



**STUDY ON THE INFLUENCE OF NIO'S CUSTOMER  
PERCEIVED VALUE ON PURCHASE INTENTION IN BEIJING**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF  
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of International Master of Business Administration in International  
Business Management

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### ABSTRACT

Nowadays, the world is facing the challenges of energy crisis and environmental problems. In recent years, with the continuous enhancement of environmental awareness and policy support around the world, the new energy vehicle industry has developed rapidly. In China, technological breakthroughs and increased market demand provide opportunities for the development of new energy vehicles, but also many challenges. There is still a large part of the market has not yet been developed. The development history of the new energy vehicle industry is not yet several decades, so the theoretical research in related fields is still immature and needs to be explored in depth. At present, most researchers focus on the analysis of new energy vehicle customer purchase intention from the perspective of factors such as policy and public awareness, while few scholars study consumer purchase intention or behavior from the perspective of customer relationship management. Therefore, research in this field is necessary and urgent. In order to improve the research in this direction in the field of new energy vehicles, this paper adopts a quantitative research method to explore the impact of customer perceived value on their purchase intention.

In this study, NIO, a Chinese independent new energy vehicle brand, which is one of the most successful start-ups in China's automobile manufacturing industry, was selected as the research object. Beijing has played an important leading role in the promotion of electric vehicles, and there is a government policy to restrict the license plate of fuel-powered vehicles, so this paper chooses Beijing, China as the research area. This study has the following four objectives: 1) To identify the influence of social value in perceived value on customer purchase intention of NIO, 2) To identify the influence of emotional value in perceived value on customer purchase intention of NIO, 3) To identify the influence of functional value in perceived value on customer

purchase intention of NIO, 4) To identify the influence of price value in perceived value on customer purchase intention of NIO. In this way, can understand consumers' purchasing behavior and demand characteristics, and provide support for improving product competitiveness and market share.

After determining the use of quantitative research methods, after understanding the relevant theoretical literature such as customer perceived value and purchase intention, combined with relevant research results, the influencing relationship model between factors was constructed, relevant hypotheses were put forward, and the questionnaire was designed and the data were collected based on the model and the characteristics of the company's products. A total of 700 questionnaires were distributed and 624 were returned, resulting in 572 valid questionnaires. After data collection, the questionnaire data were analyzed to draw conclusions, and the results can provide theoretical guidance and reference for the further development of the new energy vehicle industry.

The results of this study confirmed that: 1) The social value in the customer perceived value has a positive impact on the customer purchase intention of NIO, 2) The emotional value in the customer perceived value has a positive impact on the customer purchase intention of NIO, 3) The functional value in the customer perceived value has a positive impact on the customer purchase intention of NIO, 4) The price value in the customer perceived value has a positive impact on the customer purchase intention of NIO, that is, improving each dimension of the perceived value can improve the customer purchase intention of NIO. This requires that the new energy vehicle enterprises must pay attention to the perceived value of customers and enhance the purchase intention of customers by improving each dimension of the perceived value of customers, so as to promote the sales of new energy vehicle products. The findings could help NIO to improve market share and competitiveness, will promote the development of the new energy automotive industry.

**Keywords:** perceived value, purchase intention, new energy vehicle

## 摘要

当今世界面临着能源危机和环境问题的挑战,近几年随着全球范围内环保意识和政策支持不断增强,新能源汽车行业迅速发展。在中国,技术的突破和市场需求的增加为新能源汽车领域的发展提供了机遇同时也有诸多挑战,仍有大部分市场尚未被开发。新能源汽车产业发展历程尚不足几十年,因此相关领域的理论研究仍未成熟,亟待深入探究。目前,大部分研究人员侧重于政策和公众意识等因素角度对新能源汽车客户购买意愿进行分析,鲜有学者从客户关系管理的角度研究消费者购买意愿或行为,因此针对本领域的研究是必要的也是紧迫的。为了完善新能源汽车领域上在这一方向上的研究,本文采用定量的研究方式,探讨客户感知价值其购买意愿的影响。

本研究以中国自主新能源汽车品牌蔚来为研究对象,蔚来作为中国新能源汽车的自主品牌,是具有代表性的中国汽车制造最成功的初创企业之一。北京在电动汽车推广方面发挥了重要引领作用,并且有限制燃油汽车车牌的政府政策,因此本文选取中国北京为研究区域。本文有以下四个目的:1)探究感知价值中的社会价值对蔚来汽车公司客户购买意愿的影响,2)探究感知价值中的情感价值对蔚来汽车公司客户购买意愿的影响,3)探究感知价值中的功能价值对蔚来汽车公司客户购买意愿的影响,4)探究感知价值中的价格价值对蔚来汽车公司客户购买意愿的影响。以此可以了解消费者的购买行为和需求特征,并为提升产品竞争力和市场份额提供支持。

确定运用定量研究方法后,对顾客感知价值、购买意愿等相关理论文献进行了解后,结合相关研究成果,构建因素间的影响关系模型,提出了相关假设,结合模型以及公司产品特点设计了问卷并进行数据收集。调查问卷总共发放了700份,收回了624份,有效问卷为572份。数据收集后,对问卷数据进行了分析从而得出结论,其结果可以为新能源汽车行业的进一步发展提供理论指导和借鉴。

本次研究结果证实了:1)客户感知价值中的社会价值对蔚来汽车公司的客户购买意愿有正向影响,2)客户感知价值中的情感价值对蔚来汽车公司的客户购买意愿有正向影响,3)客户感知价值中的功能价值对蔚来汽车公司的客户购买意愿有正向影响,4)客户感知价值中的价格价值对蔚来汽车公司的客户购买意愿有正向影响,即提高感知价值的各个维度都可以提高蔚来公司的客户购买意愿。这就要求新能源汽车企业必须重视客户的感知价值,通过提升客户的感知价值的各个维度来提升客户的购买意愿,从而促进新能源汽车产品的销量。研究结果可以帮助蔚来汽车公司提高市场份额和竞争力,也会推动整个新能源汽车行业的发展。

**关键词:** 感知价值, 购买意愿, 新能源汽车

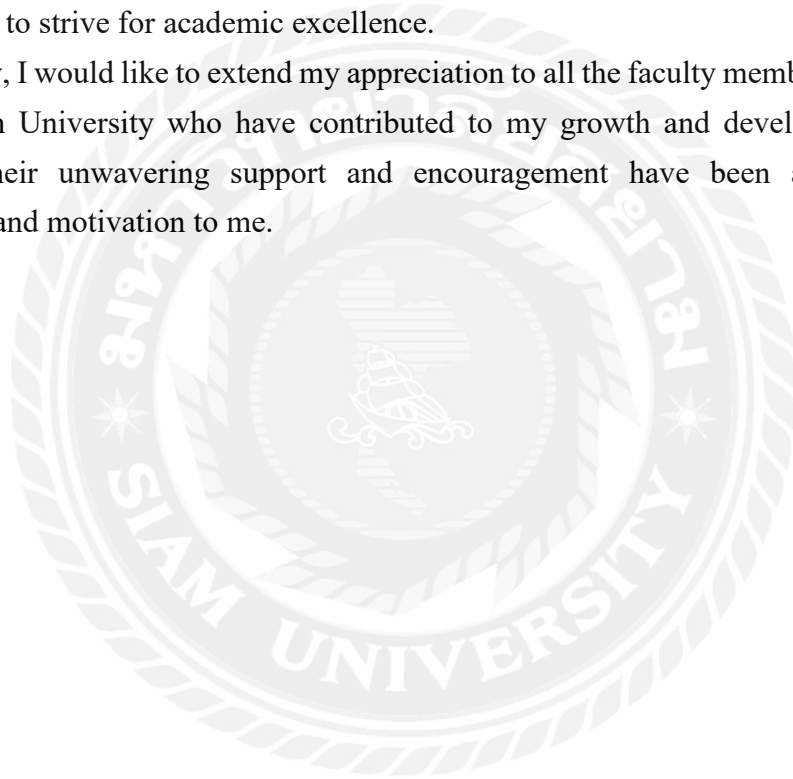
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Pang Jiabin



## Declaration

*I, PANG JIAXIN, hereby certify that the work embodied in this independent study entitled “Study On The Influence Of NIO's Customer Perceived Value On Purchase Intention in Beijing” is result of original research and has not been submitted for a higher degree to any other university or institution.*

*Pang Jiaxin*



(PANG JIAXIN)

Aug21, 2023

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# Chapter 1 Introduction

## 1.1 Research Background

In modern society, automobile has become one of the indispensable consumer goods in the life of the general public. With the continuous progress of science and technology, the quality and performance of automobiles are also improving, and it has become one of the consumer goods that people pay more and more attention to. With the development of economy and consumption upgrading, people's demand for cars is also changing. At the same time, the competition in the automobile market is becoming more and more fierce, and new energy vehicles (NEVS) have become a new market in China. With the improvement of environmental awareness and policy support, more and more consumers have begun to pay attention to and purchase new energy vehicles. This provides a new opportunity for domestic and foreign car companies. At the same time, the Chinese government also actively promotes the development of new energy vehicles, encourages enterprises to strengthen technology research and development and innovation, and promotes the application and popularization of new energy vehicles. Foreign car companies with strength have been attracted by the new energy market, and have expanded their products and markets (Huang, 2022).

With the attention of countries around the world to the development of new energy vehicles, it has become the choice of The Times for new energy vehicles to replace traditional fuel vehicles, and the general trend. “The New Energy Vehicle Industry Development Plan (2021-2035)”, reviewed and promulgated by the Chinese government in 2020, states that the transaction volume of new energy vehicles will account for about 20% of vehicles in 2025, and the transaction volume of pure electric vehicles will dominate by 2035. Therefore, it is very important and necessary to analyze the diffusion link of new energy vehicles under the situation that the development of new energy vehicles is still facing such problems as immature research and development technology, high production cost and inadequacy. This can push the Chinese government and the development manufacturers of energy vehicles to make strategic choices to promote the development of new energy vehicles, and then effectively promote consumers to choose new energy vehicles (Shi & Cheng, 2023).

The new energy vehicle industry in our country is facing an unprecedented opportunity for development, but it will inevitably meet many challenges. For example, the market competition is increasingly fierce, the development impetus needs to be updated and transformed, and the supply of core technologies needs to be improved. Moreover, with the decline of subsidies year by year, it is difficult to further improve sales, and sales were once in the cold winter period. Many scholars

have carried out research to analyze what factors affect consumers' purchase intention. It is clear that the mass adoption of electric vehicles in the near future depends to a large extent on private consumers. Therefore, exploring what are the influencing factors that influence consumer use of new energy vehicles is crucial for stakeholders and government decision-making. In many places, electric vehicles are still new automotive products for consumers. The number of consumers in countries and regions that already own or drive new energy vehicles is relatively low (Li, Long, Chen, & Geng, 2017).

Beijing has the largest number of cars in China. By the end of 2017, the total number of cars in Beijing reached 5.64 million. The growing urban population and increasing car ownership lead to a sharp rise in urban energy consumption and carbon emissions. Therefore, Beijing shoulders the responsibility of energy saving and emission reduction. For energy saving and emission reduction, Beijing became one of the first cities to demonstrate and promote electric vehicles in 2009. To further promote electric vehicles, the Beijing municipal government has proposed that the number of electric vehicles should reach 400,000 by 2020 (Huang & Ge, 2019).

Founded in 2014, NIO is a company focused on intelligent electric vehicle manufacturing. As one of the most successful start-ups in China's automobile manufacturing, NIO is a global start-up brand. It has set up R&D and production institutions in 12 places around the world, including Shanghai, Beijing, SAN Jose, Munich and London, bringing together thousands of the world's top talents in the automobile, software and user experience industries, and initially established a nationwide user service system in the Chinese market (Jiang, Wei, Guan, & Yang, 2021). Its technology research and development, marketing mode and development strategy have strong universal reference value for the development of similar enterprises and the whole automobile industry.

## **1.2 Research Problems**

The new energy vehicle industry in our country is facing unprecedented opportunities for development, but it is also bound to meet many challenges. For example, the market is increasingly competitive and requires renewal and transformation, and the supply of development drivers and core technologies needs to be improved. Moreover, as subsidies decline year by year, sales are difficult to further increase, sales once fell into the winter. Many scholars have studied and analyze which factors influence consumer purchase intention. In many places, electric vehicles are still new to consumers, and there is a large market that is still untapped

(Li, Long, Chen, & Geng, 2017).

China's new energy vehicle industry is developing rapidly, but its development history is only a few decades old. The theoretical research on new energy vehicles, too, is not yet mature. It is in line with the development trend and urgent to study the purchase intention of new energy vehicle customers. At present, most researchers in the study of the purchase intention of new energy vehicle customers still focus on their government-level guidance and related policies, the public's green cognitive concept and other perspectives to analyse, but few scholars from the perspective of customer relationship management to analyse the purchase intention of consumers or their purchase behaviour.

Customer perceived value is one of the key factors for the success of enterprises. Enterprises need to focus on improving customer perceived value while pursuing profit maximization, so as to enhance customers' dependence and trust on enterprises, so as to obtain long-term competitive advantages (Gustafsson, Johnson, & Roos, 2005). Taking NIO as an example, this study selects the customer perceived value in the objective relationship management theory as the research focus to explore its impact on the purchase intention of new energy vehicle consumers. By referring to relevant literature and theories, the relationship between customer perceived value and customer purchase intention is found out. This paper takes the four-layer dimension theory of customer perceived value of consumer durables proposed by scholars in related fields as the research framework (Sweeney & Soutar, 2001). Limits the research scope to Beijing, China, establishes the research framework and optimizes it. By putting forward hypotheses, collecting data, analyzing the data, and finally combining the actual operation and sales of NIO, we find out the aspects that can be optimized and put forward suggestions for improvement.

Compared with previous studies, this paper tries to put forward more targeted marketing suggestions for new energy automobile enterprises from the perspective of behavior subjects, namely customers, combined with the relevant knowledge of customer relationship management. To study the influence of NIO's customer perceived value on its customers' purchase intention, and put forward optimization strategies at the level of perceived value, so as to improve the sales volume of NIO. The results also have reference value for other Chinese new energy vehicle brands.

### **1.3 Objective of the study**

Perceived value has an important impact on consumer purchase intention (Zeithaml, 1988). This study aims to explore the relationship between customers'

perceived value of NIO and their purchase intention. Specifically, we will explore the relationship between customers' perceived social value, perceived emotional value, perceived functional value and perceived price value dimensions of NIO and their purchase intention (Sweeney & Soutar, 2001).

Therefore, the research purpose of this paper is to verify the following four points:

1. To identify the influence of social value in perceived value on customer purchase intention of NIO.

2. To identify the influence of emotional value in perceived value on customer purchase intention of NIO.

3. To identify the influence of functional value in perceived value on customer purchase intention of NIO.

4. To identify the influence of price value in perceived value on customer purchase intention of NIO.

Through study, we can more comprehensively understand the performance of new energy vehicle products in the market, consumer purchasing behavior and demand characteristics, better meet customer needs, formulate targeted improvement plans, and provide strong support for enterprises to enhance product competitiveness and market share.

#### **1.4 Scope of the study**

This study examines the relationship between customer perceived value and customer willingness to buy in the context of customer relationship management. The study takes customer perceived value, the most fundamental aspect of customer management, as the starting point, and combines it with theoretical research on new energy vehicles to investigate the relationship between customer perceived value and customer willingness to buy.

This paper limits the scope of the study to the Beijing region for two reasons:

1. As one of the first cities to demonstrate and promote electric vehicles in China, Beijing has played an important leading role in the promotion of electric vehicles (Huang & Ge, 2019). Large cities with more serious tailpipe emissions are the key targets for the regional promotion of electric vehicles. In addition, there is no significant difference in demand for electric vehicles between major cities such as Shanghai, Beijing and Chongqing (Miao, Xu, Zhang, & Jiang, 2014).

2. Beijing's lottery policy has squeezed consumers' demand for traditional fuel vehicles, and consumers who have no hope of buying traditional fuel vehicles can only choose new energy vehicles. In addition, new energy vehicle license plates can be



purchased according to the order of application, and the license plate allocation policy provides convenience for consumers eager to buy cars. Under such a policy environment, by choosing Beijing as the study area, we can largely avoid the interference of traditional fuel vehicles on consumers' purchase intention of new energy vehicles, and only focus on the new energy vehicle industry.

## **1.5 Research Significance**

Customer perceived value is one of the important key factors for the success of enterprises. Enterprises need to focus on improving customer perceived value while pursuing profit maximization, so as to obtain long-term competitive advantages (Asgarpour, Hamid, Sulaiman, & Asgari, 2014). Therefore, the research has important practical and theoretical significance.

For NIO, the results of this study help to understand consumer needs and formulate more accurate product development and marketing plans, so as to improve the competitiveness and market share of the company in the market. At the same time, the research results also help to improve customer satisfaction and loyalty, which is crucial for the long-term development of NIO.

The results of this study also have important reference value for the new energy vehicles market in China. By understanding the relationship between consumers' perceived value and purchase intention, it is not only for their own precise marketing, but also for other independent brand enterprises to provide more scientific market strategic planning and improve their competitiveness in the market.

From a theoretical point of view, this study has supplemented and improved the theoretical results of related research on the automobile market, and provided new ideas and directions for the research on the whole automobile market. The automobile market is a complex market, involving a variety of factors, such as consumer psychology, product design, marketing strategy and so on. It is also a challenging subject to study. This study provides a new thinking Angle and theoretical basis for the study of the automobile market through in-depth analysis of the relationship between consumer perceived value and purchase intention. In addition, this study can also provide a reference for consumers to help them better understand the advantages and characteristics of NIO new energy vehicles and make more rational purchase decisions.

In summary, the practical and theoretical significance of this study cannot be underestimated, and it has important reference value and significance for the development of NIO and the whole Chinese new energy vehicle market.

## **Chapter 2 Literatures Review**

When studying the effect of perceived value on customer purchase intention of NIO's, it is necessary to conduct an extensive review and analysis of the relevant literature in this field. In the early research, it was found that the perceptual value of the vehicle was more important than the practical value. When buying a vehicle, consumers paid more attention to the perceptual experience that the vehicle could give them, such as comfort, luxury, quality, etc., instead of just considering the function and practicality of the vehicle. Therefore, many studies have focused on uncovering the mechanism of action of perceptual factors in car purchase decisions. In recent years, literature on the purchase intention of new energy vehicles has been emerging. Some literature focuses on the relationship between the price and quality of NEVs, while others focus on comparing the environmental and energy utilization advantages and disadvantages of NEVs and conventional fuel vehicles. But, this kind of literature on the relationship between perceived value and purchase intention has not been deeply explored. There is some literature exploring the relationship between different feature types and purchase intention in other brands of BEVs or hybrids. In the literature on the purchase intention of new energy vehicles, most researchers focus on factors such as policy and public awareness. This literature review will focus on the relationship between perceived value and purchase intention, which can provide ideas for in-depth research in the new energy vehicle industry and improve the deficiencies of research results in this area of new energy vehicle enterprises.

### **2.1 Purchase intention Theory**

Engel proposed the EBK model theory in 1968, which provided a more complete and clear theory of consumer behavior. The focus is on the analysis of the purchase decision process. The whole model is divided into four parts: the central control system, that is, the consumer's psychological activity process; Information processing; The decision-making process; According to the EKB model, the consumer's decision-making process consists of five steps: problem recognition, information collection, program evaluation, selection, and purchase of results. If the products purchased by consumers can not meet their expected needs, it will cause dissatisfaction, followed by consumer complaints about the products and the reduction of brand loyalty; If the purchased product can meet the original expectations, the probability of repeat purchase of the same brand will be increased, and then the brand loyalty will be increased (Mohanty, Ramesh, & Kamat, 2020).

John Howard and Jagdish Sheth believe that the purchase intention is an important part of the purchase decision, and the generation and realization of the purchase decision are driven by both the consumer's will and the consumer's decision (Howard &

Sheth, 1969).

Mehrabian and Russell proposed SOR model in 1974, that is, "stimulus-organism-response". This model believes that consumers' purchase intention comes from consumers' physiological and psychological factors, and also comes from external environmental factors. Under the stimulation of the external environment, the consumer's internal trust degree is affected, and then the consumer's stronger purchase intention is formed, and finally the purchase behavior is implemented (Mehrabian & Russell, 1974).

Fishbein said the subjective probability of a customer's purchase behavior is his purchase intention (Fishbein, 1975).

Mullet and Karson proposed that purchase intention stems from the formation of consumers' subjective choices. In the process of recognizing a product, consumers are stimulated by external conditions, which in turn affects their purchase decisions (Mullet & Karson, 1985).

Dodds and other scholars said purchase intention means that consumers have a subjective probability or possibility to buy a particular product (Dodds, Monroe, & Grewal, 1991).

Ajzen provides a comprehensive theoretical framework for analyzing people's purchase intentions and how their purchase behavior is shaped. He argues that in purchasing decisions, people's purchase intentions are directly influenced by their attitudes, subjective norms, and perceived control. A person with a high level of perceived behavioral control also has higher controllability and intention for his purchase decision, that is, it is easier to convert purchase intention into actual action (Ajzen, 1991).

Nena Lim's research said consumers' purchase intention directly affects their purchase behavior, and therefore becomes an important indicator of customer purchase behavior. Purchase intention includes whether consumers are interested in learning about the product, whether they have purchase intention, and choose to click the link on social media platforms, actually purchase, or purchase in a physical store. Comprehensive consideration of consumer purchase intention, can be evaluated through these four indicators (Lim, 2003).

Morwitz believes that purchase intention is one of the important factors affecting consumer purchase behavior, but whether purchase intention will be transformed into actual purchase behavior also depends on other factors, such as personal, social, cultural and environmental factors. The authors emphasize that companies need to understand consumers' purchase intention, but also pay attention to the difference between consumers' actual purchase behavior and purchase intention, so as to better

develop marketing strategies and improve sales (Morwitz, 2014).

Mirabi and other scholars summarized the purchase intention, which can be defined as the situation in which consumers tend to buy a certain product under certain conditions, and it can be used to explore the reasons for consumers to buy a particular brand. The customer's purchase decision is a complex process, and the purchase intention is usually related to the consumer's behavior, perception and attitude. Purchase intention can be used as an effective tool to predict the purchase process (Mirabi, Akbariyeh, & Tahmasebifard, 2015).

Degirmenci and Breitner studied the impact of environmental performance on consumer willingness to purchase electric vehicles in 2017, comparing price value and range confidence, and ultimately concluding that environmental performance of electric vehicles is a better predictor of attitudes and purchase intentions than price value and range confidence (Degirmenci & Breitner, 2017).

Jizi Li and other scholars show that the policy mix has a great impact on consumers' purchase intention. The policies and measures introduced by the government can effectively improve consumers' purchase intention for new energy vehicles, and reduce consumers' perception of uncertainty and risk in these vehicles (Li, Zhou, Yu, & Liu, 2020).

Based on the above review of the existing literature, it can be found that the theoretical system for the study of purchase intention is relatively complete, but at present, the theoretical research on the purchase intention of new energy vehicles mainly focuses on the fields of government guidance, green environmental protection and so on.

There are few studies on the purchase intention of new energy vehicles for a company.

Combing the above literature shows that it is of great significance to explore the purchase intention of consumers for the development of the industry. This paper will conduct an in-depth discussion on the influencing factors of consumption and purchase intention of new energy vehicles. On the basis of previous research, the perceived value theoretical model is introduced, and NIO is combined to obtain more reliable research results.

## **2.2 Customer perceived value Theory**

Zeithaml proposed the theory of perceived value: the response mode of exploratory research can be divided into four consumer definitions of value: value is low price; value is the product I want; value is the quality I get at my price and value is what I pay for. These four consumer value expressions can be summarized by a

general definition: Perceived value is the consumer's overall assessment of the utility of a product, based on the perception of what is received and what is given. Although what consumers receive varies (i.e., some may want quantity, some high quality, and still others convenience) and what they give varies (i.e., some are concerned only with spending money, some with time and effort), value represents a giving and taking component with significant trade-offs. According to Zeithaml on page 14, perceived value can be regarded as a consumer's comprehensive assessment of the utility of a product, including its comprehensive consideration of the perception received and provided. This definition clearly describes the determination process of CPV, that is, the perception of the consumer before the expected purchase, the expectation at the time of the transaction and the actual evaluation received, and the expectation after the purchase and the actual evaluation received (Zeithaml, 1988).

Dodds and other scholars established a model of perceived value, taking into account the perceived benefits and perceived value of consumers as well as the price of products. The perceived value can positively affect the purchase intention (Dodds et al., 1991).

Sheth, Newman and Gross proposed a comprehensive theoretical framework for the CPV scale in 1991, which identified five consumer values that influence consumer choice behaviour. They proposed a five dimensional scale, functional value, social value, emotional value, cognitive value and conditional value (Sheth, Newman, & Gross, 1991).

Butz and Goodstein said customer perceived value refers to the emotional connection between the customer and the producer by using the superior product or service provided by the manufacturer and perceiving the added value brought by the customer after purchasing the product or service. This connection is based on the customer's perception and experience of the product or service (Butz Jr & Goodstein, 1996).

Woodruff in 1997 extends the concept of customer perceived value and sees it as a source that can enhance a firm's competitive advantage. He suggests that while customers may predict the value they will receive when choosing a product, they will actually experience the value they receive during use. Customer value is "the customer's perceived preference and assessment of the attributes, performance, and consequences of the use of these products in terms of facilitating (or hindering) the achievement of the customer's goals and objectives" (Woodruff, 1997).

Sweeney and Soutar in 2001 conducted a systematic analysis and study of customer perceived value by constructing and applying the corresponding PERVAL scale. The scale incorporates both utilitarian and hedonic components and consists of

19 indicators that measure consumer perceptions of the value of durable consumer products. The scale shows that consumers value products not only in terms of functional aspects such as expected performance, value for money and versatility, but also in terms of the enjoyment or pleasure derived from the product (emotional value) and the social consequences of the product's interaction with others (social value). Four dimensions of customer perceived value are ultimately proposed: quality value, emotional value, price value, and social value (Sweeney & Soutar, 2001).

Chen and Dubinsky propose that, in essence, value represents a tradeoff of significant "gain and give components," which are treated as gains and sacrifices, respectively (Chen & Dubinsky, 2003).

Tam concluded in its 2004 study that to succeed in a competitive market, a company does not necessarily have to offer the highest quality service or the lowest price, and perceived value can provide a greater competitive advantage (Tam, 2004).

Moliner and other scholars summarized customer perceived value as a dynamic variable in their 2007 literature. In the literature, define value as perceived value, which includes functional value provided by the quality and price of goods or services, emotional value, and social value derived from personal experience and other similar social influences (Moliner, Sánchez, Rodríguez, & Callarisa, 2007).

Asgarpour and other scholars believe that customer perceived value is determined by value, product quality, service quality and price are the main factors of customer perceived value, which cannot achieve customer perceived value, and customer satisfaction survey cannot truly meet customer expectations. This highlights the complementary role of perceived value in achieving customer satisfaction (Asgarpour et al., 2014).

### **2.3 The relationship between perceived value and purchase intention Theory**

Zeithaml believes that when consumers actually get more out of a product or service, they value it more. Therefore, improving the perceived value of the product helps to enhance the purchase intention of consumers. This view is supported by a large body of empirical research (Zeithaml, 1988).

Dodds and other scholars designed experiments and analyzed the results, pointing out that consumers' purchasing decisions depend on the relationship between the benefits they get from the products they want to buy and the costs they need to pay. In other words, the consumer's perceived value of a product comes from the benefits brought by the product and the cost paid for the purchase of the product. They argue

that consumer purchase intention is positively related to perceived value (Dodds et al., 1991).

Chang and Wildt said purchase intention was shown to be positively affected by perceived value, and perceived value can moderate the effects of perceived price and perceived quality. The trade-off between perceived price and perceived quality leads to perceived value, which is the main factor affecting purchase intention (Chang & Wildt, 1994).

Woodruff believes that customer perceived value can affect customer purchase behavior, and customer perceived value occurs in different stages of the purchase process. These include having an impact on purchase intention in the pre-purchase phase (Woodruff, 1997).

Eggert and Ulaga proposed in 2002 that customer perceived value can be viewed as a pre-purchase or post-purchase structure, and the customer value structure points to the future direction. Its strategic direction is aimed at assessing how to create value for customers and in this way enable the supplier's market offerings to best meet customer requirements (Eggert & Ulaga, 2002).

Dubinsky and Chen conducted a survey on consumer perceived value and pointed out in his 2003 study that customer perceived value plays an important role in predicting purchase behavior and achieving sustainable competitive advantage. The study mentioned that most of the cognition of proposing a purchase occurred before the actual purchase act. Perceived customer value is a strong predictor of purchase intention, and combined with the findings of previous scholars, there is sufficient evidence for the positive impact of perceived value on purchase intention or consumer purchase intention (Chen & Dubinsky, 2003).

Ho and other scholars said cognitive value, as an aspect of perceived value, will have an indirect impact on consumer purchasing behavior (Ho, Chung, Lin, & Chen, 2010).

Shafiq and other scholars believe that perceived value is an important factor in the purchase decision-making process of customers, which affects the purchase intention by influencing factors such as perceived quality, brand reputation, social influence and product price (Shafiq, Raza, & Zia-ur-Rehman, 2011).

## **2.4 Explanation of related nouns**

### **Social value**

Fishbein and Ajzen believed that participation in social culture or norms would not only put pressure on individuals to perform the behaviors discussed, but also affect customers' perception of value (Fishbein & Ajzen, 1977).

The research of Park et al. can argue that enhancing the self-concept and self-identity of individuals in the social environment is an important aspect of the basic needs of customers. If the product fails to meet this need, the customer will feel uncomfortable and thus receive less satisfaction. Therefore, they believe that meeting this need is the basis for the customer's perceived value of the product (Park, Jaworski, & MacInnis, 1986).

Sheth and other scholars believe that when customers are aware of establishing connections with others, they will feel the generation of value (Sheth et al., 1991).

Sweeney and Soutar believed that customers tend to seek products that can help improve their social self-concept in order to be recognized or respected in the society, and put forward the definition of social value in their seriousness: Social value is the improvement of social utility derived from the improvement of social self-concept by the self-concept of product ability (Sweeney & Soutar, 2001).

Gallarza and Gil say that social acceptance is one of the basic factors required for customer satisfaction and loyalty (Gallarza & Saura, 2006).

### **Emotional value**

Holbrook proposed a new consumer value, namely experiential value, which emphasizes that consumers pay more attention to the emotion, experience and pleasure obtained in the consumption process when purchasing products or services (Holbrook & Hirschman, 1982). Holbrook proposed connecting with consumers by providing values related to their emotions and experiences. These include personal quality of life improvements, emotional experiences, and experiences of unique pleasure (Holbrook, 1999).

Scholars such as Sheth pointed out that emotional value is the inner emotional connection between users and other brands when buying goods, which focuses on users' emotional attitude and brand-related emotions and emotions. Emotional value has a positive impact on the purchase intention of users (Sheth et al., 1991).

Sweeney and souar developed a scale related to the perceived value dimension, which includes factors such as enjoyment, relaxation, feeling good and happiness. They defined affective value as the utility derived from the feeling or emotional state generated by the product (Sweeney & Soutar, 2001).

Product emotional benefit is an important aspect of customer perceived value and has a positive impact on consumer purchase (Lim, Widdows, & Park, 2006).

### **Functional value**

Holbrook and Hirschman proposed the concept of utility value, which refers to the evaluation of practicality or utility of goods or services by consumers. This value is that they expect to meet their functional needs by purchasing and using the product



or service. Utility value is one of the important considerations for consumers in purchasing decisions (Holbrook & Hirschman, 1982).

According to Sheth et al., functional value means that a product or service can meet the practical needs of consumers and provide convenience, efficiency and effect through features and functions, which have an important impact on the purchase decision (Sheth et al., 1991).

Joiner says the value of a product depends on its functional capabilities. This is considered a basic requirement that every product must meet these criteria. If the functional requirements of the product are not met, the customer may leave (Joiner & Reynard, 1994).

Sweeney and Souar conducted further research and developed a scale related to this value dimension, called functional value. The scale consists of two components, namely performance (speed) and quality of the product. They consider functional value as the performance/utility resulting from the perceived quality and expected performance of the product (Sweeney & Soutar, 2001).

### **Price value**

Zeithaml believes that the cost involved in obtaining a product should include monetary related costs, such as the actual price of the product, and non-monetary related costs, such as the effort and time spent, which are closely related to the utility or benefit customers get from the money they spend or any other cost (Zeithaml, 1988).

Dodds and other scholars established a model of perceived value, taking into account the perceived benefits and perceived value of consumers as well as the price of products. The perceived value can positively affect the purchase intention (Dodds et al., 1991).

Sheth argues that price value refers to the relationship between the extent to which a product or service is perceived by consumers to provide benefits, meet needs, or solve problems compared to the price they pay. Consumers will assess the value of a product or service based on their needs and expectations and compare it with the price paid to decide whether they think the product or service has good price value (Sheth et al., 1991).

Sweeney and Souar conducted further research and defined price value, which reflects the perceived benefits of customers from short or long term cost savings of a product (Sweeney & Soutar, 2001).

## 2.5 Theoretical framework

Based on the above literature collation, this paper finally selected the theory of Sweeney, Dodds and other scholars as the theoretical research basis of this study. Sweeney and Soutar finally proposed four dimensions of customer perceived value: quality value, emotional value, price value and social value in 2001 (Sweeney & Soutar, 2001). Since new energy vehicles coincide with durable consumer goods, it is more appropriate to base this table on the customer perceived value. Dodds and other scholars believe that perceived value can affect the purchase intention, so it is also one of the basic theories of the design theoretical framework (Dodds et al., 1991).

As the research scope is set in Beijing, China, we can simplify the theoretical model of customer perceived value, exclude the guiding factors of government policies and the influence factors of citizens' environmental awareness, and obtain the following theoretical framework model that is in line with the relationship between the customer perceived value of NIO in Beijing and their purchase intention. Refer to Figure 2.1.

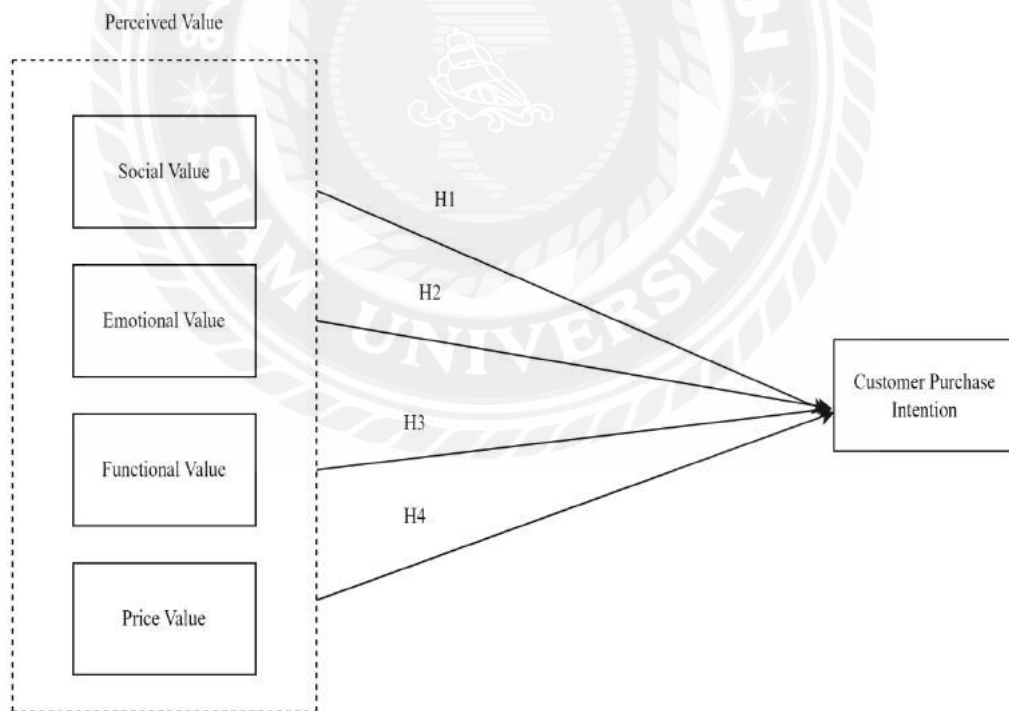


Figure2.1 Theoretical framework

## **Chapter 3 Research Methodology**

The research in this paper uses mainly quantitative research methods.

Since this paper wants to explore the influence of the perceived value of NIO on its purchase intention, previous scholars have also used quantitative research methods to study the relationship between the two, so it is appropriate for this paper to use quantitative research methods. This is one of the more widely used methods in social research at home and abroad, where the researcher uses this controlled measure of the issue under study to gather reliable information (Creswell & Creswell, 2017). Prior to conducting the questionnaire, a suitable questionnaire was designed by reviewing the literature in the field and combining the theory of the literature with the actual situation at NIO Motors to collect data on the willingness of customers to purchase NIO's products. After collecting and analyzing the valid questionnaires, descriptive statistics and principal component analysis were used as the main research methods, and the results were analyzed using the statistical analysis software SPSS for reliability and validity tests, correlation analysis and regression analysis, and the results were combined with the actual situation of NIO.

### **3.1 Research Design Question composition of the independent and dependent variable scales and their measurement**

This paper investigates the influence of NIO's customer perceived value on its customers' willingness to buy. We therefore use customer purchase intention as the dependent variable and customer perceived value as the independent variable influencing their purchase intention.

The questionnaire for this study consists of two parts, the first being demographic information and the second being the thematic part of the questionnaire. The main body of the questionnaire is divided into four sections, broken down by the four dimensions of consumer perceived value: social value, emotional value, functional value and price value.

To ensure the validity and reliability of the data, we will use a five-point Likert scale for measurement, which has clear evaluation indicators and criteria and can accurately reflect the customers' perceived value of NIO. We will also conduct statistical analysis of the data, including descriptive statistics, correlation analysis and regression analysis, in order to explore the degree of relationship and influence of customer perceived value on purchase intention.

According to Grewal, Monroe and Krishnan, three scales based on Dodds, Monroe

and Grewal's study measured buyers' willingness to buy (Grewal, Monroe, & Krishnan, 1998). The specific items ranged from "very low" to "very high" (Dodds et al., 1991). Therefore, we can also classify the willingness to buy NIO's product into three scales: I would consider buying NIO's product; I am willing to buy a NIO's product; I am willing to buy NIO's product and recommend them to others. Refer to Table 3.1 below.

Table 3.1 Purchase intention measurement questionnaire

Variables	Title
Willingness to buy	19. If I were to buy a new energy vehicle now, I would consider buying NIO's products.
	20. If I were to buy a new energy vehicle now, I am willing to buy NIO's product.
	21. If I were to buy a new energy vehicle now, I am willing to buy NIO's product and recommend them to others.

Sweeney and Soutar conducted a systematic analysis and study of customer perceived value by constructing and applying the corresponding PERVAL scale. A detailed description of the four levels of perceived value was also presented (Sweeney & Soutar, 2001).

Social value: the enhancement of social utility derived from the self-concept of product capability to enhance the social self-concept.

Emotional value: utility derived from the feeling or emotional state generated by the product.

Functional value: performance/utility derived from perceived quality and expected performance of the product.

Price value: The price/value derived from the utility of a product due to money, reducing its perceived short and long-term costs.

This paper uses this as a basic framework, combined with the multi-scale model of customer perceived value of new energy electric vehicles developed by Rui Miao, Fasheng Xu et al. in 2014 (Miao et al., 2014).

In the paper, the basic elements of the perceived value of new energy vehicles, such as: brand, infrastructure, incentives, purchase price, cost of use, sense of enjoyment, etc., are proposed and explained in the paper. This paper combines the elements with the characteristics of NIO and takes into account the consumer context

of new energy vehicles in Beijing, and modifies the design of some of the scales. The measurement questions and sources of each scale are shown in the following Table3.2:

Table3.2 Perceived value measurement topics Table

Variables	Title
Social value	<p>15. The NIO's product is in line with the modern concept of healthy and green living and can demonstrate environmental awareness.</p> <p>16. The brand image that NIO represents is appealing.</p> <p>17. NIO has a high level of visibility in the market.</p> <p>18. Using NIO's product allows me to make a good impression on others and to show my social status.</p>
Emotional value	<p>11. The exterior of the NIO's product will feel premium and aesthetically pleasing.</p> <p>12. The interior of the NIO's product makes you feel premium and comfortable.</p> <p>13. The NIO's product have quiet and smooth driving environment that is enjoyable.</p> <p>14. NIO have a good pre-sales and after-sales service, which gives you peace of mind.</p>
Functional value	<p>1. The NIO's product gives a good sense of safety and stability.</p> <p>2. The power and endurance of NIO's products are excellent.</p> <p>3. NIO's products have good battery quality and convenient power replacement technology.</p> <p>4. NIO's products have good driving and handling performance..</p> <p>5. NIO's products provide reliable, high-tech intelligent driving assistance systems.</p> <p>6. The available models of NIO's products can meet my needs.</p>

Price value	<p>7. NIO's products are cost effective.</p> <p>8. NIO's products are less expensive to use.</p> <p>9. NIO's products are less expensive to repair and maintain.</p> <p>10. The payment method of NIO allows me to enjoy more discounts.</p>
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In terms of demographic information collection, this paper mainly collects information on several projects closely related to NIO, including five basic information : gender, age, education background, income and occupation of customers.

### 3.2 Hypothesis

On the basis of literature review, this paper puts forward the following four questions and hypotheses combined with research purposes.

H1 : The customer perceived social value of NIO is positively correlated with their purchase intention

H2 : The customer perceived emotional value of NIO is positively correlated with their purchase intention

H3 : The customer perceived functional value of NIO is positively correlated with their purchase intention

H4 : The customer perceived price value of NIO is positively correlated with their purchase intention

### 3.3 Data Collection Data collection

This paper aims to explore the purchase intention of Beijing consumers for NIO's products. The research object is potential NIO consumers, that is, ordinary consumers in Beijing who are interested in new energy vehicles. The data source is mainly the data collected through questionnaire survey. Through IP restriction and random distribution of questionnaires, people interested in NIO and new energy vehicles are attracted to fill in the data.

A total of 700 questionnaires were sent out and 624 were recovered. In order to ensure the validity of the data, we eliminated questionnaires with incomplete answers or obvious irrationality, and finally retained 572 valid questionnaires, with an effective rate of 81.7%.

It should be emphasized that this survey is limited to academic research and does

not involve commercial use.

### 3.4 Reliability analysis of the scale

After collecting the questionnaires, the first thing you need to do is to check the validity of the data. The purpose of the validity and reliability tests is to help check the quality of the survey data and to help determine whether the content of the questionnaire can meet our expected survey requirements. Therefore, in the empirical analysis of the data, it is necessary to first test the reliability and validity of the questionnaire data, which can ensure the validity and reliability of the questionnaire survey, but also for the subsequent analysis and verification to provide security.

A reliability test is used to test the internal consistency of a scale by calculating the value of the scale's Cronbach's alpha coefficient. Generally speaking a Cronbach's alpha coefficient greater than 0.8 means that the internal consistency of the scale is very high; when the Cronbach's alpha coefficient is between 0.7 and 0.8, it means that the internal consistency of the scale is good; and when the Cronbach 's Alpha coefficient is below 0.7, it means that the scale has a high degree of inconsistency among the items and the scale needs some revision.

This paper tests the overall reliability of the questionnaire: excluding the five basic questions on demographics, its reliability analysis statistic results in an alpha coefficient of 0.917. the result is greater than 0.8, so the overall questionnaire has a high internal consistency. See Table 3.3:

Table 3.3 Reliability Statistical Scale

Cronbach's Alpha	Number of terms
0.917	21

In addition, we measure the "if item has been deleted" in the scale and obtain the data results in Table 3.4.

Table 3.4 Item Total Statistics

	Item deleted scale mean	Item removed from the scale variance	Corrected item total correlation	Cronbach's alpha value of the deleted item

1. The NIO's product gives a good sense of safety and stability.	66.72	204.079	.581	.912
2. The power and endurance of NIO's products are excellent.	66.73	204.139	.580	.912
3. NIO's products have good battery quality and convenient power replacement technology.	66.73	204.314	.563	.913
4. NIO's products have good driving and handling performance.	66.69	203.822	.574	.912
5. NIO's products provide reliable, high-tech intelligent driving assistance systems.	66.67	204.849	.556	.913
6. The available models of NIO's products can meet my needs.	66.68	203.540	.587	.912
7. NIO's products are cost effective.	66.75	203.690	.580	.912
8. NIO's products are less expensive to use.	66.73	205.150	.541	.913
9. NIO's products are less expensive to repair and maintain.	66.72	204.467	.553	.913
10. The payment method of NIO allows me to enjoy more discounts.	66.72	205.026	.544	.913



11. The exterior of the NIO's product will feel premium and aesthetically pleasing.	66.76	205.317	.541	.913
12. The interior of the NIO's product makes you feel premium and comfortable.	66.66	205.426	.550	.913
13. The NIO's product have quiet and smooth driving environment that is enjoyable.	66.72	203.829	.565	.913
14. NIO have good pre-sales and after-sales service, which gives you peace of mind.	66.67	204.978	.548	.913
15. The NIO's product is in line with the modern concept of healthy and green living and can demonstrate environmental awareness.	66.76	205.263	.538	.913
16. The brand image that NIO represents is appealing.	66.73	206.020	.520	.914
17. NIO has a high level of visibility in the market.	66.76	203.085	.591	.912
18. Using NIO's product allows me to make a good impression on others and to show my social status.	66.72	204.726	.544	.913
19. I If I were to buy a new energy vehicle now, I would consider buying NIO's product	66.79	203.358	.558	.913

20. If I were to buy a new energy vehicle now, I am willing to buy a NIO's product	66.80	204.593	.540	.913
21. If I were to buy a new energy vehicle now, I am willing to buy NIO's product and recommend them to others.	66.73	202.339	.602	.912

The results show that the reliability coefficients obtained by deleting any one question are all lower than the alpha coefficients obtained by the 21 items, so deleting any one question leads to a decrease in its reliability, i.e. the scale reliability is highest when the 21 items are present at the same time. The paper then proceeds to conduct reliability tests on the four different dimensions of the scale.

Functional value dimension reliability reference Table 3.5 and Table 3.6:

Table 3.5 Reliability statistics

Cronbach's	Number of items
.899	6

Table 3.6 Item Total Statistics

	Item deleted scale mean	Item removed from the scale variance	Corrected item total correlation	Cronbach's alpha value of the deleted item
1. The NIO's product gives a good sense of safety and stability.	16.81	22.770	.722	.882
2. The power and endurance of NIO's products are excellent.	16.83	22.842	.716	.883

3. NIO's products have good battery quality and convenient power replacement technology.	16.82	22.632	.721	.882
4. NIO's products have good driving and handling performance..	16.78	22.326	.747	.878
5. NIO's products provide reliable, high-tech intelligent driving assistance systems.	16.76	22.772	.720	.882
6. The available models of NIO's products can meet my needs.	16.77	22.529	.731	.881

Price value dimension reliability reference Table 3.7 and Table 3.8:

Table 3.7 Reliability statistics

Cronbach's	Number of items
.854	4

Table 3.8 Item Total Statistics

	Item deleted scale mean	Item removed from the scale variance	Corrected item total correlation	Cronbach's alpha value of the deleted item
7. NIO's products are cost effective.	10.02	8.837	.702	.812
8. NIO's products are less expensive to use.	10.00	9.009	.683	.820

9. NIO's products are less expensive to repair and maintain.	9.98	8.828	.700	.813
10. The payment method of NIO allows me to enjoy more discounts.	9.99	8.903	.700	.813

Emotional value dimension reliability reference Table 3.9 and Table 3.10:

Table 3.9 Reliability statistics

Cronbach's Alpha	Number of items
.865	4

Table 3.10 Item Total Statistics

	Item deleted scale mean	Item removed from the scale variance	Corrected item total correlation	Cronbach's alpha value of the deleted item
11. The exterior of the NIO's product will feel premium and aesthetically pleasing.	10.14	9.074	.686	.839
12. The interior of the NIO's product makes you feel premium and comfortable.	10.04	9.009	.719	.825
13. The NIO's product have quiet and smooth driving environment that is enjoyable.	10.09	8.696	.717	.826

14. NIO have good pre-sales and after-sales service, which gives you peace of mind.	10.05	8.788	.733	.819
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Social value dimension reliability reference Table 3.11 and Table 3.12

Table 3.11 Reliability statistics

Cronbach's	Number of items
.870	4

Table 3.12 Item Total Statistics

	Item deleted scale mean	Item removed from the scale variance	Corrected item total correlation	Cronbach's alpha value of the deleted item
15. The NIO's product is in line with the modern concept of healthy and green living and can demonstrate environmental awareness.	9.98	9.113	.736	.828
16. The brand image that NIO represents is appealing.	9.95	9.278	.718	.836
17. NIO has a high level of visibility in the market.	9.98	8.912	.746	.824
18. Using NIO's product allows me to make a good impression on others and to show my social status.	9.94	9.264	.690	.847

Refer to Table 3.13 and Table 3.14 for purchase intention reliability:

Table 3.13 Reliability statistics

Cronbach's	Number of items
.826	4

Table 3.14 Item Total Statistics

	Item deleted scale mean	Item removed from the scale variance	Corrected item total correlation	Cronbach's alpha value of the deleted item
19. I If I were to buy a new energy vehicle now, I would consider buying NIO's product.	6.59	4.660	.672	.771
20. If I were to buy a new energy vehicle now, I am willing to buy a NIO's product.	6.60	4.762	.684	.759
21. If I were to buy a new energy vehicle now, I am willing to buy NIO's product and recommend them to others.	6.53	4.673	.692	.750

### 3.5 Reliability and validity analysis of the scale

Reliability examines the consistency of all the items in the scale, while validity looks specifically at the energy efficiency of each item, i.e. whether each item plays a significant role in the scale. The analysis of the degree of accuracy of a scale measure to a measure is known as validity analysis. Validity analyses can be divided into two

categories, namely structural validity and content validity.

Content validity is used to analyse whether the design of a questionnaire and its results meet the logical requirements of a questionnaire analysis and whether the final results accurately measure and identify the basic questions of the study. The scale used in this study is based on a combination of relevant research findings and the characteristics of the NIO, so we can conclude that the content validity of this study meets the requirements. Structural validity was used to examine the structural differences between the theoretical and sample data, the consistency of the data for the same theoretical type and the independence of the data for different theoretical types. The following test results are shown in the table below:

Table 3.15 Independent variable KMO and Bartlett's test Table

The Kaiser-Meyer-Olkin metric of sampling adequacy.		.916
Bartlett's test for sphericity	Approximate cardinality	5424.205
	df	153
	Sig.	.000

Table 3.15 shows the validity test table of independent variables, the KMO and Bartlett's test is to examine whether the data can be analyzed using exploratory factor analysis. According to the results in Table 3.15, the KMO value is 0.916, a value greater than 0.6, and the Sig value is 0.000, a significance value less than 0.05. This indicates that the data can be tested for validity using exploratory factor analysis.

According to the results of the exploratory factor analysis, see Table 3.16 below, the cumulative variance contribution of the four dimensions was 69.576%, a value greater than 60%, so the division of the 18 question items into 4 dimensions is very appropriate, which is in line with the dimensional division of the scale.

Table 3.16 Total variance interpretation of the independent variable

Ingredients	Initial Eigenvalue			Extraction of squares and loading			Rotate square and load		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %

1	6.915	38.415	38.415	6.915	38.415	38.415	4.000	22.223	22.223
2	2.356	13.091	51.506	2.356	13.091	51.506	2.888	16.045	38.267
3	1.681	9.340	60.846	1.681	9.340	60.846	2.852	15.842	54.109
4	1.571	8.730	69.576	1.571	8.730	69.576	2.784	15.467	69.576
5	.516	2.865	72.442						
6	.500	2.775	75.217						
7	.453	2.517	77.734						
8	.438	2.432	80.166						
9	.425	2.359	82.524						
10	.407	2.258	84.783						
11	.399	2.215	86.998						
12	.386	2.144	89.142						
13	.374	2.079	91.221						
14	.360	1.997	93.219						
15	.347	1.925	95.144						
16	.314	1.745	96.889						
17	.299	1.663	98.552						
18	.261	1.448	100.000						

Extraction method: Principal component analysis.

According to SPSS data, the results of factor analysis are shown in Table 3.17: The factor matrix after the rotation of all scale questions is divided into four dimensions, as shown in the table above. Four dimensions correspond project 1 to 6, 7 to 10, 11 and 14, 15 to 18. This depends on the dimension of the questionnaire. All items with loadings greater than 0.5 on a single dimension were considered valid and, passing the validity test, were retained.

Table 3.17 Rotated composition matrixa Table

	Ingredients			
	1	2	3	4



4. NIO's products have good driving and handling performance..	.802			
5. NIO's products provide reliable, high-tech intelligent driving assistance systems.	.793			
3. NIO's products have good battery quality and convenient power replacement technology	.782			
6. The available models of NIO's products can meet my needs.	.791			
1. The NIO's product gives a good sense of safety and stability.	.776			
2. The power and endurance of NIO's products are excellent.	.770			
15. The NIO's product is in line with the modern concept of healthy and green living and can demonstrate environmental		.823		
16. The brand image that NIO represents is appealing.		.813		
17. NIO has a high level of visibility in the market.		.806		
18. Using NIO's product allows me to make a good impression on others and to show my social status.		.771		
14. NIO have good pre-sales and after-sales service, which gives you peace of mind.			.821	

12. The interior of the NIO's product makes you feel premium and comfortable.			.808	
13. The NIO's product have quiet and smooth driving environment that is enjoyable.			.792	
11. The exterior of the NIO's product will feel premium and aesthetically pleasing.			.778	
10. The payment method of NIO allows me to enjoy more discounts.				.791
9. NIO's products are less expensive to repair and maintain.				.789
8. NIO's products are less expensive to use.				.780
7. NIO's products are cost effective.				.775

Table 3.18 as the dependent variable validity inspection table, according to the results in Table 3.18, the KMO value is 0.722, which is greater than 0.6, the Sig value is 0.000, and the significance value is less than 0.05. This shows that the data can be validity inspection through exploratory factor analysis.

Table 3.18 Dependent variable KMO and Bartlett's test Table

The Kaiser-Meyer-Olkin metric of sampling adequacy.		.722
Bartlett's test for sphericity	Approximate cardinality	626.536
	df	3

	Sig.	.000
--	------	------

The items corresponding to the dependent variable are 19 to 21. According to the result of exploratory factor analysis, see table 3.19, the cumulative variance contribution ratio of the dependent variable was 74.213%, more than 60%, through the test of validity.

Table 3.19 Total variance interpretation of the dependent variable

Ingredients	Initial Eigenvalue			Extraction of squares and loading			Rotate square and load		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	2.226	74.213	74.213	2.226	74.213	74.213	2.226	74.213	74.213
2	.402	13.396	87.609						
3	.372	12.391	100.000						

Extraction method: Principal component analysis.

The overall questionnaire through the test validity, Therefore, the modified scale has passed the validity test and has good validity.

## Chapter 4 Finding and Conclusion

### 4.1 Results of demographic analysis

Based on the information collected from the questionnaire, the demographic information of the sample was collated as shown in Table4.1 below:

Table 4.1 Sample descriptive statistics Table

Statistical items	Classification	Percentage	
Gender	Male	287	50.2%
	Female	285	49.8%
Age	Under 18 years old	23	4%
	18-30 years old	53	9.3%
	30-45 years old	295	51.6%
	45-60 years old	187	32.7%
	60+ years old	14	2.4%
Education background	High School and below	36	6.3%
	Junior College	163	28.5%
	Tertiary Undergraduate	345	60.3%
	Master's degree or above	28	4.9%
Occupation	Students	23	4%
	Civil servants/staff of public institutions	119	20.8%
	Corporate staff	310	54.2%
	The self-employed	33	5.8%
	Freelancers	39	6.8%
	Unemployed/other	48	8.4%
Monthly income (The unit is RMB yuan)	Under 5000	43	7.5%
	5000-10,000	88	15.4%
	10,000 - 20,000	378	66.3%
	20,000-50,000	44	7.7%
	50,000 and above	18	3.1%

Based on the data shown in Table 4.1, we can derive the distribution characteristics of the data sample.

The sample size was collected to cover a wide range of ages, occupations and educational backgrounds, making our results more comprehensive and reliable. The close proportions of men and women among them also help us to obtain views and opinions on different genders.

Respondents were mainly in the 30-60 age group. This age group makes up the majority of respondents in our survey, which means that we can better understand the attitudes and opinions of this age group. This may be related to the fact that this age group has a higher demand for cars than other age groups. In addition, this age group is usually a major part of the social workforce and our results can better reflect the overall views and attitudes of society.

A higher proportion of respondents were business employees than other occupations. This indicates that our respondents are mainly drawn from the business sector and that corporate employees usually have a higher educational background and a stable income, which makes our findings more reliable.

Respondents were predominantly educated to undergraduate level and above, with a high percentage of 65%. This indicates that most of our respondents have a high level of education and are more likely to have in-depth knowledge and constructive opinions on an issue. In addition, people with higher education levels are often more focused on social responsibility and social development, which also helps us to obtain more comprehensive feedback on the new energy vehicle industry.

There is a wide range of income among respondents, with most of them earning between 10,000yuan and 20,000yuan per month. This indicates that our respondents' incomes are more widely distributed, which allows us to better understand the perceptions and attitudes of different income groups. In addition, the concentration of people earning between 10,000yuan and 20,000 yuan per month also highlights the views and attitudes of people in this income bracket towards the NIO.

## **4.2 Results of difference analysis**

We differentiated the various elements of demographics to explore the differences in perceived value and purchase intentions across demographic variables including the dimensions of gender, age, education, occupation and income in the scale.

In the gender dimension, this paper uses independent samples t-test for measurement and obtains the reference Table 4.2, according to the results, the sig

value in the variance test is greater than 0.05 in different dimensions, so it is necessary to compare the significant sig value under the assumption of equal variance, the p-value is greater than 0.05 in all dimensions. this indicates that there is no significant difference between the different genders in the four dimensions and in the purchase intention differences.

Table 4.2 Independent sample test

		Levene's		t-test of the mean equation						
		f	sig.	t	df	Sig.(Bilateral)	Mean Difference	Standard error value	95%confidence interval of the difference	
									Lower limit	Upper limit
Functional value dimension	Assuming equal variances	.288	.592	-.143	570	.887	-.01125	.07887	-.16615	.14365
	Assuming unequal variances			-.143	569.419	.887	-.01125	.07887	-.16617	.14367
Price value dimension	Assuming equal variances	.120	.729	-1.138	570	.256	-.09236	.08116	-.25178	.06705

	Assuming unequal variances			-1.138	569.949	.256	-.09236	.08116	-.25178	.06706
Emotional value dimension	Assuming equal variances	.067	.796	-.353	570	.724	-.02874	.08137	-.18856	.13109
	Assuming unequal variances			-.353	569.885	.724	-.02874	.08137	-.18856	.13109
Social value dimension	Assuming equal variances	.381	.538	-.451	570	.652	-.03721	.08257	-.19938	.12497
	Assuming unequal variances			-.451	569.473	.652	-.03721	.08256	-.19936	.12494
Purchase intention dimension	Assuming equal variances	.044	.835	-.144	570	.886	-.01249	.08701	-.18338	.15840

on	Assumi ng unequa l varianc es									
				-14 4	569.9 19	.866	-.01249	.08701	-.18338	.15840

In the age dimension, this paper uses a one-way ANOVA to measure the results and obtains the results in Table 4.3. According to the data in the table, the sig value of each of its dimensions is greater than 0.05, so the effect of age on each dimension is not significant. This indicates that the perceived value and purchase intention of NIO are not significantly different among different age groups.

Table 4.3 One-way analysis of variance

		Sum of squares	df	mean square	F	significance
Functional value dimension	Inter group	2.625	4	.656	.738	.567
	Within group	504.369	567	.890		
	Total	506.994	571			
Price value dimension	Inter group	1.004	4	.251	.265	.901
	Within group	537.156	567	.947		
	Total	538.159	571			
Emotional value dimension	Inter group	1.045	4	.261	.275	.894
	Within group	538.751	567	.950		
	Total	539.796	571			
Social value dimension	Inter group	7.564	4	1.891	1.955	.100
	Within group	548.318	567	.967		



	Total	555.882	571			
Purchase intention dimension	Inter group	2.191	4	.548	.505	.732
	Within group	614.868	567	1.084		
	Total	617.059	571			

In the education dimension, this paper uses a one-way ANOVA to measure the results, and the results are obtained in Table 4.4. According to the data in the table, the sig value of each of its dimensions is greater than 0.05, so the effect of education on each dimension is not significant. This indicates that the perceived value and purchase intention of NIO are not significantly different by education level.

Table 4.4 One-way analysis of variance

		Sum of squares	df	mean square	F	significance
Functional value dimension	Inter group	3.316	3	1.105	1.247	.292
	Within group	503.677	568	.887		
	Total	506.994	571			
Price value dimension	Inter group	3.639	3	1.213	1.289	.277
	Within group	534.521	568	.941		
	Total	538.159	571			
Emotional value dimension	Inter group	1.016	3	.339	.357	.784
	Within group	538.780	568	.949		
	Total	539.796	571			
Social value dimension	Inter group	2.997	3	.999	1.026	.381
	Within group	552.886	568	.973		

	Total	555.882	571			
Purchase intention dimension	Inter group	1.846	3	.615	.568	.636
	Within group	615.212	568	1.084		
	Total	617.059	571			

In the occupation dimension, this paper uses a one-way ANOVA to measure the results, and the results are obtained in Table 4.5. According to the data in the table, the sig value of each of its dimensions is greater than 0.05, so the effect of occupation on each dimension is not significant. This indicates that there is no significant difference in the perceived value and purchase intention of NIO among different occupations.

Table 4.5 One-way analysis of variance

		Sum of squares	df	mean square	F	significance
Functional value dimension	Inter group	4.945	5	.989	1.115	.351
	Within group	502.049	566	.887		
	Total	506.994	571			
Price value dimension	Inter group	5.790	5	1.158	1.231	.293
	Within group	532.370	566	.941		
	Total	538.159	571			
Emotional value dimension	Inter group	2.452	5	.490	.517	.764
	Within group	537.344	566	.949		
	Total	539.796	571			
Social value dimension	Inter group	4.942	5	.988	1.015	.408
	Within group	550.940	566	.973		

	Total	555.882	571			
Purchase intention dimension	Inter group	5.925	5	1.185	1.098	.361
	Within group	611.134	566	1.080		
	Total	617.059	571			

In the income dimension, this paper uses a one-way ANOVA to measure the results and obtains the results in Table 4.6, according to the data in the table, the sig value of each of its dimensions is greater than 0.05, so the effect of income on each dimension is not significant. This indicates that there is little difference in the perceived value and purchase intention of NIO among different income groups.

Table 4.6 One-way analysis of variance

		Sum of squares	df	mean square	F	significance
Functional value dimension	Inter group	5.437	4	1.359	1.536	.190
	Within group	501.557	567	.885		
	Total	506.994	571			
Price value dimension	Inter group	4.149	4	1.037	1.101	.355
	Within group	534.010	567	.942		
	Total	538.159	571			
Emotional value dimension	Inter group	.460	4	.115	.121	.975
	Within group	539.336	567	.951		
	Total	539.796	571			
Social value dimension	Inter group	2.223	4	.556	.569	.685
	Within group	553.659	567	.976		
	Total	555.882	571			

Purchase intention dimension	Inter group	.582	4	.145	.134	.970
	Within group	616.477	567	1.087		
	Total	617.059	571			

### 4.3 Results of correlation analysis

The purpose of correlation analysis is to determine the strength and direction of the relationship between two or more variables. It helps researchers to determine whether there is a significant linear or non-linear relationship between two variables in order to better understand and interpret the data. Specifically for the relationship between the dimensions of perceived value and purchase intention, a correlation test was conducted using SPSS, using Pearson's correlation analysis, a method that determines the strength and direction of the correlation between the dimensions of perceived value and purchase intention. The final results are shown in Table 4.7 below:

Table 4.7 Relevance Table

	Functional value dimension	Price value dimension	Emotional value dimension	Social value dimension	Purchase intention dimension
Functional Value dimension	1				
Price value dimension	.421**	1			
Emotional value dimension	.358**	.435**	1		
Social value dimension	.360**	.414**	.423**	1	

Purchase Intention dimension	.599**	.616**	.652**	.634**	1
**. Significantly correlated at the .01 level (bilaterally).					

According to the results in Table 4.7, P is less than 0.05, indicating that there is a significant correlation between each dimension, and the correlation coefficient between each dimension is greater than 0, indicating that there is a positive correlation between each dimension, and it can be concluded that there is a significant correlation between the factors of purchase intention and customer perceived value.

#### 4.4 Results of multiple linear regression analysis

The main purpose of multiple linear regression analysis is to explore the degree and direction of influence of multiple independent variables on a dependent variable, and conduct variable screening, model diagnosis and model optimization, so as to improve the predictive ability and explanatory power of the model. This paper uses SPSS to conduct multiple linear regression analysis on the relationship between each dimension of perceived value and purchase intention, in order to determine the correlation and influence degree between each dimension of perceived value and purchase intention. By analyzing the relationship between each dimension of perceived value and purchase intention, it can help enterprises to understand the needs and preferences of consumers, so as to optimize product design, improve product competitiveness, increase sales, and provide a basis for enterprises to formulate marketing strategies. Table 4.8 was obtained based on the results of SPSS.

Table 4.8 Model summary table

Models	R	R Square	Adjusted R-Square	Standard Error of Estimate	Durbin-Watson
1	.844a	.712	.710	.55968	2.066

a. Predictor variables: (constant), social value dimension, functional value dimension, emotional value dimension, price value dimension.

b. Dependent variable: purchase intention dimension

According to the results in Table 4.8 of the model, the R-squared result is 0.712, which means that 71.2% of the reasons affecting customers' willingness to buy a new energy vehicle in Beijing are related to the four dimensions of perceived value.

In general, we consider the analysis to be meaningful when the R-squared is greater than 30% in the course of our actual research. The fit of our data statistics is well above 30%, which indicates that the model has some accuracy in its calculations. In addition, the value of the Durbin-Watson statistic is around 2.0, which means that the sample is independent.

Table 4.9 Anovaa analysis of variance Table

Models	Sum of squares	df	Mean square	F	Sig.
1 Regression	439.453	4	109.863	350.733	.000b
1 Residuals	177.606	567	.313		
Total	617.059	571			

a. Dependent variable: Purchase intention dimension

b. Predictor variables: (constant), social value dimension, functional value dimension, emotional value dimension, price

According to the results in Table 4.9, the Sig value is less than 0.05, which indicates that the existence of the regression equation is meaningful representing that at least one of the independent variables can significantly influence the dependent variable. That is, at least one of social value, functional value, emotional value and price value significantly influences customer purchase intention.

Table 4.10 Coefficient  $\alpha$  table

Models	Unstandardized Coefficient		Standardized Coefficient	t	Sig.	Covariance statistics		
	B	Standard Error	Trial Version			Tolerance	VIF	
1	(Constant)	-.799	.112		-7.075	.000		
	Functional value dimension	.305	.028	.277	10.717	.000	.762	1.313
	Price value dimension	.250	.029	.233	8.624	.000	.693	1.442
	Emotional value dimension	.347	.028	.325	12.234	.000	.721	1.387
	Social value dimension	.317	.028	.301	11.437	.000	.733	1.364

a. Dependent variable: Purchase intention dimension

According to the results of coefficient  $\alpha$  Table 4.10, the Sig values are all less than 0.05, indicating that all four dimensions have a significant influence on customer purchase intention. That is, functional value can significantly affect the NIO's customer purchase intention; price value can significantly affect the NIO's customer purchase intention; emotional value can significantly affect the NIO's customer purchase intention; and social value can significantly affect the NIO's customer purchase intention.

The regression coefficient B is greater than 0 in all four dimensions, meaning that functional value, price value, emotional value and social value all have a positive impact on customers' willingness to buy. That is, the higher the functional value, price value, emotional value and social value, the stronger the customer's willingness to purchase.

Table 4.10 shows that the formula for the influence of NIO's customer perceived value on its customer purchase intention in Beijing is as follows:

Customer willingness to buy =  $-.799 + 0.305 \times \text{functional value} + 0.250 \times \text{price value} + 0.347 \times \text{emotional value} + 0.317 \times \text{social value}$

The comparison between the B-values also shows that the emotional value dimension is the highest and the price value dimension is the lowest in influencing the purchase intention of car customers.

According to Table 4.10 the VIFs are all less than 5, indicating that there is no multicollinearity between the respective variables, which further reflects the accuracy and reliability of the regression model from the side.

In summary, the paper can conclude that:

H1: The customer perceived social value of NIO is positively correlated with their purchase intention. Social value has a positive impact on customers' willingness to purchase, so hypothesis H1 holds. Social value has a positive impact on the purchase intention of NIO customers, indicating that if NIO can improve the social value of its products in terms of environmental protection, innovation and overall image, consumers will be more inclined to buy the brand's cars. Therefore, NIO should strengthen consumers' perception of its social value, and other new energy vehicle manufacturers should also pay attention to consumers' perception of social value.

H2: The customer perceived emotional value of NIO is positively correlated with their purchase intention. Emotional value has a positive impact on customers' willingness to buy, so hypothesis H2 holds. Emotional value has a positive impact on the purchase intention of NIO customers. This indicates that if NIO's products can produce stronger emotional identification and pleasure, such as product design identification, comfortable driving environment and reliable after-sales service, consumers will be more willing to buy NIO's products. Therefore, new energy vehicle companies need to focus on satisfying the emotional value of consumers and enhance the pleasure brought by products and services, so as to enhance the purchase intention.

H3: The customer perceived functional value of NIO is positively correlated with their purchase intention. Functional value has a positive impact on customers' willingness to buy, so hypothesis H3 holds. The functional value has a positive impact on the purchase intention of NIO customers. This shows that the functions and performance provided by NIO's products can meet the daily driving needs of consumers, and consumers will be more inclined to buy. In the new energy vehicle market, consumers have a high demand for functionality, so new energy vehicle companies need to strive to improve consumers' perceived value of product functions.

H4: The customer perceived price value of NIO is positively correlated with their purchase intention. Price value has a positive impact on customers' willingness to buy, so hypothesis H4 holds. The price value has a positive impact on the purchase intention of NIO customers. Although the research results show that price value has



the smallest influence on purchase intention among the four dimensions, price value is still an important factor affecting consumer decision-making. If consumers believe that NIO's products have lower prices or use costs, they will be more willing to buy NIO's products. Therefore, new energy vehicle companies need to pay attention to consumers' perceived value of price and reduce the price and maintenance cost of products as much as possible.

In summary, the perceived value of NIO's customers has an important positive impact on their purchase intention. Efforts to improve the perceived value of products will help to enhance NIO's competitiveness in the market.



## Chapter 5 Conclusion and Recommendation

### 5.1 Conclusion

The new energy vehicle industry in our country is facing unprecedented opportunities for development, but it is also bound to meet many challenges. Increasingly fierce market competition and developing the supply of power and the core technology needs to improve. Moreover, with subsidies falling year by year, it is difficult to further increase sales. Many scholars have conducted studies to analyze which factors will affect the purchase intention of consumers, and there is still a large market that has not been developed. In recent years, literature on the purchase intention of new energy vehicles has been emerging. Some literature focuses on the relationship between the price and quality of new energy vehicles, while others focus on comparing the environmental and energy utilization advantages and disadvantages of new energy vehicles and conventional fuel vehicles. However, the relationship between perceived value and purchase intention has not been thoroughly explored in such literature. There is some literature exploring the relationship between different feature types and purchase intention in other brands of BEVs or hybrids. In the literature on the purchase intention of new energy vehicles, most researchers focus on factors such as policy and public awareness.

This study takes NIO as the research object and Beijing area as the research area to explore the influence of NIO's customer perceived value on their purchase intention. NIO is an excellent representative of China's independent new energy vehicles, and its technology research and development, marketing model, and development strategy have reference value for the whole industry. Beijing, China, is a leading region for new energy vehicles and has relevant policies for new energy vehicle license plates, so it is suitable for research. By reviewing the previous related literature, combined with the theory of perceived value, constructs the research framework of this article. This paper adopted a quantitative research method, in the form of questionnaire survey, collected sample data through limited areas, and analyzed the data with the help of SPSS.

The results show that : the social value of NIO is positively correlated with customer's purchase intention; the emotional value of perceived value is positively correlated with customer's purchase intention; the functional value of perceived value is positively correlated with customer's purchase intention; the value of price in perceived value is positively correlated with customer's purchase intention. Therefore, the four research hypotheses proposed in this paper are as follows: H1: The customer perceived social value of NIO is positively correlated with their purchase intention;

H2: The customer perceived emotional value of NIO is positively correlated with their purchase intention; H3: The customer perceived functional value of NIO is positively correlated with their purchase intention; H4: The customer perceived price value of NIO is positively correlated with their purchase intention, the above four assumptions are all valid. The final results indicate that the perceived value in the buying decision of NIO play a key role, new energy automobile enterprise if you want to enhance the customer's purchase intention, we must attach importance to customer perceived value of its products. In order to maintain its advantage in the market competition, NIO needs to provide social value to meet consumer needs, meet the needs of emotional value, excellent functional performance and reasonable price positioning. This conclusion emphasizes that enterprises should pay attention to the influence of perceived value in the formulation of marketing strategies, and actively enhances the perceived value of customers from all dimensions, so as to enhance the purchase intention of consumers, ultimately promote the sales of products and expand the market share of the company.

## **5.2 Recommendation**

When studying the perceived value of NIO's, we need to comprehensively consider the limitations of the study in order to ensure that accurate conclusions and their reliability can be obtained.

Firstly, this study used the method of questionnaire survey to obtain data, and the sample scope was limited to a specific regional group: Beijing area, China. Therefore, the sample may be subject to selection bias. Although other literature thought Beijing area has a strong representative in China, but still can't ignore the whole results of representative will be affected.

Second, the number of parameters and variables used in the study are relatively limited, the study's Sweeney and Soutar of PERVAL scale and application in 2001, the scale relies on the four dimension of perceived value, thus for comprehensive assessment of the new energy vehicles will still exist deficiencies.

In addition, this study cannot fully take into account all the factors that may affect the purchase intention, such as government policies and citizens' environmental awareness. Therefore, it is inevitable that there will be omission in the control of variables, which may affect the accuracy of the conclusion.

Finally, the study itself may be influenced by the initial assumptions of the study's conclusions. Although the research hypothesis has been verified by ourselves and the reliability and validity test has been passed through the sufficient analysis of

the data, there may still be some factors that have not been considered.

Despite the above limitations, the conclusions of this study still have certain reference value.

The contribution of this study is to establish a theoretical model of the influencing factors of consumers' electric vehicle purchase intention from the perspective of perceived value. Through the data analysis of this study, the relationship between customers perceived value and purchase intention of new energy vehicles is revealed, which provides theoretical reference for new energy vehicle enterprises to formulate sales strategies and product design decisions.

Based on the findings and conclusions of this study, future research can focus on the following aspects to conduct more in-depth research on the perceived value of new energy vehicle industry.

1. Future Research can expand the range of the sample, this article only to Beijing area as the research scope, future research can cover more areas and group, in order to increase the results of representative and universality.

2. Future research can introduce more parameters and variables to evaluate the perceived value of NEVs. In addition to the four dimensions based on PERVAL scale, can according to other literature, further refinement of perceived value dimension, more in-depth research.

3. Future research can be for other factors that may affect purchase intention, such as government policy, environmental protection consciousness and so on carries on the further research, in order to understand their effect on new energy automobile market and the importance of consumer purchase decision.

4. Future research can adopt more kinds of research methods, such as in-depth interviews and field observation, to obtain more rich data and information. This will help to gain a deeper understanding of consumers' perceptions and attitudes towards NIO new energy vehicles, so as to assess their value more accurately.

5. Future research can try to conduct comparative studies on different market segments and consumer groups to understand the differences in perceived value of new energy vehicle industry among different groups and develop targeted sales strategies based on the needs of different groups.

6. Future research can be combined with research results in other fields, such as psychology and sociology, to further explain consumers' perceived value and purchase decision behavior of new energy vehicles. This will contribute to a more complete understanding of the motivations and factors behind consumer behavior.

In summary, future research should focus on addressing the limitations of existing research and conduct in-depth research using multiple methods and

perspectives to provide an accurate and comprehensive assessment and understanding of the perceived value of the new energy vehicle industry. This will be important for formulating sales strategies and promoting the development of the new energy vehicle market



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## Appendix

### Questionnaire survey on purchase intention of NIO

As a graduate student, I am currently investigating customers' purchase intention of NIO's products. The purpose of this questionnaire is to understand the opinions and attitudes of the respondents towards NIO so as to better understand the needs and desires of the respondents. All data collected in this questionnaire will only be used for academic research and will not be used for commercial purposes. All information collected will be kept strictly confidential. Be sure to answer truthfully according to your own feelings! Thank you for joining us!

#### Part 1: Basic information

##### Questionnaire 1

What is your gender?

1. Male
2. Female

##### Questionnaire 2

In which of the following age groups do you fall?

1. Under 18 years old
2. 18-30 years
3. 30-45 years
4. 45-60 years
5. 60+ years

##### Questionnaire 3

What is your education level?

1. High School and below
2. Junior College
3. Tertiary Undergraduate
4. Master's degree or above

##### Questionnaire 4

What is your current occupation?

1. Student
2. Civil servants/staff of public institutions
3. Corporate staff
4. The self-employed
5. Freelancers Unemployed/other

##### Questionnaire 5

What is your monthly income? (yuan)

1. Under 5000
2. 5000-10,000
3. 10,000 - 20,000
4. 20,000-50,000
5. 50,000 and above

The following questions in the Table A below are all 5-step options:

1. Strongly Disagree
2. Disagree
3. Unsure
4. Agree
5. Strongly Agree

Part 2: Scale questions

Table A Questionnaire 1-21					
Questionnaire 1 The NIO's product gives a good sense of safety and stability.	1	2	3	4	5
Questionnaire 2 The power and endurance of NIO's products are excellent.	1	2	3	4	5
Questionnaire 3 NIO's products have good battery quality and convenient power replacement technology.	1	2	3	4	5
Questionnaire 4 NIO's products have good driving and handling performance..	1	2	3	4	5
Questionnaire 5 NIO's products provide reliable, high-tech intelligent driving assistance systems.	1	2	3	4	5
Questionnaire 6 The available models of NIO's products can meet my needs.	1	2	3	4	5
Questionnaire 7 NIO's products are cost effective.	1	2	3	4	5
Questionnaire 8 NIO's products are less expensive to use.	1	2	3	4	5
Questionnaire 9 NIO's products are less expensive to repair	1	2	3	4	5

and maintain.					
Questionnaire 10 The payment method of NIO allows me to enjoy more discounts.	1	2	3	4	5
Questionnaire 11 The exterior of the NIO's product will feel premium and aesthetically pleasing.	1	2	3	4	5
Questionnaire 12 The interior of the NIO's product makes you feel premium and comfortable.	1	2	3	4	5
Questionnaire 13 The NIO's product have quiet and smooth driving environment that is enjoyable.	1	2	3	4	5
Questionnaire 14 NIO have good pre-sales and after-sales service, which gives you peace of mind.	1	2	3	4	5
Questionnaire 15 The NIO's product is in line with the modern concept of healthy and green living and can demonstrate environmental awareness.	1	2	3	4	5
Questionnaire 16 The brand image that NIO represents is appealing.	1	2	3	4	5
Questionnaire 17 NIO's products are less expensive to repair and maintain.	1	2	3	4	5
Questionnaire 18 Using NIO's product allows me to make a good impression on others and to show my social status.	1	2	3	4	5
Questionnaire 19 If I were to buy a new energy vehicle now, I would consider buying NIO's products.	1	2	3	4	5
Questionnaire 20 If I were to buy a new energy vehicle now, I am willing to buy a NIO's products.	1	2	3	4	5
Questionnaire 21 If I were to buy a new energy vehicle now, I am willing to buy NIO's products and recommend them to others.	1	2	3	4	5