the consumption pattern has undergone a profound change, and the green consumption concept is in line with the current values. As people's environmental awareness has been enhanced and actively seek a healthy and environmentally friendly lifestyle, consumers are more willing to consume green products, including new energy vehicles. Therefore, new energy vehicle manufacturers can use market research, and a more in-depth understanding of consumer demand for purchase, to find an accurate target market

positioning, develop a marketing program to match the needs of consumers, and improve consumer satisfaction with the product. It is also necessary to increase the frequency of environmental protection publicity and advertisement dissemination, carry out on-site environmental protection activities such as experiential test drives, introduce consumers to the relevant knowledge of environmental protection, publicize the role of new energy vehicles in maintaining the physical and mental health of consumers, conserving natural resources and protecting the ecological environment, and create a green environmentally friendly atmosphere for the whole population. At the same time, the company's internal training on the green service quality of the staff creates a good service atmosphere, thereby improving the company's image in the minds of consumers.

(4) Economic Value Perspective

With China's financial support gradually weakening, the policy support for new energy vehicles is no longer strong. Therefore, it is urgent to develop a more comprehensive and effective incentive program that is not overly dependent on financial support. With the relatively strong purchasing power of urban residents in China's major cities such as Beijing and Shanghai, incentives such as licensing and charging fees for new energy vehicles during the use phase, as well as recycling and replacement policies for new energy vehicles, could be a much better way to promote purchasing behavior than direct cash incentives. Enterprises should also proactively work with China's policies to better enable customers to enjoy the policy dividends during the planning and marketing of their products. At the same time, local governments should respond by supporting these companies with cash grants and incentivizing the research and development of key core technologies, so that they can reduce costs, improve efficiency, bring more benefits to consumers, and increase the economic value of new energy vehicles.

Price is the most direct manifestation of consumer perceived value, and for companies to make product prices reach the most reasonable level in the minds of consumers, especially compared to other competitors to reflect "fairness", is a critical issue. That is, consumers value the price as the performance of the car with the car, as well as with the same level of fuel car prices than whether competitive, but also consider the use and maintenance costs and the value of the difference in the retention and so on. Therefore, while analyzing the performance and cost of the vehicle, companies should also conduct a comprehensive evaluation of the prices of other brands of vehicles and fuel vehicles of the same type. By adopting, for example, flexible pricing strategies that cater to younger groups, such as new energy vehicle battery rentals, they can demonstrate a higher perceived value in product prices.

(5) Social Value Perspective

New energy vehicles are emerging industries with development prospects, but their development is not yet perfect, and people's awareness and acceptance of them are still low. It is necessary to have a group of people who are willing to try new products to take the lead and publicize the stable and safe performance as well as the unique advantages of new energy vehicles through various ways so that the public's trust in it can be strengthened. To encourage consumers to buy new energy vehicles, education and publicity must first improve their awareness and comprehension of new energy vehicles. This includes informing consumers about new energy vehicles' environmental benefits, the significance of energy conservation and pollution reduction, and the benefits of new technologies. Simultaneously, the government can cut the cost of purchasing new energy vehicles through subsidy policies and tax incentives to encourage consumers to make purchases. Furthermore, the development of charging infrastructure is an important connection; consumers have a high desire for the convenience of charging facilities, and resolving the charging issue can boost consumer confidence in purchasing new energy vehicles. Brand building is also important; automakers can improve brand image, product quality, and other factors to increase consumer trust and goodwill towards new energy cars. Finally, social influence is a very essential aspect. The dissemination of the social values of new energy vehicles can effectively influence consumers' purchasing decisions and stimulate their motivation to buy new energy vehicles by leveraging the publicity and promotion of social leaders and celebrities, as well as the participation of social organizations. To summarize, many different variables can work together to increase consumer interest in purchasing new energy vehicles.

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Appendix Questionnaire

Dear Sir/Madam,

Thank you for your participation in this questionnaire survey. The survey will be conducted anonymously, and your relevant information will be kept confidential. Thank you again for your cooperation.

Part I :

1. Gender? A Male B Female
2. Age? A 18-25 B26-35 C36-45 D46-55 E above 55
3. Your monthly income ? A below 3000 B 3001-6000 C 6001-10000 D 10001-20000 E Above20000
4. Your level of education?
A Highschool and below B Undergraduate C Master's degree D Others
5. Have you purchased a new energy vehicle in the past?
AYES B NO

Part II : Please judge to what extent you agree with the following statement; choose the most appropriate option, and mark the corresponding number " √ . " The questionnaire used a Likert scale, ranging from 1 to 5 in which one indicates strongly disagree (or strongly disagree), two indicates relatively disagree (or relatively disagree), three indicates neutral, four indicates relatively agree (or relatively agree), and five indicates strongly agree (or strongly agree)

Measuring item	Strongly disagree	Disagree	General	Agree	Strongly agree
Functional Value					
I think the performance of new energy vehicles on the market is more stable at present					
I think the quality of the current new energy vehicles is very reliable					
I think the current quality standard of new energy vehicles is acceptable.					
I think the quick start of new energy vehicles is attractive					
I think the low-noise driving of new energy vehicles is attractive					
Emotional Value					
I like to use new energy vehicles					
I recognize the advantages of new-energy vehicles over fuel vehicles.					
I feel relaxed when driving a new energy vehicle					
I feel comfortable and happy driving a new energy vehicle.					
Driving a new energy vehicle makes me look different					
Social Value					
Using a new energy vehicle helps me make a good impression on others					
Using a new energy vehicle can help me win more compliments.					
Using a new energy vehicle can help me build a positive and healthy image of myself.					
Using a new energy vehicle can improve people's perception of me.					

Using new energy vehicles makes others feel that I have a sense of social responsibility					
Green Value					
Using new energy vehicles can help improve the ecological environment					
Using new energy vehicles will benefit the development of society					
Using new energy vehicles can help improve environmental awareness					
Use of new energy vehicles helps improve sustainable development					
Use of new energy vehicles helps save energy					
Economic Value					
I think the current price of new energy vehicles is reasonable.					
I think it is a good choice to buy a new energy vehicle at the current market price.					
The price subsidy policy makes me feel that new energy vehicles are very attractive.					
The tax incentives make me feel that new energy vehicles are very attractive.					
I think buying a new energy vehicle is a good choice with good cost performance.					
Consumer Purchase Intention					
I am willing to collect and learn more information about new energy vehicles.					
I look forward to more types of new energy vehicles coming onto the market.					
I will prioritize the purchase of new energy vehicles over traditional vehicles.					
I will actively advise people around me					

to buy new energy vehicles					
I will experience more products of new energy vehicles					

